

Job Management Partner 1 Version 10

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1

3021-3-326-20(E)

## Notices

#### Relevant program products

For details about the applicable OS versions, and the service packs and patches required for Job Management Partner 1/Automatic Job Management System 3, see the *Release Notes*.

Job Management Partner 1/Automatic Job Management System 3 - Manager (For Windows): P-2W12-3KAL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50

The above product includes the following:

P-CC2A12-3KAL Job Management Partner 1/Automatic Job Management System 3 - Manager: version 10-50 (For Windows Server 2012 and Windows Server 2008)

P-CC2412-3KAL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50 (For Windows Server 2003 and Windows Server 2003(x64))

Job Management Partner 1/Automatic Job Management System 3 - Manager (For UNIX):

P-1J12-27AL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50 (For HP-UX(IPF))

P-9312-27AL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50 (For Solaris 11 (SPARC) and Solaris 10 (SPARC))

P-1M12-27AL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50 (For AIX) P-8112-27AL Job Management Partner 1/Automatic Job Management System 3 - Manager version 10-50 (For Linux 6.1 (x86) or later, Linux 6.1 (x86) or later, Linux 5.1 (x86) or later, and Linux 5.1 (AMD/Intel 64) or later)

Job Management Partner 1/Automatic Job Management System 3 - Agent (For Windows): P-2W12-33AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50

The above product includes the following:

P-CC2A12-33AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For Windows Server 2012 and Windows Server 2008)

P-CC2412-33AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For Windows Server 2003 and Windows Server 2003(x64))

Job Management Partner 1/Automatic Job Management System 3 - Agent (For UNIX):

P-1J12-29AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For HP-UX(IPF))

P-9312-29AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For Solaris 11 (SPARC) and Solaris 10 (SPARC))

P-1M12-29AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For AIX) P-8112-29AL Job Management Partner 1/Automatic Job Management System 3 - Agent version 10-50 (For Linux 6.1 (x86) or later, Linux 6.1 (x64) or later, Linux 5.1 (x86) or later, and Linux 5.1 (AMD/Intel 64) or later)

Job Management Partner 1/Automatic Job Management System 3 - View (For Windows): P-2W12-34AL Job Management Partner 1/Automatic Job Management System 3 - View version 10-50

The above product includes the following:

P-CC2A12-34AL Job Management Partner 1/Automatic Job Management System 3 - View version 10-50 (For Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008 and Windows Vista) P-CC2412-34AL Job Management Partner 1/Automatic Job Management System 3 - View version 10-50 (For Windows Server 2003, Windows Server 2003(x64), and Windows XP Professional)

Job Management Partner 1/Base<sup>#</sup> (For Windows):

P-2W2C-6LAL Job Management Partner 1/Base# version 10-50

The above product includes the following:

P-CC2A2C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For Windows Server 2012 and Windows Server 2008)

P-CC242C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For Windows Server 2003 and Windows Server 2003(x64))

Job Management Partner 1/Base<sup>#</sup> (For UNIX):

P-1J2C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For HP-UX(IPF))

P-9D2C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For Solaris 11 (SPARC) and Solaris 10 (SPARC))

P-1M2C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For AIX)

P-812C-6LAL Job Management Partner 1/Base<sup>#</sup> version 10-50 (For Linux 6.1 (x86) or later, Linux 6.1 (x64) or later, Linux 5.1 (x86) or later, and Linux 5.1 (AMD/Intel 64) or later)

# These products have been developed under a quality management system which has been certified to comply with ISO 9001.

### Trademarks

Active Directory is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries.

Adobe is either a registered trademark or a trademark of Adobe Systems Incorporated in the United States and/or other countries.

CONNECT: Queue is a registered trademark of Sterling Commerce, Inc.

HP NonStop is a trademark of Hewlett-Packard Development Company, L.P. in the U.S. and other countries.

HP-UX is a product name of Hewlett-Packard Development Company, L.P. in the U.S. and other countries.

IBM, AIX are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

IBM, AS/400 are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

IBM, Lotus are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

IBM, MQSeries are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

IBM, MVS are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

Internet Explorer is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Itanium is a trademark of Intel Corporation in the United States and other countries.

Linux(R) is the registered trademark of Linus Torvalds in the U.S. and other countries.

Microsoft and Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/ or other countries.

Microsoft and Outlook are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Microsoft and SQL Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Microsoft Exchange server is a product name of Microsoft Corporation in the U.S. and other countries.

Microsoft Office and Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Oracle and Java are registered trademarks of Oracle and/or its affiliates.

Pentium is a trademark of Intel Corporation in the United States and other countries.

Red Hat is a trademark or a registered trademark of Red Hat Inc. in the United States and other countries.

SAP and R/3 and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc., in the United States and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Windows is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries.

Windows Server is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries.

Windows Vista is either a registered trademark or a trademark of Microsoft Corporation in the United States and/or other countries.

The following program products contain some parts whose copyrights are reserved by Oracle and/or its affiliates: P-9312-27AL, P-9312-29AL, and P-9D2C-6LAL.

The following program products contain some parts whose copyrights are reserved by UNIX System Laboratories, Inc.: P-9312-27AL, P-9312-29AL, and P-9D2C-6LAL.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

This product includes software developed by IAIK of Graz University of Technology.

Other product and company names mentioned in this document may be the trademarks of their respective owners. Throughout this document Hitachi has attempted to distinguish trademarks from descriptive terms by writing the name with the capitalization used by the manufacturer, or by writing the name with initial capital letters. Hitachi cannot attest to the accuracy of this information. Use of a trademark in this document should not be regarded as affecting the validity of the trademark.



#### Microsoft product name abbreviations

This manual uses the following abbreviations for Microsoft product names.

Abbreviation		Full name or meaning	
Excel		Microsoft(R) Excel	
		Microsoft(R) Office Excel	
Exchange Server		Microsoft(R) Exchange 2000 Enterprise Server	
		Microsoft(R) Exchange 2000 Server	
		Microsoft(R) Exchange Server	
IE	Internet Explorer	Microsoft(R) Internet Explorer(R)	
		Windows(R) Internet Explorer(R)	
Microsoft Mail		Microsoft(R) Mail	
Microsoft SQL Server		Microsoft(R) SQL Server	
		Microsoft(R) SQL Server Enterprise Edition	
MSCS		Microsoft(R) Cluster Server	
MSMQ		Microsoft(R) Message Queue Server	
Outlook	Outlook 2003	Microsoft(R) Outlook(R) 2003	
	Outlook 2007	Microsoft(R) Outlook(R) 2007	
	Outlook 2010	Microsoft(R) Outlook(R) 2010	
Outlook Express		Microsoft(R) Outlook(R) Express	
Windows 7		Microsoft(R) Windows(R) 7 Enterprise	
		Microsoft(R) Windows(R) 7 Professional	
		Microsoft(R) Windows(R) 7 Ultimate	
Windows 8		Windows(R) 8 Enterprise	
		Windows(R) 8 Pro	
Windows 8.1		Windows(R) 8.1 Enterprise	
		Windows(R) 8.1 Pro	
Windows Server 2003	Windows Server 2003	Microsoft(R) Windows Server(R) 2003, Enterprise Edition	
		Microsoft(R) Windows Server(R) 2003, Standard Edition	
	Windows Server 2003 R2	Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	
		Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	
	Windows Server 2003 (x64)	Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition	
		Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	

Abbreviation		Full name or meaning
Windows Server 2003	Windows Server 2003 R2 (x64)	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition
		Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition
Windows Server 2008	Windows Server 2008	Microsoft(R) Windows Server(R) 2008 Datacenter
		Microsoft(R) Windows Server(R) 2008 Enterprise
		Microsoft(R) Windows Server(R) 2008 Standard
	Windows Server 2008 R2	Microsoft(R) Windows Server(R) 2008 R2 Datacenter
		Microsoft(R) Windows Server(R) 2008 R2 Enterprise
		Microsoft(R) Windows Server(R) 2008 R2 Standard
Windows Server 2012	Windows Server 2012	Microsoft(R) Windows Server(R) 2012 Datacenter
		Microsoft(R) Windows Server(R) 2012 Standard
	Windows Server 2012 R2	Microsoft(R) Windows Server(R) 2012 R2 Datacenter
		Microsoft(R) Windows Server(R) 2012 R2 Standard
Windows Vista		Microsoft(R) Windows Vista(R) Business
		Microsoft(R) Windows Vista(R) Enterprise
		Microsoft(R) Windows Vista(R) Ultimate
Windows XP Professional		Microsoft(R) Windows(R) XP Professional Operating System

*Windows* is sometimes used generically, referring to Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, and Windows XP Professional.

### Restrictions

Information in this document is subject to change without notice and does not represent a commitment on the part of Hitachi. The software described in this manual is furnished according to a license agreement with Hitachi. The license agreement contains all of the terms and conditions governing your use of the software and documentation, including all warranty rights, limitations of liability, and disclaimers of warranty.

Material contained in this document may describe Hitachi products not available or features not available in your country.

No part of this material may be reproduced in any form or by any means without permission in writing from the publisher.

#### Issued

Dec. 2014: 3021-3-326-20(E)

## Copyright

Copyright (C) 2012, 2014, Hitachi, Ltd. Copyright (C) 2012, 2014, Hitachi Solutions, Ltd.

## Summary of amendments

The following table lists changes in the manuals (3021-3-318-20(E), 3021-3-319-20(E), 3021-3-320-20(E), 3021-3-321-20(E), 3021-3-322-20(E), 3021-3-323-20(E), 3021-3-324-20(E), 3021-3-325-20(E), 3021-3-326-20(E), 3021-3-327-20(E), 3021-3-328-20(E), 3021-3-329-20(E), and 3021-3-330-20(E)) and product changes related to these manuals.

Changes	Location
A virtual machine on which JP1/AJS3 has been installed and configured can now be duplicated.	System Design (Configuration) Guide: F Configuration Guide 1: 2.2, 3.1, 3.2, 12.2, 13.1, 13.2, H Troubleshooting: 2.14 Messages 2: KFPS00615-W, KFPU00219-E
Functionality was expanded so that a disaster recovery environment can be set up with the main and remote hosts whose logical host names are the same.	Configuration Guide 1: 9.1, 9.2.1, 9.2.2, 9.2.3, 9.3, 18.1, 18.2.1, 18.2.2, 18.2.3, 18.3 Administration Guide: 12.1.2, 12.1.3, 12.1.4, 12.2.1, 12.2.2, 12.2.3, 12.3.1, 12.4.1, 12.4.2 Command Reference 2: 2. jajs_rpenvexport, 2. jajs_rpenvimport, 2. jajs_rpsite Messages 1: 1.3.3, 1.3.9, 1.4.1, KAVS3702-E, KAVS3710-I, KAVS3711-E, KAVS3754-E Messages 2: KNAD3994-E
A setting for shifting the start day by a number of days (counting both open and closed days) was added.	Overview: 3.3.2 System Design (Work Tasks) Guide: 3.5.5 Operator's Guide: 15.3.17 Command Reference 1: 2. ajschgnet, 2. ajsprint Command Reference 2: 4.2.4 Messages 1: KAVS0188-E Messages 2: KAVV455-E
A function that holds jobnet execution during immediate execution registration was added.	Overview: 3.4.2, 4.1.1

Changes	Location
A function that holds jobnet execution during immediate execution registration was added.	System Design (Work Tasks) Guide: 2.2.3
	Operator's Guide: 15.3.1, 15.3.22, 15.3.38, 15.3.47, 15.10.1
	Command Reference 1: 2. ajsentry
A function that can execute some commands from JP1/AJS3 - View to JP1/AJS3 - View to JP1/AJS3 - Manager was added.	System Design (Configuration) Guide: 4.5.4
	Configuration Guide 1: <i>C.1</i>
	Administration Guide: 2.2.2, 2.2.4, 2.3.5, 13.1, 13.1.8
	Troubleshooting:
	A.1, A.3
	10.4, 11.1.1, 11.3.9, 11.3.18, 15.3.2, 15.3.3, 15.3.52, 15.3.53, 15.3.54, 15.4.2, 15.4.3, 15.7.2, 15.7.3, 15.8.2, 15.8.3, 15.9.2, 15.9.3, 15.10.2, 15.10.3
	Command Reference 1:
	2. ajslogprint, 2. ajsprint, 2. ajsshow, 2. ajsstatus
	Command Reference 2:
	2. jajs_setup_cluster
	Messages 1: 1.3.3, KAVS0901-E, KAVS0538-I, KAVS0539-I
	Messages 2:
	KAVV263-E, KAVV269-E, KAVV385-E, KAVV418-E, KAVV419-E, KAVV2507-E, KAVV3900-Q to KAVV3910-E, KAVV3912-E to KAVV3919-E, KAVV3922-E to KAVV3929-E, KAVV3931-E, KAVV3932-E, KAVV3934-E to KAVV3936-Q
The files jajs_log.bat and jajs_log, which have the same	System Design (Configuration) Guide:
functionality as the data collection tool (_04.bat and _04), are now	5.1.1, 9.4
available. In addition, an option was added to the Windows version of the data collection tools that allows you to specify the location to which data is	Configuration Guide 1:
output.	2.2.1, 2.2.2, 7.1.1, 7.1.2, 12.2.1, 16.1.1, 16.1.2
	Administration Guide:
	2.2.5, 2.3.0
	<i>1 4 1 1 4 2 2 7 2</i>
	Command Reference 1
	1.5.8, 1.6, 2. jajs_log or _04 (UNIX only), 2. jajs_log.bat or _04.bat (Windows only)
	Command Reference 2:
	1.5.8, 1.6
	Messages 2: KAVU5287-E, KAVU5501-E

Changes	Location
An option was added to the ajsprint command so that relation line information can be output in order of the unit name.	Configuration Guide 2: 2.2.1, 2.2.2 Administration Guide: 13.1, 13.1.8 Command Reference 1: 2. ajsprint
The procedure for changing the IP address of an agent host was changed.	Configuration Guide 1: <i>6.3.19</i> , <i>15.3.19</i> Configuration Guide 2: <i>2.4.1</i> , <i>2.4.2</i> Administration Guide: <i>8.9.2</i> Messages 1: <i>1.3.4</i> , <i>KAVT0198-E</i> , <i>KAVT0199-E</i> , <i>KAVT0528-E</i> , <i>KAVT0658-E</i> to <i>KAVT0661-E</i> , <i>KAVT0664-E</i>
UTF-8 was added to the list of character encodings that can be used in AIX, HP-UX, and Solaris 10.	Overview: 10.1.1 System Design (Configuration) Guide: 2.4.3, 7.2.2, 8.2.2 Configuration Guide 1: 13.4.1, 15.1.9, C.2, D.2 Configuration Guide 2: 2.2.2, 2.7.1, 2.8.2 Administration Guide: 4.4.2 Operator's Guide: 15.3.6 Command Reference 1: 1.4.1 Command Reference 2: 1.4.1, 2. ajsembdbsetup, 2. jajs_setup, 2. jajs_setup_cluster Messages 2: KAVV179-E, KAVV503-E, KAVV601-E, KAVV882-E, KAVV883-E, KAVV1503-E, KAVV2119-E
The number of characters that can be used when specifying a logical host name for the command jajs_killall.cluster was increased.	Administration Guide: 11.6.1 Command Reference 1: 2. jajs_killall.cluster

Legend:

Overview: Job Management Partner 1/Automatic Job Management System 3 Overview

System Design (Configuration) Guide: Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide

System Design (Work Tasks) Guide: Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide Configuration Guide 1: Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1 Configuration Guide 2: Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2 Administration Guide: Job Management Partner 1/Automatic Job Management System 3 Administration Guide Troubleshooting: Job Management Partner 1/Automatic Job Management System 3 Troubleshooting Operator's Guide: Job Management Partner 1/Automatic Job Management System 3 Operator's Guide Command Reference 1: Job Management Partner 1/Automatic Job Management System 3 Command Reference 1 Command Reference 2: Job Management Partner 1/Automatic Job Management System 3 Command Reference 2 Linkage Guide: Job Management Partner 1/Automatic Job Management System 3 Linkage Guide Messages 1: Job Management Partner 1/Automatic Job Management System 3 Messages 1 Messages 2: Job Management Partner 1/Automatic Job Management System 3 Messages 2

In addition to the above changes, minor editorial corrections were made.

## Preface

This manual describes the commands of Job Management Partner 1/Automatic Job Management System 3 (abbreviated hereafter to *JP1/AJS3*).

## Intended readers

This manual is intended for:

- Those who wish to operate an automatic job execution system with JP1/AJS3 and those who design automatic job execution systems.
- Those who operate an automatic job execution system with JP1/AJS3.

## Organization of this manual

This manual organized into the following chapters. The manual is a common reference for all supported operating systems. Any platform-dependent differences in functionality are noted in the manual.

1. Overview of Commands

Chapter 1 describes how to operate JP1/AJS3 using commands.

2. Commands

Chapter 2 describes the JP1/AJS3 commands.

## Conventions: Diagrams

This manual uses the following conventions in diagrams:



## Conventions: Fonts and symbols

The following table explains the text formatting conventions used in this manual:

Text formatting	Convention
Bold	<ul> <li>Bold characters indicate text in a window, other than the window title. Such text includes menus, menu options, buttons, radio box options, or explanatory labels. For example:</li> <li>From the File menu, choose Open.</li> <li>Click the Cancel button.</li> <li>In the Enter name entry box, type your name.</li> </ul>
Italic	<ul> <li>Italic characters indicate a placeholder for some actual text to be provided by the user or system. For example:</li> <li>Write the command as follows: copy source-file target-file</li> <li>The following message appears: A file was not found. (file = file-name)</li> <li>Italic characters are also used for emphasis. For example:</li> <li>Do not delete the configuration file.</li> </ul>
Monospace	<ul> <li>Monospace characters indicate text that the user enters without change, or text (such as messages) output by the system. For example:</li> <li>At the prompt, enter dir.</li> <li>Use the send command to send mail.</li> <li>The following message is displayed: The password is incorrect.</li> </ul>

## The following table explains the symbols used in this manual:

Symbol	Convention
Ι	In syntax explanations, a vertical bar separates multiple items, and has the meaning of OR. For example: A   B   C means A, or B, or C.
{ }	In syntax explanations, curly brackets indicate that only one of the enclosed items is to be selected. For example: $\{A   B   C\}$ means only one of A, or B, or C.
[ ]	<ul> <li>In syntax explanations, square brackets indicate that the enclosed item or items are optional. For example:</li> <li>[A] means that you can specify A or nothing.</li> <li>[B C] means that you can specify B, or C, or nothing.</li> </ul>
	<ul> <li>In coding, an ellipsis () indicates that one or more lines of coding have been omitted.</li> <li>In syntax explanations, an ellipsis indicates that the immediately preceding item can be repeated as many times as necessary. For example:</li> <li>A, B, B, means that, after you specify A, B, you can specify B as many times as necessary.</li> </ul>
X	Multiplication sign
/	Division sign
<b>↑ ↑</b>	The calculation result is rounded up to the next whole number. Example: The result of $\uparrow$ 34/3 $\uparrow$ is 12.
~ (tilde)	The item shown before this symbol must be specified in accordance with the conventions shown for angle brackets, double parentheses, and double angle brackets (below).

Symbol	Convention
<>	Indicates the characters and lexical elements that can be specified.
(angle brackets)	<characters></characters>
	One or more Kanji characters, katakana characters, upper-case alphabetic characters, lower-case alphabetic characters, or numeric characters
	<numeric></numeric>
	0, 1, 2, 3, 4, 5, 6, 7, 8, or 9
	<alphabetic character=""></alphabetic>
	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z,  #, or @
	<alphanumeric character=""></alphanumeric>
	Alphabetic or numeric character
	<symbolic name=""></symbolic>
	No more than eight alphanumeric characters beginning with an alphabetic character
	<unsigned integer=""></unsigned>
	One or more numeric characters
	<hexadecimal character=""></hexadecimal>
	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, or F
	<file name=""></file>
	A system-determined name assigned to a file
	<pre><path></path></pre>
	The directories contained in the path, with each name separated by a forward slash (/) or backslash ( $\backslash$ ). The path notation is OS-dependent.
(( )) (double parentheses)	Indicates the range of specifiable values.
<< >>	Indicates the default assumed by the system when a value is unspecified.
(double angle brackets)	Example:
	If you do not specify <i>days-to-keep-form</i> ~ <numeric> ((0 to 365)) &lt;&lt;365&gt;&gt;, 365 is assumed as the number of days to keep the form.</numeric>
MAX	Choose the largest of the calculation results.
	Example:
	The result of MAX (3 $x$ 6, 4 + 7) is 18.

## Conventions: Version numbers

The version numbers of Hitachi program products are usually written as two sets of two digits each, separated by a hyphen. For example:

- Version 1.00 (or 1.0) is written as 01-00.
- Version 2.05 is written as 02-05.
- Version 2.50 (or 2.5) is written as 02-50.
- Version 12.25 is written as 12-25.

The version number might be shown on the spine of a manual as *Ver. 2.00*, but the same version number would be written in the program as *02-00*.

## ■ JP1 program reorganization in version 8

The following are the major changes that have been made to the JP1 product suite in version 8:

- JP1/AJS2 Advanced Manager was eliminated, and the database provided by JP1/AJS2 Advanced Manager was integrated into JP1/AJS2 Manager in JP1 Version 8.
- JP1/AJS2 Client Toolkit was eliminated.
- JP1/AJS2 View products for platforms other than Windows were eliminated.

## Organization of JP1/AJS3 manuals and choosing the right manuals

There are 13 JP1/AJS3 manuals. The following table summarizes their contents.

Note that *Job Management Partner 1/Automatic Job Management System 3* has been omitted from the manual titles in the table.

No.	Manual	Contents
1	Overview (3021-3-318(E))	<ul><li>JP1/AJS3 features</li><li>Description of functions</li></ul>
2	System Design (Configuration) Guide (3021-3-319(E))	<ul><li>Information that must be considered when designing a system</li><li>Cautionary notes on designing a system</li></ul>
3	System Design (Work Tasks) Guide (3021-3-320(E))	<ul><li>Information that must be considered when constructing jobs and jobnets</li><li>Cautionary notes on designing jobs and jobnets</li></ul>
4	Configuration Guide 1 (3021-3-321(E))	<ul><li>Installation and setup procedures</li><li>Environment setup procedure by operation type</li></ul>
5	Configuration Guide 2 (3021-3-322(E))	<ul><li>Description of environment setting parameters</li><li>Description of operation profiles</li></ul>
6	Administration Guide (3021-3-323(E))	<ul><li>Information required to operate a system</li><li>Know-how useful for JP1/AJS3 operation</li></ul>
7	Troubleshooting (3021-3-324(E))	<ul><li>How to troubleshoot errors</li><li>Data required when an error occurs</li></ul>
8	<i>Operator's Guide</i> (3021-3-325(E))	<ul> <li>How to operate JP1/AJS3 - View</li> <li>How to operate JP1/AJS3 Console View</li> <li>Description of windows and dialog boxes</li> </ul>
9	Command Reference 1 (3021-3-326(E))	Command syntax
10	Command Reference 2 (3021-3-327(E))	<ul><li>Syntax of commands used for setup and special operations</li><li>Syntax and coding examples of information definition files</li></ul>
11	Linkage Guide (3021-3-328(E))	• Description of functions that can be used when linked with other products and the setup method
12	Messages 1 (3021-3-329(E))	Messages output by JP1/AJS3 (messages beginning with KAJS to KAVT)
13	Messages 2 (3021-3-330(E))	Messages output by JP1/AJS3 (messages beginning with KAVU to KNAD)

Use the following illustration and table as a guide to determine the manuals you need to read.



Organization of JP1/AJS3 manuals

Purpose	Required reading	Read as necessary
To learn about JP1/AJS3's functionalities	• Overview (3021-3-318(E))	• Linkage Guide (3021-3-328(E))
To configure a system (including installation and setup) that automatically runs jobs	<ul> <li>System Design (Configuration) Guide (3021-3-319(E))</li> <li>Configuration Guide 1 (3021-3-321(E))</li> </ul>	<ul> <li>Configuration Guide 2 (3021-3-322(E))</li> <li>Linkage Guide (3021-3-328(E))</li> </ul>
To design work tasks that will be automated (including job definitions and schedule definitions)	<ul> <li>System Design (Work Tasks) Guide (3021-3-320(E))</li> </ul>	• Operator's Guide (3021-3-325(E))
To learn about monitoring and maintaining a running system	• Administration Guide (3021-3-323(E))	<ul> <li>Troubleshooting (3021-3-324(E))</li> <li>Messages 1 (3021-3-329(E))</li> <li>Messages 2 (3021-3-330(E))</li> </ul>
To learn about what action you need to take for problems that occur during operation	• Troubleshooting (3021-3-324(E))	<ul> <li>Messages 1 (3021-3-329(E))</li> <li>Messages 2</li> </ul>

Purpose	Required reading	Read as necessary
To learn about what action you need to take for problems that occur during operation	• <i>Troubleshooting</i> (3021-3-324(E))	(3021-3-330(E))
To learn about operating JP1/AJS3	• Operator's Guide (3021-3-325(E))	<ul> <li>Command Reference 1 (3021-3-326(E))</li> <li>Command Reference 2 (3021-3-327(E))</li> </ul>

## Contents

Notices 2

Preface 12

**1** 1.1 1.1.1 1.1.2 1.1.3 1.1.4 1.1.5 1.1.6 1.1.7 1.1.8 1.2 1.2.1 1.2.2 1.2.3

1.2.4 1.2.5 1.2.6 1.3 1.3.1 1.3.2 1.3.3 1.4 1.4.1 1.4.2 1.5 1.5.1 1.5.2 1.5.3 1.5.4 1.5.5 1.5.6 1.5.7

Summary of amendments 8

Overview of Commands 22
Command syntax 23
Specifying a command 23
Specifying a unit name 24
Specifying a unit name in a command when using a planning group 25
Specifying wildcard characters 28
Specifying an IPv6 address 28
Symbols used in command usage description 28
Remote execution of a command 29
Environment variables for command execution 30
Notes on using commands 31
Notes common to all commands 31
Notes on commands related to the scheduler service 31
Notes on commands that consume a large amount of system resources or commands that perform mutually conflicting processes 31
Notes on operation in the console for executing commands 32
Cautionary notes when UTF-8 is used as the character encoding 32
Note on using commands in Windows Server 2012 or Windows Server 2008 33
Linkage with other programs 34
Linkage with JP1/NQSEXEC 34
Linkage with JP1/OJE for VOS3 35
Linkage with AS/400 (JP1/OJE for Midrange Computer) 36
Environment variables 37
Environment variables used to execute JP1/AJS3 commands 37
Environment variables set when a job is executed from JP1/AJS3 39
Commands 44
Commands used to set up JP1/AJS3 44
Commands used to customize environments 46
Commands used to control JP1/AJS3 47
Commands used to manipulate units 49
Commands used to operate execution agents 54
Commands used to execute jobs 55
Commands used to manipulate the embedded database 55

- 1.5.8 Commands used when an error occurs 56
- 1.5.9 Commands used during special operation 57
- 1.6 Prerequisites to use commands 64

#### 2 Commands 71

ajs 72 ajs2collectcore (UNIX only) 76 ajsagtadd 82 ajsagtalt 90 ajsagtdel 96 ajsagtprint 99 ajsagtshow 103 ajsalter 108 ajsbackup 111 ajsbkudel 115 ajscalendar 117 ajschange 124 ajschgjob 140 ajschgnet 172 ajschgstat 187 ajschkdef 193 ajschkstart (UNIX only) 204 ajschkstop (UNIX only) 206 ajschktrsetsz 208 ajscopy 209 ajsdbcond 214 ajsdefine 222 ajsdelete 226 ajsembdbaddarea 229 ajsembdbaddlog 233 ajsembdbbackup 237 ajsembdbcancel 243 ajsembdboplog 246 ajsembdbreclaim 252 ajsembdbrorg 257 ajsembdbrstr 261 ajsembdbstart 268 ajsembdbstatus 271 ajsembdbstop 305 ajsentry 308 ajsexport 315 ajsgtroot 317 ajsimport 319 ajsintrpt 321 ajskill 324 ajsleave 328

ajslogprint 333 ajsname 337 ajsplan 340 ajsplanout 353 ajsprint 357 ajsprofalter 393 ajsprofstatus 396 ajsrelease 399 ajsrerun 407 ajsrestore 412 ajsrgexport 416 ajsrgimport 419 ajsschedule 422 ajsshow 425 ajsstart 466 ajsstatus 470 ajsstop 478 ajssuspend 484 ajstrsetsz 487 jajs\_hstd 489 jajs\_hstd\_stop 491 jajs\_killall.cluster (UNIX only) 493 jajs\_log or \_04 (UNIX only) 495 jajs\_log.bat or \_04.bat (Windows only) 505 jajs\_pmtcon 515 jajsshowadminusr (UNIX only) 518 jajs\_spmd 519 jajs\_spmd\_status 524 jajs\_spmd\_stop 528 jajs\_start (UNIX only) 531 jajs\_start.cluster (UNIX only) 533 jajs\_status 535 jajs\_stop (UNIX only) 543 jajs\_stop.cluster (UNIX only) 545 jp1exec (Windows only) 547 jp1exit (Windows only) 550 jpoagoec 553 jpoagtjobshow 556 jpomailprof (Windows only) 560 jpomanevreset 569 jpomanevshow 577 jpomanjobshow 581 jpqdbcond 585

#### Appendixes 593

A A.1 Notes on Defining Environment Variables and an Environment Variable File 594 Notes on defining environment variables 594

A.2	Notes on defining an environment variable file 595		
В	Notes on Using the Embedded-Database Commands 598		
B.1	Adding a new administrator for the embedded database or changing an existing administrator 599		
B.2	Changing the options of the tables in the embedded database 601		
B.3	ajsembdbadduser 603		
B.4	ajsembdbreuse 606		
С	Privileges Required for Operation as the AJS Administrator 611		
C.1	Command execution privileges for operation as the AJS administrator 611		
C.2	Access permissions for directories or files required for command operations by the AJS administrator 611		
D	Version Revisions 614		
D.1	Revisions in 10-50 614		
D.2	Revisions in 10-10 615		
D.3	Revisions in 10-00 616		
D.4	Revisions in 09-00 619		
D.5	Revisions in 08-00 622		
D.6	Revisions in 07-50 622		
D.7	Revisions in 07-00 624		
E	Reference Material for This Manual 626		
E.1	Related publications 626		
E.2	Conventions: Abbreviations for product names 628		
E.3	Conventions: Acronyms 630		
E.4	Conventions: KB, MB, GB, and TB 631		
E.5	Conventions: Meaning of "directory" and "folder" 631		
E.6	Conventions: Meaning of "member of the Administrators group" 631		
E.7	Default installation folders of JP1/AJS3 for Windows 631		
E.8	About the Start menu in Windows 632		
E.9	Online manual 632		
E.10	Regular expressions available in JP1/AJS3 632		
E.11	About the 3rd level and 4th level Kanji characters added in JIS 2004 (JIS X 0213:2004) 632		
E.12	About NNM linkage 633		
F	Glossary 634		

## Index 648

## **Overview of Commands**

This chapter describes how to operate JP1/AJS3 using commands.

The same syntax and rules for JP1/AJS3 commands apply to both Windows and UNIX. (Note, however, that some of the commands and options that you can use differ between Windows and UNIX.)

Under Windows, execute commands from the command prompt. You can also use JP1/Script to create a script file for JP1/AJS3 commands. Using a script file created with JP1/Script, you can specify the time to start script processing or to automatically execute the script upon the activation of the system. For details about JP1/Script, see the manual *Job Management Partner 1/Script Description and Reference (for Windows Systems)*.

Under UNIX, execute the commands from the control terminal.

## 1.1 Command syntax

This section describes the command syntax, including how to specify a command and the symbols used in the description of the command usage.

## 1.1.1 Specifying a command

Specify a command as follows:

```
ajsxxx

\begin{bmatrix} \Delta_1 - option - A [\Delta_0 value - a [, value - b [, value - c...]]] ] ...(1) \\ \begin{bmatrix} \Delta_1 - option - B [\Delta_0 value - a [, value - b [, value - c...]]] ] ...(1) \\ \begin{bmatrix} \Delta_1 arbitrary - name - X [\Delta_1 arbitrary - name - Y [\Delta_1 arbitrary - name - Z...]] \end{bmatrix} ...(2)

\Delta_0: \text{ Specifies a blank consisting of 0 or more bytes. The blank can be omitted.} \\ \Delta_1: \text{ Specifies a blank consisting of 1 or more bytes. The blank cannot be omitted.}
```

The parameters marked (1) are called options. All the parameters marked (2) are called arguments.

You can specify arguments as follows:

- Specify an option or options first, and then specify an arbitrary name or names, such as a unit name. If you specify an arbitrary name before an option, the system handles all specified arguments as arbitrary names.
- You can specify multiple options in any sequence. The same option, however, cannot appear more than once.
- You can specify multiple values for a single option by using commas to delimit them.
- You can collectively specify several options having no values.
- Example:

```
You can specify -abc instead of -a-b-c.
```

- You cannot collectively specify several two-byte options having no values.
  - Example:

```
You cannot specify -a-ab as -aab or -cd -cf as -cdcf.
```

- You can specify a value for the last option of those collectively specified. Example:
  - In -abc xyz, xyz specifies the value of c.
- If you specify a value for an option having no value, the system handles that option and all subsequent arguments as arbitrary names.
- Specifying an unexpected option results in an error.
- See 1.1.2 Specifying a unit name for notes on specifying a unit name for an arbitrary name.
- See 1.1.4 Specifying wildcard characters for notes on specifying wildcard characters for an arbitrary name.
- To specify the first arbitrary name (*arbitrary-name-X* in the above example) with a string starting with "-", enter
   -Δ<sub>1</sub> *arbitrary-name-X*. (The system handles the string following -- Δ<sub>1</sub> as an arbitrary name.) The specification of the second and subsequent arbitrary names does not require -- Δ<sub>1</sub>.
   Example:

To specify two arbitrary names (-jobA and -jobB) in series, enter -- -jobA -jobB.

<sup>1.</sup> Overview of Commands

- You can use regular expressions for an arbitrary name.
- Specifying a number of arbitrary names exceeding the expected maximum results in an error.
- Characters specified as arguments are case sensitive. Be careful about the case.

## 1.1.2 Specifying a unit name

The following describes how to specify a unit name as an arbitrary name for a command argument.

Specify a unit name as follows:

Command in which you can specify a logical host name (when remotely accessing an object on another host)

```
[[logical-host-name:][scheduler-service-name]:]unit-name[:@execution-ID]
```

Command in which you cannot specify a logical host name (when locally accessing a unit on the local host)

```
[[scheduler-service-name]:]unit-name[:@execution-ID]
```

The following explains the arguments:

#### logical-host-name

Some commands accept the specification of a logical host name while others do not. See the description of each command for details.

When the local host has more than one logical host name, specifying a scheduler service name and environment variable JP1\_HOSTNAME determines the logical host name. You do not need to specify a logical host name. If you specify a logical host name, the system will attempt to establish communication by TCP/IP even within the local host, requiring the settings for authentication.

If you omit a logical host name, the specified scheduler service name will be prefixed with the value of environment variable AJSMANAGERHOST.

If AJSMANAGERHOST is not set, the system assumes that the service resides within the local host and uses the logical host name specified in environment variable JP1 HOSTNAME.

If JP1\_HOSTNAME is not set, the system assumes the logical host name of the local host, specified in the JP1/Base configuration. With *logical-host-name* set to JP1\_HOSTNAME\_DEFAULT, the system host name (gethostname) is assumed.

Without the  $JP1\_HOSTNAME$  environment variable, however, the system assumes the JP1/AJS3 service for the physical host.

#### scheduler-service-name

If you specify a scheduler service name, the -F option and environment variable AJSCONF are ignored.

If you do not specify a scheduler service name, the value set in the -F option is assumed. If the -F option is omitted, the value of the environment variable AJSCONF is assumed. If AJSCONF is not set, the system assumes the default *scheduler* service name.

#### unit-name

For a unit name, you can specify a job group name, jobnet name, or job name. You can also use a full name to specify the unit name.

A full name starts with /, followed by the names of the root job group to the unit, each delimited with /. The full name of a unit is uniquely managed in JP1/AJS3.

If you do not use a full name to specify a unit, the name will be prefixed with the value of environment variable AJSPATH. If AJSPATH is not set, the name will be prefixed with /.

<sup>1.</sup> Overview of Commands

You can use the following symbols to enable migration from the previous products (JP1/AJS):

"&'\*<>?[\]^`{|}~

If you include any of the above symbols in a unit name, enclose the entire unit name between double quotation marks ("), and place the backslash  $(\)$  character before each included symbol to cast the symbol. For example, if you use the ajsprint command and specify the unit /net[1], specify ajsprint "/net\[1\]".

These symbols are provided only for enabling migration from the previous products (JP1/AJS3), so do not use them for other purposes.

#### execution-ID

Some commands accept the specification of an execution ID while others do not. See the description of each command for details.

An execution ID is a number assigned to a scheduled execution for the top-level jobnet when registering the jobnet. You can use JP1/AJS3 - View and ajsshow command to check the execution ID. If you do not specify any execution ID for a command that accepts the specification of an execution ID, the command automatically determines the target generation. For details about automatic determination of jobnet generations, see *4.2 Managing jobnet generations* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.

## 1.1.3 Specifying a unit name in a command when using a planning group

If operating a unit under a planning group with the following commands, units, which have a generation at the command executions, are automatically selected as operands without the root jobnet name specified. Therefore, when the commands are executed, you can operate the running root job or its subordinate jobs even if the root jobnet name is not specified.

- ajschgstat
- ajsintrpt
- ajskill
- ajsplan
- ajsrerun
- ajsshow

Whether a unit is automatically selected as an operand depends on the value specified in -X option in the above commands or on the value of the environment variable set in AJSAUTOJUDGE. Other than the above commands, irrespective of the setting of the environment variable AJSAUTOJUDGE, the root jobnet name under a planning group cannot be omitted. The unit name should be specified in a full path which you want to operate.

For details of the commands above, see 1.5 Commands. For detail of the environment AJSAUTOJUDGE see 1.4 Environment variables.

The following rules apply whether the automatic selection setting is valid:

1. The values specified in the -x option of the command has the priority. If the -x option is specified, the decision takes place according to the specified value.

When -X yes is specified:

Automatic selection is effective. You can specify a unit name without the root jobnet under the planning group. The running units are selected automatically and execution takes place on the corresponding units.

<sup>1.</sup> Overview of Commands

When -X no is specified:

Automatic selection is not effective. You cannot omit the root jobnet name under the planning group. Specify the unit name in a full path.

When -X auto is specified:

Specify the root jobnet name in a full path under the planning group. In this case, the specified unit is an operand. The path name without specifying the root jobnet name under the planning group is shared by another unit is considered as omitted, the running units are automatically selected and the corresponding units are operated.

2. If the -X option is not specified, the value of the environment variable AJSAUTOJUDGE decides actions.

When AJSAUTOJUDGE is YES:

Automatic selection is effective. You can specify a unit name without the root jobnet under the planning group. The running units are selected automatically and execution takes place on the corresponding units.

When AJSAUTOJUDGE is NO:

Automatic selection is not effective. You cannot omit the root jobnet name under the planning group. Specify the unit name in a full path.

When AJSAUTOJUDGE is AUTO:

Specify the root jobnet name in a full path under the planning group. In this case, the specified unit is an operand. The path name without specifying the root jobnet name under the planning group is shared by another units is considered as omitted, the running units are automatically selected and the corresponding units are operated.

When value is not set:

Automatic selection is effective. You can specify a unit name without the root jobnet under the planning group. The running units are selected automatically and execution takes place on the corresponding units. If the unit name specified without a jobnet name cannot be found, the unit is considered as a full path name, and the corresponding unit is executed. If there is not corresponding unit, it is an error.

For a unit under the job group, the root jobnet name should be specified even if the value of the -X is specified or that of the environment variable AJSAUTOJUDGE is set.

For the environment variable AJSAUTOJUDGE used for remote command execution, the value set when JP1/AJS3 is started is applied.

The following figure shows the unit configuration of a planning group when a command operates a unit under the planning group.

#### Figure 1-1: Unit configuration of planning group when a command executes



<sup>1.</sup> Overview of Commands

The following example of the ajsplan command shows, in the unit configuration shown in *Figure 1-1*, depending on the option specification and the setting of the environment variable, which unit is treated as an operand.

```
When -X yes is specified:
  Command sequence: ajsplan -h -X yes /Planning group
  Operand unit: planning group/Jobnet1-3
  Command sequence: ajsplan -h -X yes /Planning group/Job1
  Operand unit: planning group/Jobnet1-3/Job1
When -x no is specified:
  Command sequence: ajsplan -h -X no /Planning group/Jobnet1-3/Job1
  Operand unit: planning group/jobnet1-3/Job1
When -X auto is specified:
  Command sequence: ajsplan -h -X auto /Planning group
  Operand unit: Planning group/Jobnet1-3
  Command sequence: ajsplan -h -X auto /Planning group/Jobnet1-1
  Operand unit: Planning group/Jobnet1-1
  Command sequence: ajsplan -h -X auto /Planning group/Job1
  Operand unit: Planning group/Jobnet1-3/Job1
When AJSAUTOJUDGE is YES:
  Command sequence: ajsplan -h /Planning group
  Operand unit: Planning group/Jobnet1-3
  Command sequence: ajsplan -h /Planning group/Job1
  Operand unit: Planning group/Jobnet1-3/Job1
When AJSAUTOJUDGE is NO:
  Command sequence: ajsplan -h /Planning group/jobnet1-3/Job1
  Operand unit: Planning group/jobnet1-3/Job1
When AJSAUTOJUDGE is AUTO:
  Command sequence: ajsplan -h /Planning group
  Operand unit: Planning group/jobnet1-3
  Command sequence: ajsplan -h /Planning group/Jobnet1-1
  Operand unit: Planning group/Jobnet1-1
  Command sequence: ajsplan -h /Planning group/Job1
  Operand unit: Planning group/jobnet1-3/Job1
When no value is specified in AJSAUTOJUDGE:
  Command sequence: ajsplan -h /Planning group
  Operand unit: Planning group/jobnet1-3
  Command sequence: ajsplan -h /Planning group/Jobnet1-1
  Operand unit: Planning group/Jobnet1-1
  Command sequence: ajsplan -h /Planning group/Job1
  Operand unit: Planning group/Jobnet1-3/Job1
```

1. Overview of Commands

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1

The root jobnet name under the planning group (Planning\_group/Jobnet1-2) and the unit name under the root jobnet under the root jobnet (Planning\_group/Jobnet1-2/Jobnet1-2) share the same unit name, the root jobnet name should be omitted when specifying the unit name. The running units are automatically selected and the corresponding units are operated.

If you want to operate the root jobnet under the planning group (Planning\_group/Jobnet1-2), either specify no in the -X option or specify NO in the environment variable AJSAUTOJUDGE. with the unit name in a full path.

## 1.1.4 Specifying wildcard characters

Some arbitrary names can be specified with wildcard characters (such as \*, ?, [ and ]).

For example, when jobs (job1, job2, job3, job4) are defined in a jobnet (/net1), and you want to select all the jobs in the jobnet (/net1) as the operation target, you can specify /net1/\*, /net1/job?, or /net1/job[1234].

## 1.1.5 Specifying an IPv6 address

An IPv6 address can be specified as a command argument if it meets the following conditions:

- Only alphanumeric characters and colons (:) are used. Note that alphabetic characters are case insensitive.
- The total size of the specified characters is within 3 to 39 bytes.

The following rules apply to the specification of IPv6 addresses:

- If a 16-bit character string (block) delimited by colons (:) begins with 0, the 0 can be omitted. Example: The following IPv6 addresses are treated as the same address: 2001:db80:1234:5678:9abc:def1:2345:0001 2001:db80:1234:5678:9abc:def1:2345:1
- 16-bit character strings (blocks) whose bits are all 0 can be omitted. Consecutive blocks that contain only 0 can be omitted as a unit.

Example: The following IPv6 addresses are treated as the same address: 2001:db80:0000:0000:0000:0000:9abc 2001:db80::9abc

- In JP1/AJS3, IPv6 addresses cannot be enclosed in square brackets ([]).
   Example (allowed): 2001:db80::afff:1
   Example (not allowed): [2001:db80::afff:1]
- In JP1/AJS3, prefixes cannot be specified for IPv6 addresses.
   Example (allowed): 2001:db80::afff:1
   Example (not allowed): 2001:db80::afff:1/32

## 1.1.6 Symbols used in command usage description

The following table lists the symbols used in the description of command usage.

<sup>1.</sup> Overview of Commands

Symbol	Meaning
Ι	Only one of the options separated by a vertical bar can be used at one time. Example: A B C A, B, or C
{ }	One of the items enclosed in braces and separated by a vertical bar must be specified. Example: {A B C} Specify A, B, or C.
[ ]	The item or items enclosed in brackets are optional. When multiple items are listed, choose one or omit all. Example: [A] Specify A or nothing. [B C] Specify B, C, or nothing.
	The item or items preceding the ellipsis () can be repeated. Example: A, B, After A, specify B as many times as necessary.
_ (underline)	The underlined characters are the system default when you omit all the items enclosed in brackets. If there is no default, only the specified item will take effect. Example: [ <u>A</u>  B] A is assumed if you do not specify either item.

#### Table 1-1: Symbols used in command usage description

## 1.1.7 Remote execution of a command

You can execute a command remotely from a JP1/AJS3 - Manager host to another JP1/AJS3 - Manager host.

Using the remote command execution function, you can output information about the operation of units or the current operating environment for the scheduler service to the scheduler service on the target logical host.

The standard output, standard error output, and return values for the command executed remotely are reflected on the machine from which it is executed. Messages that may appear depend on the language type selected when the JP1/AJS3 is started on the target host.

The following table shows the commands you can execute remotely and how to execute them.

Command name	Method of remote execution			
	Add a logical host name to a job, jobnet or job group name	Specify a logical host name with the AJSMANAGERHOST environment variable	Specify a logical host name with an option	
ajschange	Yes	Yes	No	

Table 1-2: Commands you can execute remotely and how to execute them

<sup>1.</sup> Overview of Commands

Command name	Method of remote execution				
	Add a logical host name to a job, jobnet or job group name	Specify a logical host name with the AJSMANAGERHOST environment variable	Specify a logical host name with an option		
ajschgjob	Yes	Yes	No		
ajschgnet	Yes	Yes	No		
ajsentry	Yes	Yes	No		
ajsintrpt	Yes	Yes	No		
ajskill	Yes	Yes	No		
ajsleave	Yes	Yes	No		
ajsplan	Yes	Yes	No		
ajsplanout	Yes	Yes	No		
ajsprint	Yes	Yes	No		
ajsrerun	Yes	Yes	No		
ajsshow	Yes	Yes	No		
ajsstatus	No	Yes	Yes <sup>#</sup>		
ajssuspend	Yes	Yes	No		

#### Legend:

Yes: Can be used.

No: Cannot be used.

#### Note

See *Table 1-6* in *1.4 Environment variables* for the list of environment variables used during command execution.

#### #

Use the -h option.

To execute a command remotely, start the JP1/AJS3 on the command target host. You must also use the JP1/Base user management function to set user authentication, user mapping, and other necessary information.

For details on how to set the user management function of JP1/Base in a Windows host, see 3. Setup in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1. For details on how to set the user management function of JP1/Base in a UNIX host, see 13. Setup in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

## 1.1.8 Environment variables for command execution

When executing a command for the JP1/AJS3 service on the logical host, you must assign a logical host name to the JP1 HOSTNAME environment variable.

With commands for operating jobnets and jobs, the privilege to access units is identified according to the OS user name for command execution. If the OS user name is different from the JP1 user name, assign the JP1 user name to the JP1 USERNAME environment variable.

See Table 1-6 in 1.4 Environment variables for the list of environment variables used during command execution.

```
1. Overview of Commands
```

The following are notes on executing commands.

## 1.2.1 Notes common to all commands

- If a command is executed with character encoding different from the character encoding used by the JP1/AJS3 service, a message is output to the integrated trace log with character encoding of the command. As a result, messages might be output in several types of character encoding characters, causing the message text to be garbled.
- If the character encoding used by the system is EUC and the character string displayed in the command execution result contains Japanese characters, the displayed execution result might be misaligned.
- In JP1/AJS3 Manager on a UNIX host, the user must have reference privilege for the /opt/jp1/hcclibcnf/ regdir/HKEY\_LOCAL\_MACHINE.dat file to execute a command. If you execute a command without reference permission for this file, the following error message is output: KAVS1007-E Host name cannot be resolved (*logical-host-name*).
- When specifying a file name as a command argument, make sure that the content of the file conforms to the character encoding specified in the AJSCHARCODE environment setting parameter.

## 1.2.2 Notes on commands related to the scheduler service

When execution registration of a jobnet (including an operation from JP1/AJS3 - View) is canceled, processing to update the database is required. Because the amount of the update processing depends on the number of saved generations, the processing might take a long time. To prevent the update processing from affecting other processing, note the following:

- Do not execute multiple commands that cancel execution registration simultaneously.
- Execute commands that cancel execution registration in non-busy hours.

# 1.2.3 Notes on commands that consume a large amount of system resources or commands that perform mutually conflicting processes

When using commands involving high cost (including operations from JP1/AJS3 - View), such as those consuming a large amount of system resources or those conflicting with each other, you should execute them as follows:

#### Operation related to the execution of jobs or jobnets

Continuously executing commands related to the execution of jobs or jobnets may increase the workload for the service, badly affecting operation. You should execute commands related to the execution of jobs or jobnets at intervals of two or three seconds. A simultaneous execution of such commands may cause contention for access to the ISAM file. You should not execute more than four or five commands simultaneously.

Examples of applicable commands: ajsleave, ajsrerun, ajsplan, and ajsintrpt

Operation affected by the number of subordinate units

For some commands, the amount of target information increases in proportion to the number of subordinate units, badly affecting operation. If the number of subordinate units exceeds 500, you should execute a command in non-

<sup>1.</sup> Overview of Commands

busy hours. A simultaneous execution of such commands may cause contention for access to the ISAM file. You should not execute more than four or five commands simultaneously.

Examples of applicable commands: ajsleave, ajsrerun, ajsplan, and ajsintrpt

Operation for a large number of units with wildcard characters or the -R option specified

If you execute a command with wildcard characters or the -R option specified, it may process a large amount of information, badly affecting operation. If you specify wildcard characters or the -R option, also use the -E, -L, or -T option to narrow the range of units to be processed. A simultaneous execution of such commands may cause contention for access to the ISAM file. You should not execute more than four or five commands simultaneously. Examples of applicable commands: ajsleave, ajsrerun, ajsplan, and ajsintrpt

Operation for jobnets having a large number of generations

If you execute a command for a jobnet having a large number of generations, it may process a large amount of information, badly affecting operation. You should execute a command for a jobnet having a large number of generations in non-busy hours. You should also use options to narrow the target period and the range of generations to be processed.

Examples of applicable commands: ajsleave, ajsrerun, ajsplan, and ajsintrpt

For a list of applicable operations, see 1.3.2 Operations that might affect JP1/AJS3 system operation in the Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide.

## 1.2.4 Notes on operation in the console for executing commands

The operating system has a feature for temporarily stopping a process running in the console. Using this feature may prevent resources allocated by the stopped process from being released, depending on the timing. In that case, other processes may be kept waiting, the remote process may time out, or the command may sleep without finishing. While executing a command, avoid the following operation:

- In Windows:
  - If the simple edit mode is enabled for the command prompt, clicking the command prompt window causes the title bar to display **Select** and the window output to stop. In that case, the execution of the command stops until canceled. You should not, therefore, use the simple edit mode.
  - Do not press Ctrl + S to stop the output during the execution of a command. The execution of the command stops until canceled.
- In UNIX:

Do not use the SIGTSTP signal to temporarily stop the process during the execution of a command. This signal is assigned to Ctrl + Z, by default. If you use the signal to stop the command with resources not released, the JP1/AJS3 service or other commands may not be able to obtain necessary resources and be placed in the wait state.

## 1.2.5 Cautionary notes when UTF-8 is used as the character encoding

• When the character encoding is UTF-8, multi-byte characters such as Japanese require more bytes than when other character encodings are used. Therefore output columns will be misaligned if output information includes Japanese when the following commands are executed:

Applicable commands:

```
ajsdbcond, ajsshow, ajsrelease, jpqagtshow, jpqqueshow, jpqresshow, jpqendjobshow, jpqjobshow, jpqdbcond, jpqreguser, ajsagtshow, ajsplanout
```

```
1. Overview of Commands
```

- When the character encoding is UTF-8, and multi-byte characters such as Japanese are specified for command execution, the number of available character codes might be fewer than if another character encoding were used.
- When the following commands are remotely executed from a host that uses UTF-8 encoding, and the execution host DB type (AJSCHARCODE) is also UTF-8, the AJSCONVERTUTF8 environment variable must be set to no.

Applicable commands:

```
ajschange, ajschgjob, ajschgnet, ajsentry, ajsintrpt, ajskill, ajsleave, ajsplan, ajsprint, ajsrerun, ajsshow, ajsstatus, ajssuspend, ajsplanout
```

If you remotely execute these commands when the AJSCONVERTUTF8 environment variable is undefined or set to yes, the execution results might be unreadable or the processing executed for the units might not be correct. For details about the AJSCONVERTUTF8 environment variable, see *Table 1-6* in *1.4 Environment variables*.

- When UTF-8 encoding is used, and the DEFLENTYPE environment setting parameter is set to sjis, the number of characters that can be specified for the following items is the same as in the Shift-JIS environment:
  - Unit name in the unit detailed information definition
  - Comment in the unit detailed information definition
  - Exclusive jobnet in the Schedule Settings

Note that the maximum number of nested units (maximum number of hierarchical levels) becomes 10 (the default is 30).

## 1.2.6 Note on using commands in Windows Server 2012 or Windows Server 2008

Using commands in Windows Server 2012 or Windows Server 2008, note the following:

- Do not use the 3rd level and 4th level Kanji characters added in JIS 2004 in command arguments. If these characters are used, operation might not be performed correctly.
- Before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. Note, however, that if UAC is disabled, you do not have to start the Command Prompt window as an administrator.

## 1.3 Linkage with other programs

You can use commands to submit jobs to the JP1/NQSEXEC host, the JP1/OJE for VOS3 host, or the AS/400 (JP1/OJE for Midrange Computer) host and monitor the job execution status.

You can link with other programs by specifying commands in the same way as normal operation without linkage; however, there are some limit values for specifying items such as job names and user names. This section provides details of the limit values and notes on each linkage program.

## 1.3.1 Linkage with JP1/NQSEXEC

#### Limit values

For a JP1/NQSEXEC system, you can use the following commands:

jpqendjobshow, jpqjobalt, jpqjobcan, jpqjobget, jpqjobshow, jpqjobsub, jpqqueshow and ajsdefine (QUEUE job definition information in a unit definition file)

The following table shows the limit values for the above commands.

Defined item	Limit values		
Manager host name	JP1/NQSEXEC host name: Character string of up to 255 bytes.		
Queue name	Character string of up to 15 bytes. Japanese characters cannot be specified. Case-sensitive.		
Job name	<ul><li>Character string of up to 15 bytes. (If more than 15 bytes are specified, excess bytes are deleted.)</li><li>Japanese characters cannot be specified. If the specified job name starts with a number, the system automatically prefixes the name with R.</li><li>By default, the system assumes the file name in the execution file name.</li></ul>		
User name	Character string of up to 15 bytes. (If more than 15 bytes are specified, you cannot execute or manipulate the job.) Japanese characters cannot be specified.		
Execution priority	<ul> <li>1, 3 or 5.</li> <li>If you specify 2 for the execution priority, the system assumes 1. If you specify 4 for the execution priority, the system assumes 5.</li> <li>If you specify an execution priority for a job, the nice value when the job is executed is applied in JP1/NQSEXEC.</li> <li>1: nice value +10</li> <li>3: nice value</li> <li>5: nice value -10</li> </ul>		
Execution file name	Character string of up to 511 bytes. Specify in the /home/jpluser/job format. Japanese characters cannot be specified.		
Parameter	Character string of up to 255 bytes. Japanese characters cannot be specified.		
Transfer destination file name	<ul><li>Character string of up to 511 bytes.</li><li>Specify an absolute path or relative path for a file name (if you specify a relative path, use a relative path from the home directory of the user who registered the job).</li><li>Japanese characters cannot be specified in the transfer destination file name or in the file.</li></ul>		

Table 1-3: Limit values when linking with JP1/NQSEXEC

<sup>1.</sup> Overview of Commands

Cautionary note

You can only submit jobs to the JP1/NQSEXEC batch queue.

## 1.3.2 Linkage with JP1/OJE for VOS3

Limit values

For a JP1/OJE for VOS3 system, you can use the following commands:

jpqendjobshow, jpqjobcan, jpqjobget, jpqjobshow, jpqjobsub, jpqqueshow and ajsdefine (QUEUE job definition information in a unit definition file)

The following table shows the limit values for the above commands.

Table 1-4: Limit values when linking with JP1/OJE for VOS3

Defined item	Limit values
Manager host name	JP1/OJE for VOS3 host name: Character string of up to 255 bytes.
Queue name	Character string of up to 32 bytes. Japanese characters cannot be specified. Case-sensitive.
Job name	Character string of up to 63 bytes. Japanese characters cannot be specified. By default, the system assumes the job name specified in the JOB statement in JCL.
User name	Character string of up to 32 bytes. Japanese characters cannot be specified.
Execution priority	Cannot be specified. (If you specify an execution priority, JP1/OJE for VOS3 ignores it. In JP1/OJE for VOS3, jobs are executed according to the execution priority sequence specified with JCL.)
Execution file name	This is a mandatory item. Character string of up to 54 bytes. Specify the name of the dataset containing the job and the member name if a segmented or LIME dataset is used. Japanese characters cannot be specified.
Parameter	Character string of up to 1,023 bytes. If you specify an argument to be passed to the program being executed, it is ignored. However, it is possible to specify a character string intended to replace part of JCL (for how to specify it, see the manual <i>VOS3 Job Management Partner 1/Open Job Entry Description, User's Guide and Reference</i> ). If the character string excluding the part used for replacement exceeds 100 bytes, a parameter error occurs.
Transfer destination file name	Character string of up to 54 bytes. Specify the name of a dataset to which you will transfer a file. Japanese characters cannot be specified in the dataset name and in the file.

Cautionary note

Before starting linkage with JP1/OJE for VOS3, you must use the jpqreguser command to register user information (for the VOS3 user corresponding to the login user for command execution) in the host from which you will submit the job.

For details on the jpqreguser command, see *jpqreguser* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

1. Overview of Commands

## 1.3.3 Linkage with AS/400 (JP1/OJE for Midrange Computer)

Limit values

You can use the following commands for the AS/400 system:

jpqendjobshow, jpqjobcan, jpqjobget, jpqjobshow, jpqjobsub, jpqqueshow and ajsdefine (QUEUE job definition information in a unit definition file).

The following table lists the limit values for the commands.

Table 1	1-5:	Limit values	when linkina	with AS/400	(JP1/OJE for	Midrange (	Computer)
i ubio	· · · ·		which in iterating	With 7 (0/ 100		manange .	Sompator)

Defined Item	Limit values
Manager host name	Host name for the AS/400 system: Character string of up to 15 bytes.
Queue name	Job queue name for the AS/400 system: Character string of up to 10 bytes.
Job name	Job name for the AS/400 system: Character string of up to 10 bytes. The default is NONAME.
User name	Character string of up to 32 bytes. Japanese characters cannot be specified.
Execution priority	Specify the execution priority for the job on the AS/400 system. You can set 1, 3, or 5. The highest priority is 5. By default, the system assumes 1. If you specify 2 or 4, the system assumes 1 or 5, respectively.
Execution file name	Specify the name of the executable file on the AS/400 system in <i>library-name/file-name</i> or <i>library-name/file-nam</i>
Parameter	Specify a parameter string of up to 32 bytes that you want to pass to the executable file on the AS/400 system. You can specify more than one parameter by delimiting them with a comma.
Transfer source file name	Specify a file in JP1/AJS3 - Manager. Use a character string of up to 511 bytes. Specify a full-path file name. Only plain-text files can be transferred. Each line cannot exceed 80 characters.
Transfer destination file name	Specify the destination on the AS/400 system in <i>library-name/file-name.member-name</i> format. You must specify a file which already exists on the AS/400 system. If you specify the file in <i>file-name.member-name</i> format without a library name, the system assumes the library name specified with DFT_PTH in the configuration definition file for the AS/400 system.

For further details, see the Job Management Partner 1/Open Job Entry for Midrange Computer Description and User's Guide.

1. Overview of Commands
This section shows the environment variables used to execute JP1/AJS3 commands as well as those set when a job is executed from JP1/AJS3.

### 1.4.1 Environment variables used to execute JP1/AJS3 commands

The following table lists the environment variables used for command execution.

Table 1–6: Environment variables used for command exec	cution
--	--------

Environment variable	Description	Referenced
AJSMANAGERHOST	Logical host name of target host	When a logical host name is omitted in the specification of a unit name for remote execution of a command <sup>#1</sup> that operates units or the <code>ajsstatus</code> command
JP1_HOSTNAME	Logical host name of local host	When JP1/AJS3 references the logical host name of the local host or when it references the logical host of the target of operation for command execution (assuming that no logical host name has been specified as a command option) <sup>#2</sup>
AJSCONF	Scheduler service name	When a scheduler service name is omitted in the object name specification and it is also omitted in the $-F$ option
AJSPATH	AJS path name	When a unit name is not specified as a full name (used as a job group name) in any command <sup>#1</sup> used to manipulate units
JP1_USERNAME	JP1 user name	When a JP1 user name different from the OS user name is used to acquire user access permissions by using a command used to manipulate a unit <sup>#1</sup> or a command used to operate execution agents
LANG	Language type	When the language type of the text to be output is identified. In Windows, this environment variable is not available because the language type depends on the host settings. If commands used to manipulate a unit <sup>#1</sup> are executed, make sure that the value of this environment variable is the same as the value of the AJSCHARCODE environment variable of the scheduler service in which the unit to be manipulated by the commands is defined.
TZ	Time zone	When calculating a schedule or displaying a date and time $^{\#3}$
AJSAUTOJUDGE	Specifies the function for automatically selecting a target unit from the list of units in a planning group	<pre>When the -x option is omitted in any of the following commands:#4     ajschgstat command     ajsintrpt command     ajskill command     ajsplan command     ajsrerun command     ajsshow command</pre>
AJSDISPSUBUNITTYPE	Displays or hides the job group type	When the ajsrestore command is used to output a list of the units backed up in the backup box to the standard output file <sup>#5</sup>
AJSCONVERTUTF8	Converts character codes	When a command is remotely executed, because the value of environment variable LANG on the execution host is either

Environment variable	Description	Referenced
AJSCONVERTUTF8	Converts character codes	ja_JP.UTF-8, ja_JP.utf8, JA_JP, or JA_JP.UTF-8, JP1/AJS3 - Manager communication processing does not perform character code conversion.#6

### #1

See *Table 1-11* for the commands used to manipulate units.

### #2

The user mapping to be used varies with whether or not the JP1\_HOSTNAME environment variable is set.

If the JP1\_HOSTNAME environment variable is set, the user mapping defined in the logical host specified with the JP1\_HOSTNAME environment variable is used.

Otherwise, the user mapping defined in the physical host is used.

You must set the JP1\_HOSTNAME environment variable if you reference a logical host.

Do not set <code>JP1\_HOSTNAME</code> when referencing a physical host. Setting <code>JP1\_HOSTNAME</code> may cause the command to fail.

### #3

In Windows, make sure that the time zone used for command execution is the same as the system time zone.

### #4

According to the value specified in the AJSAUTOJUDGE environment variable, select a target unit from the units listed in a planning group.

You can specify the following values for the AJSAUTOJUDGE environment variable:

YES

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

NO

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

### AUTO or no specification

Whether a target unit will automatically be selected depends on how the unit name is specified.

• If you want to automatically select a target unit:

Specify a unit name without a root jobnet name in a planning group.

• If you do not want to automatically select a target unit:

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

#### #5

According to the AJSDISPSUBUNITTYPE environment variable, determine the format of output to the standard output file.

You can specify the following values for the AJSDISPSUBUNITTYPE environment variable:

YES

Output the job group type. Output format:

<sup>1.</sup> Overview of Commands

*save-file-name*: *save-source-unit-name*: *saved-unit-name*: *saved-unit-type*(*job-group-type*) Example:

0001:/group1:group2:g(p)

### NO or no specification

Do not output the job group type.

Output format:

save-file-name: save-source-unit-name: saved-unit-name: saved-unit-type

Example:

0001:/group1:p\_group1:g

For an explanation of the unit type and job group type, see *Table 2-11* in the description of the *ajsprint* in *2*. *Commands*.

#6

When the LANG environment variable on the remote execution host is set to either  $ja_JP.UTF-8$ ,  $ja_JP.utf8$ ,  $JA_JP$ , or  $JA_JP.UTF-8$ , the value specified for the AJSCONVERTUTF8 environment variable defines whether the communication processing by JP1/AJS3 - Manager converts character codes.

The following lists the values that can be specified for the AJSCONVERTUTF8 environment variable.

 ${\tt yes} \mbox{ or undefined }$ 

JP1/AJS3 - Manager converts character codes during communication processing.

no

JP1/AJS3 - Manager does not convert character codes during communication processing.

If both the source and destination hosts for remote command execution use UTF-8, set this paramter to no.

### 1.4.2 Environment variables set when a job is executed from JP1/AJS3

The following table shows the environment variables that are set when a job is executed.

Table 1-7:	Environment	variables	set for	iob execution
		vanabico	001101	

Environment variable	Description
AJSENV	Allows you to identify that the job has been started as scheduled. Usually, this variable is set to YES.
AJSPRE_ST	Sets the character indicating the end status of the preceding job or jobnet. One of the following characters is specified: n: Normal end w: Ended with warning a: Abnormal end If there are two or more preceding jobs or jobnets, the highest level of seriousness is set. If there is no preceding job or jobnet, n (normal end) is set. For a starting job for re-execution, the status of the preceding job or jobnet of the starting job is set. If the re-execution changes the status of the preceding job or jobnet to normal end or end with warning, the changed value is set.
AJSPRE_RC	Sets the return value for the preceding job (-2,147,483,648 to 2,147,483,647). If there are two or more preceding jobs, the logical OR of all return values is set. If there is no preceding job, 0 is set. For a starting job for re-execution, the return value for the previous execution is set.
AJSNETNAME	Sets the root jobnet name (character string of up to 899 bytes).
AJSJOBNAME	Sets the job name (character string of up to 930 bytes).

<sup>1.</sup> Overview of Commands

Environment variable	Description
AJSHOST	Sets the name of the manager host (character string of up to 255 bytes) which has requested the execution of the job.
AJS_AJSCONF	Sets the scheduler service name of the manager host (character string of up to 30 bytes) which has requested the execution of the job.
AJSEXDATE	Sets the scheduled date of starting root jobnet execution (in the $yyyy/mm/dd$ format). If the execution of the jobnet is delayed or the job is re-executed on the next day, the original scheduled date is set.
AJSEXECID	Sets the job execution ID (character string of up to 10 bytes).
AJSEXECPID	Sets the execution ID of the generation for which a start condition is monitored (character string of up to 10 bytes). No value is set if a start condition is not monitored.
JP1_HOSTNAME	Sets a logical host name for only a logical host. <sup>#1</sup>
JP1JobName	Sets the execution file name or job name (character string of up to 63 bytes). If a job name has been specified in a QUEUE job or jpgjobsub command, that job name is set. If a job name has not been specified for a PC job, Unix job, QUEUE job, or action job, the execution file name is set. For the execution file name, the system assumes the first 63 bytes of the file name (excluding the path).
JP1JobID	Sets the job number (1 to 999,999). For a queueless job, this variable sets the ID (character string of up to 10 bytes) that is used internally.
JP1UserName	Sets the name of the user who has submitted the job (character string of up to 63 bytes).
JP1_USERNAME	Sets the name of the user who has submitted the job (character string of up to 63 bytes).
JP1UNCName	Sets the name of the agent host that is running the job (character string of up to 255 bytes).
JP1NBQSQueueName	Sets the name of the manager host with which the job is registered (character string of up to 255 bytes) and the queue name (character string of up to 63 bytes) in \\manager-host-name \queue-name format. Sets the name of the agent host (character string of up to 255 bytes) instead of the queue name if the execution host is specified. For a queueless job, this variable does not set anything.
JP1NBQSClientName (Windows only)	Sets the name of the client computer which has entered the job (character string of up to 15 bytes). For a queueless job, this variable does not set anything.
JP1Priority	Sets the execution priority for the job (1 to 5 for the UNIX version and 32, 64, or 128 for the Windows version; $64 = low$ , $32 = middle$ , $128 = high$ ).
HOME (UNIX only)	Sets the login directory defined in the password file of the job-specified execution user. If no execution user is specified, the OS user corresponding to the JP1 user having registered the jobnet is set as the execution user.
SHELL (UNIX only)	Sets the execution shell required to execute jobs. Execution shells are determined according to the following levels of priority. Note that the shell to set changes depending on how the job is registered. In the following cases, the first listed shell has the highest priority level: When <b>Command statement</b> is not specified for a job that will be executed in a jobnet 1. The shell specified on the first line of the script file specified for the job 2. The login shell defined in the password file of the user who executes the job 3. /bin/sh When <b>Command statement</b> is specified for a job that will be executed in a jobnet <sup>#2</sup> 1. The shell specified on the first line of <b>Command statement</b> specified for the job 2. The login shell defined in the password file of the user who executes the job 3. /bin/sh

Environment variable	Description
SHELL (UNIX only)	When the jpqjobsub command is used to execute the job 1. The shell specified on the first line of the script file specified for the job 2. The shell path name specified in the jpqjobsub command's -shl option 3. The login shell defined in the execution user's password file 4. /bin/sh
LANG (UNIX only)	Sets the LANG environment variable for use at the JP1/AJS3 startup. <sup>#4</sup> JP1/AJS3 for Windows usually does not read user environment variables. When a cluster system is set up, however, user environment variables are read according to the MSCS specifications.
LONGNAME (UNIX only)	Sets the name of the execution user specified in the job. If no execution user is specified, the OS user corresponding to the JP1 user having registered the jobnet is set as the execution user.
MAIL (UNIX only)	Sets /usr/mail/ <i>execution-user-name</i> , where <i>execution-user-name</i> refers to the job- specified execution user or the OS user corresponding to the JP1 user having registered the jobnet.
PATH (UNIX only)	Sets/bin:/usr/bin. <sup>#3,#4</sup>
AJSQLManagerName (Windows only)	For queueless jobs only, sets the name of the manager host (character string of up to 255 bytes) which has requested the execution of the job.

#### Notes

- The environment variables listed in *Table 1-7* cannot be used as environment variables for job definition. They cannot be used within any file specified as an environment file either.
- For AIX, the information for /etc/environment is not inherited.
- Do not use any environment variable starting with JP1, AJS, or AJS2 (case-insensitive).
- The TZ environment variable is not set during job execution.
- Environment variables beginning with AJS are set only when a job is registered from a jobnet. They are not set in a submit job.

#### #1

In UNIX:

• When you specify JP1/AJS3 as the execution target service in the detailed definition of a job The logical host name specified in the -h option of the jajs spmd command is set.

If you omit the -h option, and the value of the JP1\_HOSTNAME environment variable has been set, that value is passed as the logical host. Nothing is set for a physical host.

• When you specify JP1/AJS3 Queueless Agent as the execution target service in the detailed definition of a job

If the host that executes the job is a logical host, the value specified as the execution agent in the detailed definition of the job is set. Nothing is set when the host that executes the job is a physical host.

#### In Windows:

- When you specify JP1/AJS3 as the execution target service in the detailed definition of a job For a logical host, the logical host name is set in the JP1\_HOSTNAME environment variable at the startup of the JP1/AJS3 service. Nothing is set for a physical host.
- When you specify JP1/AJS3 Queueless Agent as the execution target service in the detailed definition of a job

If the host that executes the job is a logical host, the value specified as the execution agent in the detailed definition of the job is set. Nothing is set when the host that executes the job is a physical host.

<sup>1.</sup> Overview of Commands

#2

If a shell is specified on the first line of the script file specified in **Script file name** when a command statement is also specified in **Command statement**, the specification of the shell has no effect.

#### #3

When a job is started from JP1/AJS3, JP1/AJS3 will explicitly set the /bin:/usr/bin value in the PATH environment variable. If you want to set any other value, you must set the value in a definition of the command or script file specified when the job was defined, or a definition in the local login script.

#### #4

If the service to be executed is for **Queueless Agent** jobs, the environment variable value set when the queueless agent service starts will be set.

Usually, environment variables are set in JP1/AJS3. Those variables include those listed in *Table 1-7*, as well as those specified for job definition, and those contained in files specified as environment files for job definition. In addition, environment variables may also be set in the command statements, script files, local login scripts, and system login scripts specified for job definition.

For environment variables like TZ that are not set during job execution, set them as one of the options below. If the same environment variables are found in these, they will be valid according to the following levels of priority (with the value of 1 as the highest level).

- In Windows:
  - 1. Environment variables specified for Environment variables<sup>#1</sup>
  - 2. Environment variables specified for Environment file#2
  - 3. System environment variables
- In UNIX:
  - 1. Definitions in the commands or script files specified for job definition
  - 2. Definitions contained in local login scripts
  - 3. Definitions contained in system login scripts
  - 4. Environment variables specified for Environment variables<sup>#1</sup>
  - 5. Environment variables specified for Environment file#2
  - 6. Environment variables set when the queueless agent service starts#3

#### #1

Variables specified for **Environment variables** in the JP1/AJS3 - View window or those specified with the env option for the jpqjobsub command.

#### #2

Variable files specified for **Environment file** in the JP1/AJS3 - View window or those specified with the -ev option for the jpqjobsub command.

#### #3

Applicable only when the service to be executed is for **Queueless Agent** jobs.

### Cautionary note

In Windows, JP1/AJS3 services normally start with the system environment variables as the settings. User environment variables are not read. Job execution is also governed by these system environment variables. However, when the system is configured as a cluster system with logical hosts, the MSCS<sup>#</sup> reads the user environment variables

<sup>1.</sup> Overview of Commands

at system startup. The user environment variables take effect in the JP1/AJS3 services started by the MSCS on the logical hosts, and are also used at job execution.

In addition to the system environment variables, the environment variables set at OS startup are also read when JP1/AJS3 services are activated.

#

Windows Server Failover Clustering (WSFC) in Windows Server 2012 or Windows Server 2008. For clustering software other than MSCS and WSFC, see the software specifications.

<sup>1.</sup> Overview of Commands

### 1.5 Commands

This section classifies all commands into the following groups according to the purpose of the command:

- Commands used to set up JP1/AJS3
- Commands used to customize environments
- Commands used to control JP1/AJS3
- Commands used to manipulate units
- · Commands used to operate execution agents
- Commands used to execute jobs
- · Commands used to manipulate embedded databases
- Commands used when an error occurs
- · Commands used during special operation

The subsequent sections detail the commands in the alphabetical order of their names. Note that some of the commands are applicable to UNIX only and that others are applicable to Windows.

### 1.5.1 Commands used to set up JP1/AJS3

The following table lists the commands used to set up JP1/AJS3:

For details about the setup commands, see 2. Commands Used during Setup in the manual Job Management Partner 1/ Automatic Job Management System 3 Command Reference 2.

### Table 1-8: Commands used to set up JP1/AJS3

Function	Command name	Window s	UNIX	Required privileges	Supported products
Sets up the operating environment that corresponds to the logical host for JP1/ AJS3 - Manager and JP1/ AJS3 - Agent.	jplajs2_setup_clust er <sup>#1</sup>		Y	UNIX: Superuser	M and A
Sets up a database to be used by scheduler services. Sets up suspend functions.	ajssetup	Y	Y	Windows: Administrators UNIX: Superuser	М
Sets the mail distribution functions.	jpomailrecv		Y	None	M and A
Registers the VOS3 user information.	jpqreguser <sup>#1</sup>	Y	Y	None (In Windows Server 2012 or Windows Server 2008, Administrators except when the -a option is specified)	M and A
Registers information about a user assumed to be a JP1 user.	jpqregguestuser <sup>#1</sup>	Y	Y	Windows: Administrators UNIX: Superuser	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Prevents increase of the number of shared memory segments.	jpqshmake <sup>#2</sup>		Y	UNIX: Superuser	M and A
Creates or deletes an adapter command setting file used to link JP1/IM.	ajs_adapter_setup	Y	Y	Windows: Administrators UNIX: Superuser	М
Sets up an embedded database environment.	ajsembdbsetup	Y	Y	Windows: Administrators UNIX: Superuser	М
Builds an embedded database environment.	ajsembdbbuild	Y	Y	Windows: Administrators UNIX: Superuser	М
Removes setup of an embedded database.	ajsembdbunset	Y	Y	Windows: Administrators UNIX: Superuser	М
Displays the information necessary for a command that is used to manipulate the embedded database and that is registered in the configuration definition.	ajsembdbidlist	Y	Y	Windows: Administrators UNIX: Superuser	М
Sets up the execution environment for the definition pre-check function.	ajschksetup	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Defines JP1/AJS3 environment setting parameters.	jajs_config	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Sets up JP1/AJS3.	jajs_setup	Y	Y	Windows: Administrators UNIX: Superuser	М
Sets up the operating environment corresponding to the JP1/AJS3 logical host.	jajs_setup_cluster	Y	Y	Windows: Administrators UNIX: Superuser	M and A
After JP1/AJS2 is upgraded to JP1/AJS3, sets up JP1/AJS3 so that it is in the standard configuration.	jajs_migrate	Y	Y	Windows: Administrators UNIX: Superuser	М
Exports the scheduler service data to a binary file from the database in an environment of JP1/AJS2 Version 8 or earlier.	ajscnvdbexport	Y	Y	Windows: Administrators UNIX: Superuser	М
Imports database backup data to a scheduler database.	ajscnvdbimport	Y	Y	Windows: Administrators UNIX: Superuser	М
Installs the JP1/AJS3 standard database (embedded database).	ajsembdbinstl	Y	Y	Windows: Administrators UNIX: Superuser	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Uninstalls the JP1/AJS3 standard database (embedded database).	ajsembdbuninstl	Y	Y	Windows: Administrators UNIX: Superuser	М
Exports the disaster recovery operation setup information.	jajs_rpenvexport	Y	Y	Windows: Administrators UNIX: Superuser	М
Imports the disaster recovery operation setup information.	jajs_rpenvimport	Y	Y	Windows: Administrators UNIX: Superuser	М
Sets up the disaster recovery environment.	jajs_rpsite	Y	Y	Windows: Administrators UNIX: Superuser	М

Y: Supported

--: Not supported

M: JP1/AJS3 - Manager

A: JP1/AJS3 - Agent

Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

#### #1

Do not execute this command if a JP1 series product that requires JP1/Base is running.

#2

If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2 06-71-/G or an earlier version, you need to execute this command only once after setup. You do not need to execute the command again. If JP1/AJS3 has been installed as a new installation, you do not need to execute this command.

### **1.5.2 Commands used to customize environments**

The following table lists the commands used to customize JP1/AJS3 environments based on operations:

Table 1–9: Commands used to customize environmer	used to customize environments
--	--------------------------------

Function	Command name	Window s	UNIX	Required privileges	Supported products
Compresses the database of the scheduler service.	ajsdbcond	Y	Y	Windows: Administrators UNIX: Superuser	М
Changes and references the size of the trace log file.	ajstrsetsz	Y	Y	Windows: Administrators UNIX: Superuser	М
Changes the request source manager host name stored in	jpoagoec	Y	Y	Windows: Administrators UNIX: Superuser	M and A

<sup>1.</sup> Overview of Commands

Function	Command name	Window s	UNIX	Required privileges	Supported products
the event action agent process when an event job is executed.	jpoagoec	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Compresses the database in the job execution environment.	jpqdbcond	Y	Y	Windows: Administrators UNIX: Superuser	М
Changes the size of the trace log file for the JP1/AJS3 Check Manager service or the JP1/AJS3 Check Agent service.	ajschktrsetsz	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Deletes the information held by the event action control manager.	jpomanevreset	Y	Y	Windows: Administrators UNIX: Superuser	М
Analyzes the internal log of the event action control manager and displays agents that often send data to the manager, and information about start conditions.	jpomanevshow	Y	Y	Windows: Administrators UNIX: Superuser	М

Y: Supported M: JP1/AJS3 - Manager A: JP1/AJS3 - Agent

Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### 1.5.3 Commands used to control JP1/AJS3

The following table lists the commands used to control JP1/AJS3:

Table 1-10: Commands used to control JP1/AJS3

Function	Command name	Window s	UNIX	Required privileges	Supported products
Automatically starts JP1/ AJS3 at a system start.	jajs_start		Y	UNIX: Superuser	M and A
Automatically stops JP1/AJS3 at a system stop.	jajs_stop		Y	UNIX: Superuser	M and A
Starts JP1/AJS3 in the logical host environment.	jajs_start.cluster		Y	UNIX: Superuser	M and A
Stops JP1/AJS3 operating in the logical host environment.	jajs_stop.cluster		Y	UNIX: Superuser	M and A
Starts the JP1/AJS3 process.	jajs_spmd	Y	Y	Windows:	M and A

Function	Command name	Window s	UNIX	Required privileges	Supported products
Starts the JP1/AJS3 process.	jajs_spmd	Y	Y	Administrators UNIX: Superuser	M and A
Terminates the JP1/AJS3 process.	jajs_spmd_stop	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Starts a specific detailed process of the host service management function (jajs_hstd).	jajs_hstd	Y	Y	Windows: Administrators UNIX: Superuser	М
Terminates a specific detailed process of the host service management function (jajs_hstd).	jajs_hstd_stop	Y	Y	Windows: Administrators UNIX: Superuser	М
Starts the scheduler service.	ajsstart	Y	Y	Windows: Administrators UNIX: Superuser	М
Terminates the scheduler service.	ajsstop	Y	Y	Windows: Administrators UNIX: Superuser	М
Changes the operating environment of the scheduler service temporarily.	ajsalter	Y	Y	Windows: Administrators UNIX: Superuser	М
Outputs the operating environment of the scheduler service to the standard output file.	ajsstatus	Y	Y	None	М
Extracts log records that match the specified conditions from the scheduler log, and outputs the extracted log records.	ajslogprint	Y	Y	None	М
Forcibly terminates the JP1/ AJS3 process during operation in a cluster system.	jajs_killall.cluster		Y	UNIX: Superuser	M and A
Confirms the JP1/AJS3 status (whether or not each component is started or terminated).	jajs_spmd_status	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Displays the operating status of the overall JP1/AJS3 system.	jajs_status	Y	Y	None	М
Starts JP1/AJS3 - View.	ajs	Y		None	V
Starts the JP1/AJS3 Check Manager service or the JP1/ AJS3 Check Agent service.	ajschkstart		Y	UNIX: Superuser	M and A
Stops the JP1/AJS3 Check Manager service or the JP1/ AJS3 Check Agent service.	ajschkstop		Y	UNIX: Superuser	M and A
Changes the settings in an operation profile.	ajsprofalter	Y	Y	Windows: Administrators	М

<sup>1.</sup> Overview of Commands

Function	Command name	Window s	UNIX	Required privileges	Supported products
Changes the settings in an operation profile.	ajsprofalter	Y	Y	UNIX: Superuser	М
Checks the settings in an operation profile.	ajsprofstatus	Y	Y	None	М
Creates, changes, or deletes an email sending profile necessary for sending emails without using Outlook.	jpomailprof	Y		Windows: Administrators	M and A
Enables the contents of the connection permission configuration file, and outputs a list of hosts that are permitted to connect.	jajs_pmtcon	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Outputs the AJS administrator information that is set.	jajsshowadminusr		Y	UNIX: Superuser	M and A

Y: Supported

--: Not supported

M: JP1/AJS3 - Manager

A: JP1/AJS3 - Agent

V: JP1/AJS3 - View

Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### 1.5.4 Commands used to manipulate units

The following table lists the commands used to manipulate units.

The privilege required to execute these commands depends on the JP1 privilege level for the user executing the command for the JP1 resource group name specified as the attribute of the target's unit. However, the execution privilege shown is not necessarily essential if the target's unit contains no JP1 resource group name or if the command-executing user has the superuser privileges (for UNIX systems) or is logged on as a member of the Administrators privileges (in Windows systems). For details about the execution privilege, see 6.4 Setting access permissions in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

Cautionary note

If the "Required privileges" column lists more than one privilege, you need only have one of the listed privileges to execute the command.

<sup>1.</sup> Overview of Commands

Table 1-11:	Commands	used to	manipulate	units
-------------	----------	---------	------------	-------

Function	Command name	Window s	UNIX	Required privileges	Supported products
Defines a unit.	ajsdefine	Y	Y	Destination of definition JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor Target and subsequent units (Forced change of a defined unit) JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Modifies the definition of a unit defined in a jobnet.	ajschange	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor At attribute change JP1_AJS_Admin Ownership privilege for units	М
Modifies the definition of a jobnet.	ajschgnet	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Modifies the definition of a job.	ajschgjob	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Copies, moves or renames a unit.	ajscopy	Y	Y	Destination of copy/move JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor Copy-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Derator JP1_AJS_Guest Move-target and subsequent units JP1_AJS_Admin JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Deletes a unit.	ajsdelete	Y	Y	Delete-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	Μ
Outputs the name of a unit to the standard output file.	ajsname	Y	Y	Output target unit	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Outputs the name of a unit to the standard output file.	ajsname	Y	Y	JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Outputs operating environment information of the scheduler service to the standard output file.	ajsgtroot	Y	Y	None	М
Outputs the definition of a unit to the standard output file.	ajsprint	Y	Y	Output-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Backs up a unit.	ajsbackup	Y	Y	Save-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	Μ
Deletes a backup box or backup file.	ajsbkudel	Y	Y	None	М
Restores a unit.	ajsrestore	Y	Y	Destination of recovery JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor Target and subsequent units (Forced change of a defined unit) JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Exports the registered execution-schedule information of a root jobnet.	ajsrgexport	Y	Y	JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Imports the registered execution-schedule information of a root jobnet.	ajsrgimport	Y	Y	JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Defines calendar information for a job group.	ajscalendar	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Defines a jobnet execution schedule for a period and then outputs it to the standard output file using the format of the schedule information parameter.	ajsschedule	Y	Y	Output-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Registers a defined jobnet for execution.	ajsentry	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Cancels the registration of a jobnet.	ajsleave	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Suspends the root jobnet. Cancels the suspended state of the root jobnet.	ajssuspend	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Outputs information about a jobnet or job, including the execution history, current status, and next scheduled execution, to the standard output file.	ajsshow	Y	Y	Output-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Outputs the list of event jobs being currently executed in the manager to the standard output file.	jpomanjobshow	Y	Y	UNIX: Superuser Windows: Administrators	М
Temporarily modifies a schedule defined for a jobnet, or the status of a job.	ajsplan	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Modifies the status of a job.	ajschgstat	Y	Y	Manipulation-target unit JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Stops the execution of a jobnet.	ajsintrpt	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Kills the execution of a job or jobnet.	ajskill	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Re-executes a job or a jobnet.	ajsrerun	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	М
Exports a unit.	ajsexport <sup>#</sup>	Y	Y	Export-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Imports a unit.	ajsimport <sup>#</sup>	Y	Y	Destination of import JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	М
Starts execution of the definition pre-check and displays the state of execution.	ajschkdef	Y	Y	Windows: Administrators UNIX: Superuser	М
Performs release entry or cancellation, or outputs release information.	ajsrelease	Y	Y	For release entry and cancellation: JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator For outputting release information: JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М
Outputs a list of temporary change information made to a root jobnet and its lower units to the standard output file.	ajsplanout	Y	Y	For root jobnets: JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	М

Y: Supported M: JP1/AJS3 - Manager

<sup>1.</sup> Overview of Commands

#### Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

#

These commands are provided by JP1/AJS3 for the packaging function. Use them for distributing a unit in combination with JP1/Software Distribution. You can only use these commands in a batch file or shell script for the packaging function.

### 1.5.5 Commands used to operate execution agents

The following table lists the commands used to operate execution agents.

Table 1-12:	Commands	used to	operate	execution	agents

Function	Command name	Window s	UNIX	Required privileges	Supported products
Adds an execution agent.	ajsagtadd	Y	Y	JP1_JPQ_Admin	М
Deletes an execution agent.	ajsagtdel	Y	Y	JP1_JPQ_Admin	М
Outputs information such as the job execution status on an execution agent to the standard output.	ajsagtshow	Y	Y	JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User or Windows: Administrators UNIX: Superuser	Μ
Changes the execution agent settings or the job transfer restriction status.	ajsagtalt	Y	Y	JP1_JPQ_Admin JP1_JPQ_Operator	М
Outputs execution agent definition information in CSV format to the standard output file.	ajsagtprint	Y	Y	JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User or Windows: Administrators UNIX: Superuser	М
Outputs a list of event jobs being executed by an execution agent to the standard output.	jpoagtjobshow	Y	Y	Windows: Administrators UNIX: Superuser	M and A

#### Legend:

Y: Supported M: JP1/AJS3 - Manager A: JP1/AJS3 - Agent

<sup>1.</sup> Overview of Commands

#### Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### 1.5.6 Commands used to execute jobs

The following table lists the commands used to execute a single job, not a jobnet.

Command execution requires you to register the OS user executing commands with the authentication server as a JP1 user. The privilege required to execute commands is shown on a command basis. As required, you should give the privilege to the JP1 user. For details about the execution privilege, see *6.4 Setting access permissions* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.* 

#### Cautionary note

If the "Required privileges" column lists more than one privilege, you need only have one of the listed privileges to execute the command.

Table 1–13: Commands used to execute job	os
--	----

Function	Command name	Window s	UNIX	Required privileges	Supported products
Executes the program specified as an argument, and saves the return code of the program in a temporary file.	jplexec	Y		None	M and A
Returns the return code that was saved by the jplexec command.	jplexit	Y		None	M and A

Legend:

Y: Supported

--: Not supported

M: JP1/AJS3 - Manager

A: JP1/AJS3 - Agent

### Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### 1.5.7 Commands used to manipulate the embedded database

The following table lists the commands used to manipulate the embedded database:

<sup>1.</sup> Overview of Commands

Function	Command name	Window s	UNIX	Required privileges	Supported products
Obtains the backup of the embedded database.	ajsembdbbackup	Y	Y	Windows: Administrators UNIX: Superuser	М
Monitors the embedded database.	ajsembdbstatus	Y	Y	Windows: Administrators UNIX: Superuser	М
Manipulates the system log of the embedded database.	ajsembdboplog	Y	Y	Windows: Administrators UNIX: Superuser	М
Backs up the embedded database or restores the embedded database using the backup and the unload log file.	ajsembdbrstr	Y	Y	Windows: Administrators UNIX: Superuser	М
Unloads and reloads the data in the embedded database.	ajsembdbrorg	Y	Y	Windows: Administrators UNIX: Superuser	М
Maintains the embedded database.	ajsembdbreclaim	Y	Y	Windows: Administrators UNIX: Superuser	М
Expands the database areas in the embedded database.	ajsembdbaddarea	Y	Y	Windows: Administrators UNIX: Superuser	М
Expands the system files for the embedded database.	ajsembdbaddlog	Y	Y	Windows: Administrators UNIX: Superuser	М
Stops the embedded database.	ajsembdbstop	Y	Y	Windows: Administrators UNIX: Superuser	М
Starts the embedded database.	ajsembdbstart	Y	Y	Windows: Administrators UNIX: Superuser	М
Cancels the execution of an embedded-database command.	ajsembdbcancel	Y	Y	Windows: Administrators UNIX: Superuser	М

### Table 1-14: Commands used to manipulate the embedded database

Legend:

Y: Supported

M: JP1/AJS3 - Manager

Note

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### 1.5.8 Commands used when an error occurs

The following table lists the commands used when an error occurs.

<sup>1.</sup> Overview of Commands

Table 1-15: Commands us	sed when an error occurs
-------------------------	--------------------------

Function	Command name	Window s	UNIX	Required privileges	Supported products
Collects information necessary for analyzing the core dump.	ajs2collectcore		Y	UNIX: Superuser	M and A
Collects the necessary data	jajs_log or _04		Y	UNIX: Superuser	M and A
when a famule occurs.	jajs_log.bat or _04.bat	Y		Windows: Administrators	M, A, and V

Y: Supported --: Not supported M: JP1/AJS3 - Manager A: JP1/AJS3 - Agent

V: JP1/AJS3 - View

### **1.5.9** Commands used during special operation

This subsection shows the commands used during special operation such as when an old-version compatibility function or an optional function is being used.

For details about the commands used during special operation, see 3. Commands Used for Special Operation in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

### (1) Commands available when the JP1/AJS3 Console function is used

The following table lists the commands available when the JP1/AJS3 Console function is used.

Table 1-16:	Commands used during s	special operation	(commands available	when the JP1/A	JS3
	Console function is used)				

Function	Command name	Window s	UNIX	Required privileges	Supported products
Sets up JP1/AJS3 Console Manager.	jplajs2cmsetup <sup>#</sup>		Y	UNIX: Superuser	М
Sets up JP1/AJS3 Console Agent.	ajscasetup	Y		Windows: Administrators	М
Sets up JP1/AJS3 Console View.	ajscvsetup	Y		Windows: Administrators	V
Sets up JP1/AJS3 Console Agent.	jp1ajs2casetup <sup>#</sup>		Y	UNIX: Superuser	М
Sets up JP1/AJS3 Console Manager.	ajscmsetup	Y		Windows: Administrators	М
Changes the size of the trace log file of JP1/AJS3 Console Manager.	ajscmtrsetsz	Y	Y	Windows: Administrators UNIX: Superuser	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Changes the size of the trace log file of JP1/AJS3 Console Agent.	ajscatrsetsz	Y	Y	Windows: Administrators UNIX: Superuser	М
Automatically starts JP1/AJS3 Console Manager at a system start.	jajscm_start		Y	UNIX: Superuser	М
Automatically stops JP1/AJS3 Console Manager at a system stop.	jajscm_stop		Y	UNIX: Superuser	М
Automatically starts JP1/AJS3 Console Agent at a system start.	jajsca_start		Y	UNIX: Superuser	М
Automatically stops JP1/AJS3 Console Agent at a system stop.	jajsca_stop		Y	UNIX: Superuser	М
Starts or stops the JP1/AJS3 Console Manager service.	ajscminetd_startstop		Y	UNIX: Superuser	М
Starts or stops the JP1/AJS3 Console Agent service.	ajscainetd_startstop		Y	UNIX: Superuser	М
Starts JP1/AJS3 Console View.	ajscon	Y		None	V
Outputs definitions for specified JP1 users for JP1/ AJS3 Console to a standard output file.	ajscmprint	Y	Y	Windows: Administrators UNIX: Superuser	М

Y: Supported

--: Not supported

M: JP1/AJS3 - Manager

V: JP1/AJS3 - View

#

Do not execute this command if a JP1 series product that requires JP1/Base is running.

# (2) Commands available in an execution environment for queue or submit jobs

The following table lists the commands available in an execution environment for queue or submit jobs.

Note that to execute a command other than the jpqexport, jpqimport, and jajs\_maintain commands, the OS user who executes the command must be registered as a JP1 user on the authentication server. Also make sure that the JP1 user is granted the proper permissions to execute the command. For details about command execution permissions, see 6.4 Setting access permissions in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

<sup>1.</sup> Overview of Commands

## Table 1–17: Commands used during special operation (commands available in an execution environment for queue or submit jobs)

Function	Command name	Window s	UNIX	Required privileges	Supported products
Outputs the current job execution environment to a file.	jpqexport	Y	Y	Windows: Administrators UNIX: Superuser	М
Defines the job execution environment (job execution agents, queues, and exclusive execution resources) collectively using the job execution environment configuration definition file (jpqsetup.conf).	jpqimport	Y	Y	Windows: Administrators UNIX: Superuser	Μ
Performs maintenance on JP1/AJS3.	jajs_maintain	Y	Y	Windows: Administrators UNIX: Superuser	М
Registers a submit job.	jpqjobsub	Y	Y	Destination of a request to register a submit job JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User	M and A
Cancels or kills the execution of a job.	jpqjobcan	Y	Y	Destination of a request to cancel a job JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup> However, if the -em option is specified, the following privileges are required (and the above privileges are not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Holds, or unholds the execution of a job.	jpqjobalt	Y	Y	Destination of a request to hold/unhold a job JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup>	M and A
Moves a job.	jpqjobmove	Y	Y	Destination of a request to move a job JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup>	M and A
Outputs information about a particular job to the standard output file.	jpqjobget	Y	Y	Destination of a request to acquire job information JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup>	M and A
Outputs a list of uncompleted jobs to the standard output file.	jpqjobshow	Y	Y	Destination of a request to acquire job information	M and A

Function	Command name	Window s	UNIX	Required privileges	Supported products
Outputs a list of uncompleted jobs to the standard output file.	jpqjobshow	Y	Y	JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup>	M and A
Outputs a list of completed jobs to the standard output file.	jpqendjobshow	Y	Y	Destination of a request to acquire job information JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User <sup>#1</sup>	M and A
Deletes information about completed jobs from the database.	jpqjobdel	Y	Y	Destination of a request to delete a job JP1_JPQ_Admin JP1_JPQ_Operator	M and A
Opens a queue.	jpqqueopen	Y	Y	Destination of a request to open a queue JP1_JPQ_Admin JP1_JPQ_Operator However, if the -em option is specified, the following privileges are required (and the above privileges are not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Closes a queue.	jpqqueclose	Y	Y	Destination of a request to close a queue JP1_JPQ_Admin JP1_JPQ_Operator However, if the -em option is specified, the following privileges are required (and the above privileges are not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Outputs queue information to the standard output file.	jpqqueshow	Y	Y	Destination of a request to acquire queue information JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User However, if the -em option is specified, the following privileges are required (and the above privileges are not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Adds a queue.	jpqqueadd	Y	Y	Destination of a request to add a queue JP1_JPQ_Admin	М

Function	Command name	Window s	UNIX	Required privileges	Supported products
Deletes a queue.	jpqquedel	Y	Y	Destination of a request to delete a queue JP1_JPQ_Admin	М
Changes a queue definition.	jpqquealt	Y	Y	Destination of a request to change a queue definition JP1_JPQ_Admin However, if the -em option is specified, the following privileges are required (and the above privilege is not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	М
Connects a queue to an agent; otherwise, changes the level of priority to a connected agent.	jpqagtlink	Y	Y	Destination of a request to connect an agent JP1_JPQ_Admin However, if the -em option is specified, the following privileges are required (and the above privilege is not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	Μ
Releases the connection between a queue and an agent.	jpqagtunlink	Y	Y	Destination of a request to cancel an agent connection JP1_JPQ_Admin	М
Outputs information about the agent host to the standard output file.	jpqagtshow	Y	Y	Destination of a request to acquire agent information JP1_JPQ_Admin However, if the -em option is specified, the following privileges are required (and the above privilege is not required). Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Adds an agent and creates a default queue at the same time.	jpqagtadd	Y	Y	Destination of a request to add an agent JP1_JPQ_Admin	М
Deletes an agent and deletes the default queue at the same time.	jpqagtdel	Y	Y	Destination of a request to delete an agent JP1_JPQ_Admin	М
Modifies the number of concurrently-executable jobs.	jpqagtalt	Y	Y	Destination of a request to change the number of concurrently-executable jobs JP1_JPQ_Admin However, if the -em option is specified, the following privileges are required (and the above privilege is not required).	M and A

Function	Command name	Window s	UNIX	Required privileges	Supported products
Modifies the number of concurrently-executable jobs.	jpqagtalt	Y	Y	Windows: Administrators <sup>#2</sup> UNIX: Superuser	M and A
Outputs information about exclusive execution resources to the standard output file.	jpqresshow	Y	Y	Destination of a request to acquire exclusive execution resources JP1_JPQ_Admin JP1_JPQ_Operator JP1_JPQ_User	М
Adds exclusive execution resources.	jpqresadd	Y	Y	Destination of a request to add exclusive execution resources JP1_JPQ_Admin	М
Deletes exclusive execution resources.	jpqresdel	Y	Y	Destination of a request to delete exclusive execution resources JP1_JPQ_Admin	М

Y: Supported

M: JP1/AJS3 - Manager

A: JP1/AJS3 - Agent

### #1

With JP1\_JPQ\_User permission, the user can operate or view only jobs submitted by the user himself or herself.

#2

On a Windows Server 2012 or Windows Server 2008 host, before you execute a command that must be executed by a member of the Administrators group, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.

### (3) Commands available when queueless jobs are used

The following table lists the commands available when queueless jobs are used.

Table 1-18:	Commands used during special operation (commands available when queueless jobs
	are used)

Function	Command name	Windo ws	UNIX	Required privileges	Supported products
Sets up the execution environment for queueless jobs.	ajsqlsetup	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Temporarily modifies the operating environment for the queueless agent service.	ajsqlalter	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Adds hosts to be processed by the queueless agent service.	ajsqlattach	Y	Y	Windows: Administrators UNIX: Superuser	M and A

Function	Command name	Windo ws	UNIX	Required privileges	Supported products
Disconnects hosts processed by the queueless agent service.	ajsqldetach	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Starts the queueless file transfer service.	ajsqlftpstart		Y	UNIX: Superuser	М
Stops the queueless file transfer service.	ajsqlftpstop	Y	Y	Windows: Administrators UNIX: Superuser	М
Starts the JP1/AJS3 Queueless Agent service.	ajsqlstart		Y	UNIX: Superuser	M and A
Stops the queueless agent service.	ajsqlstop	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Outputs detailed information about the queueless agent service.	ajsqlstatus	Y	Y	None	M and A
Modifies the size of the trace log file for the queueless agent service.	ajsqltrsetsz	Y	Y	Windows: Administrators UNIX: Superuser	M and A
Changes the size of the internal log file for execution of queueless jobs.	ajsqlexecsetsz	Y	Y	Windows: Administrators UNIX: Superuser	M and A

Y: Supported

--: Not supported

M: JP1/AJS3 - Manager

A: JP1/AJS3 - Agent

### (4) Commands available during an operation test

The following table lists the commands available during an operation test.

## Table 1–19: Commands used during special operation (commands available during an operation test)

Function	Command name	Window s	UNIX	Required privileges	Supported products
Changes and references the local time and date of the scheduler service.	ajslocaldate	Y	Y	Windows: Administrators UNIX: Superuser	М

Legend:

Y: Supported

M: JP1/AJS3 - Manager

<sup>1.</sup> Overview of Commands

### 1.6 Prerequisites to use commands

The following tables list the services you must have started before executing commands:

Table 1-20:	Services you	must have	started before	executing	commands
-------------	--------------	-----------	----------------	-----------	----------

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
ajs								
ajs2collectcore (UNIX only)								
ajsagtadd	Y							
ajsagtalt	Y							
ajsagtdel	Y							
ajsagtprint	Y							
ajsagtshow	Y							
ajs_adapter_setup <sup>#3</sup>								
ajsalter	Y	Y <sup>#8</sup>						
ajsbackup								
ajsbkudel								
ajscainetd_startstop <sup>#4</sup> (UNIX only)								
ajscalendar	Y							
ajscasetup <sup>#4</sup> (Windows only)								
ajscatrsetsz <sup>#4</sup>								
ajschange	Y							
ajschgjob	Y							
ajschgnet	Y							
ajschgstat	Y	Y						
ajschkdef	Y						Y	Y
ajschksetup <sup>#3</sup>								
ajschkstart (UNIX only)								
ajschkstop (UNIX only)							Y	Y
ajschktrsetsz								
ajscminetd_startstop <sup>#4</sup> (UNIX only)								
ajscmprint <sup>#4</sup>								

<sup>1.</sup> Overview of Commands

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
ajscmsetup <sup>#4</sup> (Windows only)								
ajscmtrsetsz <sup>#4</sup>								
ajscnvdbexport <sup>#3</sup>								
ajscnvdbimport <sup>#3</sup>								
ajscon <sup>#4</sup>				Y <sup>#5</sup>				
ajscopy	Y							
ajscvsetup <sup>#4</sup>								
ajsdbcond								
ajsdefine	Y							
ajsdelete	Y							
ajsembdbaddarea								
ajsembdbaddlog								
ajsembdbbackup <sup>#6</sup>								
ajsembdbbuild $^{\#3}$								
ajsembdbcancel								
ajsembdbidlist <sup>#3</sup>								
ajsembdbinstl <sup>#3</sup>								
ajsembdboplog								
ajsembdbreclaim								
ajsembdbrorg								
ajsembdbrstr <sup>#6</sup>								
ajsembdbsetup <sup>#3</sup>								
ajsembdbstart								
ajsembdbstatus								
ajsembdbstop								
ajsembdbuninstl <sup>#3</sup>								
ajsembdbunset <sup>#3</sup>								
ajsentry	Y	Y						
ajsexport	Y							
ajsgtroot								
ajsimport	Y							
ajsintrpt	Y	Y						

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
ajskill	Y	Y						
ajsleave	Y	Y						
ajslocaldate <sup>#4</sup>								
ajslogprint								
ajsname	Y							
ajsplan	Y	Y						
ajsplanout	Y							
ajsprint	Y							
ajsprofalter	Y							
ajsprofstatus	Y							
ajsqlalter <sup>#4</sup>					Y			
ajsqlattach <sup>#4</sup>					Y			
ajsqldetach <sup>#4</sup>					Y			
ajsqlexecsetsz <sup>#4</sup>								
ajsqlftpstart <sup>#4</sup> (UNIX only)								
ajsqlftpstop <sup>#4</sup>						Y		
ajsqlsetup <sup>#4</sup>								
ajsqlstart <sup>#4</sup> (UNIX only)								
ajsqlstatus <sup>#4</sup>								
ajsqlstop <sup>#4</sup>					Y			
ajsqltrsetsz <sup>#4</sup>								
ajsrelease	Y	Y <sup>#7</sup>						
ajsrerun	Y	Y						
ajsrestore	Y							
ajsrgexport	Y							
ajsrgimport	Y	Y						
ajsschedule	Y							
ajssetup <sup>#3</sup>								
ajsshow	Y							
ajsstart	Y							
ajsstatus	Y							
ajsstop	Y	Y						

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
ajssuspend	Y	Y						
ajstrsetsz								
jajs_config <sup>#3</sup>								
jajs_hstd	Y							
jajs_hstd_stop	Y							
jajs_killall.cluster (UNIX only)								
jajs_log or _04 (UNIX only)								
<pre>jajs_log.bat or _04.bat (Windows only)</pre>								
jajs_maintain <sup>#4</sup>								
jajs_migrate <sup>#3</sup>								
jajs_pmtcon <sup>#9</sup>	Y				Y			
jajs_rpenvexport <sup>#3</sup>								
jajs_rpenvimport <sup>#3</sup>								
jajs_rpsite <sup>#3</sup>								
jajs_setup <sup>#3</sup>								
jajs_setup_cluster <sup>#3</sup>								
jajs_spmd	Y <sup>#10</sup>							
jajs_spmd_status								
jajs_spmd_stop	Y							
jajs_start (UNIX only)								
jajs_start.cluster (UNIX only)								
jajs_status	Y							
jajs_stop (UNIX only)	Y							
jajs_stop.cluster (UNIX only)	Y							
jajsacfg <sup>#4</sup>								
jajsca_start <sup>#4</sup> (UNIX only)								
jajsca_stop <sup>#4</sup> (UNIX only)								

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
jajscm_start <sup>#4</sup> (UNIX only)								
jajscm_stop <sup>#4</sup> (UNIX only)								
jajsmcfg <sup>#4</sup>								
jp1ajs2_setup_cluster <sup>#3</sup> (UNIX only)								
jp1ajs2casetup <sup>#4</sup> (UNIX only)								
jp1ajs2cmsetup <sup>#4</sup> (UNIX only)								
jplexec (Windows only)								
jplexit (Windows only)								
jpoagoec								
jpoagtjobshow	Y							
jpomailprof (Windows only)								
jpomailrecv <sup>#3</sup> (UNIX only)	Y							
jpomanevreset <sup>#11</sup>	Y							
jpomanevshow	Y							
jpomanjobshow	Y							
jpqagtadd <sup>#4</sup>	Y							
jpqagtalt <sup>#4</sup>	Y							
jpqagtdel <sup>#4</sup>	Y							
jpqagtlink <sup>#4</sup>	Y							
jpqagtshow <sup>#4</sup>	Y							
jpqagtunlink <sup>#4</sup>	Y							
jpqdbcond								
jpqendjobshow <sup>#4</sup>	Y							
jpqexport <sup>#4</sup>								
jpqimport <sup>#4</sup>								
jpqjobalt <sup>#4</sup>	Y							

Command name	JP1/AJS3 <sup>#1</sup>	Scheduler service	HP NNM <sup>#2</sup>	Cm	Qa	Qf	CH m	СНа
jpqjobcan <sup>#4</sup>	Y							
jpqjobdel <sup>#4</sup>	Y							
jpqjobget <sup>#4</sup>	Y							
jpqjobmove <sup>#4</sup>	Y							
jpqjobshow <sup>#4</sup>	Y							
jpqjobsub <sup>#4</sup>	Y							
jpqqueadd <sup>#4</sup>	Y							
jpqquealt <sup>#4</sup>	Y							
jpqqueclose <sup>#4</sup>	Y							
jpqquedel <sup>#4</sup>	Y							
jpqqueopen <sup>#4</sup>	Y							
jpqregguestuser <sup>#3</sup>	Y							
jpqqueshow <sup>#4</sup>	Y							
jpqreguser <sup>#3</sup>								
jpqresadd <sup>#4</sup>	Y							
jpqresdel <sup>#4</sup>	Y							
jpqresshow <sup>#4</sup>	Y							
jpqshmake <sup>#3</sup> (UNIX only)								

Cm: JP1/AJS3 Console Manager

Qa: Queueless agent service

Qf: Queueless file transfer service

CHm: JP1/AJS3 Check Manager

CHa: JP1/AJS3 Check Agent

Y: Must be started

--: May not be started

#1

In a cluster configuration, you must have the JP1/AJS3 logical host started instead of starting JP1/AJS3.

### #2

For further details about the service name for HP NNM, see the documentation for HP NNM.

#3

For details about the commands, see 2. Commands Used during Setup in the manual Job Management Partner 1/ Automatic Job Management System 3 Command Reference 2.

<sup>1.</sup> Overview of Commands

#4

For details about the commands, see 3. Commands Used for Special Operation in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

#### #5

You must have JP1/AJS3 Console Manager started on the host to be connected.

#### #6

You must have the embedded database service started.

### #7

You must have the scheduler service started if you perform release entry or cancellation.

### #8

You must have the scheduler service started in the following cases:

- When you switch scheduler log files on a scheduler service basis
- When you suppress jobnet or job execution or cancel the suppression

You do not need to have the scheduler service started when you switch scheduler log files on a host basis.

### #9

Either the JP1/AJS3 service or queueless agent service must be running.

### #10

You must have the JP1/AJS3 service started if you separately start any of the processes that make up the JP1/AJS3 functionality.

### #11

You can execute the jpomanevreset command only when the JP1/AJS3 host service is active and the target scheduler service has stopped. An error occurs if all JP1/AJS3 services are stopped or if the scheduler service is active when you execute this command.



### Commands

This chapter describes each command in detail.

ajs

### Format

### Description

Starts JP1/AJS3 - View. You can also specify arguments to perform the following operation:

- Directly start the Jobnet Monitor window without having to display and operate the Login screen or JP1/AJS3 View window.
- Directly start the JP1/AJS3 View window without having to display and operate the Login screen.

### **Execution privileges**

None

### Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -v monitor

Specify starting of the Jobnet Monitor window.

You must specify this option with the -n, -1, or -m option.

### -n full-path-jobnet or job-name

Specify the full path unit name of the jobnet or job in the *scheduler-service-name* : /*jobnet-name* or *scheduler-service-name* : /*job-name* format.

You can specify a character string of 1 to 30 bytes for the scheduler service name and a character string of 1 to 930 bytes for the jobnet or job name.

You can also specify the name of a remote jobnet on the destination host in the *scheduler-service-name*: / *remote-jobnet-name* format (Example: AJSROOT1:/1042614948234/net07).

If you specify a nested jobnet, the Jobnet Monitor window will display the specified nested jobnet highlighted in the tree area.

If you specify a job, the Jobnet Monitor window will display the jobnet containing the specified job highlighted in the tree area.

#### 2. Commands
You must specify this option with the -v, -1, or -m option.

### -1 execution-ID

Specify the execution ID (a character string of up to 10 bytes) for the top-level jobnet to be displayed in the Jobnet Monitor window.

You must specify this option with the -v and -n options.

You cannot specify this option with the -m option.

### -m {state|result}

Specify whether you want to view the state or result when the Jobnet Monitor window displays the jobnet or job specified with the -n option.

If you specify state, the window displays the current execution state of the jobnet or job, in the same way as when you choose **View - Jobnet Monitor - Status** in the JP1/AJS3 - View window.

If you specify result, the window displays the current execution results of the jobnet or job, in the same way as when you choose **View - Jobnet Monitor - Result** in the JP1/AJS3 - View window.

You must specify this option with the -v and -n options.

You cannot specify this option with the -l option.

Note that if today is set for the VIEWSTATUSRANGE environment setting parameter, the status or result of the day's generation is displayed.

### -a login-information-file-name

Specify the name of the login information file that defines information necessary for logging in to JP1/AJS3 - Manager (user name, password, and destination host name).

If you specify this option, the system uses the information written in the login information file to log in to JP1/AJS3 - Manager and displays the JP1/AJS3 - View window or Jobnet Monitor window.

If you omit this option, the Login screen appears and, after you log in, the JP1/AJS3 - View window or Jobnet Monitor window appears.

The login information in the file is the same as the information you specify in the Login screen. For details about login information, see 3. Logging in and Logging out of JP1/AJS3 - Manager in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

You can specify a character string of 1 to 255 bytes. For *login-information-file-name*, you cannot specify the following file names:

- A file name that includes a space
- A file name that begins with a hyphen (-)

If you specify a file name containing a space character, the system assumes the characters preceding the space character to be the file name. If you specify a file name containing a hyphen, the system does not recognize the file name and displays the following error message:

KAVV192-E A required parameter is missing.[-a]

You must store the login information file in the following location:

JP1/AJS3 - View-installation-folder\conf\

If the conf directory does not contain the login information file, the following error message appears:

KAVV380-E The login information file (*file-name*) is not found. Detailed information: *detailed-information-1*, *detailed-information-2* 

Write the login information file in the following format:

```
username=login-user-name
password=password
host=destination-host-name
```

Each line must end with a line feed character. If you define two or more lines that contain the same keyword, the line defined first takes effect. Any keywords other than username, password, or host are ignored. A line beginning with a hash mark (#) is handled as a comment. The following shows an example:

```
#This is login information file for job server
username=user1
password=user0000
host=apserve
```

### -h login-host-name

Use this argument to temporarily change the connection-target host at automatic login.

When the -h option is specified, the system forces you to log in to the specified host. You will log in to the specified host even if the connection-target host name is specified in the login information file indicated by the -a option, or in the automatic login settings in the Environment Settings dialog box. When you specify both the -a option and the -h option as arguments of the startup command, you do not need to specify the connection-destination host name in the login information file.

If you are not performing automatic login by using the login information file indicated by the -a option or the Environment Settings dialog box, specify the default host name shown in the **Host to connect** text box in the Login screen that appears at startup.

### Notes

• You cannot encrypt or scramble the password described in the login information file. Therefore, be sure to specify user privileges given by the OS to restrict access to the login information file.

The following shows an example of restricting access to the file based on the user privilege:

- 1. Log in as the machine administrator user (such as Administrators) and choose the **Security** tab in the Properties dialog box for the login information file.
- 2. From the Names list, select the users you want to permit or deny access.
- 3. In the Access permission list, permit or deny access.

If the above steps cause a security problem, do not specify the password keyword. If you do not specify password, the error message KAVV140-E The keyword (*keyword-name*) is not specified in the login information file (*file-name*). appears, followed by the Login dialog box. Then, enter the password.

- If you specify the -a option, the system logs in using the information specified in the login information file, ignoring the automatic login function even if you specify **Yes** for **Login Auto login** in the Preferences dialog box for JP1/AJS3 View.
- When starting multiple JP1/AJS3 View hosts continuously, start the next JP1/AJS3 View host after the JP1/AJS3 View window of JP1/AJS3 View previously opened is displayed. If you start the next JP1/AJS3 View before the previous window opens, the preference information may become invalid.
- Always separate the option and its value by at least one space character.
- When you specify the name of the login information file, do not enclose the file name with double quotation marks ("). If you do so, an error message (KAVV380-E The login information file (*file-name*) is not found. Detailed information: *detailed-information-1*, *detailed-information-2*) appears.

## Example 1

The following example directly starts the Jobnet Monitor window without displaying and operating the Login screen or the JP1/AJS3 - View window. It uses <code>apserver\_login.txt</code> as the login information file and the Jobnet Monitor window will display the current results for the jobnet named <code>AJSROOT1:/GYOUMU\_GROUP1/PC\_job</code>.

```
ajs -v monitor -n AJSROOT1:/GYOUMU_GROUP1/PC_job -m result -a
apserver login.txt
```

# Example 2

The following example directly starts the JP1/AJS3 - View window without displaying and operating the Login screen. It uses <code>apserver\_login.txt</code> as the login information file.

ajs -a apserver\_login.txt

# ajs2collectcore (UNIX only)

## Format

```
ajs2collectcore
  [-b]
  [-c]
  [-f output-path-name]
  [-1]
  [-s]
  [core-dump-directory-or-core-dump-file...]
```

# Description

Searches for core dump files (names beginning with core, core-, or core.) placed under the following directories and collects analysis information from those core dump files, if any.

- /opt/jp1ajs2/
- /var/opt/jp1ajs2/
- /opt/jp1ajs2cm/
- /opt/jp1ajs2v/
- /opt/jp1base/bin/
- /var/opt/jp1base/log/
- /tmp/jp1ajs2/ajs2gencore\_create/

The following table describes the information you can collect with the ajs2collectcore command.

### Table 2-1: Information that can be collected with the ajs2collectcore command

Information category	Description	Output file name <sup>#1</sup>
Core dump	Obtains a core dump file (core).	core.Z
Backtrace information	Outputs primary analysis information about the core dump.	coreinfo.backtrace.Z <sup>#2</sup>
Shared memory information	Outputs the contents of the shared memory that is used by ISAM, scheduler services, and the connection source restriction function.	<pre>coreinfo-ISAM.shmdump.tar.Z coreinfo-scheduler.shmdump.Z coreinfo-pmtcon_m.shmdump.physical.Z coreinfo-pmtcon_a.shmdump.physical.Z coreinfo-pmtcon_m.shmdump.logical.Z coreinfo-pmtcon_a.shmdump.logical.Z</pre>
Shared library information	Obtains information about existing shared libraries, excluding the following: • /opt/jplajs2/lib/ • /opt/jplajs2v/lib/ • /opt/jplajs2cm/lib/ • /opt/jplbase/lib/	coreinfo-analyze.tar.Z <sup>#2</sup>

#### #1

Use ajs2collectcore to compress the collected data. The following describes the compression method used by each OS:

<sup>2.</sup> Commands

In Linux:

JP1/AJS3 uses the gzip command to compress data. The file extension is .gz. If gzip is not installed, data will not be compressed, and the extension .gz will not be appended to the output file name. Note that the compress command will not be used.

In UNIX systems other than Linux:

JP1/AJS3 uses the compress command to compress data. The file extension is . Z. If compress is not installed, and the gzip command is installed, JP1/AJS3 uses the gzip command to compress data instead of the compress command. In this case, the extension of the output file name is .gz. If neither the compress command nor the gzip command is installed, no data is compressed. In this case, neither extension . Z nor .gz is added to the output file name.

#2

There will be as many outputs as there are core dumps.

The collected files are output, as shown in the following example, under the output-destination directory (the default is /tmp/jplajs2/core\_analyze/).

Example:

In the following example, the command is executed when there are core dump files under /opt/jplajs2/ bin/ (the output destination is the default):

/tmp/jp1ajs2/core\_analyze/opt/jp1ajs2/bin/

The file list for the information collected is output at the same time. The file list is output immediately under the outputdestination directory. The file name is shown below:

Ajs2collectcore\_filelist.log

# **Execution privileges**

Superuser privileges

# Storage directory

/opt/jp1ajs2/tools/

# Arguments

-b

Collects only the backtrace information in the core dump file to be collected.

Specifying this option together with the -c, -l, or -s option enables you to collect non-backtrace information as well. If you specify the -c, -l, or -s option but omit this option, backtrace information is not collected.

-c

Collects only the core dump file.

Specifying this option together with the -b, -1, or -s option enables you to collect non-backtrace information as well. If you specify the -b, -1, or -s option but omit this option, backtrace information is not collected.

### -f output-path-name

Specify where to store the core dump information to be collected. Use an absolute path that does not contain space characters. Specifying the name with a relative path causes the command to terminate abnormally due to an argument error. If the specified path name contains a space character, the string before the space character is handled as the output path name and the string after the space character is regarded as another argument.

If you specify this option, core dump information is stored under the output path. If the specified output path does not exist, a message asking you whether to create the directory is output. To create the directory, enter y. If you enter n, the command does not collect the information.

If you omit this option, the default is /tmp/jplajs2/core\_analyze.

### -1

Collects only shared library information that excludes the target library supplied by JP1/AJS3.

Specifying this option together with the -b, -c, or -s option enables you to collect non-shared-library information as well. If you specify the -b, -c, or -s option but omit this option, the shared library information is not collected.

### -s

Collects only the shared memory information to be collected.

At this time, if coreinfo-ISAM.shmdump\_\*, coreinfo-Scheduler.shmdump\_\*, coreinfopmtcon\_{m | a}.shmdump.physical\_\*, or coreinfo-pmtcon\_{m | a}.shmdump.logical\*\_\* exists immediately under the destination directory path, back up the file, adding the extension .bk.

Specifying this option together with the -b, -c, or -l option enables you to collect non-shared-memory information as well. If you specify the -b, -c, or -l option but omit this option, the shared memory information is not collected.

### core-dump-directory-or-core-dump-file

Other than for a search path for core dumps to be searched for in a standard configuration (see the Description section), specify the core-dump directory path or file name you want to additionally search for by using an absolute path that does not contain space characters. Specifying the name with a relative path causes the command to terminate abnormally due to an argument error. If the specified path name contains a space character, the string before the space character is handled as an output path name and the string after the space character is regarded as another argument.

If the search path contains core dump files (names beginning with core, core-, or core.), the command obtains the backtrace information and shared library information.

If you do not specify the core-dump directory or core dump file, the target of search is core dumps under the following directory paths.

- /opt/jp1ajs2/ directory path
- /var/opt/jplajs2/ directory path
- /opt/jp1ajs2cm/ directory path
- /var/jplajs2cm/ directory path
- /opt/jp1ajs2v/ directory path
- /opt/jplbase/bin/ directory path
- /tmp/jp1ajs2/ajs2gencore\_create/ directory path

# Notes

- When you execute this command, if a file having the same name exists in the output path, an overwrite message appears. Entering  $\gamma$  in response enables the overwrite; entering n cancels the process of collecting information.
- When you execute this command, if the output path specified by the -f option does not exist, a message appears asking you to confirm creation of the directory. Entering y in response enables creation of the directory; entering n cancels the process of collecting information.
- If there are two or more core dump files, information about all the files is collected.
- If you use these arguments to specify a core-dump directory or core dump file, execute the command after confirming that the files being placed at the destination and beginning with core, core-, or core. are limited to core dump files.
- Specifying the -f option enables you to start two or more instances of this command simultaneously if you specify individual directories for output destination.
- When you collect ISAM shared memory information, you may fail to output it in a coreinfo-ISAM.shmdump.tar file because of the capacity shortage in the output destination directory. If this occurs, check to see if there are coreinfo-ISAM.shmdump\_\* files without the .bk extension. If you find such files, which serve as ISAM shared memory information, execute the tar command in a different disk area and then send the information as data.
- If the system updates the very file that is executed in the target process after core-dump files are discharged, note that you will fail to properly collect analysis information from these core-dump files.
- To collect backtrace information, the ajs2collectcore command uses the module name that is output from the file command. This means that you cannot collect backtrace information from core dumps for which the module name is not displayed by the file command.

## **Return values**

0	All data items have been collected successfully.
4	Some of the data items have been collected successfully.
Other values	The process has terminated abnormally.

# Output messages

Return value	Output message	Meaning	Operation	Action
0	Collection of the backtrace data [ <i>file-name</i> ] was successful. OutputPath: <i>output-path-name</i>	Normal collection (backtrace)	Normal termination or continued processing to obtain next information	(Not applicable)
0	Collection of the core dump file [ <i>file-name</i> ] was successful. OutputPath: <i>output-path-name</i>	Normal collection (core-dump files)	Normal termination or continued processing to obtain next information	(Not applicable)
0	Collection of the shared library data [ <i>file-name</i> ] was successful. OutputPath: <i>output-path-name</i>	Normal collection (library information)	Normal termination or continued processing to obtain next information	(Not applicable)

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1

Return value	Output message	Meaning	Operation	Action
0	Collection of the {ISAM   Scheduler   {JP1_DEFAULT   <i>logical-host-</i> <i>name</i> } PMTCON_M   {JP1_DEFAULT   <i>logical-host-</i> <i>name</i> } PMTCON_A} shared memory dump was successful. Output Path: <i>output-path-name</i>	Normal collection (shared memory information)	Normal termination or continued processing to obtain next information	(Not applicable)
4 or 8	Error!!The input parameter [ <i>argument</i> ] is invalid. << ### Usage ### >> ajs2collectcore [ -b ] [ -c ] [ -l ] [ -s ] [ -f output_fullpath ] [ additional_search_fullpath ]	Parameter error	Abnormal termination or continued processing (if there is an error in the additionally specified path)	Check the required parameters and re-execute the command.
16	Error!! The specified directory [ <i>destination-directory</i> ] could not be created.	Failure to create a destination directory	Abnormal termination	The destination disk might have reached its full capacity. Check the capacity of the destination disk. After taking steps to remedy the problem, re-execute the command.
4 or 8	Error!! The specified file [ <i>file-name</i> ] does not have overwrite permissions.	Failure to overwrite an existing file	Continued processing (Continuing to collect something other than the target file)	Assign write privileges to the target file and re-execute the command.
4 or 8	Error!! The backtrace data for the core dump file could not be collected. Corefile: <i>corresponding-core-dump-file-</i> <i>name</i>	Failure to collect backtrace information	Continued processing (Continuing to collect something other than the target backtrace information)	The destination disk might have reached its full capacity. Check the capacity of the destination disk. After taking steps to remedy the problem, re-execute the command.
4 or 8	Error!! The core dump file could not be collected. Corefile: <i>corresponding-core-dump-file- name</i>	Failure to collect core-dump files	Continued processing (Continuing to collect something other than the target core-dump file)	
4 or 8	Error!! Shared library data for the core dump file could not be collected. Corefile: <i>corresponding-core-dump-file-</i> <i>name</i>	Failure to collect shared library information	Continued processing (Continuing to collect something other than the target shared library information)	
4 or 8	Error!! {ISAM   Scheduler   {JP1_DEFAULT   <i>logical-host-</i> <i>name</i> } PMTCON_M   {JP1_DEFAULT   <i>logical-host-</i> <i>name</i> } PMTCON_A} shared memory data could not be collected.	Failure to collect shared memory information	Continued processing (Continuing to collect something other than the target shared memory information)	<ul> <li>This message is output when there is no shared memory. If you are not using shared memory, ignore the message. If you are using shared memory, the following errors are possible:</li> <li>Memory is running short.</li> </ul>

Return value	Output message	Meaning	Operation	Action
4 or 8	Error!! {ISAM   Scheduler   {JP1_DEFAULT   logical-host- name} PMTCON_M   {JP1_DEFAULT   logical-host- name} PMTCON_A} shared memory data could not be collected.	Failure to collect shared memory information	Continued processing (Continuing to collect something other than the target shared memory information)	<ul> <li>The destination disk has reached its capacity.</li> <li>Check the state of memory use and the capacity of the destination disk. After taking steps to remedy the problem, re-execute the command.</li> </ul>
4, 8, or 124	An error occurred!! ErrorCause: [ <i>error-factor</i> ] ErrorInfo: [ <i>error-information</i> ]	Other error	Continued processing (Continuing to collect something other than the target information)	(Not applicable)
(Not applicable)	There are no core dump files in default directories.	No core dumps found in a standard search path	(Not applicable)	(Not applicable)
(Not applicable)	There are no core dump files in the specified path.	No core dumps found in an additionally specified path	(Not applicable)	(Not applicable)

# ajsagtadd

# Format

```
ajsagtadd
[-h logical-host-name]
{-a execution-agent-name [-s execution-host-name]
    [-c time-time=maximum-number-of-concurrently-executable-jobs,...]
    [-t {e|i|h|b}] [-d description] |
    -g execution-agent-group-name [-l execution-agent-name[:priority],...]
    [-t {e|i|h|b}] [-d description] |
    -f execution-agent-definition-file-name [-i]}
```

### Format1 (adding an execution agent)

```
ajsagtadd
  [-h logical-host-name]
   -a execution-agent-name
   [-s execution-host-name]
   [-c time-time=maximum-number-of-concurrently-executable-jobs,...]
   [-t {e|i|h|b}]
   [-d description]
```

## Format2 (adding an execution agent group)

```
ajsagtadd
  [-h logical-host-name]
  -g execution-agent-group-name
  [-l execution-agent-name[:priority],...]
  [-t {e|i|h|b}]
  [-d description]
```

## Format3 (adding execution agents and execution agent groups all at one time)

```
ajsagtadd
[-h logical-host-name]
-f execution-agent-definition-file-name
[-i]
```

# Description

The ajsagtadd command adds an execution agent or an execution agent group.

You can also use the command to add execution agents and execution agent groups all at one time by using a file that specifies the items you want to add.

# **Execution privileges**

This command can be executed by a user at the following JP1 permission level:

• JP1\_JPQ\_Admin privilege

# Arguments

## -h logical-host-name

Specify the logical host name of the local host to which you want to add execution agents and execution agent groups.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

For a physical host, make sure that you specify neither this option nor the JP1\_HOSTNAME environment variable.

### -a execution-agent-name

Specify the name of an execution agent you want to add.

You can specify a character string of 1 to 255 bytes.

### -g execution-agent-group-name

Specify the name of an execution agent group you want to add.

You can specify a character string of 1 to 255 bytes.

### -f execution-agent-definition-file-name

Specify the name of a file that specifies execution agents and execution agent groups that you want to add collectively.

You can specify a character string of 1 to 255 bytes.

For details about the format of this file, see *Specifying the execution agent definition file settings* below. The format of this file is the same as the format of the output result of the ajsagtprint command.

Note that, for the default execution agent (named @SYSTEM) specified in the execution agent definition file, you can change only the maximum number of concurrently executable jobs and the comment.

### -s execution-host-name

Specify the name of the host on which the job will be executed.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the name of the execution agent is assumed.

You can specify this option only if the -a option is specified.

### -c time-time=maximum-number-of-concurrently-executable-jobs, ...

Specify a time period and the maximum number of concurrently executable jobs to be applied to the time period.

By specifying the maximum number of concurrently executable jobs, you can limit the number of jobs that can concurrently be executed on this execution agent. The specified limit is applied to UNIX, PC, action, custom, and passing information setting jobs. If an attempt is made to execute a job when the number of concurrently executing jobs has already reached the maximum, the job is queued to wait until the number of concurrently executing jobs becomes smaller than the maximum.

The time period is specified by using the start and end times separated by a hyphen (-). Both times are specified in *hh*: *mm* format where *mm* is specified in units of 30 minutes.

For *hh*, you can specify 0 or a value in the range from 00 to 23 (hours).

For mm, you can specify 0, 00, or 30 (minutes).

For maximum-number-of-concurrently-executable-jobs, you can specify a value from 0 to 4,294,967,295.

If this option is omitted, 00:00-00:00=5, which applies 5 as the maximum number of concurrently executable jobs for all day, is assumed.

You can specify multiple combinations of time period and maximum number of concurrently executable jobs. To do this, use a comma (, ) to separate each occurrence of *time-time=maximum-number-of-concurrently-executable-jobs* without inserting a space. You can specify a maximum of 48 time periods. If you specify overlapping time periods, the last specified value takes effect for the maximum number of concurrently executable jobs. For example, if you specify -c 1:00-2:30=5, 2:00-4:00=10, the time period from 2:00 to 2:30 overlaps. For this time period, 10 is applied as the maximum number of concurrently executable jobs.

For the time periods that are not specified, 0 is assumed as the maximum number of concurrently executable jobs. For example, if you specify only -c 1:00-5:00=10, the maximum number of concurrently executable jobs are set as follows: 0 for the period from 0:00 to 1:00, 10 for the period from 1:00 to 5:00, and 0 for the period from 5:00 to 1:00.

If the command is executed during a specified time period, the maximum number of concurrently executable jobs for the time period immediately takes effect.

You can specify this option only if the -a option is specified.

## -1 execution-agent-name[:priority],...

Specify the name of an execution agent to be associated with the execution agent group. Following the execution agent name, you can also specify the priority of the execution agent in the execution agent group. If you specify the priority, place a colon (:) as a separator between the execution agent name and the priority.

Make sure that you specify an execution agent name that has already been registered.

You can use 1 to 255 bytes to specify an execution agent name.

As the priority value, you can specify 1 to 16 where 1 is lowest and 16 is highest. A job with a higher priority value is executed earlier. If the priority is omitted, 16 is assumed.

If you want to associate multiple execution agents to the execution agent group, specify multiple occurrences of *execution-agent-name* [:*priority*] by using a comma (,) to separate each occurrence, without inserting a space. You can associate a maximum of 1,024 execution agents.

You can specify this option only if the -g option is specified.

### -t {<u>e</u>|i|h|b}

Specify the job transfer restriction status of the execution agent or execution agent group to be added.

Value	Status	Description
е	Effective	Jobs are accepted and then delivered to the target host.
i	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.

<sup>2.</sup> Commands

Value	Status	Description
h	Hold	Jobs are accepted but are not delivered to the target host.
b	Blockade	Jobs are neither accepted nor delivered to the target host.

If you omit this option, the system assumes e.

You can specify this option only if the -a or -g option is specified.

## -d description

Specify a comment on the execution agent or execution agent group to be added.

You can specify a character string of 1 to 80 bytes.

You can specify this option only if the -a or -g option is specified.

### -i

This option pertains to collective addition of execution agents and execution agent groups by using the execution agent definition file. If you specify this option, addition processing does not stop when an error occurs during the processing.

If you omit this option, the addition processing stops when an error occurs. If the addition processing stops, only the execution agents and execution agent groups processed before the error occurred are added.

This option takes effect only if the contents of the execution agent definition file are correct. If the contents are not correct, the command terminates without adding anything.

You can specify this option only if the -f option is specified.

After you specify this option to add execution agents and execution agent groups collectively, always execute the ajsagtshow or ajsagtprint command to confirm the result of addition. For details on the ajsagtshow command and the ajsagtprint command, see *ajsagtshow* in 2. Commands and *ajsagtprint* in 2. Commands.

# Notes

- The maximum number of concurrently executable jobs, the job transfer restriction status, and the execution agent priority specified by this command are not applied to event jobs.
- During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.
- This command cannot be executed for JP1/AJS3 Manager installed on another host.
- If you specify an execution host name in the -s option and the name cannot be resolved from the manager host, the command might take a long time to execute.
- When adding an execution host to an execution agent, the name of the execution host must be correctly resolved before you execute the command. Set the execution host name in the hosts file or DNS before executing the command. For details on name resolution, see 2.2.2(5) Notes on manager/agent system configurations in the Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide.
- Consecutive single-byte space characters at the end of explanatory text might become invalid. Do not end explanatory text with single-byte space characters.

# **Return values**

0 Normal end.	
---------------	--

4	• An environment variable used for command execution is incorrect.
	• The JP1/AJS3 service is not running.
	• The -h option is specified but the specified logical host does not exist or environment settings are incorrect.
	• A execution agent whose name is the same as the target host you attempted to add already exists.
	• The maximum number of execution agents that can be defined is exceeded.
	• The maximum number of execution agent groups that can be defined is exceeded.
	• The authentication server is not running.
	• A compatible ISAM configuration is used.
	• An error occurred in communication with the JP1/AJS3 service.
8	An argument specified in the command is incorrect.
12	Memory became insufficient during command processing.
20	An attempt to access shared memory failed because the access target was locked.
24	Permission to execute the command is not granted.
28	The contents of the execution agent definition file are incorrect.
36	An error occurred while the command was accessing the execution agent definition file.
40	A system limit was exceeded during allocation of shared memory, file descriptors, or resources for exclusive use.
120	• An unexpected error was detected for an OS system call.
	• The database area is not enough. Alternatively, secondary allocation of the database area failed.
	• An attempt to access the database or failed because the access target was locked.
	• A database input or output error occurred.
124	An unexpected error was detected in JP1/AJS internal processing.

# Additional information

The following shows examples of specifying the maximum number of concurrently executable jobs:

• To set 1 as the maximum number of concurrently executable jobs for the time period from 1:00 to 5:00, specify the following:

```
-c 01:00-05:00=1
```

• To set 1 as the maximum number of concurrently executable jobs for the time period from 23:00 to 24:00, specify the following:

```
-c 23:00-00:00=1
```

To indicate 24:00, specify 00:00 or 0:0.

To set 1 as the maximum number of concurrently executable jobs for the time period from 23:00 to 24:00 and the time period from 00:00 to 05:00 on the next day, specify the following:
 -c 23:00-05:00=1

You can specify a time period that is across two days.

• To set 1 as the maximum number of concurrently executable jobs for all day, specify the following: -c 00:00-00:00=1

# Specifying the execution agent definition file settings

The following are general rules that apply when you specify the execution agent definition file settings:

- You can use one execution agent definition file to specify both execution agents and execution agent groups.
- A single execution agent or execution agent group is entered on one line, and each element of one entry is separated with a comma (, ). If you specify multiple entries, make sure that each entry is specified on a separate line.

- A line beginning with a hash mark (#) is handled as a comment.
- A blank line is ignored.
- Each element of an entry must be enclosed in double quotation marks (").
- No elements of an entry can be omitted. If you do not want to specify a value for an element, enter "".

The following describes how you can specify execution agents and execution agent groups in the file.

### Specifying execution agents

### Format

```
"flag", "execution-agent-name", "target-host-system-name", "maximum-number-
of-concurrently-executable-jobs", "job-transfer-restriction-
status", "description"
```

### Arguments

- *flag* Specify A, which indicates an execution agent definition.
- execution-agent-name

Specify the name of an execution agent you want to add.

You can specify a character string of 1 to 255 bytes.

You cannot omit this element.

• target-host-system-name

Specify the execution host name.

You can specify a character string of 1 to 255 bytes.

If you omit this element, the execution agent name is assumed.

• maximum-number-of-concurrently-executable-jobs

Specify a time period and the maximum number of concurrently executable jobs for the time period. The time period is specified by using the start and end times separated by a hyphen (-). Both times are specified in *hh*: *mm* format where *mm* is specified in units of 30 minutes.

For *hh*, you can specify 0 or a value in the range from 00 to 23 (hours).

For mm, you can specify 0, 00, or 30 (minutes).

For *maximum-number-of-concurrently-executable-jobs*, you can specify a value from 0 to 4,294,967,295. If this option is omitted, 00:00-00:00=5, which applies 5 as the maximum number of concurrently executable jobs for all day, is assumed.

You can specify multiple combinations of time period and maximum number of concurrently executable jobs. To do this, use a comma (, ) to separate each occurrence of *time-time=maximum-number-of-concurrently-executable-jobs*.

• job-transfer-restriction-status

Use any of the following values to specify the job transfer restriction status of the execution agent to be added:

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.

Value	Status	Description
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

If you omit this option, the system assumes Ef.

• description

Write text as a description on the execution agent to be added.

You can specify a character string of 1 to 80 bytes.

### Example of coding

This example shows an entry that adds an execution agent under the following conditions:

- execution-agent-name: AGT01
- target host system name: HOST01
- maximum number of concurrently executable jobs: 10 for the time period from 0:00 to 12:00, and 20 for the time period from 12:00 to 0:00
- job-transfer-restriction-status: Jobs are neither accepted nor delivered to the target host.
- description: AGT01 execution-agent

```
"A", "AGT01", "HOST01", "00:00-12:00=10, 12:00-00:00=20", "Bl", "AGT01 execution-agent"
```

### Specifying execution agent groups

### Format

```
"flag", "execution-agent-group-name", "connection-destination-execution-
agent-and-priority", "job-transfer-restriction-status", "description"
```

#### Arguments

• flag

Specify G, which indicates an execution agent group definition.

• execution-agent-group-name

Specify the name of an execution agent group you want to add. You can specify a character string of 1 to 255 bytes.

You cannot omit this element.

• connection-destination-exec-target-and-priority

Specify the name of an execution agent to be associated with the execution agent group. Following the execution agent name, you can also specify the priority of the execution agent in the execution agent group. If you specify the priority, place a colon (:) as a separator between the execution agent name and the priority.

Make sure that you specify an execution agent name that has already been registered.

You can use 1 to 255 bytes to specify an execution agent name.

As the priority value, you can specify 1 to 16 where 1 is lowest and 16 is highest. A job with a higher priority value is executed earlier.

If you want to associate multiple execution agents to the execution agent group, specify multiple occurrences of *exec-agent-name* [:*priority*] by using a comma (, ) to separate each occurrence, without inserting a space.

You can associate a maximum of 1,024 execution agents.

If you omit this element, the execution agent to be associated with the execution agent group is not set.

• job-transfer-restriction-status

Use any of the following values to specify the job transfer restriction status of the execution agent group to be added:

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

If you omit this option, the system assumes Ef.

• description

Write text as a comment on the execution agent group to be added. You can specify a character string of 1 to 80 bytes.

### Example of coding

This example shows an entry that adds an execution agent group under the following conditions:

- execution-agent-group-name: AGTGRP01
- connection-destination-execution-agent and priority: AGT01(priority: 1), AGT02(priority: none)
- job-transfer-restriction-status: Jobs are accepted but are not delivered to the target host.
- description: AGTGRP01 execution-agent-group

"G", "AGTGRP01", "AGT01:1, AGT02", "Hd", "AGTGRP01 execution-agent-group"

### Example 1

To add an execution agent with the same name as target host AP1, execute the following command:

```
ajsagtadd -a AP1
```

## Example 2

To add an execution agent whose name is AP1 and whose maximum number of concurrently executable jobs for the time period from 01:00 to 05:00 is 1, execute the following command:

```
ajsagtadd -a AP1 -c 01:00-05:00=1
```

## Example 3

To add execution agent group APG1 that contains execution agents AP1 (with a priority of 16), AP2 (with the default priority), and AP3 (with a priority of 5), execute the following command:

```
ajsagtadd -g APG1 -l AP1:16, AP2, AP3:5
```

# ajsagtalt

## Format

```
ajsagtalt
[-h logical-host-name]
{-a execution-agent-name
    [-s execution-host-name]
    [-c time-time=maximum-number-of-concurrently-executable-jobs,...]
    [-d description] |
    -a execution-agent-name -t {e|i|h|b} |
    -g execution-agent-group-name -d comment |
    -g execution-agent-group-name -l execution-agent-name[:priority] |
    -g execution-agent-group-name -m execution-agent-name[:priority] |
    -g execution-agent-group-name -u execution-agent-name |
    -g execution-agent-group-name -t {e|i|h|b}}
```

#### Format1 (for changing the execution agent settings)

```
ajsagtalt
  [-h logical-host-name]
  -a execution-agent-name
  [-s exec-host-nam]
  [-c time-time=maximum-number-of-concurrently-executable-jobs,...]
  [-d description]
```

### Format2 (for changing the execution agent group settings)

```
ajsagtalt
[-h logical-host-name]
-g execution-agent-group-name
-d description
```

### Format3 (for adding an execution agent to an execution agent group)

```
ajsagtalt
[-h logical-host-name]
-g execution-agent-group-name
-l execution-agent-name[:priority]
```

### Format4 (for changing the priority of an execution agent in an execution agent group)

```
ajsagtalt
[-h logical-host-name]
-g execution-agent-group-name
-m execution-agent-name[:priority]
```

#### Format5 (for removing an execution agent from an execution agent group)

```
ajsagtalt
[-h logical-host-name]
-g execution-agent-group-name
-u execution-agent-name
```

### Format6 (for changing the job transfer restriction status of an execution agent)

```
ajsagtalt
[-h logical-host-name]
-a execution-agent-name
-t {e|i|h|b}
```

### Format7 (for changing the job transfer restriction status of an execution agent group)

```
ajsagtalt
[-h logical-host-name]
-g execution-agent-group-name
-t {e|i|h|b}
```

## Description

The ajsagtalt command changes the settings of an execution agent or execution agent group, or changes the job transfer restriction status of an execution agent or execution agent group.

## **Execution privileges**

This command can be executed by a user at either of the following JP1 permission levels:

- JP1\_JPQ\_Admin privilege
- JP1\_JPQ\_Operator privilege(Users at this permission level can change only the job transfer restriction status of an execution agent or execution agent group.)

## Arguments

### -h logical-host-name

Specify the logical host name of the local host on which the execution agent or execution agent group whose settings you want to change is registered.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

For a physical host, make sure that you specify neither this option nor the JP1 HOSTNAME environment variable.

#### -a execution-agent-name

Specify the name of the execution agent whose settings you want to change.

You can specify a character string of 1 to 255 bytes.

## -g execution-agent-group-name

Specify the name of the execution agent group whose settings you want to change.

You can specify a character string of 1 to 255 bytes.

## -s exec-host-nam

Specify the execution host name (agent host name).

You can specify a character string of 1 to 255 bytes.

You can specify this option only if the -a option is specified.

The name of the execution host to be specified must be resolved correctly. Before executing the command, set the name of the execution host to be specified in the hosts file or on a DNS server. If an execution host name that a manager host cannot resolve is specified, command execution might take a long time.

For details about name resolution, see 2.2.2(5) Notes on manager/agent system configurations in the Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide.

## -c time-time=maximum-number-of-concurrently-executable-jobs , . . .

Specify the time periods for which you want to change the maximum number of concurrently executable jobs, together with the new values for the maximum number of concurrently executable jobs.

By specifying the maximum number of concurrently executable jobs, you can limit the number of jobs that can concurrently be executed on this execution agent. The specified limit is applied to UNIX, PC, action, custom, and passing information setting jobs. If an attempt is made to execute a job when the number of concurrently executing jobs has already reached the maximum, the job is queued to wait until the number of concurrently executing jobs becomes smaller than the maximum.

The time period is specified by using the start and end times separated by a hyphen (-). Both times are specified in *hh*: *mm* format where *mm* is specified in units of 30 minutes.

For *hh*, you can specify 0 or a value in the range from 00 to 23 (hours).

For mm, you can specify 0, 00, or 30 (minutes).

For maximum-number-of-concurrently-executable-jobs, you can specify a value from 0 to 4,294,967,295.

You can specify multiple combinations of time period and maximum number of concurrently executable jobs. To do this, use a comma (, ) to separate each occurrence of *time-time=maximum-number-of-concurrently-executable-jobs* without inserting a space. You can specify a maximum of 48 time periods. If you specify overlapping time periods, the last specified value takes effect for the maximum number of concurrently executable jobs. For example, if you specify -c 1:00-2:30=5, 2:00-4:00=10, the time period from 2:00 to 2:30 overlaps. For this time period, 10 is applied as the maximum number of concurrently executable jobs.

For time periods that are not specified, the maximum number of concurrently executable jobs is not changed.

If the command is executed during a specified time period, the maximum number of concurrently executable jobs for the time period is immediately changed.

You can specify this option only if the -a option is specified.

## -d description

Specify a comment on the execution agent or execution agent group.

You can specify a character string of 1 to 80 bytes.

You can specify this option only if the -a or -g option is specified.

<sup>2.</sup> Commands

### -1 execution-agent-name[:priority]

Specify the name of an execution agent to be associated with the execution agent group. Following the execution agent name, you can also specify the priority of the execution agent in the execution agent group. If you specify the priority, place a colon (:) as a separator between the execution agent name and the priority.

Make sure that you specify an execution agent name that has already been registered.

You can use 1 to 255 bytes to specify an execution agent name.

As the priority value, you can specify 1 to 16 where 1 is lowest and 16 is highest. A job with a higher priority value is executed earlier. If the priority is omitted, 16 is assumed.

You can specify this option only if the -g option is specified.

### -m execution-agent-name[:priority]

Specify this option if you want to change the priority of an execution agent in the execution agent group. Specify the execution agent name and the new priority with an intervening colon (:).

You can use 1 to 255 bytes to specify the execution agent name.

As the priority value, you can specify 1 to 16 where 1 is lowest and 16 is highest. A job with a higher priority value is executed earlier. If the priority is omitted, 16 is assumed.

You can specify this option only if the -g option is specified.

#### -u execution-agent-name

Specify the name of an execution agent you want to remove from the execution agent group.

You can specify a character string of 1 to 255 bytes.

You can specify this option only if the -g option is specified.

#### $-t \{e|i|h|b\}$

Specify this option if you want to change the job transfer restriction status of an execution agent or execution agent group to be added.

Value	Status	Description
е	Effective	Jobs are accepted and then delivered to the target host.
i	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
h	Hold	Jobs are accepted but are not delivered to the target host.
b	Blockade	Jobs are neither accepted nor delivered to the target host.

You can specify this option only if the -a or -g option is specified.

## Notes

- The maximum number of concurrently executable jobs, the job transfer restriction status, and the execution agent priority specified by this command are not applied to event jobs.
- During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

- This command cannot be executed for JP1/AJS3 Manager installed on another host.
- If any jobs (PC jobs, UNIX jobs, custom jobs, or action jobs) are running, you must include an execution agent in an execution agent group.
- If any jobs (PC jobs, UNIX jobs, custom jobs, action jobs, or even jobs) are running, you cannot change the execution host.
- You cannot change the execution host used as the default execution agent (named @SYSTEM). For details about the default execution agent, see 5.1.4 Default execution agent in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.
- Consecutive single-byte space characters at the end of explanatory text might become invalid. Do not end explanatory text with single-byte space characters.

# **Return values**

0	Normal end.
4	<ul> <li>An environment variable used for command execution is incorrect.</li> <li>The JP1/AJS3 service is not running.</li> <li>The -h option is specified but the specified logical host does not exist or environment settings are incorrect.</li> <li>The specified execution agent does not exist.</li> <li>The specified execution agent group does not exist.</li> <li>The authentication server is not running.</li> <li>A compatible ISAM configuration is used.</li> <li>A job is running.</li> <li>An error occurred in communication with the JP1/AJS3 service.</li> </ul>
8	An argument specified in the command is incorrect.
12	Memory became insufficient during command processing.
20	An attempt to access shared memory failed because the access target was locked.
24	Permission to execute the command is not granted.
40	A system limit was exceeded during allocation of shared memory, file descriptors, or resources for exclusive use.
120	<ul> <li>An unexpected error was detected for an OS system call.</li> <li>The database area is not enough. Alternatively, secondary allocation of the database area failed.</li> <li>An attempt to access the database failed because the access target was locked.</li> <li>A database input or output error occurred.</li> </ul>
124	An unexpected error was detected in JP1/AJS internal processing.

# Example 1

To change the maximum number of concurrently executable jobs to 1 for the time period from 1:00 to 5:00 on execution agent AP1, execute the following command:

ajsagtalt -a AP1 -c 01:00-05:00=1

# Example 2

To add execution agent AP2 (with a priority of 1) to execution agent group APG1, execute the following command:

```
ajsagtalt -g APG1 -l AP2:1
```

# Example 3

To remove execution agent AP3 from execution agent group APG1, execute the following command:

ajsagtalt -g APG1 -u AP3

# ajsagtdel

# Format

```
ajsagtdel
[-h logical-host-name]
{-a execution-agent-name | -g execution-agent-group-name}
```

## Format1 (for deleting an execution agent)

```
ajsagtdel
[-h logical-host-name]
-a execution-agent-name
```

### Format2 (for deleting an execution agent group)

```
ajsagtdel
[-h logical-host-name]
-g execution-agent-group-name
```

# Description

Deletes an execution agent or execution agent group.

# **Execution privileges**

This command can be executed by a user at the following JP1 permission level:

• JP1\_JPQ\_Admin privilege

# Arguments

### -h logical-host-name

Specify the logical host name of the local host on which the execution agent or execution agent group you want to delete is registered.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

For a physical host, make sure that you specify neither this option nor the JP1\_HOSTNAME environment variable.

### -a execution-agent-name

Specify the name of an execution agent you want to delete.

You can specify a character string of 1 to 255 bytes.

### -g execution-agent-group-name

Specify the name of an execution agent group you want to delete.

You can specify a character string of 1 to 255 bytes.

# Notes

• Before you execute this command, use the ajsagtalt command to change the job transfer restriction status of the execution agent you want to delete to *Blocked* so that jobs are not executed on the agent. For details about the job transfer restriction status of an execution agent, see 5.2 *Restricting job transfer* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.

Note that the job transfer restriction status of an execution agent has no effect on event jobs. Therefore, ensure that a new event job or jobnet with start conditions is not executed on the execution agent to be deleted.

You cannot delete an execution agent on which a job (PC, UNIX, custom, action, or event job) is running. To delete an execution agent on which a job is running, you must forcibly terminate the job.

You can use the ajsagtshow command to check for jobs that are running. For details on the ajsagtshow command, see *ajsagtshow* in 2. Commands.

• If you execute this command on a target host on which an event job or a jobnet with start conditions was executed, the target host remembers the manager host name specified in the -h option of the command. If the target host remembers the manager host name, the host performs communication with the manager host to report that the host has started or stopped. Because this communication is unnecessary, use the following procedure to delete the manager host name specified for the -h option of this command.

To delete the manager host name remembered by the target host you want to delete:

1. Check whether the target host remembers the manager host name specified in the -h option of the ajsagtdel command.

To do this, on the target host, execute the following command:

jpoagoec -p

2. Delete the manager host specified in the -h option of the ajsagtdel command.

Execute the following command:

jpoagoec -d manager-host-name-specified-in-the-h-option

For details on the jpoagoec command, see *jpoagoec* in 2. Commands.

- Do not perform the following operations while an event job or a jobnet with a start condition is running:
  - Stop the OS before stopping the JP1/AJS3 service on the execution host for the execution agent.
  - Turn off the target host system acting as the execution agent.

If you execute this command after performing either of these operations, the specified execution agent cannot be deleted. If this occurs, stop and cold start the JP1/AJS3 service on the manager host or delete information about event jobs or jobnets with start conditions being executed on the execution agent, and then execute the command again.

To delete information about event jobs or jobnets with start conditions being executed on the execution agent:

1. For each scheduler service, check whether there are any event jobs being executed or jobnets with start conditions being monitored by the execution agent in question.

Execute the following command:

jpomanjobshow [-h logical-host-name]<sup>#</sup> -F scheduler-service-name -a execution-agent-name

- 2. Stop the scheduler service you identified in step 1.
- 3. From the scheduler service you stopped in step 2, delete the information for the event job being executed or jobnet with start conditions being monitored by the execution agent in question. Execute the following command:

jpomanevreset [-h logical-host-name]<sup>#</sup> -F scheduler-service-name -a execution-agent-name -s

#

You do not need to specify the -h option if the manager host targeted by the command is a physical host.

For details on how to stop a scheduler service, see 8.5.2 Stopping the scheduler service in the Job Management Partner I/Automatic Job Management System 3 Administration Guide. For details on the jpomanjobshow command, see *jpomanjobshow* in 2. Commands, and for details on the jpomanevreset command, see *jpomanevreset* in 2. Commands.

- During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.
- This command cannot be executed for JP1/AJS3 Manager installed on another host.

## **Return values**

0	Normal end.
4	An environment variable used for command execution is incorrect.
	• The JP1/AJS3 service is not running.
	• The -h option is specified but the specified logical host does not exist or environment settings are incorrect.
	• The specified execution agent does not exist.
	• The specified execution agent group does not exist.
	• The target host cannot be deleted because a job is being executed.
	• The authentication server is not running.
	A compatible ISAM configuration is used.
	<ul> <li>The specified execution agent cannot be deleted because it is connected from an execution agent group.</li> </ul>
	• The execution agent or execution agent group cannot be deleted because the job transfer restriction status is not <i>Blocked</i> .
	• An error occurred in communication with the JP1/AJS3 service.
8	An argument specified in the command is incorrect.
12	Memory became insufficient during command processing.
20	An attempt to access shared memory failed because the access target was locked.
24	Permission to execute the command is not granted.
40	A system limit was exceeded during allocation of shared memory, file descriptors, or resources for exclusive use.
120	• An unexpected error was detected for an OS system call.
	• The database area is not enough. Alternatively, secondary allocation of the database area failed.
	• An attempt to access the database failed because the access target was locked.
	• A database input or output error occurred.
124	An unexpected error was detected in JP1/AJS internal processing.

## Example 1

To delete execution agent AP1, execute the following command:

```
ajsagtdel -a AP1
```

# Example 2

To delete execution agent group APG1, execute the following command:

ajsagtdel -g APG1

<sup>2.</sup> Commands

# ajsagtprint

# Format

```
ajsagtprint
[-h logical-host-name]
{-a execution-agent-name | -g execution-agent-group-name | -l}
```

## Format1 (for outputting the execution agent definition)

```
ajsagtprint
[-h logical-host-name]
-a execution-agent-name
```

### Format2 (for outputting the execution agent group)

```
ajsagtprint
[-h logical-host-name]
-g execution-agent-group-name
```

### Format3 (for outputting the definition information of all execution agents and execution agent groups)

```
ajsagtprint
[-h logical-host-name]
-1
```

# Description

The ajsagtprint command outputs the definition information of execution agents or execution agent groups to the standard output file in CSV format.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_JPQ\_Admin privilege
- JP1\_JPQ\_Operator privilege
- JP1\_JPQ\_User privilege

or

In Windows: Administrators privilege

In UNIX: Superuser privileges

## Arguments

### -h logical-host-name

Specify the logical host name of the local host on which the execution agents or execution agent groups whose definition information you want to output are registered.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

For a physical host, make sure that you specify neither this option nor the JP1\_HOSTNAME environment variable.

### -a execution-agent-name

If you want to output the definition information of a specific execution agent, specify the name of the execution agent.

You can specify a character string of 1 to 255 bytes.

### -g execution-agent-group-name

If you want to output the definition information of a specific execution agent group, specify the name of the execution agent group.

You can specify a character string of 1 to 255 bytes.

### -1

Specify this option if you want to output the definition information for all execution agents and execution agent groups.

## Note

- During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.
- This command cannot be executed for JP1/AJS3 Manager installed on another host.

## **Return values**

0	Normal end.
4	<ul> <li>An environment variable used for command execution is incorrect.</li> <li>The JP1/AJS3 service is not running.</li> <li>The -h option is specified but the specified logical host does not exist or environment settings are incorrect.</li> <li>The specified execution agent does not exist.</li> <li>The specified execution agent group does not exist.</li> <li>The authentication server is not running.</li> <li>A compatible ISAM configuration is used.</li> </ul>
8	An argument specified in the command is incorrect.
12	Memory became insufficient during command processing.
20	An attempt to access shared memory failed because the access target was locked.
24	Permission to execute the command is not granted.
40	A system limit was exceeded during allocation of shared memory, file descriptors, or resources for exclusive use.
120	An unexpected error was detected for an OS system call.
124	An unexpected error was detected in JP1/AJS internal processing.

# Example 1

In the following example, the command outputs the definition information for execution agent AP1.

ajsagtprint -a AP1

# Example 2

In the following example, the command displays the information about all execution agents or execution agent groups.

ajsagtprint -l

# Output example 1

The following shows a sample execution of the command with the -a option specified:

```
ajsagtprint -a AP1
# <time-stamp> HOSTNAME:<host-name<sup>#1</sup>>
#,AGENT,HOST,CON-EXE,STATUS,DESCRIPTION
"A","AP1","Host1","1:00-3:00=10","Ef","Agent1"
```

#1

For a physical host, the local host name is displayed. For a logical host, the name of the logical host is output.

The following shows the meaning of the output.

flag

• #:

Indicates a comment line.

• A:

Indicates the definition information of an execution agent.

AGENT

Indicates that execution agent names are output in this column.

HOST

Indicates that target host names (agent host names) are output in this column.

CON-EXE

Indicates that the maximum number of concurrently executable jobs is output in this column.

STATUS

Indicates the job transfer restriction status of the execution agent.

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

#### DESCRIPTION

Indicates that the comment on the execution agent is output in this column.

# Output example 2

The following shows a sample execution of the command with the -g option specified:

2. Commands

ajsagtprint -g AGG1

```
# <time-stamp> HOSTNAME:<host-name<sup>#1</sup>>
#,AGENT GROUP,LINK AGENT,STATUS,DESCRIPTION
"G","AGG1","AG1:1","Ef","AgentGroup1"
```

#1

For a physical host, the local host name is displayed. For a logical host, the name of the logical host is output.

The following shows the meaning of the output.

flag

• #:

Indicates a comment line.

• G:

Indicates the definition information of an execution agent group.

AGENT GROUP

Indicates that execution agent group names are output in this column.

LINK AGENT

Indicates that the name and priority of the execution agent in the execution agent group are output in this column.

STATUS

Indicates the job transfer restriction status of the execution agent group.

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

DESCRIPTION

Indicates that the comment on the execution agent group is output in this column.

# ajsagtshow

## Format

```
ajsagtshow
[-h logical-host-name]
{-a execution-agent-name | -g execution-agent-group-name|-1|-n}
```

### Format1 (for displaying information about an execution agent)

```
ajsagtshow
[-h logical-host-name]
-a execution-agent-name
```

### Format2 (for displaying information about an execution agent group)

```
ajsagtshow
[-h logical-host-name]
-g execution-agent-group-name
```

### Format3 (for displaying information about all execution agents and execution agent groups)

```
ajsagtshow
[-h logical-host-name]
-1
```

### Format4 (for displaying the names of all execution agents and execution agent groups)

```
ajsagtshow
[-h logical-host-name]
-n
```

# Description

The ajsagtshow command outputs the job execution status and other information about execution agents or execution agent groups to the standard output.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_JPQ\_Admin privilege
- JP1\_JPQ\_Operator privilege
- JP1\_JPQ\_User privilege

or

In Windows: Administrators privilege

In UNIX: Superuser privileges

```
2. Commands
```

# Arguments

## -h logical-host-name

Specify the logical host name of the local host on which the execution agent or execution agent group for which you want to output execution agent information is registered.

You can specify a character string of 1 to 255 bytes.

If this option is omitted, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

For a physical host, make sure that you specify neither this option nor the JP1\_HOSTNAME environment variable.

### -a execution-agent-name

Specify the name of an execution agent for which you want to output execution agent information.

You can specify a character string of 1 to 255 bytes.

### -g execution-agent-group-name

Specify the name of an execution agent group for which you want to output execution agent information.

You can specify a character string of 1 to 255 bytes.

### -1

Specify this option if you want to output the information for all execution agents and execution agent groups.

-n

Specify this option if you want to output only the names of all execution agents and execution agent groups. If this option is specified, information other than the names of execution agents and execution agent groups is not output.

## Notes

- During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.
- This command cannot be executed for JP1/AJS3 Manager installed on another host.

# **Return values**

0	Normal end.
4	<ul> <li>An environment variable used for command execution is incorrect.</li> <li>The JP1/AJS3 service is not running.</li> <li>The -h option is specified but the specified logical host does not exist or environment settings are incorrect.</li> <li>The specified execution agent does not exist.</li> <li>The specified execution agent group does not exist.</li> <li>The authentication server is not running.</li> <li>A compatible ISAM configuration is used.</li> </ul>
8	An argument specified in the command is incorrect.
12	Memory became insufficient during command processing.
20	An attempt to access shared memory failed because the access target was locked.

24	Permission to execute the command is not granted.
40	A system limit was exceeded during allocation of shared memory, file descriptors, or resources for exclusive use.
120	An unexpected error was detected for an OS system call.
124	An unexpected error was detected in JP1/AJS internal processing.

# Example 1

To output the information for all execution agents and execution agent groups, execute the following command:

```
ajsagtshow -1
```

## Example 2

To output the definition information for execution agent AP1, execute the following command:

```
ajsagtshow -a AP1
```

# Output example 1

The following shows a sample execution of the command with the -a option specified:

#

For a physical host, the local host name is displayed. For a logical host, the name of the logical host is output.

The following shows the meaning of the output.

#### AGENT

Indicates that execution agent names are output in this column.

STATUS

Indicates the job transfer restriction status of the execution agent.

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

#### HOST

Indicates that target host names are output in this column.

CON-EXE

Indicates that the maximum number of concurrently executable jobs is output in this column.

QUE

Indicates that the number of queued jobs (UNIX, PC, action, custom, and passing information setting jobs) is output in this column.

JOB

Indicates that the number of running jobs (UNIX, PC, action, custom, and passing information setting jobs) is output in this column.

EVENT

Indicates that the number of event jobs being executed is output in this column.

DESCRIPTION

Indicates that the comment on the execution agent specified when the execution agent was added or changed is output in this column.

# Output example 2

The following shows a sample execution of the command with the -g option specified:

```
ajsagtshow -g AGTG01
HOSTNAME: < host-name<sup>#</sup>>
KNAC1101-I The output of the agent manager information started.
                        QUE LINKAGENT
AGENT GROUP
               STATUS
                                               AGT ST DESCRIPTION
_____
               _____
                                              ___
                           0 -
AGTG01
               Εf
                           - AGT01:16
                                               Εf
               _
                           - AGT02:16
                                               Εf
KNAC1102-I The output of the agent manager information ended.
```

#

For a physical host, the local host name is displayed. For a logical host, the name of the logical host is output.

The following shows the meaning of the output.

#### AGENT GROUP

Indicates that execution agent group names are output in this column.

STATUS

Indicates the job transfer restriction status of the execution agent group.

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

QUE

Indicates that the number of queued jobs (UNIX, PC, action, and custom jobs) is output in this column.

#### LINKAGENT

Indicates that the name and priority of the execution agent in the execution agent group are output in this column. A colon (:) is output between the name and priority. 1 indicates the lowest priority and 16 indicates the highest priority.

### AGT ST

Indicates the job transfer restriction status of the execution agent.

Value	Status	Description
Ef	Effective	Jobs are accepted and then delivered to the target host.
In	Ineffective	New jobs are not accepted but the jobs that have already been accepted are delivered to the target host.
Hd	Hold	Jobs are accepted but are not delivered to the target host.
Bl	Blockade	Jobs are neither accepted nor delivered to the target host.

#### DESCRIPTION

Indicates that the comment on the execution agent group specified when the execution agent group was added or changed is output in this column.

# ajsalter

# Format

```
ajsalter
  [-F service-name]
  [-s {none|EXEC}]
  [[-o] -c {CHANGE|COPY}]
```

# Description

Temporarily modifies the operating environment for a scheduler service.

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

# Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

### -s{none|EXEC}

Specify whether you want to suppress the execution of a jobnet or job, or cancel suppression.

If you use this option to suppress execution while a jobnet or job is being executed, the next jobnet or job will not be activated.

• none

Cancels the suppression of execution for a jobnet or job.

• EXEC

Suppresses the execution of a jobnet or job. Once the system has completed the execution of the jobnet or job currently being executed, it will not start any subsequent jobnet or job.

If you use this option, you can temporarily modify the setting of the SUPPRESS environment setting parameter.

-0

If you specify this option, the scheduler log file for the host, not the scheduler service, is replaced.

Depending on whether this option is specified and the value of the AJSLOGOUTPUTDEST environment setting parameter, the scheduler log file to be replaced differs, as described in the following table.
AJSLOGOUTPUTDEST value	-o option	
	Specified	Not specified
schedule(default)	Н	S
host	Н	Н

Legend:

- H: The scheduler log file for the host is replaced.
- S: The scheduler log file for the scheduler service is replaced.

You must specify this option with the -c option.

#### -c {CHANGE | COPY }

Specify how to change the scheduler log file.

• CHANGE

Writes history information to the alternate scheduler log file.

• COPY

Copies the contents of the current scheduler log file to the alternate scheduler log file. The system deletes data from the current scheduler log file and then writes history information from the beginning of the file.

If a log output error occurs during output of a scheduler log and the log output is blocked, use this option to replace the scheduler log file. Once the scheduler log file has been replaced, the system cancels blocking of log output.

### Notes

- For details about replacement of the scheduler log file, see 8.7 Swapping a scheduler log file in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide.
- If the -s option is specified, the setting of the SUPPRESS environment setting parameter is temporarily modified. The modification is lost the next time the scheduler service is started.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Example1

The following command temporarily modifies the jobnet operating environment, suppressing the execution of jobs:

```
ajsalter -s EXEC
```

### Example2

To replace the current scheduler log file for the host that contains scheduler service AJSROOT2 with the alternate scheduler log file after copying the contents of the current file to the alternate file, execute the following command:

```
ajsalter -F AJSROOT2 -o -c COPY
```

If host is set for the AJSLOGOUTPUTDEST environment setting parameter, regardless of whether the -0 option is specified, scheduler log file for the host is replaced.

ajsalter -F AJSROOT2 [-0] -c COPY

# ajsbackup

## Format

```
ajsbackup
    [-F service-name]
    [-b backup-information-directory-name]
    [-R]
    [-E|-L]
    [-T]
    [{-G|-N|-J}]
    [{-i|_e|-f}]
    [{-i|_e|-f}]
    [{-m|_a}]
    -n backup-box-name
    unit-name...
```

## Description

Converts a *unit* into a backup file and stores it in a backup box.

Executing this command causes a single backup file to be created in the specified backup box. The system names the backup file using the least unused value within the range of 0001 to 1024.

If the AJSPRINTNETSCHPRF environment setting parameter specifies the dependency on the schedule for the upperlevel jobnet, you can specify either of the following methods to output the unit definition information for the nested jobnet having a schedule rule:

- Enable the schedule rule and do not depend on the schedule for the upper-level jobnet.
- Delete the schedule rule and depend on the schedule for the upper-level jobnet.

For details about how to set the AJSPRINTNETSCHPRF environment setting parameter, see 2.2.2(79) AJSPRINTNETSCHPRF in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

We recommend that the user who executes this command be logged on as a member of the Administrators group (in Windows systems) or have superuser privileges (in UNIX systems).

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -ь backup-information-directory-name

Specify the full path of the directory if you use a directory other than the backup information directory<sup>#</sup> specified at the time of configuration.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the backup information directory<sup>#</sup> specified at the time of configuration.

#### #

It refers to the directory name specified by the AJSBKUROOT environment setting parameter.

### -R

Backs up all *units* in the specified job group or jobnet repeatedly by layers (for details, see *Additional information* below).

We recommend that you specify the -R option with the -T option. In that case, you can collectively back up each layer of units, thus reducing the size of the entire backup information. If you specify the -R option with the -E, -L, -G, -N, and/or -J options, the system backs up *units* according to the specification by each option.

### -E

Backs up jobnets and jobs contained in the jobnets registered for execution.

If you specify this option with the -T, -N, and/or -J options, the system backs up *unit*s according to the specification by each option.

-L

Backs up jobnets and jobs contained in the jobnets not registered for execution.

If you specify this option with the -T, -N, and/or -J options, the system backs up *unit*s according to the specification by each option. You cannot specify this option with the -G option.

### -т

Backs up root jobnets or recovery jobnets.

If you specify this option with the -L option, the system backs up *unit*s according to the specification by the -L option. You cannot specify this option with the -G or -J option.

### -G

Backs up job groups.

You cannot specify this option with the -L or -T option.

### -N

Backs up jobnets or recovery jobnets.

If you specify this option with the -L option, the system backs up *unit*s according to the specification by the -L option.

#### -J

Backs up jobs, including recovery jobs, QUEUE jobs, recovery QUEUE jobs, OR jobs, and event jobs.

You cannot specify this option with the -T option.

#### -i

Displays a message with a confirmation prompt if the backup destination contains a *unit* having the same name as a *unit* to be backed up.

#### -е

Generates an error (without updating information), if the backup destination contains a unit having the same name as a unit to be backed up.

### -f

Enforces backup (and updates information) if the backup destination contains a unit having the same name as a unit to be backed up.

#### -m

Creates a new backup box before backing up units.

The command terminates abnormally if a backup box has already been created.

#### -a

Adds a backup file to a backup box.

The command terminates abnormally if no backup box has been created.

#### -n backup-box-name

Specify the name of the backup box.

You can specify a character string of 1 to 50 bytes.

The name of the backup box depends on the file system of your operating system. It is case-sensitive if you are using UNIX and case-insensitive if you are using Windows.

#### unit-name

Specify the name of the unit to be backed up.

You can specify a character string of 1 to 930 bytes.

You can specify one or more units. If you specify the -R option with the -E, -L, -T, -G, -N, and/or -J options, the system backs up units according to the specification of each option.

You cannot specify a logical host name or execution ID as a unit name.

### Notes

- Either of the following users can back up a unit:
  - A user who has reference privileges for the units to be backed up and the update privilege for the backup box
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege for all units and the update privilege for the backup box.

- You can create up to 1,024 backup files in a single backup box. You cannot create 1,025 or more backup files.
- If the command is executed for a release target jobnet (root jobnet for which release entry is made), the jobnet definitions in *Being applied* status are backed up. However, the unit definition information to be backed up does not include the release information.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Additional information

The following describes an example for backing up units repeatedly by layers:

Example:

If you specify the -R option to back up a job group (group1) having the following structure, the system backs up elements of layers (A) to (H) in separate backup files.

group1(B) (C) (C) (C) (C) (C) (C)	(A) ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
net11ijob111(G)(F)	

## Example

The following command backs up all units contained in job group /Materials/ShipManagement to a newly created backup box, BOX1:

ajsbackup -RTmn BOX1 /Materials/ShipManagement

# ajsbkudel

## Format

```
ajsbkudel
  [-F service-name]
  [-b backup-information-directory-name]
  [-i]
  -n backup-box-name
  [backup-file-name...]
```

## Description

Deletes a backup box or backup file.

## **Execution privileges**

OS execution privileges for the backup files and directories to be deleted

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

### -b backup-information-directory-name

Specify the full path of the directory if you use a directory other than the backup information directory<sup>#</sup> specified at the time of configuration.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the backup information directory<sup>#</sup> specified at the time of configuration.

#

It refers to the directory name specified by the AJSBKUROOT environment setting parameter.

### -i

Displays a message with a confirmation prompt before deleting a backup box or file.

### -n backup-box-name

Specify the name of the backup box to be deleted.

You can specify a character string of 1 to 50 bytes.

The name of the backup box depends on the file system of your operating system. It is case-sensitive if you are using UNIX and case-insensitive if you are using Windows.

## backup-file-name

Specify the name of the backup file to be deleted, following the name of the backup box containing it.

Specify a value ranging from 0001 to 1024. You can specify one or more backup files. To specify more than one file, separate them by at least one space character.

### Notes

- To delete a backup box or backup file, you must have the update privilege for both the backup box and backup file.
- If you delete a backup box, the directory having the backup box name within the backup information directory is not deleted. After the ajsbkudel command deletes the backup box, use the rmdir command as required to delete the directory having the backup box name.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Example

The following command deletes backup file 0001 from backup box BOX1:

ajsbkudel -n BOX1 0001

# ajscalendar

## Format

```
ajscalendar
     [-F service-name]
     [-lt {hour:minute|none|no}]
     [-ld {day|none|no|{sun|su|mon|mo|tue|
          tu|wed|we|thu|th|fri|fr|sat|sa}:n
     [-md {this|th|next|ne|none|no}]
     [-c]
     [-op {sun|su|mon|mo|tue|tu|wed|we|
          thu|th|fri|fr|sat|sa|
          {year/month/{day|
          {sun|su|mon|mo|tue|tu|wed|we|
          thu|th|fri|fr|sat|sa}[:n]}}]
     [-cl {sun|su|mon|mo|tue|tu|wed|we|
          thu|th|fri|fr|sat|sa|
          {year/month/{day|
          {sun|su|mon|mo|tue|tu|wed|we|
          thu|th|fri|fr|sat|sa}[:n]}}]
     [-no {sun|su|mon|mo|tue|tu|wed|we|
          thu|th|fri|fr|sat|sa|{year/month/{day|
          {sun|su|mon|mo|tue|
          tu|wed|we|thu|th|fri|fr|sat|sa}
          [:n]}}]
     [-of open-day-information-file-name]
     [-cf closed-day-information-file-name]
     [-nf canceled-day-information-file-name]
     [-df calendar-information-file-name]
     [-d year/month/day]
     [-R]
     job-group-name...
```

## Description

Defines calendar information for a job group.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -lt { *hour*: *minute* | none | no }

Set the base time for the calendar.

• hour:minute

You can specify a value between 0 and 23 for the hour.

You can specify a value between 0 and 59 for the minute.

• none|no

Inherits the base time in the calendar information defined for an upper-level job group. If calendar information is defined for none of the upper-level job groups, the system assumes 0:00.

#### -ld { day | none | no | { sun | su | mon | mo | tue | tu | wed | we | thu | th | fri | fr | sat | sa } : n }

Set the base date for the calendar.

• day

You can specify a value between 1 and 31 for the day.

• none|no

Inherits the base date in the calendar information defined for an upper-level job group.

If calendar information is defined for none of the upper-level job groups, the system assumes the first day of the month.

• sun|su

Sets the base date to Sunday.

• mon|mo

Sets the base date to Monday.

• tue|tu

Sets the base date to Tuesday.

• wed|we

Sets the base date to Wednesday.

• thu|th

Sets the base date to Thursday.

• fri|fr

Sets the base date to Friday.

• sat|sa

Sets the base date to Saturday.

• n

Specify the week for the day; a value between 1 and 5 (specifying 1 for Sunday, for example, indicates the first Sunday of the month).

You must specify this value when specifying the day of the week, such as sun or su.

#### -md {this|th|next|ne|none|no}

Specify the base month for the calendar (specify the month to which a date belongs relative to the base date).

• this|th

Sets dates following the base date to be those of the month to which the base date belongs.

• next|ne

Sets dates following the base date to be those of the month next to the month to which the base date belongs.

• none|no

Inherits the base month in the calendar information defined for an upper-level job group.

If calendar information is defined for none of the upper-level job groups, the system assumes the base date's month.

#### -c

Deletes calendar information.

If you delete calendar information, the system inherits the calendar information defined for an upper-level job group. To prevent calendar information from increasing excessively, we recommend that you delete it periodically and then redefine the open and closed days.

You cannot use this option to delete the base time, base date, and base month. To delete these settings, specify none for the corresponding option.

If you specify this option with any of the -op, -cl, -no, -of, -cf, -nf, and -df options, the system deletes calendar information before setting the open, closed, or canceled day, regardless of the sequence in which you specify the options.

### -op {sun|su|mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa|{year/month/{day|{sun|su| mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa}[: n]}}

Specify an open day (a day on which you will execute a jobnet).

You can specify one or more open days.

For details about the date format, see Additional informations below.

### -cl {sun|su|mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa|{year/month/{day|{sun|su| mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa}[: n]}}

Specify a closed day (a day on which you will not execute a jobnet).

You can specify one or more closed days.

For details about the date format, see Additional informations below.

### -no {sun|su|mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa|{year/month/{day|{sun|su| mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa}[: n]}}

Specify a canceled day (a day on which you will cancel the specification of an open or closed day).

You can specify one or more canceled days.

For details about the date format, see Additional informations below.

### -of open-day-information-file-name

Specify the name of the file containing the dates of open days (for details about the date format, see *Additional informations* below).

You can specify a character string of 1 to 255 bytes.

The system adds open days to the calendar information according to the contents of this file.

#### -cf closed-day-information-file-name

Specify the name of the file containing the dates of closed days (for details about the date format, see *Additional informations* below).

You can specify a character string of 1 to 255 bytes.

The system adds closed days to the calendar information according to the contents of this file.

#### -nf canceled-day-information-file-name

Specify the name of the file containing the dates of canceled days (for details about the date format, see *Additional informations* below).

You can specify a character string of 1 to 255 bytes.

The system adds canceled days to the calendar information according to the contents of this file.

#### -df calendar-information-file-name

Specify the name of the calendar information file, in which calendar information parameters, indicating open and closed days, are defined.

By storing the output result obtained by specifying the -d option in the ajsprint command in a file, you can specify the file as the calendar information file in this option.

You can specify a character string of 1 to 255 bytes.

If you specify stdin as the file name, the system inputs calendar information from the standard input.

Only the parameters indicating open and closed days can be specified in a calendar information file as unit definition parameters. You cannot specify the base time, base date, or base month. For details about unit definition parameters, see 4.1 Creating a unit definition file in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

#### -d year/month/day

Deletes the calendar information previous to the specified date (for example, specifying  $-d_{2006/6/1}$  deletes the calendar information previous to June 1, 2006, including the information for June 1, 2006).

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify value between 1 and 12 for the month.

• *day* 

You can specify a value between 1 and 31 for the day.

#### -R

Defines calendar information for all job groups contained in the specified job group.

#### job-group-name

Specify the name of the job group for which you want to define calendar information.

You can specify a character string of 1 to 930 bytes.

You can specify one or more job groups.

You cannot specify a logical host name or execution ID as a job group name.

### Notes

- Either of the following users can define calendar information:
  - A user granted the update privilege when a job group was defined or when its attributes were changed. If the job group has higher job groups, the user must have the reference privilege for all of the groups.
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the reference privilege and the update privilege.

- If an open day information file, closed day information file, canceled day information file, or calendar definition file contains calendar information which does not conform to the specified format, the <code>ajscalendar</code> command ignores that information and continues processing. Make sure that a line feed is specified at the end of the information file. If there is no line feed, the last line will be treated as external format information and ignored. In addition, the calendar information specified on the last line will not be defined even if the <code>ajscalendar</code> command has been successfully executed.
- If you simultaneously specify an open day information file, closed day information file, canceled day information file, and calendar definition file, any error encountered during the processing of one of the files causes the ajscalendar command to stop processing for the erroneous file and continue processing for other files.

Note that the ajscalendar command defines only the calendar information in successfully processed files, and then abnormally terminates.

- If nothing is defined in the open day information file, closed day information file, canceled day information file, or calendar definition file, the system does not modify the corresponding calendar information.
- If you modify the calendar information for a job group simultaneously with <code>ajscalendar</code> command and the Edit Monthly Calendar or Edit Annual Calendar window of JP1/AJS3 View, the results will be unpredictable.
- Always separate an option and its value by at least one space character.
- For ajscalendar command, you cannot specify more than one option.

Correct use: ajscalendar -c -F AJSROOT1 /GROUP Incorrect use: ajscalendar -cF AJSROOT1 /GROUP

- If the open day information file, closed day information file, canceled day information file, or calendar definition file contains no valid calendar information, and if no valid calendar definition option is specified, <code>ajscalendar</code> command ends abnormally.
- If any invalid calendar definition option is specified, the command ends abnormally.
- Make sure that the ajscalendar command is executed when the amount of processing is small. Execution of the command might affect operation because execution of jobnets registered in the same scheduler service as the job group for which calendar information is defined is suppressed. However, a jobnet with start conditions placed in *Now monitoring* status before the definition is changed is executed when the start conditions are satisfied during execution of the ajscalendar command.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Additional informations

- The schedule is recalculated if the following conditions are satisfied:
  - A scheduler service of the specified job group is running.
  - This command has terminated normally.
- The following shows the formats of a standard-week value and open, closed, and canceled days, which are calendar information stored in open day information, closed day information, and canceled day information files. The three types of information files use the same format. Make sure that a line feed is specified at the end of the information file. If there is no line feed, the last line will be treated as external format information and ignored. In addition, the calendar information specified on the last line will not be defined even if the ajscalendar command has been successfully executed.

Format of standard-week values:

sun|su: Specifies Sunday. mon|mo: Specifies Monday. tue|tu: Specifies Tuesday. wed|we: Specifies Wednesday. thu|th: Specifies Thursday.

fri|fr: Specifies Friday.

sat|sa: Specifies Saturday.

Format of open, closed, and canceled days:

 $YYYY/MM/\{DD\{sun|su|mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa}[:n]\}$ 

• *YYYY* 

You can specify a value between 1994 and 2036 for the year.

• *MM* 

You can specify value between 1 and 12 for the month.

• *DD* 

You can specify a value between 1 and 31 for the day.

• n

Specify the week for the day; a value between 1 and 5 (specifying 1 for Sunday, for example, indicates the first Sunday of the month).

If you specify 5 for a month which does not have the fifth week, the system invalidates the calendar information.

- Calendar information options (-op, -cl, and -no) specified later take precedence over those specified earlier (for example, if you specify -op mon -cl mon -no mon, the system places a higher priority on -no mon, thus handling Monday as a canceled day).
- If you specify a standard-week value and open, closed, and canceled days simultaneously, the open, closed, and canceled days take precedence (for example, if you specify -op 2010/10/25 -cl sun, the system places a higher priority on -op 2010/10/25, thus handling October 25, 2010 as an open day).
- If you specify the day of the week for an open, closed, or canceled day, the day is converted to the corresponding date and then stored as calendar information.
- If you do not set calendar information for a job group, JP1/AJS3 references the calendar information of the upperlevel job group or the scheduler service. If calendar information is not set for the upper-level job group and the scheduler service, open days are assumed.

## Example 1

The following command deletes the calendar information for job group /Sales, and then sets the closed days for October 2010 (Saturdays and Sundays). This example assumes that the closed days are defined in the closed day information file (/tmp/calendar).

```
ajscalendar -c -cf /tmp/calendar /Sales
```

Contents of the closed day information file (/tmp/calendar)

```
2010/10/sat
2010/10/sun
```

## Example 2

The following command sets the calendar information for job group /Sales. (Saturdays and Sundays are set to closed days according to the standard-week values. In October 2010, however, Saturdays are assumed to be open days.)

ajscalendar -cl su -cl sa -op 2010/10/sa /Sales

# ajschange

## Format

```
ajschange
    [-F service-name]
    [attribute-information-change-options]
    [schedule-information-change-options]
    [job-information-change-options]
    [relationship-change-options]
    [root-jobnet-execution-order-control-information-change-options]
    [wait-condition-change-options]
    [-R]
    [-L|-E]
    [-T]
    [-G|-N|-J]
    [-S]
    job-name-or-jobnet-name-or-job-group-name...
```

## Description

Modifies the definition of a unit.

## **Execution privileges**

You must have any of the following JP1 privileges:

When updating (defining) an element

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

When changing an attribute of an element using the -g, -o, or -m option

- JP1\_AJS\_Admin privilege
- Owner of the unit

#### Cautionary note

If **User who owns** is specified for **Executed by** for the unit, any JP1 user who has a JP1 privilege level for the jobnet other than JP1\_AJS\_Admin can only modify a unit he or she owns.

If no JP1 resource group is specified for the unit, any user can perform any operation for the unit even if they do not have the above JP1 privilege level.

If no owner is specified for the unit, any user can modify attributes for the unit even if they do not have the above JP1 privilege level.

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -R

Modifies the definitions of all jobnets, job groups, and jobs contained in the specified unit.

If you specify this option with the -L, -E, -T, -G, -N, and/or -J options, the system modifies the definitions according to the specification of each option.

### -L

Modifies the definitions of job groups, jobnets not registered for execution, and jobs.

If you specify this option with the -T, -N, and/or -J options, the system modifies the definitions of jobnets or jobs not registered for execution according to the specification of each option. You cannot specify this option with the -E and/ or -G option.

### -E

Modifies the definitions of jobs and jobnets registered for execution.

If you specify this option with the -T, -N, and/or -J options, the system modifies the definitions of jobnets or jobs registered for execution according to the specification of each option. You cannot specify this option with the -L and/ or -G option.

### -T

Modifies the definitions of root jobnets.

If you specify this option with the -E or -L option, the system modifies the definitions of root jobnets according to the specification of each option. If you specify this option with the -N option, the -N option is disabled. You cannot specify this option with the -G or -J option.

#### -G

Modifies the definitions of job groups.

You cannot specify this option with the -L, -E, -T, -N, -J, or a relationship change option.

### -N

Modifies the definitions of jobnets.

If you specify this option with the -T option, this option is disabled. If you specify this option with the -E or -L option, the system modifies the definitions of jobnets according to the specification of each option. You cannot specify this option with the -G or -J option.

### -J

Modifies the definitions of jobs.

You cannot specify this option with the -T, -G, or -N option or a relationship change option.

### -s

Allows you to change the definition of a suspended jobnet or a job in a suspended jobnet, even if the jobnet is already registered for execution.

If you specify this option together with an option that modifies an item that cannot be modified while a jobnet is suspended, the command terminates abnormally.

#### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job, jobnet or job group for which you want to modify definitions.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job name, jobnet name, or job group name. You should not, however, specify the following pairs of units, which have different definition information:

- Job group and manager job group
- Jobnet and manager jobnet

You can specify a logical host name as a job, jobnet or job group name. You cannot specify an execution ID.

#### attribute-information-change-options

These options modify the attributes of a unit.

These options are common to all units. (The -H and -I options are, however, exceptions. You can specify the -H and -I options only for manager units.)

-m permission-mode

Specify the permission mode when modifying the JP1 user settings for job execution.

You can specify four octal digits.

The following is the meaning of each digit, starting from the left:

1<sup>st</sup> digit

Specify the handling of the user for job execution

0 to 3: Assumes the JP1 user who has registered the jobnet to be the user for job execution.

4 to 7: Assumes the JP1 user who owns the job to be the user for job execution.

2<sup>nd</sup> to 4<sup>th</sup> digits

Specifies any value between 0 and 7.

This option is valid for only jobs. It is invalid if specified for non-job units.

-o owner-name

Modifies the owner of the unit.

You can specify a character string of 1 to 31 bytes.

-g JP1-resource-group-name

Modifies the group name for the owner of the unit.

You can specify a character string of 1 to 63 bytes. Use alphanumeric characters and an underscore (\_) to specify the name.

-C *comment* 

Modifies the comment for the unit.

You can specify a character string of 1 to 80 bytes.

-н manager-host-name

Modifies the manager host name.

You can specify this option only for a manager unit.

You can specify a character string of 1 to 255 bytes.

#### -I manager-unit-name

Modifies the manager unit name.

You can specify this option only for a manager unit.

You can specify a character string of 1 to 961 bytes.

#### schedule-information-change-options

These options modify the schedule defined for a jobnet (if you modify the schedule, the system will recalculate the schedule upon the end of command execution).

You can specify these options only for a jobnet.

-D job-group-name

Specify the name of the job group in which the target calendar information is defined, when modifying the calendar information.

You can specify a character string of 1 to 930 bytes.

-d  $[N,] \{ [[year/]month/] \{ [+|*|@]day| [+|*|@]b[-day] | [+] \{ sun|su|mon|mo|tue|tu|wed| we|thu|th|fri|fr|sat|sa \} [: {n|b}] \} |en|ud|undefine \}$ 

Modifies the date on which you want to start executing the jobnet.

You can specify up to 144 dates in one command.

To clear all definitions, specify -d 0, ud, or -d 0, undefine.

• N

Specify the corresponding rule number if you specify more than one starting date for executing the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• year

Specify the year of the starting date for executing the jobnet.

You can specify a value between 1994 and 2036 for the year.

By default, the system assumes the year in which you registered the jobnet for execution.

• month

Specify the month of the starting date for executing the jobnet.

You can specify value between 1 and 12 for the month.

By default, the system assumes the month in which you registered the jobnet for execution.

• +

Specify the execution start date using the number of days following the base date.

• •

Specify the execution start date using the number of open days following the base date.

• @

Specify the execution start date using the number of closed days following the base date.

• day

Specify the day of the execution start date.

You can specify the following values:

When specifying an absolute date

• Year/month/day specification: 1 to last day of specified year/month.

- Month/day specification: 1 to last day of specified month. For February, however, 1 to 29.
- Day specification: 1 to 31.

When specifying a relative date or the number of open or closed days

1 to 35 (days).

If you omit the specification of + (relative date), \* (number of open days) or @ (number of closed days), the system assumes an absolute day of the month in which you registered the jobnet for execution.

• b

Sets the last day of the month to the jobnet start date.

• *-day* 

Specify the starting date for executing the jobnet using the number of days between the date and the end of the month.

You can specify the following values:

When specifying an absolute date

- Year/month/day specification: 0 to (last day of specified year/month -1).
- Month/day specification: 0 to (last day of specified month -1). For February, however, 0 to 28.
- Day specification: 0 to 30.

When specifying a relative date or the number of open or closed days

0 to 34 (days).

You can specify this option with + (relative date), \* (number of open days) or @ (number of closed days).

• sun|su|mon|mo|tue|tu|wed|we|thu|th|fri|fr|sat|sa

Specify Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday as the starting date for executing the jobnet.

• n

Specify the week for the day; a value between 1 and 5 (specifying 1 for Sunday, for example, indicates the first Sunday of the month).

By default, the system assumes the start date to be the next day of the week after the date when the jobnet was registered for execution and the date when the ajsschedule command was executed. If you do not specify anything when either *year* or *month* is specified for the execution start date, the system assumes the first week when you register anything for execution and when you execute the ajsschedule command.

• en

Changes the defined execution start date to the date on which you registered the jobnet for execution.

• ud|undefine

Clears the entire schedule for the jobnet.

If you specify this option, specify 0 for N (jobnet rule number).

Specifying this option causes the -d, -t, -V, -W, -K, -y, -s, and -h options to be disabled.

#### -t [*N*,][+]*hour:minute*

Modifies the time at which you want to start executing the jobnet.

You can specify up to 144 times in one command.

• N

Specify the corresponding rule number if you specify more than one starting date for executing the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• +

Handles the time specified with *hour:minute* as a relative time. By default, the system handles the specified time as an absolute time.

• hour:minute

Specify the starting time for executing the jobnet. You can specify a value between 0 and 47 for the hour. You can specify a value between 0 and 59 for the minute.

-V [N,] { hour : minute | M-minute | U-minute | C-minute }

Modifies the delay time for starting the jobnet.

You can specify up to 144 times in one command.

• N

Specify the corresponding rule number if you specify more than one delay time for starting the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• hour:minute

Specify an absolute time.

You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

• M-minute

Specify the number of minutes relative to the starting time for executing the root jobnet. You can specify a value between 1 and 2,879 for the minute.

• U-minute

Specify the number of minutes relative to the starting time for executing the upper-level jobnet. You can specify a value between 1 and 2,879 for the minute.

• C-minute

Specify the number of minutes relative to the starting time for executing the relevant jobnet. You can specify a value between 1 and 2,879 for the minute.

-W [N,] { hour : minute | M-minute | U-minute | C-minute }

Modifies the delay time for ending the jobnet.

You can specify up to 144 times in one command.

• N

Specify the corresponding rule number if you specify more than one delay time for ending the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• hour:minute

Specify an absolute time.

You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

• *M*-minute

Specify the number of minutes relative to the starting time for executing the root jobnet. You can specify a value between 1 and 2,879 for the minute.

• U-minute

Specify the number of minutes relative to the starting time for executing the upper-level jobnet. You can specify a value between 1 and 2,879 for the minute.

• C-minute

Specify the number of minutes relative to the starting time for executing the relevant jobnet. You can specify a value between 1 and 2,879 for the minute.

-K [N, ] linked-rule-number

Modifies the rule number to be linked with that for the upper-level jobnet if you have more than one schedule defined. You can specify up to 144 numbers in one command. You cannot specify a rule number for the root jobnet.

• N

Specify the rule number for the schedule for the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• linked-rule-number

Specify the rule number for the upper-level jobnet that corresponds to the above rule number.

-y [N, ] processing-cycle, {y|m|w|d}

Modifies the processing cycle for the jobnet.

You can specify up to 144 processing cycles.

• N

Specify the corresponding rule number if you specify more than one delay time for starting the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• processing-cycle, {y|m|w|d}

Modify the processing cycle and its unit (for example, specify -y 6, m to process the jobnet at intervals of six months).

• у

Specifies the processing cycle in years. You can specify a value between 1 and 9 for the processing cycle.

• m

Specifies the processing cycle in months. You can specify a value between 1 and 12 for the processing cycle.

• W

Specifies the processing cycle in weeks. You can specify a value between 1 and 5 for the processing cycle. You cannot specify this if an open day or closed day is used to define the starting date for executing the jobnet. If you specify this, the schedule is calculated assuming that one week is equal to seven open days or seven closed days. We recommend that you specify the processing cycle on a daily basis. A good example would be "7, d", instead of "1, w".

• d

Specifies the processing cycle in days. You can specify a value between 1 and 31 for the processing cycle.

#### -s [N,] {af|be|no|ca}

Modifies the method of shifting the execution date if the scheduled date of jobnet execution falls on a closed day in the JP1/AJS3 calendar.

You can specify up to 144 methods in one command.

• N

Specify the corresponding rule number if you specify more than one delay time for starting the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• af

Executes the jobnet by shifting the execution day to a day after the scheduled date of execution.

• be

Executes the jobnet by shifting the execution day to a day before the scheduled date of execution.

• no

Forcibly executes the jobnet even if the scheduled date of execution is a closed day, provided a scheduler service is running.

• ca

Does not execute the jobnet if the scheduled date of execution is a closed day.

-h [N, ] shift-days

If you specify af (shifting to a day after the execution day) or be (shifting to a day before the execution day) for the -s option, the -h option specifies the period into which the system can shift the execution day.

You can specify up to 144 periods.

• N

Specify the corresponding rule number if you specify more than one delay time for starting the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• shift-days

You can specify a number between 1 and 31 (days). (For example, specify -s af -h 5 if you want the system to find a substituting execution day by selecting each following day within five days including the scheduled execution day.)

-p year/month/day

Modifies the expiration date for jobnet execution.

• year

Specify the year of the expiration date.

You can specify a value between 1994 and 2036 for the year.

• month

Specify the month of the expiration date.

You can specify value between 1 and 12 for the month.

• day

Specify the day of the expiration date.

You can specify a value between 1 and 31 for the day.

#### -1 number-of-logs-to-keep

Modifies the number of logs to store the results of jobnet execution.

You can specify a number between 1 and 99 (logs).

You can, however, enable the system setting option to increase the number of generations to up to 999.

-n priority-value

Modifies the assumed value of the execution priority for jobs in the jobnet.

You can specify a value between 1 and 5.

The lowest priority is 1 and the highest is 5.

-b {y|w|a|n}

Modifies the hold attribute for the jobnet. If you specify w or a for a nested jobnet, the system assumes n.

• y

Holds the execution of the jobnet.

• W

Holds execution only if the previous execution of the jobnet has terminated abnormally or with a warning.

• a

Holds execution only if the previous execution of the jobnet has terminated abnormally.

• n

Does not hold the execution of the jobnet.

One of the job information change options (the option for modifying the job hold attribute) has the same name as this option. Be careful not to mix up these options when specifying wildcard characters if there are several types of units.

#### job-information-change-options

These options modify the definition information for a job.

The -b and -j options can be specified for any job.

Other options can be specified for UNIX jobs, recovery UNIX jobs, PC jobs, recovery PC jobs, custom UNIX jobs, recovery custom UNIX jobs, custom PC jobs, recovery custom PC jobs, and recovery QUEUE jobs.

-c command-text

Modifies a command text.

You can specify a character string of 1 to 1,023 bytes.

You can specify this option for UNIX or Custom UNIX jobs, or recovery jobs for them.

-z script-file-name

Specify a script file name for a UNIX job, or an execution file name for a PC job and a QUEUE job.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

*−∨ environment-variable-file-name* 

Modifies the environment variable file name.

Use a full path to specify the file name.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

#### -i standard-input-file-name

Modifies the standard input file name.

Use a full path to specify the file name.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

#### -u standard-output-file-name

Modifies the standard output file name.

Use a full path to specify the file name.

You can specify a character string of 1 to 511 bytes.

You can output the standard output file as a temporary file by specifying \$JP1AJS2\_JPQSTDOUTTEMP\$.

You can also specify a macro variable.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-e standard-error-output-file-name

Modifies the standard error output file name.

Use a full path to specify the file name.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-w warning-threshold

Modifies the threshold value for completion with a warning.

You can specify a value between 0 and 2,147,483,647.

If the specified value is greater than the abnormal threshold, the value is defined as the abnormal threshold value.

-a abnormal-threshold

Modifies the threshold value for abnormal end.

You can specify a value between 0 and 2,147,483,647.

If the specified value is smaller than the abnormal threshold, the value is defined as the abnormal threshold value.

A value that is smaller than the lower limit or greater than the upper limit of the return code to be automatically retried cannot be specified if the retry settings for the unit to be updated is set and a return code to be automatically retried is specified.

-j job-execution-agent-host-name

Modifies the name of the job execution agent host.

You can specify a character string of 1 to 255 bytes.

You cannot specify this option for a QUEUE job, an OR job, a judgment job, or recovery jobs for them.

-U remote-execution-user

Modifies the name of the user who executes the job.

You can specify a character string of 1 to 63 bytes.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-b {y|n}

Modifies the hold attribute for the job.

You can specify this option for jobs other than OR jobs, and for their recovery jobs.

This option cannot be specified for a job specified in a start condition.

• у

Holds the execution of the job.

• n

Does not hold the execution of the job.

One of the schedule information change options (the option for modifying the job hold attribute) has the same name as this option. Be careful not to mix up these options when specifying wildcard characters if there are several types of units.

-q queue-name

Modifies the name of the queue for queuing the job.

You can specify a character string of 1 to 63 bytes.

You can specify this option for QUEUE job or recovery jobs for them.

-k job-name

Modifies the job name.

You can specify a character string of 1 to 63 bytes.

You can specify this option for QUEUE job or recovery jobs for them.

#### relationship-change-options

These options modify the relationship of the execution order for jobnets and jobs. You can specify these options only for a jobnet.

You can specify up to 20 – A options (make relation options) and 20 – B options (break relation options) in one command.

-A preceding-unit-name, succeeding-unit-name [, {seq|con}]

Specify the names of the preceding and succeeding units between which you want to create a relationship (associate units). You must also specify the connection type.

You can specify a character string of 1 to 30 bytes for each unit name (*preceding-unit-name and succeeding-unit-name*).

If the relation line is already set for the preceding and succeeding units whose relationship is to be set, the command returns 0 and ends normally.

• seq

Specifies forward connection.

• con

Specifies the judgment connection of a judgment job and a dependent unit.

The system does not create a relationship in any of the following cases:

- If the same unit name is specified for the preceding unit as well as the succeeding unit
- If the unit of the specified preceding unit name or succeeding unit name does not exist
- If a recovery unit is specified as the preceding unit name, and a regular unit is specified as the succeeding unit name
- If you attempt to set a reverse relationship for units between which you have already set a relationship
- If you specify a relationship and cancel a relationship, at the same time, between the same preceding unit and succeeding unit
- If you specify a job group, manager job group, manager jobnet, or root jobnet
- If there are two or more preceding units when the succeeding unit is a judgment job
- If the preceding unit is other than an event job when the succeeding unit is an OR job
- If you specify a unit other than a judgment job as the preceding unit for a judgment connection
- If the judgment connection of a judgment job and a dependent unit makes other than 1-to-1 matching

- If you specify a start condition unit name for the name of the preceding or succeeding unit
- -B preceding-unit-name, succeeding-unit-name

Specify the names of the preceding and succeeding units between which you want to break a relationship (cancels the association between units).

You can specify a character string of 1 to 30 bytes for each unit name.

If the relation line does not exist for the preceding and succeeding units whose relationship is to be broken, the command returns 0 and ends normally.

#### root-jobnet-execution-order-control-information-change-options

These options modify the information that control the execution order of root jobnets based on jobnet connectors. You can specify these options only for a root jobnet that has not been registered, and for a planning group whose units have not been registered.

-M whether-to-control-the-root-jobnet-execution-order

Specify whether to control the root jobnet execution order.

- y: The root jobnet execution order is controlled.
- n: The root jobnet execution order is not controlled.

If you change the value of this option from y to n, the specifications of the -O (jobnet connector name), -Qh (host to connect), and -Qs (connection service name) options are cleared (neither y nor n is set). For the -P (root jobnet execution order control method) and -Qx (linkage of root jobnet execution order control between scheduler services) options, n is set.

-0 *jobnet-connector-name* 

Specify the full name of the unit of the jobnet connector to be connected. You can specify a character string of 1 to 930 bytes.

You can specify this option if y is specified for the -M option. Specifying this option if n is specified for the -M option results in an error.

-P root-jobnet-execution-order-control-method

Specify the method for controlling the root jobnet execution order.

- y: Root jobnets are executed synchronously with jobnet connectors.
- n: Root jobnets are executed asynchronously with jobnet connectors.

You can specify this option if y is specified for the -M option. Specifying this option if n is specified for the -M option results in an error.

-Qx linkage-of-root-jobnet-execution-order-control-between-scheduler-services

Specify whether to establish linkage between scheduler services when the execution order of root jobnets is controlled.

You can only specify this option for a planning group whose units have not been registered, and for a root jobnet that has not been registered.

If you change the value of this option from y to n, the specifications of the -Qh (host to connect) and -Qs (connection service name) options are cleared (neither y nor n is set).

• у

Linkage between scheduler services is established.

Root jobnet execution order control is linked with jobnet connectors including those defined on other hosts or those defined in other scheduler services.

• n

Linkage between scheduler services is not established.

Root jobnet execution order control is linked with only jobnet connectors defined in the same scheduler service.

-Qh connection-host-name

Specify the name of the host on which a jobnet connector to be connected is defined. You can specify a character string of 1 to 255 bytes. You cannot specify space, tab, or linefeed characters.

You can specify this option only if y is specified for the -Qx option (linkage of root jobnet execution order control between scheduler services).

-Qs connection-service-name

Specify the name of the scheduler service on which a jobnet connector to be connected is defined. You can specify a character string of 1 to 30 bytes. You cannot specify a null string ("") to reset the scheduler service name definition to the default status.

You can specify this option only if y is specified for the -Qx option (linkage of root jobnet execution order control between scheduler services).

#### wait-condition-change-options

These options modify wait conditions.

You cannot use these options in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

You can apply these options to suspended units by specifying them together with the -S option.

-Qm {and|or}

Specify the wait method. This option must be specified together with the -Qn option and the -Qu option if no units whose ends are being waited for are defined for the target unit.

If "" is specified for this option, and is assumed.

• and

The unit starts executing when all units whose ends are being waited for finish executing.

• or

The unit starts executing when any one of the units whose ends are being waited for finish executing.

 $-Qn \{y \mid n\}$ 

Specify how the unit behaves when there are no applicable generations of the root jobnet of the unit whose end is being waited for. This option must be specified together with the -Qm option and the -Qu option if no units whose ends are being waited for are defined for the target unit.

If "" is specified for this option, n is assumed.

• у

Start executing.

• n

Do not start executing.

-Qu name-of-unit-whose-end-is-being-waited-for

Specify the full path name of an additional unit whose end is being waited for by a wait condition. You can specify a character string of 1 to 930 bytes. The unit you specify is added to the units already defined for the wait condition. If you specify a unit that is already defined as a unit whose end is being waited for by that wait condition, the command ends normally without the unit being added.

You cannot add more than 32 units whose ends are being waited for.

You can specify multiple instances of this option together with the -Qd option (which deletes units whose ends are being waited for).

If you specify this option together with the -Qd option and specify the same unit name in both options, the -Qd option takes precedence and the specified unit is deleted.

This option must be specified together with the -Qm option and the -Qn option if the command targets a unit for which no units whose ends are being waited for are defined.

-Qd name-of-unit-whose-end-is-being-waited-for-to-delete

Specify the full path name of a unit whose end is being waited for that you want to delete from a wait condition. You can specify a character string of 1 to 930 bytes. The unit you specify is removed from the wait conditions defined for the target unit.

If you specify a unit that is not defined as a unit whose end is being waited for by the wait condition, the command ends normally.

You can specify multiple instances of this option together with the -Qu option (which adds units whose ends are being waited for).

If you specify this option together with the -Qu option and specify the same unit name for both options, the -Qd option takes precedence and the specified unit is deleted.

-Qz

Deletes all units whose ends are being waited for defined in the wait condition.

You cannot specify this option with the -Qu option or -Qd option.

-Qg {exec|execdeffer|none}

If a jobnet with start conditions is specified as the jobnet whose end is being waited for, specify the behavior when the execution generation ends abnormally.

To specify this option for a unit for which no unit whose end is being waited for is specified, you must also specify the -Qm, -Qn, and -Qu options.

If "" is specified for this option, none is assumed.

• exec

Start executing.

• execdeffer

Do not start executing. Note, however, that if the execution generation is in the *Skipped so not exe*. status, execution starts.

• none

Do not start executing.

#### -QU {y|n}

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for, and the status of the monitoring generation changes to Unmonitored + Ended.

To specify this option for a unit for which no unit whose end is being waited for is specified, you must also specify the -Qm, -Qn, and -Qu options.

If "" is specified for this option, n is assumed.

• у

Start executing.

• n

Do not start executing.

## Notes

- Either of the following users can change the unit definition:
  - A user who was granted the update privilege when the unit was defined or when the unit's attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges
  - Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.
- We recommend that you not execute this command during the execution of a jobnet. (This command terminates abnormally if some other process is using the target unit. You cannot use JP1/AJS3 View to manipulate or update a unit while you are modifying the definition of the unit with this command. You cannot execute a unit while you are manipulating it.)
- We recommend that you cancel the registration of jobnets before attempting to change the contents of the definitions of registered jobnets (Otherwise, you cannot change the related information). Use the ajsleave command when canceling the registration of jobnets.
- If you specify any invalid option for the unit, this command will terminate abnormally. Do not use wildcard characters for modification (use a regular expression, such as A\* for a name starting with A).
- Modifying the schedule disables any temporary plan modification you specified previously.
- If you shift the execution start day to a day previous to the target day, the schedule for the past becomes invalid; the system does not execute the jobnet.
- If you use the command to define a jobnet, the system does not check the consistency of the execution order of units. A jobnet in which units will result in a loop or a judgment job without any associated dependent units results in an error and is placed in *Invalid exe. seq.* status.
- To leave information undefined (default), specify "" for the option.
- If you specify the -t, -V, -W, -K, -y, -s, or -h option with a rule number not contained in the schedule definition for the jobnet, the command will end normally, without adding any schedule. When adding a schedule rule, also specify the -d option.
- If the release target jobnet (root jobnet for which release entry is made) is changed, the jobnet definitions in *Being applied* status are also changed.
- You cannot control the execution order of release target jobnets (root jobnets for which release entry is made).
- You cannot use the -A or -B option to change the definition of a relation line associated with a suspended unit. To change a relation line for a suspended unit, use the ajschgnet command.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Additional information

To leave information undefined (default) for an attribute information change, schedule information change or job information change option, specify "" for the option.

## Example 1

The following command changes the starting time for executing jobnet net1 to 17:00 (absolute time) on every Friday in October 2010:

ajschange -d 2010/10/fr -y 1, w -t 17:00 net1

## Example 2

The following command changes the standard output file for job net1/job1 to /dev/null:

```
ajschange -u /dev/null net1/job1
```

## Example 3

The following command creates a relationship between two jobs, net1/job1 and net1/job2:

```
ajschange -A job1, job2 net1
```

## Example 4

The following command sets the execution order control information for root jobnet /net1 so that it is executed synchronously with jobnet connector /net2/netconl:

ajschange -M y -O /net2/netconl -P y /net1

The following command cancels the execution order control for root jobnet /net1:

```
ajschange -M n /net1
```

# ajschgjob

## Format

```
ajschqjob
     [-F service-name]
     [job-common-information-change-options]
     [UNIX/PC/QUEUE/CUSTOM-job-information-change-options]
     [judgment-job-information-change-options]
     [JP1-event-reception-monitoring-job-information-change-options]
     [file-monitoring-job-information-change-options]
     [email-reception-monitoring-job-information-change-options]
     [message-queue-reception-monitoring-job-information-change-options]
     [MSMQ-reception-monitoring-job-information-change-options]
     [log-file-monitoring-job-information-change-options]
     [Windows-event-log-monitoring-job-information-change-options]
     [execution-interval-control-job-information-change-options]
     [JP1-event-sending-job-information-change-options]
     [email-sending-job-information-change-options]
     [message-queue-sending-job-information-change-options]
     [MSMQ-sending-job-information-change-options]
     [HP-NNM-status-report-job-information-change-options]
     [local-power-control-job-information-change-options]
     [remote-power-control-job-information-change-options]
     [-R]
     [-L|-E]
     [-J]
     job-name-or-jobnet-name-or-job-group-name...
```

## Description

Modifies the definitions of jobs.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

Cautionary note

If **User who owns** is specified for **Executed by** for the unit, any JP1 user who has a JP1 privilege level for the jobnet other than JP1\_AJS\_Admin can only modify a unit he or she owns.

If no JP1 resource group is specified for the unit, any user can perform any operation for the unit even if they do not have the above JP1 privilege level.

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -R

Modifies the definitions of all jobs contained in the specified unit.

If you specify this option with the -L, -E, and/or -J options, the system modifies the definitions according to the specification of each option.

### -L

Modifies the definitions of jobs in jobnets not registered for execution.

If you specify this option with the -J option, the system modifies the definitions of jobs in unregistered jobnets. You cannot specify this option with the -E option.

### -E

Modifies the definitions of jobs in jobnets registered for execution.

If you specify this option with the -J option, the system modifies the definitions of jobs in registered jobnets. You cannot specify this option with the -L option.

### -J

Modifies the definitions of jobs.

### job-name-or-jobnet-name-or-job-group-name

Specify the full name of the job for which you want to modify definitions. You can also specify the full name of the job, jobnet, or job group with the -R, -E, -L, or -J option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job name, jobnet name, or job group names.

You can specify a logical host name as a job, jobnet or job group name. You cannot specify an execution ID.

### job-common-information-change-options

These options modify information common to all jobs.

#### -ex "execution-agent-host-name"

Modifies the name of the job execution agent host.

You can specify a character string of 1 to 255 bytes.

You cannot specify this option for a QUEUE job, judgment job, or OR job.

-et execution-time-out-period

Modifies the execution time-out period.

You can specify a value between 1 and 1,440 for the minute.

You cannot specify this option for a QUEUE job, judgment job, or OR job. The same is applicable to any job within the start conditions.

-ha  $\{y \mid n\}$ 

Modifies the hold attribute.

You cannot specify this option for an OR job. The same is applicable to any job within the start conditions.

• У

Holds the execution of a job.

• n

Does not hold the execution of a job.

-es {kl|nr|wr|an}

Modify the time-out state of the event job after the execution time-out period elapses. This option is valid for the following information change options:

- JP1 event reception monitoring job
- File monitoring job
- Email reception monitoring job
- Message-queue message reception monitoring job
- MSMQ message reception monitoring job
- Log file monitoring job
- Windows event-log monitoring job
- Execution interval control job

You can specify the following characters with this option:

- kl: Killed
- nr: Ended normally
- wr: Ended with warning
- an: Ended abnormally

You can specify this option only for an event job. You cannot specify this option for an event job within the start condition.

If you specify this option for a unit for which no execution time-out period has been specified, you must specify an execution time-out period using the -et option.

-fd time-required-for-execution

Change the time-required-for-execution within which the job is expected to be terminated. A delay of job execution is detected based on this time.

You can specify a value from 1 to 1,440 (in minutes). Specifying a non-numeric character or a numeric value outside the 1-1,440 range results in an error.

You cannot specify this for a judgment job or an OR job. If you specify this option for a judgment job or OR job, the option is ignored and processing continues.

#### UNIX/PC/QUEUE/CUSTOM-job-information-change-options

These options modify job definition information.

You can specify these options for UNIX jobs, recovery UNIX jobs, PC jobs, recovery PC jobs, custom UNIX jobs, recovery custom UNIX jobs, custom PC jobs, recovery custom PC jobs, QUEUE jobs, and recovery QUEUE jobs.

-te command-text

Modifies a command text.

You can specify a character string of 1 to 1,023 bytes.

You can specify this option for UNIX or Custom UNIX jobs, or recovery jobs for them.

-sc script-file-name

Specify a script file name for a UNIX job, or an execution file name for a PC job and a QUEUE job. You cannot specify this option for custom PC job or recovery jobs for them.

#### -pm parameter

Modifies a parameter for the execution file.

You cannot specify this option for custom PC job or recovery jobs for them.

-wk work-path-name

Modifies the work path (current path) name.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

-ev environment-variable-file-name

Modifies the environment variable file name.

You can specify a character string of 1 to 511 bytes.

Use a full path name to specify the environment variable file name.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

For notes on defining environment variables, see A. Notes on Defining Environment Variables and an Environment Variable File.

-en environment-variable

Modifies the environment variable.

You can specify a character string of 1 to 20,479 bytes.

You can specify more than one environment variable using up to a total of 20,479 bytes.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

For notes on defining environment variables, see A. Notes on Defining Environment Variables and an Environment Variable File.

-si standard-input-file-name

Modifies the standard input file name.

You can specify a character string of 1 to 511 bytes.

Use a full path name to specify the standard input file name.

You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

-so standard-output-file-name

Modifies the standard output file name.

You can specify a character string of 1 to 511 bytes.

Use a full path name to specify the standard output file name.

You can output the standard output file as a temporary file by specifying \$JP1AJS2\_JPQSTDOUTTEMP\$.

You can also specify a macro variable.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-se standard-error-output-file-name

Modifies the standard error output file name.

You can specify a character string of 1 to 511 bytes.

Use a full path name to specify the standard error output file name.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-oa {new|add}

Modifies the method for updating the information in the standard output file. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• new

Outputs information to a new standard output file.

• add

Adds information to an existing standard output file.

```
-ea {new|add}
```

Modifies the method for updating the information in the standard error output file. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• new

Outputs information to a new standard error output file.

• add

Adds information to an existing standard error output file.

-pr execution-priority

Modifies the priority for job execution.

You can specify a value between 1 and 5.

The lowest priority is 1 and the highest is 5.

-un job-execution-user-name

Modifies the name of the user for executing the job.

You can specify a character string of 1 to 63 bytes.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-jd {nm|ab|cod|mdf|exf}

Modifies the type of end judgment.

If this value is changed to a value other than cod, the setting values for the -Ab, -rs, -re, -rc, and -ri options related to the retry setting are initialized.

• nm

Assumes every termination of the job to be a normal end.

• ab

Assumes every termination of the job to be an abnormal end.

• cod

Assumes a normal end if the return code is below the specified value.

• mdf

Assumes a normal end if the job has updated a file.

You cannot specify this option for a QUEUE job or recovery jobs for them.

• exf

Assumes a normal end if the job has created a file.

You cannot specify this option for a QUEUE job or recovery jobs for them.

-wt warning-threshold

Modifies the threshold value for completion with a warning.

You can specify a value between 0 and 2,147,483,647.

If the specified value is greater than the abnormal threshold, the value is defined by using the abnormal threshold value.

-th abnormal-threshold

Modifies the threshold value for abnormal end.

You can specify a value between 0 and 2,147,483,647.
If the specified value is smaller than the warning threshold, the value is defined by using the warning threshold value.

A value that is smaller than the lower limit or greater than the upper limit of a return code requiring automatic retry cannot be specified if the retry settings for the job to be updated are set and a return code requiring automatic retry is specified.

-jf end-judgment-file-name

Modifies the name of the end judgment file.

You cannot specify this option for a QUEUE job or recovery jobs for them.

 $-Ab \{y \mid n\}$ 

Changes the behavior of automatic retry when a job ends abnormally.

• у

Performs automatic retry when a job ends abnormally.

• n

Automatic retry is not performed if a job ends abnormally.

y can be specified for this option only when the value specified for the -jd option is cod.

If this value is changed from y to n, all related settings for the -rs, -re, -rc, and -ri options are deleted. In addition, when n is specified for this option, if the -rs, -re, -rc, and -ri options are specified together with this option, they are ignored.

This option cannot be defined for the passing information setting job.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-rs lower-limit-of-return-code-to-be-automatically-retried

Specify the lower limit for the return codes to be automatically retried. When automatic retry on abnormal end is set, if the return code output on an abnormal end is equal to or greater than the value specified for this option, automatic retry is performed.

You can specify a value from 1 to 4,294,967,295. If "" is specified, the value is treated as undefined, and the value of the abnormal threshold + 1 for the end judgment is assumed at job execution.

A value that is equal to or smaller than the abnormal threshold and a value that is greater than the upper limit of the return code to be automatically retried cannot be specified. In addition, if the lower and upper limits of the return code to be automatically retried (enabled when the job is executed) constitute an invalid range, an error occurs.

This option cannot be defined for the passing information setting job.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-re upper-limit-of-return-code-to-be-automatically-retried

Specify the upper limit for the return codes to be automatically retried. When automatic retry on abnormal end is set, if the return code output on an abnormal end is equal to or smaller than the value specified for this option, automatic retry is performed.

You can specify a value from 1 to 4,294,967,295. If "" is specified, the value is treated as undefined, and the maximum value (4,294,967,295) is assumed at job execution.

A value that is equal to or smaller than the abnormal threshold and a value that is smaller than the lower limit for the return codes to be automatically retried cannot be specified. In addition, if the lower and upper limits of the return codes to be automatically retried constitute an invalid range, an error occurs.

This option cannot be defined for the passing information setting job.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-rc maximum-number-of-retry-executions

Specify the maximum number of retry executions for automatic retry.

You can specify a value from 1 to 12. This option cannot be defined for the passing information setting job.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-ri retry-interval

Specify the retry interval for automatic retry.

You can specify a value from 1 to 10 (minutes).

This option cannot be defined for the passing information setting job.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

#### -qu queue-name

Modifies the name of the queue for queuing the job.

You can specify a character string of 1 to 63 bytes.

You can specify this option for QUEUE job or recovery jobs for them.

-qm queue-manager-host-name

Modifies the name of the queue manager host.

You can specify a character string of 1 to 255 bytes.

You can specify this option for QUEUE job or recovery jobs for them.

-rq job-name

Modifies the job name.

You can specify a character string of 1 to 63 bytes.

You can specify this option for QUEUE job or recovery jobs for them.

-s1 transfer-source-file-name-1

Modifies transfer source file name 1.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

#### -d1 transfer-destination-file-name-1

Modifies transfer destination file name 1.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

```
-t1 {sav|del}
```

Modifies the option for deleting transfer destination file 1 upon the completion of job execution. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• sav

Saves the file upon the completion of job execution.

• del

Deletes the file upon the completion of job execution.

-s2 *transfer-source-file-name-2* 

Modifies transfer source file name 2.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

-d2 *transfer-destination-file-name-2* 

Modifies transfer destination file name 2.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

#### -t2 {sav|del}

Modifies the option for deleting transfer destination file 2 upon the completion of job execution. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• sav

Saves the file upon the completion of job execution.

• del

Deletes the file upon the completion of job execution.

-s3 transfer-source-file-name-3

Modifies transfer source file name 3.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

-d3 transfer-destination-file-name-3

Modifies transfer destination file name 3.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

```
-t3 {sav|del}
```

Modifies the option for deleting transfer destination file 3 upon the completion of job execution. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• sav

Saves the file upon the completion of job execution.

• del

Deletes the file upon the completion of job execution.

#### -s4 transfer-source-file-name-4

Modifies transfer source file name 4.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

-d4 transfer-destination-file-name-4

Modifies transfer destination file name 4.

You can specify a character string of 1 to 511 bytes.

You cannot specify this option for custom PC job or recovery jobs for them.

-t4 {sav|del}

Modifies the option for deleting transfer destination file 4 upon the completion of job execution. You cannot specify this option for a QUEUE job, a custom PC job, or recovery jobs for them.

• sav

Saves the file upon the completion of job execution.

• del

Deletes the file upon the completion of job execution.

#### $-jt \{q|n\}$

Modify whether the job has the queuing attribute. You can specify this option for UNIX or PC jobs, or recovery jobs for them. You cannot specify this option for a QUEUE job or recovery jobs for them.

• q

Has the queuing attribute.

• n

Does not have the queuing attribute.

# judgment-job-information-change-options

These options modify definition information for a judgment job.

-ej {gt|ge|lt|le|eq|ne|ri|ro|ef|nf|vgt|vge|vlt|vle|veq|vne|vri|vro|sce|spe| sne|spn|snn|snl}

This option is used to modify the judgment method.

If the database configuration of JP1/AJS3 is the compatible ISAM configuration, ri, ro, vri, vro, and spn cannot be specified.

• gt

Indicates that the return code for the preceding job is greater than the judgment value.

• ge

Indicates that the return code for the preceding job is greater than or equal to the judgment value.

• lt

Indicates that the return code for the preceding job is less than the judgment value.

• le

Indicates that the return code for the preceding job is less than or equal to the judgment value.

• eq

Indicates that the return code for the preceding job is equal to the judgment value.

• ne

Indicates that the return code for the preceding job is not equal to the judgment value.

• ri

Indicates that the return code of the preceding job is within the judgment value range. The lower limit judgment return code (-el option) and the upper limit judgment return code (-eh option) must also be specified at the same time. If necessary, specify boundary conditions (the -lP and -uP options).

• ro

Indicates that the return code of the preceding job is outside of the judgment value range. The lower limit judgment return code (-el option) and the upper limit judgment return code (-eh option) must also be specified at the same time. If necessary, specify boundary conditions (the -lP and -uP options).

• ef

Indicates that the job has created a file.

• nf

Indicates that the job has not created a file.

• vgt

Indicates that the value of the specified variable is greater than the judgment value (numeric).

• vge

Indicates that the value of the specified variable is equal to or greater than the judgment value (numeric).

• vlt

Indicates that the value of the specified variable is less than the judgment value (numeric).

• vle

Indicates that the value of the specified variable is equal to or less than the judgment value (numeric).

• veq

Indicates that the value of the specified variable is equal to the judgment value (numeric).

• vne

Indicates that the value of the specified variable is not equal to the judgment value (numeric).

• vri

Indicates that the value of the specified variable is within the judgment value (numeric) range. The lower limit variable judgment value (-jG option) and the upper limit variable judgment value (-jG option) must also be specified at the same time. If necessary, specify boundary conditions (the -lP and -uP options).

• vro

Indicates that the value of the specified variable is outside the judgment value (numeric) range. The lower limit variable judgment value (-jG option) and the upper limit variable judgment value (-jG option) must also be specified at the same time. If necessary, specify boundary conditions (the -lP and -uP options).

• sce

Indicates that the value of the specified variable is equal to the judgment value (string).

• spe

Indicates that the value of the specified variable includes the judgment value (string).

• sne

Indicates that the value of the specified variable is not equal to the judgment value (string).

• spn

Indicates that the value of the specified variable does not include the judgment value (character string). The variable name  $(-j \lor option)$  and the judgment character string  $(-j \intercal option)$  of the variable must also be specified at the same time.

• snn

Indicates that the value of the specified variable does exist.

• snl

Indicates that the value of the specified variable does not exist.

-ec judgment-return-code

Modifies the return code used for judgment.

You can specify a value between 0 and 4,294,967,295.

# -el lower-limit-judgment-return-code

Changes the lower limit return code used for judgment.

You can specify a value from 0 to 4,294,967,295. If there is no integer value within the range used to judge the return code from the lower limit judgment return code (-el option) and the boundary condition (-lP option) to the upper limit judgment code (-eh option) and the boundary condition (-uP option), an error occurs.

If the return code is either within or outside the judgment value range (the vi or ro is specified for the -ej option), this option takes effect.

If the return code is a negative value, judgment can be performed by specifying a value that is converted to an unsigned integer. For example, -1 is handled as 4,294,967,295 in Windows, and as 255 in UNIX. Note, however, that if a negative number in a return code is converted to an unsigned integer, it is within the range from 2,147,483,648 to 4,294,967,295. Therefore, if the range for a return code is spans 0, a range cannot be specified.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

#### -eh upper-limit-judgment-return-code

Changes the upper limit return code used for judgment.

You can specify a value from 0 to 4,294,967,295. If there is no integer value within the range used to judge the return code from the lower limit judgment return code (-el option) and the boundary condition (-lP option) to the upper limit judgment code (-eh option) and the boundary condition (-uP option), an error occurs.

If the return code is either within or outside the judgment value range (the vi or ro is specified for the -ej option), this option takes effect.

If the return code is a negative value, judgment can be performed by specifying a value that is converted to an unsigned integer. For example, -1 is handled as 4, 294, 967, 295 in Windows, and as 255 in UNIX. Note, however, that if a negative number in a return code is converted to an unsigned integer, it is within the range from 2,147,483,648 to 4,294,967,295. Therefore, if the range for a return code is spans 0, a range cannot be specified.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-ef end-judgment-file-name

Modifies the name of the file used for judgment.

You can specify a character string of 1 to 260 bytes.

-j∨ variable-name

Changes the variable name serving as the target of judgment.

You can specify a string of 1 to 64 bytes in ?AJS2xxxx? format. What you can specify in the xxxxx part is limited to upper-case alphabetic characters, numeric characters, and periods (.).

-jT string-of-judging-variable

Changes the string serving as the target of variable judgment.

You can specify a string of 1 to 511 bytes.

-jI numerical-value-of-judging-variable

Changes the numerical value serving as the target of variable judgment.

You can specify a value of 0 to 2,147,483,647.

-jS lower-limit-variable-judgment-value

Changes the numeric value of the lower limit used for variable judgment.

You can specify a value from 0 to 2,147,483,647. If there is no integer value within the range used for variable judgment (numeric) from the lower limit variable judgment numeric value (-jS option) and the boundary condition (-lP option) to the upper limit variable judgment numeric value (-jG option) and the boundary condition (-uP option), an error occurs.

If the variable value is either within or outside the range (the vri or vro is specified for the -ej option) of the judgment value (numeric), this option takes effect.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-jG upper-limit-variable-judgment-value

Changes the numeric value of the upper limit used for variable judgment.

You can specify a value from 0 to 2,147,483,647. If there is no integer value within the range used for variable judgment (numeric) from the lower limit variable judgment numeric value (-jS option) and the boundary condition (-lP option) to the upper limit variable judgment numeric value (-jG option) and the boundary condition (-uP option), an error occurs.

If the variable value is either within or outside the range (the vri or vro is specified for the -ej option) of the judgment value (numeric), this option takes effect.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

-lP {gt|ge}

Defines boundary conditions for the lower limit judgment return code (-el option) or the lower limit variable judgment value (-jS option).

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

• gt

Indicates that the return code of the preceding job or the judgment value (numeric) of a variable is greater than the judgment value.

• ge

Indicates that the return code of the preceding job or the judgment value (numeric) of a variable is equal to or greater than the judgment value.

-uP {lt|le}

Defines boundary conditions for the upper limit judgment return code (-eh option) or the upper limit variable judgment value (-jG option).

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

• lt

Indicates that the return code of the preceding job or the judgment value (numeric) of a variable is smaller than the judgment value.

• le

Indicates that the return code of the preceding job or the judgment value (numeric) of a variable is equal to or smaller than the judgment value.

# JP1-event-reception-monitoring-job-information-change-options

These options modify definition information for a JP1 event reception monitoring job.

-jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for *passing-information-name*:

- CMTMOUT: Whether the job has ended due to time-out
- EVID: Event ID
- EVUSR: Event issuer user name
- EVGRP: Event issuer group name
- EVHOST: Event issuer event server name
- EVIPADDR: Event issuer IP address
- EVMSG: Message information
- EVDETAIL: Event detail information

- EVSEV: Extended attribute event level
- EV: extended-attribute-name: Arbitrary extended attribute
- EVENV1 to EVENV9: Retrieved data
- EVUSRID: Event issuer user ID
- EVGRPID: Event issuer group ID
- EVPROCESSID: Event issuer process ID
- EVDATE: Date of event issue
- EVTIME: Time of event issue

#### -EI monitoring-event-ID

Modifies the monitoring event ID.

-EU event-source-user-name

Modifies the name of the user issuing an event.

You can specify a character string of 1 to 20 bytes.

-EG event-source-group-name

Modifies the name of the group issuing an event.

You can specify a character string of 1 to 20 bytes.

-EH event-source-host-name

Modifies the name of the host issuing an event.

You can specify a character string of 1 to 255 bytes.

-Ei event-source-IP-address

Modifies the IP address of the event source.

You can specify a value between 0.0.0.0 and 255.255.255.255 in the *XXX*. *YYY*. *xxx*. *yyy* format. You can specify a value between 0 and 255 for each of *XXX*, *YYY*, *xxx* and *yyy*.

-EM event-message-information

Modifies the event message information.

You can specify characters or a regular expression of 1 to 1,024 bytes.

-ED event-detail-information

Modifies the event detail information.

You can specify characters or a regular expression of 1 to 1,024 bytes.

-ES event-level

Modifies the event level, which is one of the event extended attributes.

You can specify the following character strings. You can specify multiple event levels delimited with ":", such as -ES em:al.

- em: Uses Emergency as the matching criteria.
- al: Uses Alert as the matching criteria.
- cr: Uses Critical as the matching criteria.
- er: Uses Error as the matching criteria.
- wr: Uses Warning as the matching criteria.
- no: Uses Notice as the matching criteria.

- in: Uses Information as the matching criteria.
- db: Uses Debug as the matching criteria.

-EF *any-event-extended-attribute* 

Modifies any event extended attribute.

You can specify more than one attribute in the following format:

-EF "any-event-extended-attribute-name:\"value\""

If the value contains double quotation marks (") or #, use a cast character (#). Specify #\" for " and ## for #.

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value specified in the -EF option is converted to the evwfr=*any-event-extended-attribute-name*:"*value*"; format that is output with the ajsprint -a option.

-ET end-judgment-condition

Modifies the end judgment condition.

You can specify the following characters:

- n: Assumes every termination of the job to be a normal end.
- a: Assumes every termination of the job to be an abnormal end.
- n:*file-name*: Assumes a normal end if the message coincides with the contents of the specified file.
- a: *file-name*: Assumes an abnormal end if the message coincides with the contents of the specified file.
- d:file-name: Assumes a normal end if the detailed information coincides with the contents of the specified file.
- b:*file-name*: Assumes an abnormal end if the detailed information coincides with the contents of the specified file.

You can specify a character string of 1 to 256 bytes for the file name.

#### -Eu event-source-user-ID

Modifies the ID of the user issuing an event.

You can specify a value between -1 to 9,999,999,999.

-Eg event-source-group-ID

Modifies the ID of the group issuing an event.

You can specify a value between -1 to 9,999,999,999.

-Ep event-source-process-ID

Modifies the ID of the process issuing an event.

You can specify a value between -1 to 9,999,999,999.

```
-Ee {no|minutes}
```

Specify whether, immediately after the JP1 event reception monitoring job is executed (before starting monitoring for a JP1 event) any previous JP1 events will still be monitored for reception.

```
• no
```

Does not search for previous JP1 events.

• minutes

Searches for JP1 events that occurred after the specified time before the JP1 event reception monitoring job was executed. You can specify a decimal value between 1 and 720 (minutes).

If you specify *minutes*, ensure that the monitor event ID is already specified with the -EI option.

If you have not specified the monitor event ID, use the -EI option simultaneously to specify the monitor event ID.

# file-monitoring-job-information-change-options

These options modify definition information for a file monitoring job.

#### -jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for *passing-information-name*:

- CMTMOUT: Whether the job has ended due to time-out
- FLFNAME: Full-path name of the changed file
- FLCOND: Conditional parameter
- FLCTIME: Time at which the file was updated
- FLSIZE: Size of the changed file

#### -FF monitored-file-name

Modifies the name of the file to be monitored.

You can specify a character string of 1 to 255 bytes. Use a complete name or wildcard characters to specify the file name. Note, however, that you cannot specify the file name using wildcard characters when a value from 1 to 9 is used to specify the monitor interval in the -FI option.

#### -FC monitoring-conditions

Modifies the monitoring conditions.

You can specify one or more of the following characters. (Delimit with ":", such as -FC c:d. You cannot, however, specify both s and m in one command.

- c: Monitors the creation of a file.
- d: Monitors the deletion of a file.
- s: Monitors the resizing of a file.
- m: Monitors the modification of the last written time for a file.

When you specify the -FO option, also specify the c character.

If you specify the c character without specifying the -FO option, the file monitor job is executed before the system monitors creation of the file to be monitored.

If you delete the c character, the system does not monitor file creation.

-FI monitoring-interval

Modifies the time interval for file monitoring.

You can specify a value between 1 and 600 (seconds). Note, however, that you cannot specify a value from 1 to 9 when the file name using wildcard characters is used to specify the monitor file name in the -FF option.

-FO handling-in-presence-of-file-to-be-monitored

This option changes the way of executing the file monitoring job when there is a file to be monitored. It can be specified only when the monitor conditions contain "Monitor file creation".

You can specify one or more of the following characters.

- y: The system terminates normally assuming that the monitor conditions have been met.
- n: The system continues to monitor the target file.

#### email-reception-monitoring-job-information-change-options

These options modify definition information for an email reception monitoring job.

#### -jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name: passing-information-name.* However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for passing-information-name:

- CMTMOUT: Whether the job has ended due to time-out
- MLRCVADDRESS: Email sender's address<sup>#</sup>
- MLRCVSUBJECT: Email title
- MLRCVBODY: File storing email text
- MLRCVATTACHFILEnn (nn is a value between 01 and 20): Name of the file attached to the email
- MLRCVATTACHLIST: Name of the file containing a list of files attached to the email
- MLRCVMAILBODY: Email
- MLRCVTIME: Time at which the email arrived
- #

In Windows, you can pass display names (nicknames).

To pass a display name, set the Nickname attribute of the NextAddress environment setting parameter. For details, see 2.3.4 Setting up the environment for the mail system linkage in the Job Management Partner 1/ Automatic Job Management System 3 Linkage Guide.

#### -pf platform-type

Modifies the platform type for defining email reception.

You can specify either of the following characters:

- u: Defines email reception under UNIX.
- p: Defines email reception under Windows.

#### -MA sender

Modifies the sender of the received email.

You can specify a character string of 1 to 256 bytes.

You can specify up to 20 senders in the -MA "sender" format.

-ML email-reception-list-name

Modifies the name of the email reception list.

You can specify a character string of 1 to 255 bytes.

-MP profile-name

Modifies the profile name.

You can specify a character string of 1 to 256 bytes.

### -Ms email-save-mode

Modifies the mode of saving received email.

You can specify either of the following characters:

- y: Saves received email.
- n: Does not save received email.

-MS subject

Modifies the subject of the received email.

You can specify a character string of 1 to 256 bytes.

You can specify up to 20 subjects in one command using the -MS "text" format.

-MF folder-to-store-attached-file

Modifies the name of the folder in which you store any attached file of the received email. You can specify a character string of 1 to 256 bytes.

-mf attached-file-list-file-name

Modifies the name of the file containing a list of attached files.

You can specify a character string of 1 to 256 bytes. Use a full path to specify the list file name.

-Mt file-to-store-email-text

Modifies the name of the file in which you store the text of the received email.

You can specify a character string of 1 to 256 bytes. Use a full path to specify the file name.

-MT text

Modifies the text of the received email.

You can specify a character string of 1 to 512 bytes.

You can specify up to 20 messages in one command in the -MT text format.

# message-queue-reception-monitoring-job-information-change-options

These options modify definition information for a message queue reception monitoring job.

-jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for passing-information-name:

- CMTMOUT: Whether the job has ended due to time-out
- MQRCVCORRELATION: Message correlation ID

- MQRCVDISCRIMINATION: Message ID
- MQRCVQUEUE: Message reception queue name
- MQRCVMODELQUEUE: Model queue name
- MQRCVMESSAGEFILE: Message structure storage file name

#### -QC correlation-ID

Modifies the correlation ID of the received message.

You can specify a character string of 1 to 24 bytes. You can, however, specify only uppercase letters and numbers.

#### -QD message-ID

Modifies the message ID of the received message.

You can specify a character string of 1 to 24 bytes. You can, however, specify only uppercase letters and numbers.

-QM model-queue-name

Modifies the model queue name for the queue used to monitor message reception.

You can specify a character string of 1 to 48 bytes. Specify the queue name using an MQ character string.

-QQ message-reception-queue-name

Modifies the name of the queue used to monitor message reception.

You can specify a character string of 1 to 48 bytes. Specify the queue name using an MQ character string.

-QS message-storage-file-name

Modifies the name of the file in which you store messages.

You can specify a character string of 1 to 256 bytes.

# MSMQ-reception-monitoring-job-information-change-options

These options modify definition information for an MSMQ reception monitoring job.

-jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for passing-information-name:

- CMTMOUT: Whether the job has ended due to time-out
- MSRCVQUEUEPATH: Message queue path name
- MSRCVMUTUAL: Message correlation ID
- MSRCVMESSAGELABEL: Message label
- MSRCVAPPLICATION: Message application information
- MSRCVMESSAGEFILE: Message structure storage file name

#### -SA application-information

Modifies the application information for the message to be monitored.

You can specify a hexadecimal value between 0 and FFFFFFF.

-SM message-label

Modifies the message label for the message to be monitored.

You can specify a character string of 1 to 249 bytes.

-SQ queue-path-name

Modifies the queue path name for the queue used to monitor messages.

You can specify a character string of 1 to 259 bytes.

-SR message-correlation-ID

Modifies the correlation ID of the message to be monitored.

You can specify a character string of 1 to 20 bytes. You can, however, specify only uppercase letters and numbers.

-SF message-storage-file-name

Modifies the name of the file in which you store messages.

You can specify a character string of 1 to 256 bytes. Use a full path to specify the file name.

# log-file-monitoring-job-information-change-options

These options modify definition information for a log file monitoring job.

-jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for *passing-information-name*:

- CMTMOUT: Whether the job has ended due to time-out
- LFFNAME: Trapped log file name
- LFDATA: Trapped data

#### -Lw file-creation-wait-option

Modifies the option for file creation wait at the beginning of log file monitoring job.

You can specify either of the following characters:

- y: Generates an error if a log file is not found.
- n: Repeats opening a file until a log file is created.

-Ld log-file-output-file-format

Modifies the output file format for the log file.

You can specify the following character strings.

- s: Sequential (default). Data is appended to one log file, and when the file is filled to its capacity, a new log file is created with another name, and new log data is written to the new file.
- s2: Sequential. A log file with the same name is continuously used for logging by creating a new file with the same name after backing up the current file with another name or deleting the current file.

If the job execution host is a Windows host, you can specify this option in JP1/AJS3 or in JP1/AJS2 08-00 or a later version if the JP1/Base version is 08-10 or later.

If the job execution host is a UNIX host, you can specify this option in JP1/AJS3 or in JP1/AJS2 07-00 or a later version if the JP1/Base version is 07-00 or later.

- w1: Wraparound (When log data is written to the end of the log file, the existing data is overwritten with new data, starting with the beginning of the file.)
- w2: Wraparound (When log data is written to the end of the log file, the existing data is deleted and then new data is written from the beginning of the file.)

## -LF log-file-name

Changes the log file name to be monitored.

You can specify a character string of 1 to 256 bytes.

You can specify up to 8 files in one command in the -LF "log-file-name" format.

-LL header-specification

Modifies the header.

You can specify either of the following characters:

- 1: *number-of-lines-in-header*: Modifies the number of lines contained in the header. You can specify a value between 0 and 99, 999 (lines).
- s: header-size: Modifies the size of the header. You can specify a size of up to 9,999,999 (bytes).

# -LM data-other-than-log-information

Modifies data other than the log information.

You can specify more than one data item in one command using the -LM "[!] \"*data-other-than-log-information* \"" format.

If the data contains double quotation marks (") or #, use a cast character (#). Specify #\" for " and ## for #.

You can specify a character string of up to 1,024 bytes in total. This means that the sum of the number of bytes should not exceed 1,024 after the value specified in the -LM option is converted to the following format that is output with the <code>ajsprint -a</code> option:

lfmks=[!]"data-1-other-than-log-information"[:[!]"data-2-other-than-log-information"...];

-LX maximum-event-data-length

Modifies the maximum length of event data.

You can specify a character string of 2 to 512 bytes.

# -LR log-data-record-format

Modifies the record format of the log data to be trapped.

You can specify either of the following characters:

- v:'[\] *delimiter*': Delimits a line using variable-length records. You can specify the delimiter consisting of a character string of 1 byte.
- f: *record-length*: Delimits a line using fixed-length records. You can specify a value between 1 and 9,999,999 (bytes) for the record length.
- -LI log-file-search-interval

Modifies the time interval for log file searching.

You can specify a value between 1 and 86,400 (seconds).

-Ls search-start-option

Modifies the search start option.

You can specify either of the following characters:

- y: Inputs from the top data.
- n: Does not input from the top data.

#### -LD *trap-data*

Modifies the data to be trapped.

You can specify more than one data item in one command using the -LD "[!]\"*trap-data*\"" format.

If the trap data contains double quotation marks (") or #, use a cast character (#). Specify #\" for " and ## for #.

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value specified in the -LD option is converted to the lftpd=[!]"*trap-data-1*"[:[!]"*trap-data-2*"...]; format that is output with the ajsprint -a option.

### Windows-event-log-monitoring-job-information-change-options

These options modify definition information for a Windows event log monitoring job.

-jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name : passing-information-name*. However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for passing-information-name:

- CMTMOUT: Whether the job has ended due to time-out
- NELOG: Log type
- NEEVKIND: Event type
- NESOURCE: Source
- NECLASS: Category
- NEEVID: Event ID
- NEDETAIL: Description

#### -NJ event-category-judgment-condition

Modifies the judgment condition for an event category.

You can specify one of the following characters:

- y: Monitors the specified category.
- n: Monitors the categories other than the specified category.

#### -NC category

Modifies the category of the events you want to monitor.

You can specify a character string of 1 to 255 bytes.

-ND *description* 

Modifies the description you want to use for comparison when monitoring the detailed description of an event. You can specify a character string of 1 to 1,024 bytes.

#### -Ni event-ID-judgment-condition

Modifies the judgment condition for an event ID.

You can specify either of the following characters:

- y: Monitors the specified event ID.
- n: Monitors the event IDs other than the specified event ID.

#### -NI event-ID

Modifies the event ID of the events you want to monitor.

You can specify a value between 0 and 4,294,967,295.

#### -NE event-type

#### Modifies the event type.

You can specify either of the following characters: You can specify one of the following characters: You can specify multiple types delimited with ":", such as -NE i:w:e.

- v: Monitors verbose events.
- i: Monitors information events.
- w: Monitors warning events.
- e: Monitors error events.
- c: Monitors critical events.
- s: Monitors successful audit events.
- f: Monitors failed audit events.

#### -NL log-type

Modifies the log type.

You can specify the following character strings.

- sys: Monitors the system log.
- sec: Monitors the security log.
- app: Monitors the application log.
- dns: Monitors the DNS Server log (for Windows 2000).
- dir: Monitors the Directory Service log (for Windows 2000).
- frs: Monitors the file reproduction service log (for Windows 2000).
- oth: Monitors the log type specified for the -Nt option.

When oth is specified, the -Nt option must also be specified. If the value is changed from oth to another value, the value specified for the -Nt option is deleted.

#### -Nt any-log-type

Changes an arbitrary log type to be monitored.

You can specify a character string of 1 to 255 bytes.

If oth is not specified for the -NL option, an error occurs.

#### -Ns source-judgment-condition

Modifies the judgment condition for a source.

You can specify either of the following characters:

• y: Monitors the specified source.

• n: Monitors the sources other than the specified source.

#### -NS source

Modifies the source you want to monitor.

You can specify a character string of 1 to 255 bytes.

#### execution-interval-control-job-information-change-options

This option modifies definition information for an execution interval control job.

#### -jp macro-variable-specification

Modifies the specification of a macro variable.

You can specify this option multiple times in the format -jp *macro-variable-name: passing-information-name.* However, if you specify the same macro variable name more than once, the system only passes the passing information associated with the first instance of the macro variable name.

Specify macro variable names as a string of 1 to 64 bytes in ?AJS2xxxxx? format. The xxxxx part is limited to uppercase alphabetic characters, numeric characters, and periods (.).

You can specify a character string of up to 2,048 bytes in total. This means that the sum of the number of bytes should not exceed 2,048 after the value of the -jp option is converted to the jpoif=?AJS2xxxx?:passing-information-name; format that is output with the ajsprint -a option.

You can specify the following character strings for passing-information-name:

• CMTMOUT: Whether the job has ended due to time-out

#### -Tw wait-time

Modifies the wait time.

You can specify a value between 1 and 1,440 for the minute.

```
-eT {y|n}
```

When the execution interval control job is defined as a start condition, specify whether to complete the job immediately after it is started:

- y: Completes the job immediately after it is started and starts the first execution immediately.
- n: The job is not completed immediately after it is started. The job waits until the wait time passes before it starts the first execution.

For the execution interval control job defined for a normal jobnet instead of a start condition, the -eT option cannot be specified. If the option is specified, the KAVS0159-W message appears, the specification of the option is treated as invalid, and command processing continues.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

#### JP1-event-sending-job-information-change-options

These options modify definition information for an JP1 event sending job.

-pf platform-type

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.
- -EH event-destination-host-name

Modifies the name of the host to which you want to transmit events.

You can specify a character string of 1 to 255 bytes.

#### -eM message

Modifies the message information you want to attach to the event.

You can specify a character string of 1 to 1,023 bytes.

-eI transmit-event-ID

Modifies the event ID of the event you want to transmit.

You can specify a hexadecimal value between 00000000 and 00001FFF, or between 7FFF8000 and 7FFFFFFF.

#### -es event-level

Modifies the event level, which is one of the event extended attributes.

You can specify the following character strings.

- em: Specifies Emergency.
- al: Specifies Alert.
- cr: Specifies Critical.
- er: Specifies Error.
- wr: Specifies Warning.
- no: Specifies Notice.
- in: Specifies Information.
- db: Specifies Debug.

# -Ef any-event-extended-attribute

Modifies any extended attribute attached to the event.

You can specify options in the following format: -Ef "any-extended-attribute-name:\"value\"".

You can specify in the following format:

-Ef "any-event-extended-attribute-name:\"value\""

You can specify more than one attribute (up to 128 bytes in the evsfr=*any-event-extended-attribute-name*:"*value*"; format).

If the value contains double quotation marks (") or #, use a cast character (#). Specify  $\# \ \#$  for " and # # for #.

-eK {y|n}

Specifies whether to check the arrival of the event.

You can specify either of the following characters:

- n: Does not check the arrival of the event.
- y: Checks the arrival of the event.

-eP event-arrival-check-interval

Specifies the interval at which arrival checks will be attempted if the JP1 event has not yet arrived.

If the unit definition specifies no event arrival check, you can modify the specification to check arrivals by specifying this option with the -eK y option.

You cannot specify this option with the -eK n option.

You can specify a decimal value between 3 and 600 (seconds).

-eR event-arrival-check-count

Specifies the number of times arrival checks will be attempted if the JP1 event has not yet arrived.

If the unit definition specifies no event arrival check, you can modify the specification to check arrivals by specifying this option with the -eK y option.

You cannot specify this option with the -eK n option.

You can specify a decimal value between 0 and 999 (times).

-jt {q|n}

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

# email-sending-job-information-change-options

These options modify definition information for an email sending job.

#### -pf platform-type

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

### -MA email-address

Modifies the address to which you want to transmit email.

You can specify the following character strings.

- to:*email-address*: Transmits the email to the destination.
- cc:email-address: Transmits a copy of the email to the destination.
- bcc:email-address: Transmits a copy of the email to the destination using the blind carbon copy feature.

You can specify a character string of 1 to 256 bytes for the email address.

You can specify up to 20 email addresses in one command using the -MA "email-address" format.

#### -MP profile-name

Modifies the profile name.

You can specify a character string of 1 to 256 bytes.

-MS subject

Modifies the subject of the email to be sent.

You can specify a character string of 1 to 256 bytes.

-mF attached-file-name

Modifies the name of the file you want to attach to the email to be sent.

You can specify a character string of 1 to 256 bytes. You can specify up to 20 files in one command in the -mF "*attached-file-name*" format. Use a full path to specify the file name.

-mf attached-file-list-file-name

Modifies the name of the file containing a list of attached files.

You can specify a character string of 1 to 256 bytes. Use a full path to specify the list file name.

-MT text

Modifies the text of the email to be sent.

You can specify a character string of 1 to 512 bytes.

-mt *text-file-name* 

Modifies the text file name for the email to be sent.

You can specify a character string of 1 to 256 bytes. Use a full path to specify the file name.

#### -jt {q|n}

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

### message-queue-sending-job-information-change-options

These options modify definition information for a message queue for a sending job.

#### -pf *platform-type*

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

### -QC correlation-ID

Modifies the correlation ID of the message to be sent.

You can specify a character string of 1 to 24 bytes. You can, however, specify only uppercase letters and numbers.

#### -QD message-ID

Modifies the message ID you want to assign to the message to be sent.

You can specify a character string of 1 to 24 bytes. You can, however, specify only uppercase letters and numbers.

-qE *dead-letter-queue-name* 

Modifies the dead letter queue name.

You can specify a character string of 1 to 48 bytes. Specify the queue name using an MQ character string.

-qH hold-time

Modifies the hold time for the message to be sent.

You can specify a value between 1 and 9,999,999 for the minute.

-QM model-queue-name

Modifies the model queue name.

You can specify a character string of 1 to 48 bytes. Specify the queue name using an MQ character string.

-qd message-data-file-name

Modifies the name of the message data file.

You can specify a character string of 1 to 256 bytes.

-qF message-format-name

Modifies the message format name.

You can specify a character string of 1 to 8 bytes. You can, however, specify only uppercase letters and numbers.

-qM queue-manager-name

Modifies the name of the queue manager used to sent the message.

You can specify a character string of 1 to 48 bytes. Specify the queue manager name using an MQ character string.

-qp connection-queue-management-program-name

Modifies the name of the connection queue management program.

You can specify a character string of 1 to 48 bytes. Specify the program name using an MQ character string.

-qR priority

Modifies the priority of the message to be sent.

You can specify a value between 0 and 9.

#### -qP permanence

Modifies the permanence of the message to be sent.

You can specify either of the following characters:

- y: Permanent
- n: Not permanent

## -QQ queue-name

Modifies the name of the queue used to send the message.

You can specify a character string of 1 to 48 bytes. Specify the queue name using an MQ character string.

-jt {q|n}

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

# MSMQ-sending-job-information-change-options

These options modify definition information for an MSMQ sending job.

-SA application-information

Modifies the application information for the message to be sent.

You can specify a hexadecimal value between 0 and FFFFFFF.

-SH maintenance-duration

Modifies the hold time for the message to be sent.

You can specify the following values:

- -1: INFINITE
- n: 0 to 2,147,483,647 (seconds)

# -sJ journal-queue-storage-specification-for-message

Modifies the specification for storing the sent message into the journal queue.

You can specify either of the following characters:

- y: Stores the message into the journal queue.
- n: Does not store the message into the journal queue.
- -SM message-label

Modifies the message label for the message to be sent.

You can specify a character string of 1 to 249 bytes.

# -sl sending-time-out-limit

Modifies the time-out limit for transmitting the message to be sent. You can specify the following values:

- -2: LONG\_LIVED
- -1: INFINITE
- *n*: 0 to 2,147,483,647 (seconds)

-sM sending-mode

Modifies the sending mode for the message to be sent.

You can specify either of the following characters:

- h: Transmits the message in the high-speed mode.
- r: Transmits the message in the restorable mode.

#### -sP priority

Modifies the priority of the message to be sent.

You can specify a value between 0 and 7.

-sl queue-label-name

Modifies the queue label name for the message destination. You can specify a character string of 1 to 124 bytes.

-SQ queue-path-name

Modifies the queue path name for the message destination.

You can specify a character string of 1 to 259 bytes.

-SR correlation-ID

Modifies the correlation ID of the message to be sent.

You can specify a character string of 1 to 20 bytes. You can, however, specify only uppercase letters and numbers.

-sF *text-file-name* 

Modifies the text file name for the message to be sent.

You can specify a character string of 1 to 259 bytes. Use a full path to specify the file name.

-sT text-type

Modifies the type of the text of the message to be sent.

You can specify a hexadecimal value between 0 and FFFFFFF.

-su dead-letter-queue-storage-specification-for-message

Modifies the specification for storing the sent message into the dead letter queue.

You can specify either of the following characters:

- y: Stores the message into the dead letter queue.
- n: Does not store the message into the dead letter queue.

-jt {q|n}

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

# HP-NNM-status-report-job-information-change-options

These options modify definition information for an OpenView status report job.

#### -pf platform-type

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

# -CI message-additional-information-to-post-to-HP NNM

Modifies the additional information for the message you want to post to HP NNM.

2. Commands

You can specify a character string of 1 to 256 bytes.

### -CC status-to-post-to-HP NNM

Modifies the status you want to post to HP NNM.

You can specify on of the following character strings:

- un: Unknown
- no: Normal
- wa: Warning
- mi: Minor
- ma: Major
- cr: Critical
- re: Restricted
- te: Testing
- di: Disabled

# $-jt \{q|n\}$

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

# local-power-control-job-information-change-options

These options modify definition information for a local power control job.

#### -pf *platform-type*

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

#### -PT power-control-type

Modifies the power control type.

You can specify one of the following characters:

- f: Turns off the power.
- r: Shuts down and then restarts the system.
- s: Shuts down the system.

#### -Pf shutdown-type

Modifies the shutdown type.

You can specify one of the following characters:

- m: Performs monitoring termination.
- r: Performs restrictive termination.
- f: Performs forced termination.
- p: Performs planned termination.

#### $-jt \{q|n\}$

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

# remote-power-control-job-information-change-options

These options modify definition information for a remote power control job.

## -pf platform-type

Modifies the platform type.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

### -PH power-control-target-host-name

Modifies the name of the JP1/Power Monitor agent host to which you want to apply power control. You can specify a character string of 1 to 255 bytes.

# -PF power-control-type

Modifies the power control type for the JP1/Power Monitor agent host.

You can specify one of the following characters:

- o: Turns on the power.
- m: Performs monitoring termination.
- r: Performs restrictive termination.
- f: Performs forced termination.
- p: Performs planned termination.
- s: Performs forced stop.

#### -PN next-power-on-time-setting

Modifies the setting of the next power-on time for the JP1/Power Monitor agent host.

You can specify one of the following characters or values:

- n: Does not specify a next power-on time.
- a: Enables the next power-on time set for the JP1/Power Monitor agent host.
- c: [MM/DD.]hh:mm Specify the time in the c: [MM/DD.]hh:mm format. You can specify the following values:

*MM*: 1 to 12 (month) *DD*: 1 to 31 (day) *hh*: 0 to 23 (hour) *mm*: 0 to 59 (minute)

# -PR restart

Modifies the setting of restart after the shutdown of the JP1/Power Monitor agent host. You can specify either of the following characters:

- y: Restarts the host.
- n: Does not restart the host.

#### -PW power-off-termination-wait

Modifies the setting of whether to wait for the JP1/Power Monitor agent host to completely turn off before terminating the remote power control job.

You can specify either of the following characters:

- y: Waits for shutdown.
- n: Does not wait for shutdown.

The end of power-off means that the JP1/Power Monitor on the agent host reports the start of a shutdown to the manager host of the JP1/Power Monitor.

-PP platform-type-of-power-control-target-host

Modifies the platform type for the host on which you will execute the remote power control job.

You can specify either of the following characters:

- u: Operates in a UNIX environment.
- p: Operates in a Windows environment.

#### -jt {q|n}

Changes the queuing attribute type.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

### Notes

- Either of the following users can change the job definition:
  - A user who was granted the update privilege when the job was defined or when its attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

- We recommend that you not execute this command during the execution of a jobnet. (This command terminates abnormally if some other process is using the target job. You cannot use JP1/AJS3 View to manipulate or update a job while you are modifying the definition of the job with this command. You cannot execute a job while you are manipulating it.)
- To modify the definition of a job in a registered jobnet, we recommend that you first cancel the registration of the jobnet. Use the ajsleave command when canceling the registration of jobnets.
- If you specify any invalid option for the unit, this command will terminate abnormally.
- If the jobnet for which you modify the definition is a release target jobnet (root jobnet for which release entry is made), the job definitions in the jobnet in *Being applied* status are modified.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information

To leave information undefined (default) for one of the following options, specify "" for the option.

- Job common information change option
- UNIX/PC/QUEUE job information change option
- Judgment job information change option
- JP1 event reception monitoring job information change option
- File monitoring job information change option
- Email reception monitoring job information change option
- · Message queue reception monitoring job information change option
- MSMQ reception monitoring job information change option
- Log file monitoring job information change option
- Windows event log monitoring job information change option
- Execution interval control job information change option
- JP1 event sending job information change option
- Email sending job information change option
- Message queue sending job information change option
- MSMQ sending job information change option
- OpenView status report job information change option
- Local power control job information change option
- Remote power control job information change option

# Example 1

The following command changes the standard output file for job net1/job1 to /dev/null:

ajschgjob -so /dev/null /net1/job1

# Example 2

The following command changes the judgment condition for the judgment job (net1/jdg1) to a return code *from 0* to less than 10.

ajschgjob -ej ri -el 0 -lP ge -eh 10 -uP lt /net1/jdg1

# ajschgnet

# Format

```
ajschgnet
[-F service-name]
[schedule-information-change-options]
[relationship-change-options]
[start-condition-information-change-options]
[jobnet-connector-information-change-options]
[-S]
[-R]
[-L]-E]
[-T]
[-N]
jobnet-name-or-start-condition-unit-name-or-job-group-name...
```

# Description

Modifies the definition of a jobnet (schedule definition) and the definition of a start condition unit.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -s

This option makes it possible to change the order in which jobnets and jobs are executed, even for suspended jobnets that have been registered for execution.

#### -R

Modifies the definitions of the specified jobnet or all jobnets contained in the specified job group.

If you specify this option with the -L, -E, -T, and/or -N options, the system modifies the definitions according to the specification of each option.

#### -L

Modifies the definitions of jobnets not registered for execution.

If you specify this option with the -T and/or -N options, the system modifies the definitions of unregistered jobnets according to the specification of each option. You cannot specify this option with the -E option.

<sup>2.</sup> Commands

## -E

Modifies the definitions of jobnets registered for execution.

If you specify this option with the -T and/or -N options, the system modifies the definitions of registered jobnets according to the specification of each option. You cannot specify this option with the -L option.

## -**T**

Modifies the definitions of root jobnets.

If you specify this option with the -E or -L options, the system modifies the definitions of root jobnets according to the specification of each option. If you specify this option with the -N option, the -N option is disabled.

### -N

Modifies the definitions of jobnets.

If you specify this option with the -E or -L option, the system modifies the definitions of jobnets according to the specification of each option. If you specify this option with the -T option, this option is disabled.

### jobnet-name-or-start-condition-unit-name-or-job-group-name

Specify the full name of a jobnet or start condition unit for which you want to modify definitions. Alternatively, you can specify the full name of the jobnet, start condition unit, or job group with the -R, -L, -E, -T, or -N option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one jobnet name or job group name.

You can specify a logical host name as a jobnet or job group name. You cannot specify an execution ID.

#### schedule-information-change-options

These options modify the schedule defined for a jobnet (if you modify the schedule, the system will recalculate the schedule upon the end of command execution).

-DD job-group-name

Specify the name of the job group in which the target calendar information is defined, when modifying the calendar information.

You can specify a character string of 1 to 930 bytes.

 $\label{eq:linear_loss} \begin{array}{l} -\mathrm{dd} & [N,] \left\{ \left[ year/]month/ \right] \left\{ \left[ +|*|@]day \right] \left[ +|*|@]b[-day] \right] \left[ +] \left\{ \mathrm{sun} \right] \mathrm{sum} \mathrm{su$ 

Modifies the date on which you want to start executing the jobnet.

You can specify up to 144 dates in one command.

To clear all definitions, specify either -dd 0, ud or -dd 0, undefine.

• N

Specify the corresponding rule number if you specify more than one starting date for executing the jobnet. You can specify a value between 0 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• year

Specify the year of the starting date for executing the jobnet.

You can specify a value between 1994 and 2036 for the year.

By default, the system assumes the year in which you registered the jobnet for execution.

• month

Specify the month of the starting date for executing the jobnet.

You can specify value between 1 and 12 for the month.

By default, the system assumes the month in which you registered the jobnet for execution.

• +

Specify the execution start date using the number of days following the base date.

• \*

Specify the execution start date using the number of open days following the base date.

• @

Specify the execution start date using the number of closed days following the base date.

• day

Specify the day of the execution start date.

You can specify the following values:

When specifying an absolute date

- Year/month/day specification: 1 to last day of specified year/month.
- Month/day specification: 1 to last day of specified month. For February, however, 1 to 29.
- Day specification: 1 to 31.

When specifying a relative date or the number of open or closed days

1 to 35 (days).

If you omit the specification of + (relative date), \* (number of open days) or @ (number of closed days), the system assumes an absolute day of the month in which you registered the jobnet for execution.

• b

Sets the last day of the month to the jobnet start date.

• *-day* 

Specify the starting date for executing the jobnet using the number of days between the date and the end of the month.

You can specify the following values:

When specifying an absolute date

- Year/month/day specification: 0 to (last day of specified year/month -1).
- Month/day specification: 0 to (last day of specified month -1). For February, however, 0 to 28.
- Day specification: 0 to 30.

When specifying a relative date or the number of open or closed days

0 to 34 (days).

You can specify this option with + (relative date), \* (number of open days) or @ (number of closed days).

• sun | su | mon | mo | tue | tu | wed | we | thu | th | fri | fr | sat | sa Specify Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday as the starting date for executing the jobnet.

• n

Specify the week for the day; a value between 1 and 5 (specifying 1 for Sunday, for example, indicates the first Sunday of the month).

By default, the system assumes the start date to be the next day of the week after the date when the jobnet was registered for execution and the date when the ajsschedule command was executed. If you do not specify anything when either *year* or *month* is specified for the execution start date, the system assumes the first week when you register anything for execution and when you execute the ajsschedule command.

- en
  - Changes the defined execution start date to the date on which you registered the jobnet for execution.
- ud|undefine

Clears the entire schedule for the jobnet.

If you specify this option, specify 0 for N (jobnet rule number).

Specifying this option causes the -dd, -tt, -VV, -WW, -KK, -yy, -ss, -hh, -wt, -wc, -ct, -cc, and - ce options to be disabled.

-tt [*N*, ] [+] *hours* : *minutes* 

Modifies the time at which you want to start executing the jobnet.

You can specify up to 144 times in one command.

• N

Specify the corresponding rule number if you specify more than one starting date for executing the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• +

Handles the time specified with *hour:minute* as a relative time.

By default, the system handles the specified time as an absolute time.

• hour:minutes

Specify the starting time for executing the jobnet. You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

-VV [N,] { hours : minutes | M-minutes | U-minutes | C-minutes }

Modifies the delay time for starting the jobnet.

You can specify up to 144 times in one command.

• N

Specify the corresponding rule number if you specify more than one delay time for starting the jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• hour:minutes

Specify an absolute time.

You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

• *M*-minutes

Specify the number of minutes relative to the starting time for executing the root jobnet. You can specify a value between 1 and 2,879 for the minute.

• U-minutes

Specify the number of minutes relative to the starting time for executing the upper-level jobnet. You can specify a value between 1 and 2,879 for the minute.

• *C-minutes* 

Specify the number of minutes relative to the starting time for executing the relevant jobnet. You can specify a value between 1 and 2,879 for the minute.

-WW [N,] { hours : minutes | M-minutes | U-minutes | C-minutes }

Modifies the delay time for ending the jobnet. You can specify up to 144 times in one command.

• N

Specify the rule number if you specify more than one delay time for ending the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

- hour:minutes
  - Specify an absolute time.

You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

• *M*-minutes

Specify the number of minutes relative to the starting time for executing the root jobnet. You can specify a value between 1 and 2,879 for the minute.

• U-minutes

Specify the number of minutes relative to the starting time for executing the upper-level jobnet. You can specify a value between 1 and 2,879 for the minute.

• *C*-minutes

Specify the number of minutes relative to the starting time for executing the relevant jobnet. You can specify a value between 1 and 2,879 for the minute.

-KK [N, ] linked-rule-number

Modifies the rule number to be linked with that for the upper-level jobnet if you have more than one schedule defined. You can specify up to 144 numbers in one command. You cannot specify a rule number for the root jobnet.

• N

Specify the rule number for the schedule for the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• linked-rule-number

Specify the rule number for the upper-level jobnet that corresponds to the above rule number.

-yy [N,] processing-cycle,  $\{y | m | w | d\}$ 

Modifies the processing cycle for the jobnet.

You can specify up to 144 processing cycles.

• N

Specify the rule number for the corresponding jobnet. You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• processing-cycle, {y|m|w|d}

Modify the processing cycle and its unit (for example, specify -yy 6, m to process the jobnet at intervals of six months).

• у

Specifies the processing cycle in years. You can specify a value between 1 and 9 for the processing cycle.

• m

Specifies the processing cycle in months. You can specify a value between 1 and 12 for the processing cycle.

• w

Specifies the processing cycle in weeks. You can specify a value between 1 and 5 for the processing cycle. You cannot specify this if an open day or closed day is used to define the starting date for executing the jobnet. If you specify this, the schedule is calculated assuming that one week is equal to seven open days or seven closed days; however, we recommend that you specify the processing cycle on a daily basis. A good example would be "7, d", instead of "1, w".

• d

Specifies the processing cycle in days. You can specify a value between 1 and 31 for the processing cycle.

### -ss [N,] {af | be | no | ca }

Modifies the method of shifting the execution date if the scheduled date of jobnet execution falls on a closed day in the JP1/AJS3 calendar.

You can specify up to 144 methods in one command.

• N

Specify the rule number for the corresponding jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• af

Executes the jobnet by shifting the execution day to a day after the scheduled date of execution.

• be

Executes the jobnet by shifting the execution day to a day before the scheduled date of execution.

• no

Forcibly executes the jobnet even if the scheduled date of execution is a closed day, provided a scheduler service is running.

• ca

Does not execute the jobnet if the scheduled date of execution is a closed day.

# -hh [N, ] shift-days

If you specify af (shifting to a day after the execution day) or be (shifting to a day before the execution day) for the -ss option, the -hh option specifies the period into which the system can shift the execution day. You can specify up to 144 periods.

• N

Specify the rule number for the jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• shift-days

You can specify a number between 1 and 31 (days). (For example, specify -ss af -hh 5 if you want the system to find a substituting execution day by selecting each following day within five days including the scheduled execution day.)

-wt [*N*,] {no|*hours:minutes*|*relative-minutes*|un}

Modifies the time between the jobnet being placed into the event wait status and the event wait status being released. You can specify up to 144 times in one command.

If you specify no for the -wc option, you can only specify no for this option.

• N

Specify the rule number for the corresponding jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• no

Does not use a start condition.

• hour:minutes

Specify the wait time as absolute time.

You can specify a value between 0 and 47 for the hour.

You can specify a value between 0 and 59 for the minute.

• relative-minutes

Specify a time relative to the scheduled start time for the jobnet.

You can specify a value between 1 and 2,879 (minutes)

• un

Waits for an unlimited period of time until the condition is satisfied.

#### -wc [N,] {no|valid-number-of-waits-for-events|un}

Modifies the number of times the system will wait for events after it completes the execution of the event-activated jobnet.

You can specify up to 144 times in one command.

If you specify no for the -wt option, you can only specify no for this option.

• N

Specify the rule number for the corresponding jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• no

Does not use a start condition.

• valid-number-of-waits-for-events

Specify the number of times the system will wait for events.

You can specify a value between 1 and 999 (times).

• un

Sets an unlimited number of times for waiting.

### -pp year/month/day

Modifies the expiration date for jobnet execution.

• year

Specify the year of the expiration date.

You can specify a value between 1994 and 2036 for the year.

• month

Specify the month of the expiration date.

You can specify value between 1 and 12 for the month.

• day

Specify the day of the expiration date.

You can specify a value between 1 and 31 for the day.

-11 number-of-logs-to-keep

Modifies the number of logs to store the results of jobnet execution.

You can specify a number between 1 and 99 (logs).

You can, however, enable the system setting option to increase the number of generations up to 999.

-nn priority-value

Modifies the priority for jobnet execution.

You can specify a value between 1 and 5.

The lowest priority is 1 and the highest is 5.

-bb  $\{y \mid w \mid a \mid n\}$ 

Modifies the hold attribute for the jobnet. If you specify w or a for a nested jobnet, the system assumes n.

• y

Holds the execution of the jobnet.

• w

Holds execution only if the previous execution of the jobnet has terminated abnormally or with a warning.

• a

Holds execution only if the previous execution of the jobnet has terminated abnormally.

• n

Does not hold the execution of the jobnet.

-ej exclusive-jobnet-name

Modifies the name of the jobnet which should not be executed on the same date (name of a jobnet in the same layer). You can specify a character string of 1 to 30 bytes.

You cannot specify the name of a local jobnet.

# -ct [N,] {no|be|af|db|da}

Modifies the method for scheduling the jobnet by days from start time.

You can specify up to 144 methods in one command.

• N

Specify the rule number for the corresponding jobnet. You can specify a value between 1 and 144. By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• no

Does not schedule the jobnet by days from start time.

If you specify this option together with the -cc (for specifying the number of days for scheduling the jobnet by days from start time) or -ce (for specifying the number of shift days for scheduling the jobnet by days from start time) option for the same rule number, the KAVS0159-W message is output. Then, the specification of the -ce or -cc option is ignored.

• be

Shifts the scheduled date of execution to a previous open day, relative to the shift date specified with the -ss option.

• af

Shifts the scheduled date of execution to a subsequent open day, relative to the shift date specified with the – ss option.

• db

Shifts the scheduled date of execution to a previous day, relative to the shift date specified with the -ss option. If you specify this option, closed days are also subject to substitute scheduling.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

If you specify this option together with the -ce option (for scheduling the jobnet by days from the start time) for the same rule number, the KAVS0159-W message is output. Then, the specification of the -ce option is ignored.

• da

Shifts the scheduled date of execution to a subsequent day, relative to the shift date specified with the -ss option. If you specify this option, closed days are also subject to substitute scheduling.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

If you specify this option together with the -ce option (for scheduling the jobnet by days from the start time) for the same rule number, the KAVS0159-W message is output. Then, the specification of the -ce option is ignored.

-cc [N,] number-of-days-for-schedule-by-days-from-start-time

Modifies the number of days for scheduling the jobnet by days from start time (number of open days from the start date).

You can specify up to 144 numbers in one command.

• N

Specify the rule number for the corresponding jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

number-of-days-for-schedule-by-days-from-start-time

You can specify a value between 1 and 31 (days).

-ce[N, ] shift-days-for-schedule-by-days-from-start-time

Modifies the number of shift days for scheduling the jobnet by days from start time (number of absolute days from the start date).
You can specify up to 144 numbers in one command.

• N

Specify the rule number for the corresponding jobnet.

You can specify a value between 1 and 144.

By default, the system assumes 1 as the rule number (that is, you will modify a schedule having a rule number of 1).

• shift-days-for-schedule-by-days-from-start-time

You can specify a value between 1 and 31 (days).

### -cd $\{no | un | n\}$

Modifies the number of days after which the system terminates a wait status, such as event activation wait or execution wait. You can specify this option only for the root jobnet.

• no

Cancels the setting of the number of days for termination.

Once you cancel the setting, the value set for the system option becomes valid as the time the system will wait before termination.

• un

Waits for un unlimited time of period without terminating the wait status.

• n

Specify the number of days the system will wait before terminating a wait status.

You can specify a value between 1 and 2 for the day.

-de  $\{y \mid n\}$ 

Modifies dependency with the schedule for the upper-level jobnet.

You cannot specify a rule number for the root jobnet.

• у

Depends on the schedule for the upper-level jobnet. You cannot specify this option with an option for changing the schedule rule.

• n

Does not depend on the schedule for the upper-level jobnet.

```
-ms {sch|mlt}
```

Modifies the scheduling method for multiple jobnet activation.

You can specify this option only for the root jobnet.

• sch

Activates jobnets by applying the schedule skip method.

• mlt

Activates jobnets by applying the multi-schedule method.

```
-mp {y|n}
```

Modifies the settings for multiple jobnet activation. You can specify this option only for the root jobnet.

• у

Enables multiple activation.

• n

Disables multiple activation.

#### -ah remote-jobnet-execution-agent-host-name

Modifies the name of the remote jobnet execution agent host.

You can specify a character string of 1 to 255 bytes.

-ex job-execution-agent-host-name

Modifies the name of the job execution agent host.

You can specify a character string of 1 to 255 bytes.

-fd time-required-for-execution

Modifies the time required for executing the jobnet or remote jobnet for which the end delay is monitored. You can specify a value between 1 and 2,879 (minutes).

### relationship-change-options

These options modify the relationship of the execution order for jobnets and jobs. You can specify this option only for a jobnet.

You can specify up to 20 - AA options (make relation options) and 20 - BB options (break relation options) in one command.

-AA preceding-unit-name, succeeding-unit-name [, {seq|con}]

Specify the names of the preceding and succeeding units between which you want to create a relationship (associate units). You must also specify the connection type.

You can specify a character string of 1 to 30 bytes for each unit name (*preceding-unit-name and succeeding-unit-name*).

If the relation line is already set for the preceding and succeeding units whose relationship is to be set, the command returns 0 and ends normally.

• seq

Specifies forward connection.

• con

Specifies the judgment connection of a judgment job and a dependent unit.

The system does not create a relationship in any of the following cases:

- If the same unit name is specified for the preceding unit as well as the succeeding unit
- If the unit of the specified preceding unit name or succeeding unit name does not exist
- If a recovery unit is specified as the preceding unit name, and a regular unit is specified as the succeeding unit name
- If you attempt to set a reverse relationship for units between which you have already set a relationship
- If you specify a relationship and cancel a relationship, at the same time, between the same preceding unit and succeeding unit
- If you specify a job group, manager job group, manager jobnet, or root jobnet
- If there are two or more preceding units when the succeeding unit is a judgment job
- If the preceding unit is other than an event job when the succeeding unit is an OR job
- If you specify a unit other than a judgment job as the preceding unit for a judgment connection
- If the judgment connection of a judgment job and a dependent unit makes other than 1-to-1 matching
- If you specify the name of a unit with start conditions in the preceding unit name or the succeeding unit name.

#### -BB preceding-unit-name, succeeding-unit-name

Specify the names of the preceding and succeeding units between which you want to break a relationship (cancels the association between units).

You can specify a character string of 1 to 30 bytes for each unit name.

If the relation line does not exist for the preceding and succeeding units whose relationship is to be broken, the command returns 0 and ends normally.

#### start-condition-information-change-options

This option modifies the attribute of the start condition.

#### -rc {and|or}

Specify how the conditions must be satisfied to start the jobnet.

- and
  - Starts the jobnet when all conditions are satisfied.
- or

Starts the jobnet when at least one of the conditions is satisfied.

#### -ab {exec|hold|stop}

For a jobnet with start conditions, this parameter specifies the behavior of the jobnet's execution generations whose start conditions are satisfied, if the preceding execution generation has terminated abnormally.

• exec

Executes the jobnet generations whose start conditions are satisfied.

• hold

Holds the execution of the jobnet generations whose start conditions are satisfied.

• stop

Stops the jobnet that is monitoring whether the start conditions are satisfied (the monitoring generation of the jobnet).

```
-mS {m|w|s}
```

Specifies the action taken if there is already a monitored jobnet generation in *Now monitoring* status when monitoring of start conditions starts.

• m

Generates a new monitoring generation in addition to the existing monitoring generation in *Now monitoring* status. In this case, note that as many start conditions as there are jobnet generations in *Now monitoring* status are satisfied.

• W

Waits until the monitoring generation in *Now monitoring* status terminates. If a timeout has been set for execution of this jobnet generation, and the execution times out, the monitoring generation is placed in *Skipped so not executed* status.

• s

Skips starting the monitoring generation of the jobnet, and places the generation in *Skipped so not executed* status.

-gs  $\{y \mid n\}$ 

Specifies whether to stay execution of a generation of a jobnet if the generation's start conditions are satisfied while another generation is already running when concurrent execution of jobnet generations is disabled.

• у

Execution of the jobnet is not repeated so that the generation stays.

• n

Execution of the jobnet is repeated so that the generation does not stay.

### jobnet-connector-information-change-options

These options modify the jobnet connector attributes.

-lr connection-destination-jobnet-name

Specify the full name of a unit (root jobnet or planning group) that will become the jobnet to which the jobnet connector will be connected.

You can specify a character string of 1 to 930 bytes.

You can specify this option for only a jobnet connector that has not been registered.

-cx linkage-of-root-jobnet-execution-order-control-between-scheduler-services

Specify whether to establish linkage between scheduler services when the execution order of root jobnets is controlled.

You can specify this option for only a jobnet connector that has not been registered.

If you change the value of this option from y to n, the specifications of the -ch (host to connect) and -cs (connection service name) options are cleared (neither y nor n is set).

• у

Linkage between scheduler services is established.

Root jobnet execution order control is linked with jobnet connectors including those defined on other hosts or those defined in other scheduler services.

• n

Linkage between scheduler services is not established.

Root jobnet execution order control is linked with only jobnet connectors defined in the same scheduler service.

-ch connection-host-name

Specify the name of the host on which a jobnet connector to be connected is defined. You can specify a character string of 1 to 255 bytes. You cannot specify space, tab, or linefeed characters.

You can specify this option only if y is specified for the -cx option (linkage of root jobnet execution order control between scheduler services).

-cs connection-service-name

Specify the name of the scheduler service on which a jobnet connector to be connected is defined. You can specify a character string of 1 to 30 bytes. You cannot specify a null string ("") to reset the scheduler service name definition to the default status.

You can specify this option only if y is specified for the -cx option (linkage of root jobnet execution order control between scheduler services).

### Notes

- Either of the following users can change the jobnet definition:
  - A user who was granted the update privilege when the jobnet was defined or when its attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

- We recommend that you not execute this command during the execution of a jobnet. (This command terminates abnormally if some other process is using the target jobnet. You cannot use JP1/AJS3 View to manipulate or update a unit while you are modifying the definition of the jobnet with this command. You cannot execute a jobnet or job while you are manipulating it.
- We recommend that you cancel the registration of jobnets before attempting to change the contents of the definitions of registered jobnets. Use the ajsleave command when canceling the registration of jobnets. With the target jobnet suspended, however, specifying the -s option in this command makes it possible to change the order of execution of jobnets and jobs without having to cancel the registration of jobnets.
- Modifying the schedule disables any temporary plan modification you specified previously.
- If you shift the execution start day to a day previous to the target day, the schedule for the past becomes invalid.
- The command terminates abnormally if the jobnet in which an attempt is made to change related information is in the process of a suspended-status change.
- If you use the command to define a jobnet, the system does not check the consistency of the execution order of units. If the units are associated so that their execution order loops, the jobnet will cause an error during execution because the order of the element's execution is invalid.
- To leave information undefined (default), specify "" for the option.
- If you specify the -tt, -VV, -WW, -KK, -yy, -ss, -hh, -wt, -wc, -ct, -cc, or -ce option with a rule number not contained in the schedule definition for the jobnet, the command will end normally, without adding any schedule. When adding a schedule, also specify the -dd option.
- If the release target jobnet (root jobnet for which release entry is made) is changed, the jobnet definitions in *Being applied* status are also changed.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Additional information

To leave information undefined (default) for the schedule information change option, the related information change option, or the start condition information change option, specify "" for the option.

### Example 1

The following command changes the starting time for executing jobnet net1 to 17:00 (absolute time) on every Friday in October 2010. It also changes the processing cycle to a weekly schedule:

```
ajschgnet -dd 2010/10/fr -tt 17:00 -yy 1, w net1
```

### Example 2

The following command makes a relationship between two jobs, net1/job1 and net1/job2:

```
ajschgnet -AA job1, job2 net1
```

# Example 3

The following command sets the connection-destination jobnet name in jobnet connector /net2/netconl so that the jobnet connector connects to root jobnet /net1:

ajschgnet -lr /net1 /net2/netconl

# Example 4

The following commands change the start conditions (.CONDITION) of root jobnet / JOBNET1 as follows:

• If there is already a monitored jobnet generation in *Now monitoring* status when monitoring of start conditions starts, processing waits for the generation to terminate.

ajschgnet -F AJSROOT1 -mS w /JOBNET1/.CONDITION

• If start conditions of a jobnet generation are satisfied while another generation is already running, execution of the jobnet is repeated so that the generation will not stay.

ajschgnet -F AJSROOT1 -gs n /JOBNET1/.CONDITION

# ajschgstat

# Format

```
ajschgstat
   [-F service-name]
   [-t new-status]
   [-v current-status]
   [-c return-code]
   [-h execution-host-name]
   [-B execution-registration-number]
   [-R]
   [-E]
   [-J]
   [-J]
   [-X {yes|no|auto}]
   job-name-or-jobnet-name-or-job-group-name...
```

# Description

The ajschgstat command changes the status of a job or jobnet connector. Changing the status of a job also changes the status of a jobnet containing that job.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -t new-status

Specify the new status to which you want to change the current status of a job or jobnet connector. You cannot specify this option for a judgment job.

Table 2-2 shows the statuses that can be specified and their meanings.

*Table 2-3* shows which new statuses you can specify for a job when you want to change the current status. Likewise, *Table 2-4* shows which new statuses you can specify for a jobnet connector when you want to change the current status.

Status	Description
normal	Ended normally
fail	Failed to start You cannot specify this for jobnet connector.

### Table 2-2: Statuses after change

2. Commands

Status	Description
warning	Ended with warning
abnormal	Ended abnormally
bypass	Bypassed You cannot specify this for jobnet connector.
exit	Change the status according to the return code and job threshold. Changed to "Ended normally," "Ended with warning", or "Ended abnormally." You cannot specify this for OR jobs, event jobs, action jobs, or jobnet connector.

# Table 2–3: Possible combinations (for a job)

Current	New				
	Ended normally	Failed to start	Ended with warning	Ended abnormally	Bypassed
Waiting for previous to end					
Being held					
Waiting to execute	Indeterminate	Indeterminate	Indeterminate	Indeterminate	
Now queuing	Yes	Yes	Yes	Yes	
Now running	Yes		Yes	Yes	
Ended normally	N/A	Yes	Yes	Yes	Yes
Failed to start	Yes	N/A	Yes	Yes	Yes
Ended with warning	Yes	Yes	N/A	Yes	Yes
Ended abnormally	Yes	Yes	Yes	N/A	Yes
Killed	Yes	Yes	Yes	Yes	Yes
Unknown end status	Yes	Yes	Yes	Yes	Yes
Not executed, and ended	Yes	Yes	Yes	Yes	Yes
Bypassed	Yes	Yes	Yes	Yes	N/A
Now fault detecting	Yes				

### Legend:

Yes: Possible

Indeterminate: Possible for queueless jobs and not possible for other jobs.

--: Not possible

N/A: Not applicable

# Table 2-4: Possible combinations (for a jobnet connector)

Current	New		
	Ended normally	Ended with warning	Ended abnormally
Not sched. to exe.	No	No	No
Waiting for previous to end	No	No	No
Not executed, and ended	Yes	Yes	Yes

<sup>2.</sup> Commands

Current	New		
	Ended normally	Ended with warning	Ended abnormally
Bypassed	Yes	Yes	Yes
Now running	Yes	Yes	Yes
Running + Warning	Yes	Yes	Yes
Now fault detecting	Yes	Yes	Yes
Ended normally		Yes	Yes
Ended with warning	Yes		Yes
Ended abnormally	Yes	Yes	
Killed	Yes	Yes	Yes
Unknown end status	Yes	Yes	Yes
Shutdown	Yes	Yes	Yes

Legend:

Yes: Possible

No: Not possible

--: Not applicable

### -v current-status

Specify the current status of the job.

The system can change the status of the job only if the current status of the job coincides with the status specified with this option. You cannot specify this option for a judgment job.

The following table lists the statuses you can specify.

Table 2-5:	Statuses	before	change
------------	----------	--------	--------

Status	Description
queuing	Now queuing
running	Now running
normal	Ended normally
fail	Failed to start
warning	Ended with warning
abnormal	Ended abnormally
unknown	Unknown end status
unexec	Not executed, and ended
bypass	Bypassed
abend	Failed to start, Ended abnormally, Killed, Unknown end status or Not executed, and ended
exec-wait	Waiting to execute
noend	Now queuing or Now running

#### -c return-code

Specify the return code for the job.

#### UNIX

You can specify a value between 0 and 255.

#### Windows

You can specify a value between -2,147,483,648 and 2,147,483,647.

This option is valid only when the job is currently placed in an end status or when you change the job to an end status (an end status refers to "Ended normally," "Failed to start," "Ended with warning," "Ended abnormally," "Unknown end status," "Not executed, and ended" or "Bypassed"). You cannot specify this option when changing the status of a jobnet connector.

To set the job end result according to the value of the return code specified with this option, specify exit for the -t option. Note, however, that you cannot specify the -t option for a judgment job. You can only change the return code.

If you use the -t option to set the end status for a running job without specifying the -c option, the system assumes 0 as the return code.

#### -h execution-host-name

Specify the name of the host to execute the job.

You can specify a character string of 1 to 255 bytes.

#### -в execution-registration-number

Specify the execution registration number of the jobnet containing the job for which you want to change the status, in the *YYYYMMDDNNN* format. The meaning of *YYYYMMDDNNN* is as follows:

YYYY: Year of the date of execution

MM: Month of the date of execution

DD: Day of the date of execution

NNN: Execution registration sequence number for the date of execution

If you omit this option, the system assumes the execution registration number for the root jobnet containing the target job. (If the root jobnet is running, the system assumes the execution registration number for the current generation.) Otherwise, the system assumes the execution registration number for the last generation in the log information.)

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

#### -R

Specify this option if you want to change the status of all jobs or jobnet connectors included in the specified unit.

If you specify this option with the -E or -J option, the system modifies the status of jobs or jobnet connector according to the specification of each option.

#### -E

Changes the status of jobs in a jobnet registered for execution or the status of jobnet connector.

-J

Changes the status of a job.

### -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

• yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

- If you want to automatically select a target unit Specify a unit name without a root jobnet name in a planning group.
- If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job for which you want to change the status. You can also specify a job name, jobnet name, or job group name with the -R, -E, or -J option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job name, jobnet name or job group name.

You can specify an execution ID as a job name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

You cannot specify a logical host name.

# Notes

- Either of the following users can execute the command:
  - A user granted the operation privilege for the unit whose status is to be changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.

• This command terminates abnormally if you execute it when a scheduler service is not running.

- If you use JP1/AJS3 View or the ajschgstat command to change the end status of a job being executed, the succeeding unit begins execution. If you change an abnormally ended job to the normal end status, however, the succeeding unit will not be executed.
- If you use JP1/AJS3 View or the ajschgstat command to change the end status of a job being executed, an event, a message, or log information indicating the end of the job is output. If you change the status of an ended job, no event, message, or log information indicating the end of the job is output.
- You cannot use this command for units subordinate to remote jobnets.
- This command terminates abnormally if the target job is in a suspended state.
- You cannot change the status of an event job or judgment job defined in start conditions.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.
- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- For an explanation of how to specify the name of a unit in a planning group, see *Additional informations* in *ajsplan* in *2. Commands*.
- The command cannot perform an operation on suspended jobnet connectors.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example

The following command changes the status of the abnormally ended job (job1) to "Ended normally." This job is contained in the root jobnet (net1) and the job group name is set in environment variable AJSPATH (if the job group name is set in environment variable AJSPATH, you can omit the specification of the job group when executing the command).

ajschgstat -t normal -v abnormal net1/job1

# ajschkdef

# Format

```
ajschkdef
[-F service-name]
[{-s|-a}]
[-0][-M][-C][-P][-H][-D][-U][-A]
[-p execution-agent-profile-name]
[-e unit-attribute-profile-name]
[-u registered-user-name]
[-u registered-user-name]
[-o output-file-name]
[-R]
[-L]
[-T]
[-N]
[-J]
job-name, jobnet-name-or-job-group-name...
```

# Description

Starts the execution of a definition pre-check and displays the state of execution.

### **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\bin\ In UNIX: /opt/jp1ajs2/bin/

# Arguments

### -F service-name

Specify the name of a scheduler service for which units that will undergo a definition pre-check are defined.

You can specify a string of 1 to 30 bytes.

If you omit this option, the default is the value of environment variable AJSCONF. If environment variable AJSCONF has not been set, the name of the default scheduler service is assumed.

When specifying the scheduler service name for the logical host, you need to specify the logical host name in environment variable JP1\_HOSTNAME.

If environment variable JP1\_HOSTNAME has not been set, the local host name is assumed.

#### -s

Starts the execution of the definition pre-check.

#### -a

Outputs the execution status of the definition pre-check to the standard output file. The following table summarizes the names of execution statuses to be output:

State of execution	Name of status to be output	Meaning
Not yet executed	stop	<ul><li>The definition pre-check can be executed.</li><li>The definition pre-check result file has been updated.</li></ul>
Currently being executed	run	<ul><li>The definition pre-check cannot be executed.</li><li>The definition pre-check result file is being updated</li></ul>

### -O, -M, -C, -P, -H, -D, -U, -A

Specify the items you want to check in a definition pre-check.

You can specify more than one check item at the same time. The following table summarizes what each option actually checks and the order in which checks are made (the order shown is an example).

Checking order	Option	Check item
1	-0	Order of execution
2	-М	Detailed jobnet definition <sup>#1</sup>
3	-C	Execution agent restriction
4	- P	Empty job definition
5	-H	Execution agent name
6	-U	User mapping <sup>#2</sup>
7	- D	Detailed job definition
8	-A	Execution file privileges <sup>#2</sup>

#1

This option also checks the jobnet connectors and the units whose ends are being waited for by wait conditions.

#2

If you use the execution-user fixing function, this item is checked for the fixed JP1 user as defined in the unitattribute profile.

The command checks in the order of the options shown in the table, regardless of the order in which you specify the options. If the -D option (detailed job definition) or -A option (execution file privileges) is specified, the user mapping will also be checked as a precondition because information about the OS user that executes the job is required. If the -P, -H, -U, -D, or -A options (corresponding to 4 to 8 in the Checking order colum) are specified to be checked by the agents, the execution agent name will also be checked as a precondition.

By default, all options (-O, -M, -C, -P, -H, -U, -D, -A) are assumed.

None of these options can be specified together with the -a option.

### -p execution-agent-profile-name

When checking execution agent restriction, specify the applicable execution agent profile using an absolute path.

You can specify a character string of 1 to 255 bytes.

If the folder you specify contains spaces, enclose the entire path in double quotation marks (").

You can specify this option together with the -C option. If you specify the -C option but omit this option, the execution agent profile for the scheduler service specified in the -F option applies.

If the database is in a compatible ISAM configuration, an error occurs when you specify this option.

#### -e unit-attribute-profile-name

When checking the execution-user fixing function, specify the applicable unit-attribute profile using an absolute path.

You can specify a character string of 1 to 255 bytes.

If the folder you specify contains spaces, enclose the entire path in double quotation marks (").

You can specify this option together with the -U, -D, or -A option. If you specify the -U option but omit this option, the system assumes the unit attribute profile for the scheduler service specified in the -F option. If you omit the -F option, the system assumes the unit attribute profile for the default scheduler service.

If the database is in a compatible ISAM configuration, an error occurs when you specify this option.

#### -u registered-user-name

Specify the JP1 user for which the jobnet is actually registered in actual operation.

You can specify a string of 1 to 31 bytes.

When the job definition has a registered user in its execution-user type, the specified JP1 user performs the user mapping check.

By default, the user executing this command is assumed.

This option cannot be specified together with the -a option.

#### -o output-file-name

Using an absolute path, specify the pre-check result file name. See *Output example* for the format of the pre-check result file name.

You can specify a string of 1 to 255 bytes.

An overwrite is performed if there is a file whose name is the same as that of the specified output file.

An error occurs if there is no directory path.

If you omit this option, the default is the file name specified in the environment variable parameter AJSCHK\_CHECKFILE. If the AJSCHK\_CHECKFILE environment setting parameter is not specified, the default value for the AJSCHK\_CHECKFILE is assumed.

For details on the AJSCHK\_CHECKFILE environment setting parameter, see 2.5.2(1) AJSCHK\_CHECKFILE in the Job Management Partner I/Automatic Job Management System 3 Configuration Guide 2.

This option cannot be specified together with the -a option.

<sup>2.</sup> Commands

-R

Treats all jobnets or jobs under the specified unit as subject to the definition pre-check (pre-check starting point). If this option is specified together with the -L, -T, -N, or -J option, the applicable jobnets and jobs are subject to the definition pre-check (check starting point) according to the specification of each option.

To check all jobnets and jobs under a job group, specify this option together with the -T option.

This option cannot be specified together with the -a option.

### -L

Performs a definition pre-check on unregistered jobnets and jobs.

If you specify this option together with the -T, -N, or -J option, a definition pre-check is performed on unregistered jobnets according to the definition of each option.

This option cannot be specified together with the -a option.

### -T

Performs a definition pre-check on the root jobnet.

You cannot specify this option together with the -a or -J option.

### -N

Performs a definition pre-check on jobnets.

You cannot specify this option together with the -a or -J option.

-J

Performs a definition pre-check on jobs.

You cannot specify this option together with the -a, -T, or -N option.

### job-name, jobnet-name-or-job-group-name

Specify the job, jobnet, or job group for which you are to perform a definition pre-check.

A definition pre-check starts with the units immediately under the specified unit.

You can specify a string of 1 to 930 bytes.

You can specify multiple jobs, jobnets, or job groups. You can also specify the root job group (/). Note that you must specify the -R option if you specify a job group name.

Note that a job, jobnet, or job group cannot contain the logical host name, scheduler service name, or execution ID.

This option cannot be specified together with the -a option.

### Notes

- Make sure that you perform a definition pre-check while no jobs are running. If you perform a definition pre-check while a job is running, the following problems might occur:
  - Performance of job execution is affected by contention of access to the scheduler database.
  - An error occurs in job execution processing because the load on the system becomes temporarily heavy.

- You cannot use this command to start a new definition pre-check while another definition pre-check is being performed. If you want to perform multiple definition pre-checks, make sure that a definition pre-check is not being performed, and then execute this command with the -a option specified.
- If the JP1/AJS3 Check Manager service has not been started, this command terminates abnormally. The check process does not work with an agent for which the JP1/AJS3 Check Agent service has not started, but continues with other agents for which the JP1/AJS3 Check Agent service has started.
- If you perform a definition pre-check while the JP1/AJS3 service is not running on the manager side, the pre-check result might not be output correctly.
- Do not attempt to add or delete target units (including the units under the particular directory path) or change the content of definitions while a definition pre-check is underway. Doing so may prevent the check results from being output properly.
- While a definition pre-check is being performed, do not change the execution agent settings specified for the units (including subordinate units) being checked. If you change these settings, the pre-check result might not be output correctly.
- If any non-target unit is specified, you will not see any message saying that the unit has been skipped.
- If you specify the -R option, the specified unit and the units under the particular directory path undergo a pre-check. In this case, each unit is checked more than once because the target units are checked repeatedly on a layer basis.
- If you specify the -R option, the execution agent name for the upper-level jobnet is assumed for the jobs to be checked, regardless of the definition of the job execution agent name. To perform a definition pre-check without the execution agent name being assumed for the upper-level unit as the job execution agent name, specify the -R option together with the -T or -N option.
- If you specify the -R option to check the execution order of the jobs for the pre-check, only the order of the jobs is checked. Accordingly, if you specify the -R option and perform a pre-check of a judgment job subject to checking, an error message indicating that a dependent job has not been defined for a judgment job might appear even when the judgment job has a dependant. In such cases, perform a pre-check of the definition by specifying the jobnet either without specifying the -R option, or else with the -R option specified together with the -T option or the -N option.
- Using the -a option to examine the state of operation while a large number of units are being checked may take some time before the result is displayed.
- Delete the JP1\_HOSTNAME environment variable before performing a definition pre-check on units of the physical host.
- If the check results are not output, read the Hitachi integrated log and take corrective action according to what it says.
- If you perform a definition pre-check on a unit for which an irresolvable host name is specified for **Exec-agent** in the detailed unit definition, output of the definition pre-check result file takes a long time.
- If you perform a definition pre-check on a jobnet connector and its connection-destination jobnet, specify the jobnet connector as the target of the definition pre-check.
- The system does not perform a definition pre-check of any macro variable names you specify.
- The checks performed by the -D option (detailed job definition) and the -A option (execution file privileges) for a UNIX job assume that the user mapping check result is normal. If the user mapping check returns an error, the detailed job definition check and execution file privileges check will be performed assuming that the job execution user is an OS user that has superuser privileges (that is, a root user). Therefore, the checks will not be performed correctly if the user mapping check result fails and the job execution OS user is not a root user. If the job execution OS user is not a root user, you must correct the user mapping error, and then re-execute the detailed job definition check and execution file privileges check.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

### Example

In this example, the command below executes a definition pre-check under the following conditions:

- The registered user name is USER1.
- The command checks all unregistered jobs under the /GROUP1/NET1 directory path.
- The command specifies all the check conditions.

```
ajschkdef -F AJSROOT1 -s -u USER1 -RLJ /GROUP1/NET1
```

### **Output example**

The following shows an example of the command output resulting from a definition pre-check performed under the above conditions. In this example, missing execution agent information is detected on the Manager in /GROUP1/ NET1/JOB1, an empty job definition is detected for /GROUP1/NET1/JOB2, and an error related to execution agent permission was detected for /GROUP1/NET1/JOB3.



#### Explanation of output items

(1) CHECKUNIT=full-unit-name[, full-unit-name...]

The unit name specified when the definition pre-check was performed is output in *full-unit-name* form. If you specified multiple names, all of them are output, with a comma inserted between them.

(2) CHECKSERVICE=scheduler-service-name

The scheduler service name specified when the definition pre-check was performed is output.

(3) CHECKAGTPROFNAME=execution-agent-profile-name

The execution agent profile name specified when the definition pre-check was performed is output. This field is blank if execution agent profiles are disabled.

<sup>2.</sup> Commands

#### (4) CHECKUSER=registered-user-name

The registered-user-name specified when the definition pre-check was performed is output.

#### (5) CHECKUNITPROFNAME=unit-attribute-profile-name

The unit-attribute profile name specified when the definition pre-check was performed is output. This field is blank if the execution-user fixing function is disabled.

#### (6) CHECKOPT=specified-option

The options (-O/-M/-C/-P/-H/-D/-U/-A/-R/-L/-T/-N/-J) specified when the definition pre-check was performed are output, with a comma inserted between them.

#### (7) CHECKSTARTTIME=*execution-start-date*

The date and time at which the definition pre-check was performed are output in the form *YYYY/MM/DD hh*:*mm*:*ss*.

- (8) Empty lines
- (9) Check result information (unit name, path name, error category, error details)

After the definition pre-check is performed, information about the check result is output in list form. The units involving errors are listed, with a comma inserted between them.

unit-name

The unit name of a unit that showed an error in the check is output.

path-name

The path name (the full parent unit name) of a unit that showed an error in the check is output.

error-category

The category of an error that was detected in the check is output.

See the following table for the categories of errors that are output.

error-details

The details of an error (classified by error category) that was detected in the check are output.

The following table gives details about output errors.

Check item specified at startup	Error category	Error detail
Order of execution	The execution order is looped in the relation definitions.	<ul> <li>For 08-10 and earlier: (none)</li> <li>For 08-50 and later: unit=unit-name<sup>#1</sup></li> </ul>
	A dependent job has not been defined for a judgment job.	<ul> <li>For 08-10 and earlier: (none)</li> <li>For 08-50 and later: unit=unit-name; unit-name; #2</li> </ul>
	A relation definition other than a conditional connection has been defined for a dependant job.	<ul> <li>For 08-10 and earlier: (none)</li> <li>For 08-50 and later: unit=unit-name; unit-name;<sup>#3</sup></li> </ul>
Execution agent name	The host name of the Manager cannot be resolved from the Agent side.	MANAGER_HOST= manager-host-name

Check item specified at startup	Error category	Error detail
Execution agent name	The host IP address of the Manager cannot be resolved from the Agent side. <sup>#4</sup>	MANAGER_IP= manager-host-IP-address
	The execution-agent has not been registered on the Manager side.	EXEC_AGENT= execution-agent-name
	The target host name cannot be resolved from the Manager side.	AGENT_HOST= execution-host-name
Detailed jobnet definition	The specified connection range is different from the jobnet for the connection-destination.	unit=connection-destination-jobnet-name <sup>#5</sup>
	Cannot connect to the specified host.	nchn=connection-host-name
	Specified Scheduler service not exist.	ncsv=connection-service-name
	Jobnet name for the connection- destination is not specified.	(none)
	The specification of jobnet for the connection-destination is not collect.	ncr=connection-destination-jobnet-name
	The jobnet for the connection- destination is not configured for controlling the execution order.	unit=connection-destination-jobnet-name <sup>#5</sup>
	Cannot connect with the connection host name specified in the jobnet for the connection-destination.	unit=connection-destination-jobnet-name <sup>#5</sup>
	The connection service name specified in the jobnet for the connection- destination is incorrect.	unit=connection-destination-jobnet-name <sup>#5</sup>
	The jobnet connector name specified at jobnet for the connection-destination is wrong.	unit=connection-destination-jobnet-name <sup>#5</sup>
	Specified unit whose end is being waited for does not exist.	unit=unit-whose-end-is-being-waited-for
	The specification of unit whose end is being waited for is not collect.	unit=unit-whose-end-is-being-waited-for
Detailed job definition	The specified file or directory does not exist.	sc=script-file-name (execution-file-name) ev=environment-variable-file-name wkp=working-path-name si=standard-input-file-name so=standard-output-file-name se=standard-error-output-file-name ts1=transfer-source-file-name td1=transfer-dectination-file-name
		ts2=transfer-destination-file-name td2=transfer-destination-file-name ts3=transfer-source-file-name td3=transfer-destination-file-name ts4=transfer-source-file-name td4=transfer-destination-file-name

Check item specified at startup	Error category	Error detail
Detailed job definition	You do not have permission to access	sc=script-file-name (execution -file-name)
	the specified file or directory.	ev=environment-variable-file-name
		wkp=working-path-name
		si=standard-input-file-name
		so= standard-output-file-name
		se= standard-error-output-file-name
		ts1=transfer-source-file-name
		td1=transfer-destination-file-name
		ts2= <i>transfer-source-file-name</i>
		td2=transfer-destination-file-name
		ts3=transfer-source-file-name
		td3=transfer-destination-file-name
		ts4=transfer-source-file-name
		td4=transfer-destination-file-name
	The specified platform type is invalid.	pfm=platform-type
	The format of the value specified for the event ID is invalid.	evwid=event-ID
	The value specified for "Find event before exec." is outside the valid range.	Evesc <i>=pre-search-time</i>
	The format of the name of the file to be monitored is invalid.	flwf=monitoring-target-file-name
User mapping <sup>#6</sup>	The specified user mapping is invalid.	JP1_USER=JP1-user-name
	Mapping of an execution host is invalid.	JP1_USER=JP1-user-name
	Mapping of a OS user is invalid.	OS_USER=OS-user-name
	The specified user does not exist.	un=execution-user-name
Execution file privileges	You do not have permission to execute the specified script file or executable file.	JP1_USER=JP1-user-name
		rile_AUTH=Jue-privuege
Empty job definition	The script file or executable file or event ID is not specified.	(None)
Execution agent restriction	The specified exec-agent is not enabled on the exec-agent profile.	execution-agent-name

#1

Only one unit name is output for units whose execution order is looped in the relation definitions.

#2

The names of judgment jobs for which dependent units are not defined by using conditional relations are output. If there are multiple errors, all unit names separated with a semicolon (;) are output.

#3

The names of dependent units that have relation definitions other than conditional relations are output.

If there are multiple errors, all unit names separated with a semicolon (;) are output.

#4

This error is output if NAT (network address translation) is used for communication between agents and the manager because the IP address resolved from the manager host name is different for the agent hosts and the manager host. Ignore this error if there are no problems with the settings.

#5

#### If Other service is specified for Connection range, host-name: scheduler-service-name: unit-name is output.

#6

If the user mapping check fails, the -D option (detailed job definition) check and the -A option (execution file privileges) check are performed assuming that the job execution user is an OS user that has superuser privileges (that is, a root user). Therefore, if the job execution user is not a root user, correct the user mapping error, and then re-execute the detailed job definition check and execution file privileges check.

#7

For details about file privileges, see the following table.

File privileges are output in the same way as in the chmod command. (Example: 0644)

Access permission type	Value	Explanation
Special access permission	1000	Swap is maintained in the program code.
	2000	The group ID is set during execution.
	4000	The user ID is set during execution.
User with the same UID	100	Execution
	200	Writing
	400	Reading
Group with the same GID	10	Execution
	20	Writing
	40	Reading
Other user	1	Execution
	2	Writing
	4	Reading

#### (10) Empty lines

#### (11) CHECKENDTIME=*execution-end-date*

The date and time when the definition pre-check ended is output in the form YYYYH/MM/DD hh:mm:ss form.

(12) NUMBER OF CHECKUNITS=number-of-checked-units/number-of-units-subject-to-checking, NUMBER OF ERRORS= number-of-items-for-which-an-error-was-detected

Summary information for the result of a definition pre-check is output. This information includes the number of checked units and the number of items for which an error was detected. If no error was detected, 0 is output.

If you specify the -O or -M option, jobnets and jobnet connectors are also counted as checked units. If you specify any of the -C, -P, -H, -U, -D, or -A options, jobs are also counted.

The number of units subject to checking might be different from the number of checked units in the following case:

- A definition pre-check process error occurred during checking.
- If a definition pre-check process error occurred during checking, the error message is output to the integrated trace log.
- The connection source restriction function refused connection to the checked units.

If the units to be checked are jobnet connectors with their **Connection range** set to **Other service** and the source restriction function is enabled on the destination host, the number of checked units will be reduced by the number of units whose connection was denied.

If an error occurred during the check, the error details are output to the integrated trace log. If different machines are being used for the JP1/AJS3 - Manager and the JP1/AJS3 - Agent, check the integrated trace log in the manager machine first. If no errors are found, check the integrated log in the agent machine.

Items (1) to (7) (information about the definition pre-check) and items (11) and (12) (execution end date and summary information) are output only once each time the command is executed. Item (9) (check results) is output for all error occurrences that were detected.

# ajschkstart (UNIX only)

# Format

In JP1/AJS3 - Manager:

ajschkstart [-m] [-a]

### In JP1/AJS3 - Agent:

```
ajschkstart
[-a]
```

# Description

Starts the JP1/AJS3 Check Manager service or the JP1/AJS3 Check Agent service.

# **Execution privileges**

Superuser privileges

# Storage directory

/opt/jp1ajs2/bin/

# Arguments

#### -m

Starts the JP1/AJS3 Check Manager service.

#### -a

Starts the JP1/AJS3 Check Agent service.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

### Notes

- This command applies only to UNIX. You cannot use this command in Windows.
- If you omit all options, the following options are assumed:
  - JP1/AJS3 Manager: -m, -a
  - JP1/AJS3 Agent: -a

# Additional information

In Windows, start the service control manager first.

# Example

In this example, the command starts, in JP1/AJS3 - Manager, the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service:

ajschkstart -m -a

# ajschkstop (UNIX only)

# Format

In JP1/AJS3 - Manager:

ajschkstop [-m] [-a]

### In JP1/AJS3 - Agent:

```
ajschkstop
[-a]
```

# Description

Stops the JP1/AJS3 Check Manager service or the JP1/AJS3 Check Agent service.

### **Execution privileges**

Superuser privileges

### Storage directory

/opt/jp1ajs2/bin/

### Arguments

#### -m

Stops the JP1/AJS3 Check Manager service.

#### -a

Stops the JP1/AJS3 Check Agent service.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

### Notes

- This command applies only to UNIX. You cannot use this command for Windows.
- If you omit all options, the following options are assumed:
  - JP1/AJS3 Manager: -m, -a
  - JP1/AJS3 Agent: -a
- When a check is underway, processing is terminated without waiting for the check to end.
- If this command is used to stop the JP1/AJS3 Check Agent service, the command does it by communicating with the local host via TCP/IP according to the JP1/Base physical host communication settings. Therefore, if the IP address corresponding to the local host name (shown by the hostname command) can be used to communicate with another host, the command might stop the JP1/AJS3 Check Agent service on the other host.

If you execute the command in this environment, beforehand, set the hosts, DNS, jplhosts, or jplhosts2 file so that the local host name can resolve into the local host IP address.

For details about the jplhosts or jplhosts2 file, see the Job Management Partner 1/Base User's Guide.

# **Additional information**

In Windows, stop the service control manager first.

### Example

In this example, the command stops, in JP1/AJS3 - Manager, the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service:

ajschkstop -m -a

# ajschktrsetsz

# Format

```
ajschktrsetsz
[-s size]
```

# Description

Changes the size of the trace log file for the JP1/AJS3 Check Manager service or the JP1/AJS3 Check Agent service.

If you do not specify any arguments for execution, the currently set size of the trace log file is output to the standard output file.

# **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

### Storage directory

In Windows:

JP1/AJS3 - Manager-installation-folder\bin\

JP1/AJS3 - Agent-installation-folder\bin\

In UNIX:

/opt/jp1ajs2/bin/

# Arguments

#### -s size

Specifies the size of the trace log file.

You can specify a value of 64 to 2,097,151 kilobytes.

### Notes

- If you use this command to reduce the size of a trace log file, the content of the original trace log file is deleted.
- Always separate the option and its value by at least one space character.

# Example

In this example, the command reserves a value of 4,096 kilobytes for the size of the trace log file for the JP1/AJS3 Check Manager service or the JP1/AJS3 Check Agent service:

ajschktrsetsz -s 4096

# ajscopy

# Format

```
ajscopy
  [-F service-name]
  [-m permission-mode]
  [-c|-v]
  [-S]
  [-R]
  [-L|-E]
  [-T]
  [-G|-N|-J]
  -o output-destination-unit-name
  input-source-unit-name...
```

# Description

Copies, moves or renames units.

When you copy a unit defined under a unit with the upper-level unit-attribute inheritance function set, a function will set the owner and JP1 resource group of the copy. For details on this function, see 6.4.1(4)(a) Overview of the upper-level unit-attribute inheritance function in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

When you move or rename a unit, it retains the owner and JP1 resource group of the source unit.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege (allows you to execute this command only for the copy target unit and its subunits)
- JP1\_AJS\_Guest privilege (allows you to execute this command only for the copy target unit and its subunits)

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -m permission-mode

Specify the permission mode if you change the settings for the JP1 user for job execution before copying, moving, or renaming a jobnet.

You can specify a four-digit octal value.

The following is the meaning of each digit, starting from the left:

1<sup>st</sup> digit

Specify the handling of the user for job execution

0 to 3: Assumes the JP1 user who has registered the jobnet to be the user for job execution.

4 to 7: Assumes the JP1 user who owns the job to be the user for job execution.

### 2<sup>nd</sup> to 4<sup>th</sup> digits

Specifies any value between 0 and 7.

If you omit this option, the system assumes the same value as that for the source unit. This option is valid only if you define a job with the  $-\circ$  option.

#### -c

Copies the unit.

### -v

Moves or renames the unit.

You cannot specify this option with the -E option.

### -s

This option makes it possible to copy units under the particular jobnet, even for suspended jobnets that have been registered for execution. It is also possible to change the names of units that are added during the suspend operation. Even for suspended jobnets, however, you cannot copy or rename units in the following situation:

• While jobnets are being executed

### -R

Assumes all job groups, jobnets, and jobs contained in the specified unit as the input source unit.

If you specify this option with the -G, -N, -J, -L, -E, and/or -T options, the system assumes the input source unit according to the specification of each option.

### -L

Assumes the job groups, jobnets not registered for execution, and jobs as the input source unit.

You cannot specify this option with the -G option.

### -E

Assumes the jobnets registered for execution and jobs as the input source unit.

You cannot specify this option with the -v or -G option.

# -T

Assumes the root jobnet as the input source unit.

You cannot specify this option with the -G or -J option.

#### -G

Assumes job groups as the input source unit.

You cannot specify this option with the -L, -E, -T, -N, or -J option.

#### -N

Assumes jobnets as the input source unit.

You cannot specify this option with the -G or -J option.

If you specify this option with the -T option, this option is disabled.

#### -J

Assumes jobs as the input source unit.

You cannot specify this option with the -G, -N, or -T option.

#### -o output-destination-unit-name

Specify the name of the unit to which you want to copy, move, or rename the unit.

You can specify a character string of 1 to 930 bytes.

When copying or moving:

If you specify an existing job group name or jobnet name, the system copies or moves the unit into that unit.

When renaming:

You cannot specify an existing job name, manager job group name, manager jobnet name.

Note that you cannot specify a logical host name, scheduler service name, or execution ID as *output-destination-unit-name*.

#### input-source-unit-name

Specify the name of the unit from which you want to copy, move, or rename the unit.

You cannot specify the start condition unit as input-source-unit-name.

You can specify a character string of 1 to 930 bytes.

You cannot specify a logical host name or execution ID as the input source unit.

### Notes

- Either of the following users can copy a unit:
  - A user granted the reference privilege for the unit copy source (and all subordinate data) and the update privilege for the copy destination
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege and the update privilege.
- Any of the following users can move or rename a unit:
  - A user granted the update privilege for the source and destination units
  - A user granted the update privilege for the unit to be renamed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

Common notes on copying, moving, and renaming:

- If the unit (other than job groups) specified as the name of the output destination unit or name of the input source unit is currently open, this command terminates abnormally.
- You cannot move or rename a unit containing a registered jobnet (other than remote jobnets) or a unit contained in such a registered jobnet. You cannot copy or move a unit into a registered jobnet. For units other than remote jobnets, however, specifying the -s option in this command while keeping the target jobnet suspended allows you to copy a unit to the target jobnet or rename an additional unit without having to cancel the registration of the jobnet.
- You cannot assign the same name to both the input source unit and the output destination unit.
- You must assign a new unit name to the output destination unit. (If you use any existing unit name, the target unit will move into the existing output destination unit.) With more than one input source unit specified, however, you cannot give a new unit name to the output destination name.
- This command terminates abnormally if a unit specified in the name of the output destination unit or a unit specified in the name of the input source unit is undergoing a suspended-stage change.

Copying and moving

- You cannot copy or move a job group into a jobnet.
- If an error occurs while the system is copying a unit, it deletes the unit that has been partly copied. This command terminates abnormally.
- You cannot copy or move a planning group into a jobnet.
- You cannot copy or move any unit other than a jobnet or remote jobnet into a planning group.
- You cannot move or rename a planning group containing a registered root jobnet.
- If you copy or move as a root jobnet a root jobnet that is a jobnet to which a jobnet connector is connected, execution order control information such as the jobnet connector name is also copied or moved. On the other hand, if you copy or move the root jobnet as a nested jobnet, the definition information is reset to the default status (execution order control is disabled).
- If you copy or move the planning group defined as the jobnet to which a jobnet connector is to be connected, the execution order control information such as the jobnet connector name is also copied or moved.
- If you attempt to copy a release target jobnet (root jobnet for which release entry is made), the jobnet definitions in *Being applied* status are copied. If you attempt to move a release target jobnet, definitions of all jobnets for which release entry is made are moved.
- You cannot copy or move jobnet connectors, start conditions, or link jobnets so that they are under a release target jobnet (root jobnet for which release entry is made).
- If you copy or move an execution interval control job that is defined for immediate completion after the job has been started, from start conditions to a normal jobnet, the job settings are changed. The job is no longer set for immediate completion after the job has been started.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information

Units that have been copied or moved are automatically located in an empty space on the Jobnet Editor window in JP1/AJS3 - View (somewhere from the top left to the bottom right).

# Example

The following command copies jobnet net1 into job group grp1:

ajscopy -c -o grp1 net1

# ajsdbcond

# Format

```
ajsdbcond

[-F service-name]

[[-m] |

[[-x][-k]

[-d directory-name][-p {output-destination}]]|

[[{-1|-L} [-a] [[-i {output-destination}]]

[-t {output-destination, unused-area-size-threshold} [-v]]]]

|[-t {output-destination, unused-area-size-threshold} [-v]]]]
```

# Description

- 1. Compresses unused areas and reorganizes files if the ratio of unused areas is high for the ISAM files that the scheduler service uses.
- 2. Outputs the ratio of unused areas, data file fragmentation ratio, and unused area size for the ISAM files used by the scheduler service, to the standard output file.

You can display the ratio of unused areas for the ISAM files even while the scheduler service is using the ISAM files.

- 3. Outputs the following information for the ISAM files that the scheduler service uses, to the specified destination as a message:
  - Information about reorganization (start and end date/time, statistics)
  - Unused area size
  - Whether the unused area size has reached the threshold
  - You can specify one or more of the following message destinations:
  - Standard error output
  - Windows event log or Syslog
  - JP1 event
- 4. Checks whether the size of unused areas for the ISAM files that the scheduler service uses has reached the threshold and sets the result in the return value of the command.
- 5. Converts the format of the ISAM file.

### **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default service name.

<sup>2.</sup> Commands

#### -m

Outputs the semaphore number and the ISAM file format (whether the key reuse functionality is enabled or disabled) of the specified scheduler database.

You cannot specify this option with any option other than -F.

#### -x

Reorganizes the ISAM files that the scheduler service uses.

-k

Converts all ISAM files that constitute the specified scheduler service to the format enabling the key reuse functionality, and completely reorganizes the data and key files.

### -d directory-name

Specify the directory for the work file used for key sorting, if you reorganize the ISAM files that the scheduler service uses.

For an explanation of the system action when you omit this option, see the description of the Jiscond command in the *Job Management Partner 1/Base User's Guide*.

### -p {output-destination}

Outputs a message when the command starts and ends the reorganization of the ISAM files that the scheduler service uses.

You must specify this option with the -x option.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.

- e: Standard error output
- s: Windows event log or Syslog
- j: JP1 event

The following shows example message output when this option is specified:

Example 1: When reorganization is started

```
KAVS1500-I Database condensing of the scheduler service (AJSROOT1) started. 20XX/10/01 01:05:40
```

Example 2: When reorganization is ended normally

```
KAVS1501-I Database condensing of the scheduler service (AJSROOT1) ended normally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)
```

The start date/time, end date/time, elapsed time, unused area size before reorganization, and unused area size after reorganization are also output.

Example 3: When reorganization is ended abnormally

```
KAVS1502-I Database condensing of the scheduler service (AJSROOT1) ended abnormally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)
```

### $\{-1 | -L\}$

Displays the ratio of unused areas for the ISAM files that the scheduler service uses.

You can obtain more detailed information about the ISAM files by specifying this option with the -a option.

• -1

Exclusively uses the ISAM files to obtain information.

Because this option exclusively uses the files, it provides more accurate information than the -L option. It, however, causes an error if another process is using the ISAM files.

• -L

Obtains information without exclusively using the ISAM files.

Because this option does not exclusively use the files, it can obtain information even while the scheduler service is using the ISAM files. If another process is simultaneously updating the ISAM files, however, the command fails to obtain accurate information for any updates performed just when it obtains information.

-a

Outputs detailed information about the ISAM files that the scheduler service uses.

If this option is specified with the -1 or -L option, the command outputs the data file fragmentation ratio and unused area size as well as the ratio of unused areas.

### -i {output-destination}

Outputs a message indicating the unused area size for the ISAM files that the scheduler service uses.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.

- e: Standard error output
- s: Windows event log or Syslog
- j: JP1 event

The following shows example message output when this option is specified:

Example:

```
KAVS1503-I The ISAM unused area size of the scheduler service (AJSROOT1) is 99 MB.
```

#### -t {output-destination, unused-area-size-threshold}

Outputs a message if the unused area size for the ISAM files that the scheduler service uses has reached the specified threshold.

You can use this option to schedule the execution of the ajsdbcond command as a JP1/AJS3 job when the scheduler service is not very busy, so that the command periodically checks the status of the ISAM files and outputs a warning message as required.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.
- e: Standard error output
- s: Windows event log or Syslog

j: JP1 event

• unused-area-size-threshold

Specifies a threshold for the unused area size for the ISAM files. You can specify a value within the range from 1 to 1024 (in MB;  $1 \text{ MB} = 1,024 \times 1,024 \text{ bytes}$ ).

The following shows example message output when this option is specified:

Example:

```
KAVS1504-W The ISAM unused area size for scheduler service (AJSROOT1) is 101 MB, which exceeds the 100 MB threshold value.
```

-v

Sets the return value (process return code) of the command to indicate whether the ratio of unused areas has reached the specified value.

You must specify this option with the -t option.

### Notes

- Back up and store the files before reorganizing them. The ajsdbcond command uses the directory specified in the -d option as the work directory. The drive or partition containing that directory must have at least twice as much free space as the largest ISAM key file for the scheduler service for which you want to perform reorganization. In addition, the drive or partition containing the scheduler service database directory must have at least as much free space as the largest ISAM file for the scheduler service for which you want to perform reorganization.
- If you do not specify the -d option, the command uses the default OS work directory. For details, see the description of the Jiscond command in the *Job Management Partner 1/Base User's Guide*.
- If you specify none of the -x, -t, -l, -L, -k, and -m options, the -x option is assumed.
- If you specify the -x or -k option for this command, you must back up the ISAM files before executing the command (before reorganizing the ISAM files).
- If you specify the -x, -1, or -k option for this command, you must execute the command with the ISAM files closed (to close the ISAM files, execute the jajs\_spmd\_stop command to terminate the operation of JP1/AJS3. Be sure to stop all the JP1/AJS3 Views and JP1/AJS3 Console Agent services.) When the ISAM files are open, executing the command will result in an error.
- If you specify the -L option for this command, you can also obtain information about any ISAM files that other processes are using. If another process is simultaneously updating the ISAM files, however, the command fails to obtain accurate information for any updates performed just when it obtains information. In order to maintain the integrity of the ISAM files, other processes attempting to access the ISAM files have to wait while the command is executed. You should not, therefore, use this command when the scheduler service is busy.
- The output information from this command with the -l or -L option specified refers to the ratio of unused areas, not the ratio of fragmentation. If, therefore, the ISAM file contains no records or there are an extremely limited number of records, 100% is output showing the ratio of unused areas to the empty area that has been reserved.
- Even if you reorganize the ISAM files, some unused areas may remain.

## **Return values**

0	Normal end <sup>#1</sup>
1	The ISAM files being used contain unused areas exceeding the specified threshold size.#2
Multiple of 4 within the range from 4 to 124	Abnormal end

#1

When the -t and -v options are specified simultaneously, indicates that the ISAM files used by the scheduler service have not reached the unused area size threshold.

#2

This code is returned only when the -t and -v options are specified simultaneously.

# **Additional informations**

• The following shows the format of output when the -1 or -L option is specified:

Table mana	Descuel second	Data	16	K0	
l able name	Record count	Data	Key 1	Key 2	
AJSUNIT	2208	08	0%	08	
AJSARROW	2000	0%	0%		
AJSBODY	2206	45%	10%		
AJSSCH	39676	56%	32%		
AJSCAL	1	0%	0%		
AJSSTAT	724	32%	77୫		
AJSENTRY	48	7 <b>9</b> %	33%		
AJSGEN	28	65%	0%		
AJSPERF	34	77%	0%	08	

The following items are output:

Table name

Displays the table name.

Record count

Displays the number of records.

#### Data

Displays the ratio of unused areas for the data file.

#### Key 1

Displays the ratio of unused areas for the first key file.

#### Key 2

Displays the ratio of unused areas for the second key file.

This item is blank if there is only a single key file.

There cannot be more than two key files.

• The following shows the format of output when the -a option is specified with the -1 or -L option.

Table name	Record co	unt Data	Fragment rati	o Key 1	Key 2	Unused area size
AJSUNIT	2208	0%		08	0%	
		0.000MB	-	0.000MB	0.000MB	0.000MB
AJSARROW	2000	0%		0%		
		0.000MB	-	0.000MB		0.000MB
AJSBODY	2206	45%	50%	10%		
		0.540MB	000	0.000MB		0.540MB
AJSSCH	39676	56%	50%	32%		
		0.000MB		0.000MB		0.000MB
AJSCAL	1	0%	-	0%		
		0.000MB		0.000MB		0.000MB
AJSSTAT	724	32%	-	77%		
		10.125MB		68.375MB		78.500MB
AJSENTRY	48	79%	-	33%		
		0.000MB		0.500MB		0.500MB
AJSGEN	28	65%	20%	0%		
		4.000MB		0.000MB		4.000MB
AJSPERF	34	77%	-	0%	0%	
		1.700MB		6.100MB	11.200MB	19.000MB
Total unused	area size					102.540MB

Data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -1 or -L option. The lower row displays the unused area size for each file (in MB;  $1 \text{ MB} = 1,024 \times 1,024$  bytes).

The following items are output:

#### Table name

Displays the table name.

#### Record count

Displays the number of records.

#### Data

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -1 or -L option. The lower row displays the unused area size.

#### Fragment ratio

For a variable-length record, updating a record may cause the data in ISAM files to be split into multiple blocks. This item displays the ratio of the split records to the total number of records. This item is only displayed for variable-length ISAM files. It displays a hyphen (-) for tables other than unit definition tables (BODY), schedule definition tables (SCH), and generation management tables (GEN).

#### Key 1

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -1 or -L option. The lower row displays the unused area size.

#### Key 2

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -1 or -L option. The lower row displays the unused area size.

#### Unused area size

Displays the total unused area size for the data and key files that comprise each ISAM file.

#### Total unused area size

Displays the total unused area size for the ISAM files that the scheduler service uses.

• The following shows the format of output when the -m option is specified:

Table name AJSUNIT AJSARROW	Reuse key Enabled Enabled	Semaphore No. 2 3
	Omitted	
AJSPERF	Enabled	10

The following items are output:

Table name

Displays the table name.

Reuse key

Displays Enabled if the key reuse functionality for the ISAM file format is enabled.

Displays Disabled for the conventional ISAM file format.

Semaphore No.

Displays the semaphore number if the file is split by semaphore.

Otherwise, a hyphen (-) is displayed.

• If you specify j (JP1 event) as the output destination for the -p, -i, or-t option, the following JP1 events are output:

Specified option	Event ID	Event name	Issued when	Message ID
-р	00004150	Scheduler database reorganization started	Reorganization starts.	KAVS1500-I
-p	00004151	Scheduler database reorganization ended normally	Reorganization ends normally.	KAVS1501-I
-р	00004152	Scheduler database reorganization ended abnormally	Reorganization ends abnormally.	KAVS1502-E
-i	00004153	ISAM unused area size information	ISAM unused area size information is obtained.	KAVS1503-I
-t	00004154	ISAM unused area size threshold reached	The ISAM unused area size threshold is reached.	KAVS1504-W

Note

For details about the JP1 events, see A. JP1 Events Issued by JP1/AJS3 in the Job Management Partner 1/ Automatic Job Management System 3 Administration Guide.

- The following describes a database reorganization log that is output when the database is reorganized: When you execute the ajsdbcond command, it creates the CONDENSE {1|2}.log file in the directory storing the database. This file contains the database reorganization log, which records the following statistics:
  - Start date/time, end date/time, and time required
  - Unused area size and total file size before database reorganization
  - Unused area size and total file size after database reorganization

Data is logged in the HNTR log format.

Message KAVS1510-I is output with the statistics of database reorganization embedded.

Output example

```
KAVS1500-I Database condensing of the scheduler service (AJSROOT1)
started. 20XX/10/01 01:05:40
KAVS1510-I CONDENSE: Before condensing the database. Unused area size:
102.020 MB Total file size:542.245 MB
CONDENSE: ISAM After condensing the database. Unused area size:0.100 MB
Total file size:440.225 MB
KAVS1501-I Database condensing of the scheduler service (AJSROOT1) ended
normally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)
```

### Example 1

The following command reorganizes the ISAM files the AJSROOT1 scheduler service uses, when the scheduler service is stopped:

ajsdbcond -x -F AJSROOT1

### Example 2

The following command outputs the status of the ISAM files the AJSROOT1 scheduler service uses (ratio of unused areas, unused area size, and data file fragmentation ratio):

ajsdbcond -l -a -F AJSROOT1

### Example 3

The following command outputs information about the ISAM files the scheduler service uses to the standard output, and outputs messages to the standard error output and Windows event log or Syslog if the unused area size has reached the threshold (10 MB):

```
ajsdbcond -L -a -t se,10 -F AJSROOT1
```

# ajsdefine

# Format

```
ajsdefine
  [-F service-name]
  [-S]
  [{-x|-t}]
  [{-i|-e|-f}]
  [-p]
  [-d destination-unit-name]
  [unit-definition-file-name...]
```

# Description

Defines a unit based on the parameters coded in a unit definition file.

For details about a unit definition file, see 4.1 Creating a unit definition file in the manual Job Management Partner 1/ Automatic Job Management System 3 Command Reference 2.

If you define a unit under a unit for which the upper-level unit-attribute inheritance function is set, a function will set the owner and JP1 resource group of the defined unit. For details on this function, see 6.4.1(4)(a) Overview of the upper-level unit-attribute inheritance function in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -s

This option makes it possible to update the definitions of nested jobnets and jobs, even for suspended jobnets that have been registered for execution. Even for suspended jobnets, however, you cannot update definitions in the following situations:

- While the definition of the root jobnet is being updated
- While the definitions of job groups containing the definition of the root jobnet are being updated
- While jobnets are being executed

#### -x

Defines a unit based on the parameters coded in a unit definition file.

#### -t

Performs only a syntax check for the parameters coded in a unit definition file.

-i

Displays a message with a confirmation prompt if the definition destination contains a unit having the same name as the unit coded in the unit definition file. If you enter y for this prompt, the unit name is forcibly updated.<sup>#</sup> This option generates an error if the unit definition file contains the specification of units having the same name in the same layer.

#### #

Delete the unit to be forcibly updated and subordinate units, and then create a unit and code in the unit definition file.

#### -е

Generates an error without updating information, if the definition destination contains a unit having the same name as the unit coded in the unit definition file. This option generates an error if the unit definition file contains the specification of units having the same name in the same layer. The system does not update information.

#### -f

Forcibly updates<sup>#</sup> the unit if the definition destination contains a unit that has the same name as the unit coded in the unit definition. This option generates an error if the unit definition file contains the specification of units having the same name in the same layer.

#### #

Delete the unit to be forcibly updated and subordinate units, and then create a unit and code in the unit definition file.

-p

When the upper-level unit-attribute inheritance function is enabled, specify this option to ignore the unit-attribute profile when defining the unit.

Specify this option when you want to define units exactly as they appear in a unit definition file output by the ajsprint command.

#### -d destination-unit-name

Specify the name of the job group or jobnet in which you want to define the unit.

You can specify a character string of 1 to 255 bytes. You cannot specify the logical host name or execution ID. You cannot specify a job group or jobnet for which the number of nested units exceeds 30 (10 if the DEFLENTYPE environment setting parameter is set to sjis), the maximum allowed.

If this option is omitted, the root job group (/) is assumed, in which units will be created.

### unit-definition-file-name

Specify the name of the file in which you defined the unit definition parameters (attributes of the unit).

You can specify a character string of 1 to 255 bytes.

You can specify more than one unit definition file. You cannot use wildcard characters here.

If the coding of any unit definition file is invalid, the system stops processing that file but continues processing other files.

If you omit this option, the system inputs the unit definition parameters from the standard input.

### Notes

- Either of the following users can define a unit:
  - A user granted the update privilege for the definition destination of the unit
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

- If an error occurs while the unit is being defined, the unit is deleted and the command ends abnormally. When a unit is forcibly updated by specifying the -i or -f option, if an error occurs after the unit to be updated is defined, the unit is deleted and the command ends abnormally.
- If you forcibly update a job group or a jobnet by specifying the -i or -f option, the schedule for jobnet that references the forcibly updated job group is not recalculated. The schedule for jobnet for which the forcibly updated jobnet is specified in the exclusive schedule is also not recalculated.
- If you forcibly update a unit by specifying the -i or -f option, the following jobnets that are registered for planned execution or for fixed execution for a specified number of future generations might be placed in Shutdown status or their execution schedules might not be created:
  - Jobnets for which the job group to be updated is specified in Refer to the calendar of another job group option
  - Jobnets for which the jobnet to be updated is specified in Exclusive schedule option

To prevent this, perform either of the following operations:

- Cancel the registration of the jobnets mentioned in 1 or 2 above, and then execute the ajsdefine command with the -i or -f option specified.
- Change the unit definition by using the ajscalendar, ajschange, or ajschgnet command, not by using the ajsdefine command.
- If the jobnet specified for *destination-unit-name* is in either of the following states, this command terminates abnormally:
  - The jobnet is registered for execution, and is not in the suspend status.
  - The jobnet has been edited exclusively by JP1/AJS View.
- You cannot define a job group in a jobnet.
- You cannot define a unit in a job, manager job group or manager jobnet.
- You cannot update information about a root jobnet registered for execution or information about any job group or planning group containing that root jobnet.
- For a jobnet registered for execution, you cannot define a unit in the jobnet or in its upper-level or lower-level unit.
- In the following units, however, specifying the -s option in this command while keeping the target jobnet suspended allows you to specify information without having to cancel the registration of the jobnet: units in the root jobnet, those in the job groups containing the root jobnet, and those in other than remote jobnets. (If the target unit is currently being executed, specifying the -s option will not allow you to update the information.)
- You cannot define a planning group in a jobnet.
- You cannot define any unit other than a jobnet or remote jobnet in a planning group.
- If you use the command to define a jobnet, the system does not check the consistency of the execution order of units. A jobnet in which units will result in a loop or a judgment job without any associated dependent units results in an error and is placed in *Invalid exe. seq.* status.

- If you attempt to define a unit in a release target jobnet (root jobnet for which release entry is made), the definition of the unit is added to the jobnet definitions in *Being applied* status.
- You cannot define jobnet connectors or start conditions in release target jobnets (root jobnets for which release entry is made).

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information

If the window position is not specified for units to be defined, they are automatically located in an empty space on the Jobnet Editor window in JP1/AJS3 - View (somewhere from the top left to the bottom right).

# Example

The following command defines a unit in job group /group1 based on the parameters coded in unit definition file /tmp/unit\_def:

```
ajsdefine -d /group1 /tmp/unit def
```

# ajsdelete

# Format

```
ajsdelete
  [-F service-name]
  [-i]
  [-S]
  [-R]
  [-L]
  [-T]
  [-G|-N|-J]
  job-name-or-jobnet-name-or-job-group-name...
```

# Description

Deletes a unit. This command guarantees consistency in the relationship even if you delete a jobnet or job for which you have made a relationship with other elements.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

## Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -i

Displays a message with a confirmation prompt before deleting a unit.

-s

This option makes it possible to delete nested jobnets and jobs, even for suspended jobnets that have been registered for execution. Even for suspended jobnets, however, you cannot delete definitions in the following situations:

- While deleting the root jobnet
- While deleting the job group containing the root jobnet
- While jobnets are being executed

#### -R

Deletes all units in the specified job group or jobnet, according to the other specified options.

If you specify this option with the -L, -T, -G, -N and/or -J options, the system deletes the unit according to the specification of each option.

### -L

Deletes job groups, jobnets not registered for execution, and jobs.

If you specify this option with the -T, -N, and/or -J options, the system deletes unregistered jobnets according to the specification of each option. You cannot specify this option with the -G option.

### -**T**

Deletes root jobnets.

If you specify this option with the -L option, the system deletes root jobnets according to the specification of the -L option. If you specify this option with the -N option, the -N option is disabled. You cannot specify this option with the -G or -J option.

### -G

Deletes job groups.

You cannot specify this option with the -L, -T, -N, or -J option.

### -N

Deletes jobnets and recovery jobnets.

If you specify this option with the -L option, the system deletes jobnets and recovery jobnets according to the specification of the -L option. If you specify this option with the -T option, the -N option is disabled. You cannot specify this option with the -G or -J option.

### -J

Deletes jobs.

You cannot specify this option with the -T, -G, or -N option.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job, jobnet or job group you want to delete.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group name. You cannot, however, specify the root job group (/).

You cannot specify a logical host name or execution ID as a job, jobnet or job group name.

## Notes

- Either of the following users can delete a unit:
  - A user granted the update privilege for the unit to be deleted
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

• For units other than in the root jobnet, the job group containing the root jobnet, and the remote jobnet, however, specifying the -s option in this command while keeping the target jobnet suspended makes it possible to conduct

the delete process without having to cancel the registered jobnet. (If the target unit is being currently executed, the delete process is not effective even if the -s option is specified.)

- If you attempt to delete a release target jobnet (root jobnet for which release entry is made), the definition of all jobnets for which release entry is made is deleted. If you attempt to delete a unit in a root jobnet for which release entry is made, the jobnet definitions in *Being applied* status are deleted.
- This command terminates abnormally if the target jobnet or job is undergoing a suspended-state change.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example

The following command deletes only unregistered jobnets among the units contained in job group /group1, after displaying a prompt for confirmation:

ajsdelete -iRLN /group1

# ajsembdbaddarea

## Format

```
ajsembdbaddarea

-r {table|index}

[-raw]

-s embedded-database-file-system-area-size

[-id embedded-database-setup-ID]

-d name-of-directory-where-database-area-to-be-expanded-stored
```

### Format1 (for expanding the tablespace)

```
ajsembdbaddarea
-r table
[-raw]
-s embedded-database-file-system-area-size
[-id embedded-database-setup-ID]
-d name-of-directory-where-database-area-to-be-expanded-stored
```

### Format2 (for expanding the index area)

```
ajsembdbaddarea

-r index

[-raw]

-s embedded-database-file-system-area-size

[-id embedded-database-setup-ID]

-d name-of-directory-where-database-area-to-be-expanded-stored
```

### Description

The ajsembdbaddarea command expands the embedded database area (tablespace or index area).

You can execute this command only when the embedded database is running.

You can execute the command regardless of the operating status of JP1/AJS3.

### **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

### Storage directory

In Windows:

```
JP1/AJS3 - Manager-installation-folder \tools \
```

In UNIX:

/opt/jp1ajs2/tools/

# Arguments

### -r table | index

Specifies the type of database area to be expanded.

- table
  - Expands the tablespace.
- index Expands the index area.
  - Expands the fild

#### -raw

Specify this option when you use a RAW file (character type special file).

### -s embedded-database-file-system-area-size

Specify in MB the size of the file system area in the embedded database to be allocated.

You can specify a value in the range from 1 to 2047.

### -a name-of-directory-where-database-area-to-be-expanded-stored

Use 120 bytes or less to specify the name of the directory that stores the database area to be expanded. If you specify a non-existent directory, an error occurs.

Keep the following points in mind when you specify a directory name:

- Use a full path name to specify a directory name.
- If you want to specify a directory whose name contains spaces, enclose the entire path in double quotation marks (").
- Do not specify a disk on a network drive.
- In a cluster system, specify a directory on the shared disk.
- Make sure that the amount of space specified in the -s option is available to the specified directory.
- If you also want to specify the -raw option, specify a partition that is not formatted (in Windows) or specify a character-type special file (in UNIX). Do not specify a partition in use or a character-type special file.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

### Notes

• This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.

- In a cluster system, execute this command on the executing host (the host specified for the -eh option of the ajsembdbbuild command).
- The table area and the index area can each be expanded a maximum of 15 times.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

# Additional information

When this command is executed, a file whose name is in the following format is created in the directory specified for the -d option:

#### ajsRRRRRIIIIYYYYMMDDhhmmss

- RRRRR: Type of expanded resource (value specified for the -r option)
- IIII: embedded database setup ID (value specified for the -id option)
- YYYY: year
- MM: month
- DD: day
- hh: hours
- mm: minute
- ss: second

Example:

The following shows an example of the command line and the file created when the command is executed at 21:40:12 on June 1, 2010:

```
ajsembdbaddarea -r index -s 2000 -d K:\rdarea -id _JF0
```

```
K:\rdarea\ajsindex JF020100601214012
```

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Use the ajsembdbstatus -s ust command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re- execute the command.

Message	Cause	Action to be taken
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# ajsembdbaddlog

### Format

```
ajsembdbaddlog
[-raw]
-s embedded-database-file-system-area-size
-r {sys|spd}
[-id embedded-database-setup-ID]
-d name-of-directory-where-file-to-be-expanded-stored
[-du name-of-directory-where-file-to-be-expanded-stored]
```

### Format 1 (for expanding the system log file)

```
ajsembdbaddlog
[-raw]
-s embedded-database-file-system-area-size
-r sys
[-id embedded-database-setup-ID]
-d name-of-directory-where-file-to-be-expanded-stored
```

### Format 2 (for expanding the sink point dump file)

```
ajsembdbaddlog

[-raw]

-s embedded-database-file-system-area-size

-r spd

[-id embedded-database-setup-ID]

-d name-of-directory-where-file-to-be-expanded-stored
```

### Format 3 (for expanding the duplicated system log file)

```
ajsembdbaddlog

[-raw]

-s embedded-database-file-system-area-size

-r sys

[-id embedded-database-setup-ID]

-d name-of-directory-where-file-to-be-expanded-stored

-du name-of-directory-where-file-to-be-expanded-stored
```

#### Format 4 (for expanding the duplicated sink point dump file)

```
ajsembdbaddlog

[-raw]

-s embedded-database-file-system-area-size

-r spd

[-id embedded-database-setup-ID]

-d name-of-directory-where-file-to-be-expanded-stored

-du name-of-directory-where-file-to-be-expanded-stored
```

## Description

The ajsembdbaddlog command expands the embedded database system file (system log file or sink point dump file).

You can execute this command only while the embedded database and all the scheduler services for which the applicable embedded database was created as the scheduler database are not running.

# **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\ In UNIX:

/opt/jp1ajs2/tools/

# Arguments

### -raw

Specify this option when you use a RAW file (character type special file).

When you specify this option, be careful with the specification of the arguments of the -d and -du options. For details, see the descriptions for the -d and -du options.

### -s embedded-database-file-system-area-size

Specify in MB the size of the file system area in the embedded database to be allocated.

The range of values that can be specified in this option varies depending on the value of the -r option.

```
If the -r value is sys:
1 to 2,047
If the -r value is spd:
1 to 1,024
```

### -r sys | spd

Specify the type of system file to be expanded.

• sys

The system log file is expanded.

• spd

The sink point dump file is expanded.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded

<sup>2.</sup> Commands

database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

### -a name-of-directory-where-file-to-be-expanded-stored

Use 120 bytes or less to specify the name of the directory that stores the file to be expanded. If you specify a non-existent directory, an error occurs.

Keep the following points in mind when you specify a directory name:

- Use a full path name to specify a directory name.
- If you want to specify a directory whose name contains spaces, enclose the entire path in double quotation marks (").
- Do not specify a disk on a network drive.
- In a cluster system, specify a directory on the shared disk.
- Make sure that the amount of space specified in the -s option is available to the specified directory.
- If you also want to specify the -raw option, specify a partition that is not formatted (in Windows) or specify a character-type special file (in UNIX). Do not specify a partition in use or a character-type special file.

### -du name-of-directory-where-file-to-be-expanded-stored

Specify this option when you duplicate the system files of the embedded database.

You need to specify a different directory from the directory specified in the -d option. Other items are the same as the -d option.

### Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- Do not execute this command more than once in quick succession. If you do so, the following problems might occur:
  - The message output is invalid. For example, an invalid message is output or a message that should be output is not output.
  - The command results in an error.
- You can create a maximum of 30 system log files and a maximum of 30 sink point dump files. When you create the first embedded database environment, 12 system log files are created by default and you can add up to 18 system log files. Three sink point dump files are also created by default, and you can add up to 27 sink point dump files.
- In a cluster system, execute this command on the executing host (host specified for the -eh option of the ajsembdbbuild command). After executing the command, copy the ajs2 files from *embedded-database-practical-directory*\CONF to the standby host.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

# Additional information

Each time this command is executed, a file whose name is in the following format is created in the directories specified for the -d and -du options:

ajsRRRIIIIYYYYMMDDhhmmss{D}

- RRRRR: Type of expanded resource (value specified for the -r option)
- IIII: embedded database setup ID (value specified for the -id option)
- YYYY: year
- MM: month
- DD: day
- hh: hours
- mm: minute
- ss: second

Example:

The following shows an example of the command line and the files created when the command is executed at 21:57:30 on March 2, 2010:

```
ajsembdbaddlog -r sys -s 2000 -d L:\sysarea1 -du M:\sysarea2 -id _JF0
L:\sysarea1\ajssys_JF020100302215730
M:\sysarea2\ajssys_JF020100302215730D
```

### Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2102-E	The embedded database is being started or stopped.	Use the ajsembdbstatus -s ust command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re-execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# ajsembdbbackup

## Format

```
ajsembdbbackup

[-mh logical-host-name]

[-i embedded-database-practical-directory]

-d data-area-name

-b backup-file-storage-directory

[-s]

[-id embedded-database-setup-ID]
```

# Function

Acquires the backup of the embedded database.

This command is available when the embedded database is active.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\ In UNIX:

/opt/jp1ajs2/tools/

# Arguments

### -mh logical-host-name

Specification of this option is no longer necessary. The logical host name specified by this option is ignored.

### -i embedded-database-practical-directory

Specify the embedded database directory. Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks ("). You must specify the same directory that you specify in the -i option of the ajsembdbbuild command. In UNIX, if you omit the -i option of the ajsembdbbuild command during the setup, you can omit this option.

If you do not specify this argument, /opt/jplajs2/embdb/ JF0 is assumed.

This option is provided for compatibility with versions earlier than 08-00. Normally, use the -id option.

If you specify both the -i option and the -id option, the value specified for the -i option takes precedence.

<sup>2.</sup> Commands

#### -d data-area-name

Specify the data area name of the embedded database. Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks ("). If you have specified the embedded database directory in the -d option of the ajsembdbuild command, specify as follows:

#### In Windows

directory-name-specified-in-the-d-option\ajssys02

In UNIX

directory-name-specified-in-the-d-option/ajssys02

If you have specified the RD area partition in the -a option of the ajsembdbbuild command, specify as follows:

In Windows

data-area-specified-in-the-a-option

In UNIX

data-area-specified-in-the-a-option

If you want to operate an embedded database created by using the jajs\_setup or jajs\_migrate command, use the ajsembdbidlist command to check the directory that contains the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

#### In Windows

[directory-name-displayed-by-the-ajsembdbidlist-command] \dbarea\ajssys02

#### In UNIX

/var/opt/jp1ajs2/embdb/\_JFn<sup>#</sup>/dbarea/ajssys02

If you operate the embedded database in a logical host environment set up by using the jajs\_setup\_cluster command, specify the value specified for the -d option.

#### In Windows

[*directory-name-specified-in-the-d-option*]\jp1ajs2\embdb\\_JFn<sup>#</sup>\dbarea\ajssys02

In UNIX

[directory-name-specified-in-the-d-option]/jplajs2/embdb/\_JFn<sup>#</sup>/dbarea/ajssys02

If you operate the embedded database in a logical host environment set up by using the jajs\_setup\_cluster command, specify the value specified for the -d option.

#### For Windows

[*directory-name-specified-in-the-D-option*]\jp1ajs2\embdb\ JFn<sup>#</sup>\dbarea\ajssys02

For UNIX

[*directory-name-specified-in-the-D-option*]/jp1ajs2/embdb/ JFn<sup>#</sup>/dbarea/ajssys02

#

Specify the value specified for the -id option of this command. If you omit the -id option, specify \_JF0.

### -ь backup-file-storage-directory

Specify the directory that stores the backup file. Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks (").

Create the directory that you are going to specify beforehand. If you specify a directory that does not exist, an error occurs.

The specified directory stores the following files:

- Backup file
- Processing output result file

File names are automatically assigned based on the following rules:

When the -s option is specified

- Backup file: BACK XXXXYYZZVVWW.bk
- Output result file: BACK XXXXYYZZVVWW.log

When the -s option is not specified

- Backup file: BACK MST XXXXYYZZVVWW.bk
- Output result file: BACK\_MST\_XXXXYYZZVVWW.log

XXXX: Year YY: Month ZZ: Day VV: Hour WW: Minutes

The amount of free space required for the backup file storage directory differs depending on the scale of the embedded database model as shown in the following table.

Table 2-6: Embedded database models and the required free space

Database model	Required free space
Large scale	About 6,700 MB
Medium scale	About 1,400 MB
Small scale	About 200 MB

If the database area has been expanded by using the ajsembdbaddarea command, additional free space equivalent to the area added by the expansion is required. Similarly, if the database auto-increment function is enabled, additional free space equivalent to the area added by the function is required.

For details about the database auto-increment function, see *B.1 Estimating the amount of required database area* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

-s

Specify this option when you specify to acquire the backup during operation.

If you acquire a backup of the embedded database, you will need an unload log file when you restore the database from the backup. Therefore, confirm that an unload log file is output. This file is output if the operating status of the automatic

<sup>2.</sup> Commands

log unload functionality is set to ACTIVE by using the ajsembdboplog command. For details on the ajsembdboplog command, see *ajsembdboplog* in 2. Commands.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

If you specify both the -id option and the -i option, the -i option takes precedence.

### Notes

- Do not acquire the backup of an embedded database with a failure. If you do so, and then use that backup file for restoration, a problem might occur.
- Execute this script while the embedded database is active.
- If you execute this script while a job is being executed, the job might end abnormally. In such a case, re-execute the script when job execution load is low.
- When you specify -s option and acquire the backup, ajsembdbrstr command requires the unload log file as the input information.
- If you do not specify s option and acquire the backup, make sure that the database is not updated before you backup the database.
- If you attempt to back up the database when it has been updated, an error might occur.
- To monitor the systemlog files status, use the ajsembdbstatus command with the -l option specified. For details about the ajsembdbstatus commands, see the sections that cover these commands in *I*. *Commands*. For details on the ajsembdbstatus command, see *ajsembdbstatus* in *2*. *Commands*.
- The execution results of the command are output to the log file. The log file is stored in the following directories: For Windows Server 2012 or Windows Server 2008, if the installation folder is in the default folder or a folder protected by the system:

%ALLUSERSPROFILE%\Hitachi\JP1\JP1 DEFAULT\JP1AJS2\log

The default of the %ALLUSERSPROFILE% value is *system-drive*\ProgramData.

A folder protected by the system is the path to a folder in any of the following:

- system-drive \Windows

- system-drive \ Program Files

- system-drive \Program Files (x86) (For 64-bit Windows)

For Windows Server 2012 or Windows Server 2008 in which an installation folder other than the above is used:

JP1/AJS3-Manager-installation-folder\log

For Windows Server 2003:

JP1/AJS3-Manager-installation-folder\log

### For UNIX

/var/opt/jp1ajs2/log

• The file name is a j sembdbbackup.log. Since the contents of this file are not overwritten, the file size increases indefinitely. Evacuation or delete the contents of this file as necessary.

If this file does not exist, execute ajsembdbbackup command to create a new one.

- If you do not specify the -s option, you can restore the embedded database by using only the backup file. Execute the command without -s when acquiring the backup in synchronization with JP1/AJS3.
- If you use the backup file that is acquired by specifying the -s option to restore the embedded database, you need the unload log file as well. Use caution.
- While you are executing the ajsembdbbackup command, a KFPS01278-W or KFPS01279-W warning message may appear.

If code=1601-0 is included in the KFPS01278-W message or code=1607-0 is included in the KFPS01279-W message, the backup operation is not affected.

- Do not execute multiple instances of this command concurrently. If you do so, the following problems might occur:
  - A message output error occurs. For example, an incorrect message is output, or a message that should be output is not output.
  - This command incorrectly results in an error.

## Return values

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

An error might occur when you execute ajsembdbbackup command. If an error occurs, read the following table and take appropriate action.

Table 2-7: Actions to be taken if an error occurs whe	en ajsembdbbackup	command is executed
---	-------------------	---------------------

Message	Cause	Action to be taken
KFPS01280-E AJSEMBDBBACKUP:EmbedDB SYNC END (4) AJSEMBDBBACKUP:[ERROR]pdlogsync -d sys -w -t 180	The database cannot be backed up since the scheduler database is being updated.	Wait until the job being executed ends, and then re- execute the command.
KAVS0996-E	<ul> <li>An argument is incorrect.</li> <li>Some options are not specified.</li> <li>The path specified in -i option is not for the embedded database practical directory, or the user does not have read privileges.</li> </ul>	Review the specified arguments, and then re-execute the command.
KFPR26012-E	The path specified in -d option is incorrect, or the user does not have read privileges for the folder indicated by the specified path.	Revise the specified path and privileges, and then re-execute the command. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
KFPR16003-E	The path specified in -b option is incorrect, or the user does not	Revise the specified path and privileges, and then re-execute the command. If AJS

Message	Cause	Action to be taken
KFPR16003-E	have write privileges indicated by the specified path.	administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
KFPR26006-E Invalid parameter AAA exists at -m option in command line	The host name specified in – mh option is invalid.	Revise the host name and the specified arguments, and then re-execute the command.
KFPS01984-E	The path specified in -i option is not a absolute path.	Revise the specified path, and then re-execute the command.
Bad directory specified in -i option	The path specified in the $-i$ option is not the path for the embedded database practical directory, or the user does not have the appropriate privileges. Alternatively, the system has not been set up correctly.	Specify the correct embedded database directory in -i option. Alternatively, revise the privileges, and then re-execute the command. If the embedded database directory is specified correctly, retry setup of the embedded database. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
KAVS2104-E	The setup ID specified in -id option is invalid or the embedded database is not set up.	Check whether the setup ID specified in -id option is correct.

# ajsembdbcancel

### Format

```
ajsembdbcancel
-u Server-name or program-name
-p process-ID
[-id embedded-database-setup-ID]
```

# Description

Cancels the processing of an embedded-database command that is being executed.

Cancellation of the command results in an error. For details about the error that might occur, check the error message or the log for the command.

You can execute this command only when the embedded database is running. You can execute the command regardless of the operating status of JP1/AJS3.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\

```
In UNIX:
/opt/jp1ajs2/tools/
```

## Arguments

#### -u Server-name or program-name

Specifies the name of the server or the name of the program related to execution of the embedded database operation commands.

The name of the program (PROGRAM) or the server name (SVID) related to the embedded database operation commands is output by executing the ajsembdbstatus command with the -s prc option specified during excecution of an embedded database operation command.

The PROGRAM or SVID is output only when a corresponding embedded database operation command is being executed.

The following table lists the PROGRAM and SVID values for each command.

Command name	SVID#	PROGRAM
ajsembdbbuild, ajsembdbstart	Ominitx	
ajsembdbaddarea		pdmod
ajsembdbrorg	Omrorgx	

<sup>2.</sup> Commands

Command name	SVID#	PROGRAM
ajsembdbreclaim	Omrorg <i>x</i>	
ajsembdbstatus	Omdbstx	
ajsembdbbackup	0bcpyx	
ajsembdbrstr	Obrstrx	

# The x at the end of a program name is a number such as 0, 1, and 2.

The processing of embedded database operation commands other than those listed above cannot be canceled by this command.

### -p process-ID

Specify the process ID of the information output by the ajsembdbstatus command with the -s prc option specified.

#### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

### Notes

• When you execute this command, the following message appears:

```
4432 16:49:20 unt1 _pd0canc KFPS05082-Q Utility server name=0mrorg0,utility server process id=5456 cancel process ? (y/n)
```

This is a confirmation message asking you whether you want to cancel the processing of the command. Enter y if there are no problems.

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- If you execute the ajsembdbstatus command with the -s prc option specified while a embedded database manipulation command is running, the ajsembdbstatus command might not output a program name that can be specified for the -u option. If that occurs, the processing you attempted to cancel by using the ajsembdbcancel command either has not started yet or has already ended.
- Do not execute this command more than once in quick succession. If you do so, the following problems might occur:
  - The message output is invalid. For example, an invalid message is output or a message that should be output is not output.
  - The command results in an error.

# **Return values**

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Confirm that the embedded database is running, and then re-execute the command. You can confirm whether the embedded database is running by executing the ajsembdbstatus command with the -s ust option specified.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re-execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# ajsembdboplog

## Format

```
ajsembdboplog
    [<u>-s</u>|-r|-t|
    -g system-log-file-group-name -o output-destination-file-name [-f]|-
w]
    [-id embedded-database-setup-ID]
```

### Format 1 (for monitoring the status of the automatic log unload functionality)

ajsembdboplog -s [-id embedded-database-setup-ID]

### Format 2 (for restarting the automatic log unload functionality)

```
ajsembdboplog
-r
[-id embedded-database-setup-ID]
```

### Format 3 (for stopping the automatic log unload functionality)

```
ajsembdboplog
-t
[-id embedded-database-setup-ID]
```

### Format 4 (for unloading the system log file)

```
ajsembdboplog
-g system-log-file-group-name
-o output-destination-file-name
[-f]
[-id embedded-database-setup-ID]
```

#### Format 5 (for swap the system log file)

```
ajsembdboplog
-w
[-id embedded-database-setup-ID]
```

### Description

Allows you to perform the following for the system log:

- Control the automatic log unload functionality.
- Unload the specified system log file group to the output destination file and place the system log file group in the unloaded status.
- Swap the system log file (group) that is currently used as the output destination.

When you specify the -s, -r, -t, and -w options, you can execute this command only when the embedded database is running. In other cases, you can execute the command regardless of the operating status of the embedded database.

You can execute the command regardless of the operating status of JP1/AJS3.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

### Storage directory

In Windows:

JP1/AJS3 - Manager-installation-folder \tools \

In UNIX:

/opt/jp1ajs2/tools/

## Arguments

### -g system-log-file-group-name

Specify the group name of the system log file to be unloaded.

To check the system log file group name, execute the -l option of the ajsembdbstatus command.

#### -o output-destination-file-name

Specify the name of the unload log file that is the output destination.

Use the absolute path to specify the file name. If the specified directory name contains a space character, enclose the path in double quotation marks (").

Do not specify a disk on a network drive.

The size of the directory that stores the unload log output file differs depending on the scale that is specified by using the ajsembdbbuild command. Note that if the system log auto-increment function is used, the space incremented by the function is also required in addition to the space shown in the following table.

ajsembdbbuild option	Required free space
-1 (large-scale model)	About 1,200 MB
-m (medium-scale model)	About 230 MB
-s (small-scale model)	About 30 MB

In an embedded database environment set up by using the jajs\_setup or jajs\_setup\_cluster command, the system log auto-increment function is used for the small-scale model (specified by the -s option of the ajsembdbbuild command).

In an embedded database environment set up by using the jajs\_migrate command, the system log auto-increment function is used for the scale model specified for the -s option of the jajs\_migrate command. If the -s option of the jajs\_migrate command is omitted, s (small-scale model) is assumed.

If the system log file to be unloaded is a new system log file that is added by using the ajsembdbaddlog command, you need the free space of the size specified in the -s option of the ajsembdbaddlog command. Note that if the system log auto-increment function is used, the space incremented by the function is also required in addition to the space shown in the above table.

Each time you unload the system log file, you need the free space described above.

-f

Specify this option when you forcibly unload the system log file. When you specify this option, you can unload the current system log file group or a system log file group that has already been unloaded. However, the status of the system log file group does not change.

You use this option when you need to run the embedded database by using the unload log file and the backup of the embedded database. If an error occurs in the embedded database, the unload log immediately before the error might not be output. In that case, specify the -f option to acquire the unload log file. However, if a problem occurred in the system log file of the embedded database, the command might fail and you might not be able to acquire the unload log file.

-s

Specify this option to display the operating status of the automatic log unload functionality.

-r

Specify this option to restart the automatic log unload functionality.

Immediately after the restart, the directory in which the unload log file is created inherits the information of the previous operation.

When you specify this option the command fails if the automatic log unload functionality has already been started.

-t

Specify this option to stop the automatic log unload functionality.

This option cancels the unload processing if there is a system log file being unloaded. The unload log file that is output at this time is incomplete and cannot be used for restoration.

When you specify this option the command fails if the automatic log unload functionality has already been stopped.

-w

Specify this option if you want to swap the system log file (group) that is currently used as the output destination.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

# Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- If you specify the -r or -t option in the ajsembdboplog command, you need to enable the automatic log unload functionality for the embedded database before you execute the command. If you specify the -r or -t option in ajsembdboplog in an environment in which the automatic log unload functionality is not enabled, an error occurs.
- When the unload log file and the backup of the embedded database are used to restore the embedded database, stopping the automatic log unload functionality while the embedded database is being restarted results in an incomplete restoration. In this case, JP1/AJS3 restores the embedded database only up to the unload log that is output to the unload log file before the automatic log unload functionality is stopped. If you have stopped the automatic log unload functionality, you need to re-acquire the backup of the embedded database when you restart the automatic log unload functionality.
- When the unload log file and the backup of the embedded database are used to restore the embedded database, stopping the automatic log unload functionality while the embedded database is running the subsequent system log file groups waiting to be unloaded.

If you continue using the embedded database in this state, all the system log file groups eventually wait to be unloaded and the embedded database becomes unavailable.

To prevent this problem from occurring, you might want to stop the automatic log unload functionality. In this case, periodically execute the ajsembdbstatus command with the -l option specified to check the status of the system log file group, and then execute the ajsembdboplog command with the -g option specified to unload the system log file group.

- Do not execute this command more than once in quick succession. If you do so, the following problems might occur:
  - The message output is invalid. For example, an invalid message is output or a message that should be output is not output.
  - The command results in an error.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Confirm that the embedded database is running, and then re-execute the command. You can confirm that the embedded database is running by executing the ajsembdbstatus command with the -s ust option specified.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.

Message	Cause	Action to be taken
KAVS2105-E	The specified system log file group does not exist.	Check the system log file group name and re-execute the command.
KAVS2106-E	Unloading failed.	Execute the ajsembdbstatus command with the -1 option specified to check whether the specified system log file group can be unloaded. If the system log file group can be unloaded, wait a while and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re-execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

### Output example

The following shows an output example of checking the operating status of the automatic log unload functionality.

```
ajsembdboplog -s -id _JF0

HOSTNAME : 127.0.0.1 (180252)

SERVER_NAME:ajs2

AUTO_LOG_UNLOAD NOW_UNLOAD_LOG_GROUP CREATE_DIR

ACTIVE **** K:/logback

CURRENT LOG GENERATION INFO.

LOG_GROUP GEN_NO. SERVER_RUN_ID RUN_ID UNLOAD_FILE_NAME

log1 1 43c4ad0d 43c4acf3 ajs2_43c4ad0d0001_log1
```

HOSTNAME

#### 127.0.0.1 is displayed.

The item in parentheses is the hour, minutes, and seconds (format: *HHMMSS*) of the time when the ajsembdboplog command is executed.

#### Cautionary note

If any of the conditions below is met, the host name of the embedded database installation directory is output by using no more than 32 characters. In a cluster configuration, the first host name that is set as the active server is output.

- When JP1/AJS3 Manager for Windows version 09-50 or earlier is used and the embedded database has been built on a logical host
- When JP1/AJS3 Manager for UNIX version 09-50 or earlier is used
- When JP1/AJS3 Manager version 09-50 or earlier is updated to version 10-00 or later, and IPv6 has not been set up

#### SERVER\_NAME

Indicates the identifier of the embedded database with up to four characters. For JP1/AJS3, this identifier is fixed to ajs2.

#### AUTO\_LOG\_UNLOAD

Indicates the operating status of the automatic log unload functionality.

ACTIVE: The feature is operating.

 $\ensuremath{\texttt{STOP}}$  : The feature is stopped.

### -: The automatic log unload functionality is unavailable.

#### NOW\_UNLOAD\_LOG\_GROUP

Indicates the log file group name of the system log file being unloaded.

\*\*\*\* is output if there is no system log file being unloaded.

#### CREATE\_DIR

Indicates the name of the directory in which the unload log file being used is created.

LOG\_GROUP

Indicates the log file group name of the system log file of the current generation.

Gen No.

Indicates the generation number of the log with a hexadecimal number of up to eight.

#### SERVER\_RUN\_ID

Indicates the information used by the system.

#### RUN ID

Indicates the information used by the system.

#### UNLOAD\_FILE\_NAME

Indicates the name of the file that is created when the log of the current generation is automatically unloaded.

# ajsembdbreclaim

### Format

```
ajsembdbreclaim
    -m {manager|
        scheduler [-F scheduler-service-name]|
        agent}
    [-mh logical-host-name]
    [-t {d|<u>f</u>}]
    [-r {1|<u>2</u>}]
```

Format 1 (for maintaining the scheduler service under the manager and agent management)

```
ajsembdbreclaim
-m manager
[-mh logical-host-name]
-t f
-r 2
```

Format 2 (for maintaining the index area for the scheduler service under the manager and agent management)

```
ajsembdbreclaim
-m manager
[-mh logical-host-name]
-t d
-r 2
```

Format 3 (for maintaining the pages for the scheduler service under the manager and agent management)

```
ajsembdbreclaim
-m manager
[-mh logical-host-name]
-t f
-r 1
```

Format 4 (for maintaining only the pages in the index area for the scheduler service under the manager and agent management)

```
ajsembdbreclaim
-m manager
[-mh logical-host-name]
-t d
-r 1
```

#### Format 5 (for maintaining the specified scheduler service)

```
ajsembdbreclaim
-m scheduler
[-F scheduler-service-name]
[-mh logical-host-name]
```
-t f -r 2

### Format 6 (for maintaining the index area for the specified scheduler service)

```
ajsembdbreclaim

-m scheduler

[-F scheduler-service-name]

[-mh logical-host-name]

-t d

-r 2
```

#### Format 7 (for maintaining the pages for the specified scheduler service)

```
ajsembdbreclaim

-m scheduler

[-F scheduler-service-name]

[-mh logical-host-name]

-t f

-r 1
```

#### Format 8 (for maintaining only the pages in the index area for the specified scheduler service)

```
ajsembdbreclaim

-m scheduler

[-F scheduler-service-name]

[-mh logical-host-name]

-t d

-r 1
```

#### Format 9 (for maintaining agent management)

```
ajsembdbreclaim
-m agent
[-mh logical-host-name]
-t f
-r 2
```

### Format 10 (for maintaining the index area used for agent management)

```
ajsembdbreclaim
-m agent
[-mh logical-host-name]
-t d
-r 2
```

### Format 11 (for maintaining the pages used for agent management)

```
ajsembdbreclaim
-m agent
[-mh logical-host-name]
-t f
-r 1
```

### Format 12 (for maintaining only the pages in the index area used for agent management)

```
ajsembdbreclaim
-m agent
[-mh logical-host-name]
-t d
-r 1
```

## Description

Maintains the areas in the embedded database used by JP1/AJS3.

You can execute this command only when the embedded database is running. You can execute the command regardless of the operating status of JP1/AJS3.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\ In UNIX:

/opt/jp1ajs2/tools/

## Arguments

### -m {manager | scheduler | agent}

Specify the range of maintenance.

• manager

Specify this option to maintain all scheduler services and the agent management in JP1/AJS3 - Manager. You can specify this option together with the -mh option.

• scheduler

Specify this option to maintain the areas for the specified scheduler service. You can specify this option together with the -mh and -F options.

• agent

Specify this option to maintain agent management. You can specify this option together with the -mh options.

### -F scheduler-service-name

Specify the name of the scheduler service for which you want to maintain the areas.

If you omit this option, the system assumes the default scheduler service name.

### -mh logical-host-name

Specify the target JP1 logical host name.

You can specify a character string of 1 to 32 bytes.

If you omit this option and environment variable JP1\_HOSTNAME has been set, the system assumes the value set for JP1\_HOSTNAME. If environment variable JP1\_HOSTNAME has not been set, the system assumes the physical host name.

### -t d | <u>f</u>

Specify the maintenance mode.

• d

Specify this option to maintain the area where indexes are stored.

• f

Specify this option to maintain the areas where indexes and data are stored.

If you omit this option, the system assumes f.

Depending on the type of operation, the data storage area might become full before the index storage area does. Execute the -db -d option of the ajsembdbstatus command and check the obtained output result. If only a few pages in the data storage area can be released, but many pages in the index storage area can be released, specify the -t d option when you execute the command so that you can maintain the areas efficiently.

### -r 1 | <u>2</u>

Specify the level of maintenance.

• 1

Specify this option to release only pages.

• 2

Specify this option to release pages and segments.

If you omit this option, the system assumes 2.

Execute the -db - d option of the ajsembdbstatus command and check the obtained output result. If many pages can be released, but only a few segments are being used, specify the -r l option when you execute the command so that you can maintain the areas efficiently.

### Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- If either of the following conditions is met, a timeout error might occur for the ajsembdbreclaim command:
  - When the job execution load of a job or jobnet is high
  - When a unit is operated by using a command or in JP1/AJS3 View

If a timeout error occurs, re-execute the ajsembdbreclaim command when the load is low or after unit operation by a command or in JP1/AJS3 - View has finished.

• If a failure such as a communication or disk failure occurs during execution of this command, the command might not respond. If the non-responding command cannot be killed manually (for example, when a job is automatically executed from another job), you can specify the embedded database system common definition pd utl exec time to kill the command. For details about pd utl exec time, see the system common

definition in the C.1(2) Examining the embedded-database operating environment and operating method in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

• If multiple ajsembdbreclaim commands are executed concurrently for a single embedded database, one of the commands might abnormally terminate and the message KFPA11770-I will be displayed. In this case, no action is needed if any one of the commands is executed successfully. Note that if multiple ajsembdbreclaim commands are executed concurrently for a single embedded database, a conflict might occur during log output processing, and the following message might be output between lines in the output result:

The process cannot access the file. The file is being used by another process.

You can ignore this message because there are no problems with the output results.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Use the -s ust option of the ajsembdbstatus command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re-execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information. If the ajsembdbreclaim command times out because a high-load job or jobnet is running, re-execute the job when the system load is low. If the ajsembdbreclaim command times out because of unit operations by commands or in JP1/AJS3 - View, re- execute the command after those unit operations have finished.
KAVS2123-E	The version of the embedded database is invalid.	Update the embedded database to a version supported by JP1/AJS3.

# ajsembdbrorg

## Format

```
ajsembdbrorg
    -k {unld|reld}
    [-F scheduler-service-name]
    [-mh logical-host-name]
    [-agent]
    -d name-of-directory-where-unload-file-stored
```

### Format 1 (for storing the data in the embedded database in the unload data file)

```
ajsembdbrorg

-k unld

[-F scheduler-service-name]

[-mh logical-host-name]

[-agent]

-d name-of-directory-where-unload-file-stored
```

### Format 2 (for restoring the data in the embedded database by using the unload data file)

```
ajsembdbrorg
    -k reld
    [-F scheduler-service-name]
    [-mh logical-host-name]
    [-agent]
    -d name-of-directory-where-unload-file-stored
```

## Description

Obtains and restores the data in the embedded database.

You can execute this command only while the embedded database and all the scheduler services for which the applicable embedded database was created as the scheduler database are not running.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\ In UNIX:

/opt/jp1ajs2/tools/

## Arguments

### -k unld | reld

Specify the type of processing.

• unld

Specify this option to store the data in the database of the specified scheduler service in the unload data file.

• reld

Specify this option to restore the data in the database of the specified scheduler service from the unload data file.

### -F scheduler-service-name

Specify the name of the target scheduler service.

If you omit this option, the system assumes the default scheduler service name.

Specification of this option is overridden by the -agent option specification.

### -mh logical-host-name

Specify the name of the target JP1 logical host.

You can specify a character string of 1 to 32 bytes.

If you omit this option and environment variable JP1\_HOSTNAME has been set, the system assumes the value set for JP1\_HOSTNAME. If environment variable JP1\_HOSTNAME has not been set, the system assumes the physical host name.

#### -agent

Specify this option if you want to execute the command for the database for the agent management.

Specification of this option overrides the -F option specification.

### -d name-of-directory-where-unload-file-stored

Specify the name of the directory that stores the unload file.

Use the absolute path to specify the directory name. If the specified directory name contains a space character, enclose the path in double quotation marks (").

Do not specify a disk on a network drive.

Prepare the directory you are going to specify beforehand. If you specify a non-existent directory, an error occurs.

When you specify unld for the -k option, the unload file is created in the directory specified here.

If the file already exists, a confirmation message asking you whether you want to delete the file appears.

Message to be output: OK to Overwrite the unload file?(y/n):

To delete the file, enter y.

### Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- Before you execute this command, stop all the scheduler services for which the applicable embedded database is created as the scheduler database. In addition, stop all the services that are accessing the embedded database,

including the JP1/AJS3 service and the JP1/AJS3 Console Agent service. If you execute this command without stopping services, you might need to wait for a long time.

• When you specify unld for the -k option, the directory you specify in the -d option must have the following free space:

ajsembdbbuild option	Required free space
-1 (large-scale model)	About 6,700 MB
-m (medium-scale model)	About 1,400 MB
-s (small-scale model)	About 200 MB

Note that if the embedded database area is expanded by the ajsembdbaddarea command or the system log autoincrement function, the space incremented by the command or function is also required in addition to the space shown in the above table.

Each time you execute this command, the above free space is required.

- Before you execute the command with the -k reld option (restoration) specified, make sure that maintenance of the embedded database area has been completed by using the ajsembdbreclaim command.
- If a failure such as a communication or disk failure occurs during execution of this command, the command might not respond. If the non-responding command cannot be killed manually, you can specify the embedded database system common definition pd\_utl\_exec\_time to kill the command. For details about pd\_utl\_exec\_time, see the system common definition in the *C.1(2) Examining the embedded-database operating environment and operating method* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.
- Do not execute multiple ajsembdbrorg commands with the same scheduler service name set in the -F option for each command.
- Do not concurrently execute for a single embedded database multiple ajsembdbrorg commands in which the agent option is specified.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Use the -s ust option of the ajsembdbstatus command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
КАVS2106-Е	Unloading failed.	Wait a while and then re-execute the command.

Message	Cause	Action to be taken
KAVS2107-E	Reloading failed.	Specify the correct unload data file and then re- execute the command.
KAVS2113-E	The specified directory does not exist.	Check the argument specified in the $-d$ option and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re- execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.
KFPL15047-E	There is no permission for the path specified in the $-d$ option or for the unload log file in the path.	Check the permissions for the specified path or for the unload log file, and then re-execute the command. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.

# ajsembdbrstr

# Format

```
ajsembdbrstr
[-mh logical-host-name]
[-M]
[-i embedded-database-practical-directory]
-d data-area-name
-bf backup-file
[-1 unload-log-file-1, unload-log-file-2,...|
-ld unload-log-storage-directory]
-e output-result-file-storage-directory
[-id embedded-database-setup-ID]
```

# Description

Backs up the embedded database, or restores the embedded database using the backup and the unload log file.

# **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\

In UNIX: /opt/jp1ajs2/tools/

## Arguments

### -mh logical-host-name

Specification of this option is no longer necessary. The logical host name specified by this option is ignored.

### -M

Specify this argument to restore the system area.

The system area stores the internal information about the embedded database system.

To restore the system area of the embedded database, you must start the embedded database in a special mode that allows the restoration of the system area.

In this mode, you cannot restore the data area. Once you complete restoration of the system area, you must execute the ajsembdbstop command to stop the embedded database, and then execute the ajsembdbstart command, without options, to restart the embedded database.

When you want to restore the system area and the data area, specify the same options other than -M, the same backup file, and the same unload file.

If you specify different options, or a different backup file or unload file, data might be damaged. Use caution.

In the following case, restore the data area after you restore the system area by specifying -M:

- The embedded database server stops due to a failure, and does not start even if you attempt to restart it.
  - 1. Resolve the problem in the embedded database.
  - 2. Execute the ajsembdbstart command with the -r option to start the embedded database in the status where the system area can be restored.
  - 3. Execute the ajsembdbrstr command with the -M option to restore the system area of the embedded database.
  - 4. If step 3 ends normally, execute the ajsembdbstop command to stop the embedded database that has started in the status where the system area can be restored.
  - 5. Execute the ajsembdbstart command for the embedded database, to start the embedded database in the normal status.
  - 6. Execute ajsembdbrstr to restore the data area in the embedded database.

For details about the ajsembdbstart and ajsembdbstop commands, see *ajsembdbstart* in 2. *Commands* and *ajsembdbstop* in 2. *Commands*.

### -i embedded-database-practical-directory

Specify the embedded database directory. Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks ("). You must specify the same directory that you specify in the -i option of the ajsembdbbuild command. In UNIX. If you omit the -i option of the ajsembdbbuild command during the setup, you can omit this option.

If you omit this argument, /opt/jplajs2/emdbd/\_JF0/ is assumed.

If you specify both the -i option and the -id option, the value specified for the -i option takes precedence.

### -d data-area-name

Specify the data area name of the embedded database. Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks ("). If you have specified the embedded database directory in the -d option of the ajsembdbbuild command, specify as follows:

For Windows:

directory-name-specified-in-the-d-option \ajssys02

For UNIX:

directory-name-specified-in-the-d-option/ajssys02

If you have specified the RD area partition in the -a option of the ajsembdbbuild command, specify as follows:

For Windows:

data-area-partition-specified-in-the-a-option

For UNIX:

data-area-partition-specified-in-the-a-option

If you want to operate an embedded database created by using the jajs\_setup or jajs\_migrate command, use the ajsembdbidlist command to check the directory that contains the embedded database. For details on the

<sup>2.</sup> Commands

ajsembdbidlist command, see ajsembdbidlist in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

### For Windows:

[directory-name-displayed-by-the-ajsembdbidlist-command] \dbarea\ajssys02

### For UNIX:

/var/opt/jp1ajs2/embdb/\_JF $n^{\#}$ /dbarea/ajssys02

If you operate the embedded database in a logical host environment set up by using the jajs\_setup\_cluster command, specify the value specified for the -d option.

### For Windows:

[*directory-name-specified-in-the-d-option*]\jp1ajs2\embdb\\_JFn<sup>#</sup>\dbarea\ajssys02

For UNIX:

[directory-name-specified-in-the-d-option]/jplajs2/embdb/\_JFn<sup>#</sup>/dbarea/ajssys02

If you operate the embedded database in a logical host environment set up by using the  $jajs\_setup$  command, specify the value specified for the -D option.

### For Windows:

[*directory-name-specified-in-the-d-option*]\jp1ajs2\embdb\ JFn<sup>#</sup>\dbarea\ajssys02

For UNIX:

[*directory-name-specified-in-the-d-option*]/jp1ajs2/embdb/\_JFn<sup>#</sup>/dbarea/ajssys02

#

Specify the value specified for the -id option of this command. If you omit the -id option, specify JF0.

### -bf backup-file

Specify the backup file that is acquired using ajsembdbbackup command.

Use an absolute path to specify the directory. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks (").

### -1 unload-log-file-1, unload-log-file-2, . . .

Specify this argument to use the acquired unload log file to restore the embedded database. You specify this argument when you specify the -bl option of the ajsembdbbuild command to create an embedded database.

Use an absolute path to specify an unload log file. In Windows, to include space characters in the specified absolute path, enclose the path in double quotation marks ("). Specify the unload log files in the sequence they are acquired. When you specify two or more unload log files, enclose the path after -l in double quotation marks (").

If you do not specify -s option when you acquire the backup, you can omit the input of the unload log file. In such a case, the database is restored up to the point when the backup is acquired.

### -1d unload-log-storage-directory

In the same way as the -1 option, you can specify this option if you want to use unload log files for restoration. Specify the absolute path name of the directory that contains the unload log files.

In Windows, if you specify an absolute path that contains spaces, enclose the entire path in double quotation marks (").

### -e output-result-file-storage-directory

Specify the directory that stores the output result of the restoration. In Windows, use an absolute path to specify the directory. To include space characters in the specified absolute path, enclose the path in double quotation marks ("). You must create the directory you are going to specify beforehand. If the specified directory does not exist, an error occurs.

The following file is stored in the specified directory:

• Processing output result file

The file name is automatically assigned based on the following rules:

• Output result file: RSTR\_XXXYYZZVVWW.log XXXX: Year YY: Month ZZ: Day VV: Hour WW: Minutes

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

If you specify both the -id option and the -i option, the -i option takes precedence.

### Notes

- If the unload log is used in an embedded-database environment that has been created by using advanced setup, before executing the ajsembdbrstr command, execute the ajsembdboplog command with the -w option specified. Doing this unloads the current system log file. If the ajsembdbrstr command fails, you do not need to execute the ajsembdboplog command again before re-executing the ajsembdbrstr command.
- Execute the command when the scheduler service is inactive.
- If an error occurs during restoration, the database recovery might be incomplete. If an error occurs, do not start the scheduler service immediately.
- When you execute ajsembdbbackup command with the -s option to acquire the backup, the restoration using the ajsembdbrstr command script requires the unload log file as input information.
- If you execute ajsembdbbackup command without the -s option to acquire the backup, the ajsembdbrstr command script can restore the embedded database using only the backup file, and does not use the unload log file. In such a case, the database can be restored up to the point when the backup is acquired.
- When restoration ends normally, acquire the backup.
- The execution results of the command are output to the log file. The log file is stored in the following directories:

For Windows Server 2012 or Windows Server 2008, if the installation folder is in the default folder or a folder protected by the system:

%ALLUSERSPROFILE%\Hitachi\JP1\JP1\_DEFAULT\JP1AJS2\log

The default of the %ALLUSERSPROFILE% value is *system-drive*\ProgramData.

A *folder protected by the system* is the path to a folder in any of the following:

- *system-drive*\Windows

- *system-drive*\Program Files

- system-drive \Program Files (x86) (For 64-bit Windows)

For Windows Server 2012 or Windows Server 2008 in which an installation folder other than the above is used: *JP1/AJS3-Manager-installation-folder*\log

For Windows Server 2003:

JP1/AJS3-Manager-installation-folder \log

For UNIX

/var/opt/jp1ajs2/log

The file name is ajsembdbrstr.log. Since the contents of this file are not overwritten, the file size increases indefinitely. Evacuation or delete the contents of this file as necessary.

When this file does not exist, execute ajsembdbrstr to create a new one.

• If an error occurs when ajsembdbrstr command is executed, the database area of the embedded database is blocked. If you re-execute ajsembdbrstr command in this status, an error occurs. In such a case, execute the following command for the embedded database to release the blocked status of the database area:

pdrels -r ALL -o

Note that before you execute the pdrels command, you need to set environment variables from the command prompt. For details about the environment variables you need to set, see the table that describes the applicable environment variables in 10.2.2(2) Using a script to reorganize the database in the Job Management Partner 1/ Automatic Job Management System 3 Administration Guide.

• To delete the environment of the embedded database, re-create the environment of the embedded database, and then restore the data, complete <code>ajsembdbsetup</code> command, and then execute <code>ajsembdbrstr</code> command.

If the embedded database area has been expanded by using the ajsembdbaddarea command, the same expansion is also necessary before you execute the ajsembdbrstr command. However, if the unload log is used in an embedded database environment created by using advanced setup, make sure that you execute the ajsembdboplog command with the -w option specified before performing the expansion.

The expansion procedure is as follows.

For Windows:

1. Back up the following folder:

*embedded-database-practical-folder* #\CONF\embrm

- 2. Execute the ajsembdbunset command.
- 3. Execute the ajsembdbbuild command.
- 4. Execute the ajsembdbsetup command.
- 5. In the folder you backed up in step 1, rename the addarea file to addarea.bat, and then execute the file.
- 6. Execute the ajsembdbrstr command.
- 7. Change the name of the file you renamed in step 5 back to addarea.

- 8. Restore the folder you backed up in step 1 to the following folder: embedded-database-practical-folder #\CONF
- 9. Delete the folder you backed up in step 1.

For UNIX:

- 1. Back up the following directory:
  - embedded-database-practical-directory #/conf/embrm
- 2. Execute the ajsembdbunset command.
- 3. Execute the ajsembdbbuild command.
- 4. Execute the ajsembdbsetup command.
- 5. In the folder you backed up in step 1, add execute permission to the access permissions of the addarea file, and then execute the file.
- 6. Execute the ajsembdbrstr command.
- 7. Restore the directory you backed up in step 1 to the following directory:

embedded-database-practical-directory #/conf

8. Delete the directory you backed up in step 1.

#

You can check the embedded database practical folder or directory by using the ajsembdbidlist command. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

- Specifying the -l option causes an error in ajsembdbrstr command if update information is not stored in the actually specified unload log file.
- Do not execute multiple instances of this command concurrently. If you do so, the command instances might incorrectly result in an error.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Actions to be taken if an error occurs

An error might occur when ajsembdbrstr command is executed. If an error occurs, read the following table and take appropriate action.

Message	Cause	Action to be taken
KFPR26227-E	The unload log file is not specified.	Execute the following embedded database commands such as pdstop or pdstart, specify the unload log file in -l option, and then re-execute the ajsembdbrstr command. pdrels -r ALL -0
KAVS0996-E	<ul><li>An argument is incorrect.</li><li>Some options are not specified.</li></ul>	Review the specified arguments and re-execute the command.

<sup>2.</sup> Commands

Message	Cause	Action to be taken
KAVS0996-E	<ul> <li>Mutually exclusive options are specified simultaneously.</li> <li>The path specified in -i does not indicate the embedded database practical directory, or the user does not have read privileges.</li> </ul>	Review the specified arguments and re-execute the command.
KFPR00765-I Pdrstr terminated, return code=8 or KFPR00765-I Pdrstr terminated, return code=12	<ul> <li>The host name specified in -mh option is incorrect.</li> <li>The path specified in -d, -bf, -e, or -1 option is incorrect.</li> <li>The path specified in -d, -bf, -e, or -1 option is not a absolute path.</li> </ul>	Review the specified path, execute the following embedded database command, and re-execute the command. pdrels -r ALL -o
KFPR26203-E	There is no permission for the path specified in the $-e$ option or $-ld$ option.	Check the permissions for the specified path, and then re-execute the command. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
KFPS01984-E	The path specified in $-i$ option is not a absolute path.	Revise the specified path, execute the pdstart command, and then re-execute the ajsembdbrstr command.
КFPH27006-Е	There is no permission for the path specified in the $-d$ option.	Check the permissions for the specified path, and then re-execute the command. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
КFPH27008-Е	Referencing is not possible, because the database area is blocked.	Execute the following embedded database command, and then re-execute the ajsembdbrstr command.
		pdrels -r ALL -o
Bad directory specified in - i option	The path specified in the -i option is not the path for the embedded database practical directory, or the user does not have the appropriate privileges. Alternatively, the system has not been set up correctly.	Specify the correct embedded database directory in $-i$ option. Alternatively, check the permissions and then re-execute the command. If the embedded database directory is specified correctly, retry set up of the embedded database. If AJS administrators operate the system, make sure that the AJS administrators have the appropriate privileges.
KAVS2104-E	The setup ID specified in -id option is invalid or the embedded database is not set up.	Check whether the setup ID specified in -id option is correct. Alternatively, use ajsstatus to check whether the embedded database is set as the database for the scheduler service.

# ajsembdbstart

# Format

```
ajsembdbstart
[-R|Rf]
[-r]
[-id embedded-database-setup-ID]
```

### Format 1 (for starting the embedded database)

```
ajsembdbstart
[-id embedded-database-setup-ID]
```

Format 2 (for starting the embedded database to restore the area storing the internal information of the embedded database system)

```
ajsembdbstart
-r
[-id embedded-database-setup-ID]
```

Format 3 (for starting the embedded database after canceling suppression of starting the embedded database (in UNIX only))

```
ajsembdbstart
-R [-r] [-id embedded-database-setup-ID]
```

### Format 4 (for canceling suppression of starting the embedded database (in UNIX only))

```
ajsembdbstart
-Rf [-id embedded-database-setup-ID]
```

## Description

Starts the embedded database.

You can execute this command only while the embedded database and all the scheduler services for which the applicable embedded database was created as the scheduler database are not running.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows:

JP1/AJS3 - Manager-installation-folder \tools \

In UNIX:

/opt/jp1ajs2/tools/

# Arguments

-r

Specify this option when you use the ajsembdbrstr command to restore the system area in the embedded database.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (*n*: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

### -R

This option, which can be used in UNIX only, cancels suppression of starting the embedded database, and then starts the embedded database.

Before you specify this option, make sure that the embedded database is inactive and the error indicated by the reason code in the KFPS00715-E message has been corrected.

### -Rf

This is a UNIX-specific option that is used to cancel suppression of starting the embedded database.

Specifying this option does not start the embedded database. However, if the embedded database uses a method to cancel suppression of starting the embedded database that was available earlier than version 10-00, and the embedded database is in a non-cluster environment, the embedded database is automatically started after the suppression of starting is canceled.

Specification of this option overrides the -r option specification.

## Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- You cannot execute this command together with any of the following commands on the same logical host:

ajsprofalter command ajsembdbstart command

ajsembdbstop command

ajsstart command

ajsstop command

jajs hstd command

jajs\_hstd\_stop command

jajs\_spmd command

jajs\_spmd\_status command

 $\verb"jajs_spmd_stop" command"$ 

```
jajs_start command (UNIX only)
jajs_start.cluster command (UNIX only)
jajs_stop command (UNIX only)
jajs_stop.cluster command (UNIX only)
```

- When JP1/AJS3 is running, the jajs\_dbmd process stopped by the ajsembdbstop command also starts. Note, however, that if the type of the embedded database is one used for JP1/AJS3 Manager before version 10-00, the jajs\_dbmd process does not start.
- Do not execute this command more than once in quick succession. If you do so, the following problems might occur:
  - The message output is invalid. For example, an invalid message is output or a message that should be output is not output.
  - The command results in an error.
- In Windows, make sure that the embedded database service has started. If this command is executed when the service has not started, an error occurs and the messages KAVS2117-E and KFPS01801-E appear.

## **Return values**

0	Normal end
1	The embedded database is being started or stopped
2	The embedded database is active
Other values	Abnormal end

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0787-E	The system administration daemon is processing.	Use the jajs_spmd_status command to check the service status, and then re-execute the command.
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2102-E	The embedded database is being started or stopped.	Use the -s ust option of the ajsembdbstatus command to check whether the embedded database is running and then re-execute the command.
KAVS2103-E	The embedded database is running.	The embedded database is already started and no action is required.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re- execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# ajsembdbstatus

## Format

```
ajsembdbstatus
{-s [ust|prc|usta] |
    -db [-d] |
    -1 |
    -c}
    [-id embedded-database-setup-ID]
```

### Format 1 (for monitoring the operating status of the embedded database 1)

```
ajsembdbstatus
-s ust
[-id embedded-database-setup-ID]
```

### Format 2 (for monitoring the operating status of the embedded database 2)

```
ajsembdbstatus
-s usta
[-id embedded-database-setup-ID]
```

### Format 3 (for monitoring the status of the processes of the embedded database)

```
ajsembdbstatus
-s prc
[-id embedded-database-setup-ID]
```

### Format 4 (for monitoring the database areas in the embedded database)

```
ajsembdbstatus
-db
[-d]
[-id embedded-database-setup-ID]
```

### Format 5 (for monitoring the system log of the embedded database)

```
ajsembdbstatus
-l
[-id embedded-database-setup-ID]
```

### Format 6 (for outputting embedded database configuration information)

```
ajsembdbstatus
-c
[-id embedded-database-setup-ID]
```

## Description

Monitors the embedded database. You can monitor the following items:

• Operating status of the embedded database

- Status of the processes of the embedded database
- Database areas in the embedded database
- System log of the embedded database

To monitor the database areas in the embedded database (by specifying the -db option) or the status of the processes of the embedded database (by specifying the -s prc option), execute the command while the embedded database is running. In other cases, you can execute the command regardless of the operating status of the embedded database.

You can execute the command regardless of the operating status of JP1/AJS3.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows:

```
JP1/AJS3 - Manager-installation-folder \tools \
```

In UNIX:

/opt/jp1ajs2/tools/

# Arguments

### -s {ust|prc|usta}

Specify this option to monitor the status of the embedded database.

• ust

Specify this option to display the operating status of the embedded database, including the start and stop status of the embedded database.

• prc

Specify this option to display the status of the processes of the embedded database.

Use this option to check whether a command that manipulates the embedded database is accessing the embedded database. You can also use the option to acquire the name of the server or the program that you need when you want to cancel the command that is accessing the embedded database. You can then use the ajsembdbcancel command to cancel the command.

• usta

Specify this option to display the embedded database start status related to system area restoration in addition to the information displayed by the ust option.

### -db

Specify this option to monitor the database areas in the embedded database.

Use this option to check the time of maintenance or the status of the database areas.

-d

Specify this option to display detailed information about the database.

When you specify this option, you can check the number of pages that can be released by using the ajsembdbreclaim command.

### -1

Specify this option to monitor the system log of the embedded database.

Use this option to check the status of the system log file when you back up or restore the embedded database.

### -c

Outputs the configuration information for the embedded database.

This option is used during setup for cluster use, to check the embedded database data area directory when the embedded database is backed up or restored and to check if the settings of the primary node and the secondary node are correct. Note, however, that this option is valid only if the command is executed for a embedded database built in JP1/AJS3 version 10-00 or later. If it is executed for the embedded database built in version 09-50 or earlier, the KAVS2129-I message appears and the command ends abnormally.

### -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (n: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

## Notes

- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- When you execute the ajsembdbstatus command with the -db option or the -l option specified while JP1/ AJS3 is running, the output information might not be the latest information. To acquire the latest information when you execute the command, you need to execute the command while no operation (such as the definition and execution of a job) is being performed for a unit.
- Note that if multiple ajsembdbstatus commands are executed concurrently for a single embedded database, a conflict might occur during log output processing, and the following message might be output between lines in the output result:

```
The process cannot access the file. The file is being used by another process.
```

You can ignore this message because there are no problems with the output results.

# **Return values**

0	Normal end
1	The embedded database is being started or stopped
2	The embedded database is being stopped
4, 8, 12	Abnormal end

<sup>2.</sup> Commands

16	Windows
	The embedded database is inactive
	UNIX
	The pdprcd process is being stopped

## Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	Start the embedded database and then re-execute the command.
KAVS2102-E	The embedded database is being started or stopped.	Use the -s ust option of the ajsembdbstatus command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re- execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# Output example

### Checking the operating status of the embedded database

```
ajsembdbstatus -s usta -id _JF0
HOSTNAME : 127.0.0.1(144852)
SYSTEMID : ajs2
UNITID : unt1
ENTRYHOST : 127.0.0.1
PAIRHOST :
UNIT-STAT FES-STAT SETUP-STAT
ONLINE ******* SETUP
START-OPT : NORMAL
```

#### HOSTNAME

127.0.0.1 is displayed.

The item in parentheses is the hour, minutes, and seconds (format: *HHMMSS*) of the time when the ajsembdbstatus command is executed.

### Cautionary note

If any of the conditions below is met, the host name of the embedded database installation directory is output by using no more than 32 characters. In a cluster configuration, the first host name that is set as the active server is output.

- When JP1/AJS3 Manager for Windows version 09-50 or earlier is used and the embedded database has been built on a logical host
- When JP1/AJS3 Manager for UNIX version 09-50 or earlier is used

• When JP1/AJS3 - Manager version 09-50 or earlier is updated to version 10-00 or later, and IPv6 has not been set up

#### SYSTEMID

Indicates the identifier of the embedded database with upt to four characters. For JP1/AJS3, this identifier is fixed to ajs2.

#### UNITID

Indicates the system-specific identifier with upt to four characters. For JP1/AJS3, this identifier is fixed to unt1.

#### ENTRYHOST

127.0.1 is displayed.

### Cautionary note

If any of the following conditions is met, the name of the host on which the ajsembdbstatus command is executed is output:

- When JP1/AJS3 Manager for Windows version 09-50 or earlier is used and the embedded database has been built on a logical host
- When JP1/AJS3 Manager for UNIX version 09-50 or earlier is used
- When JP1/AJS3 Manager version 09-50 or earlier is updated to version 10-00 or later, and IPv6 has not been set up

#### PAIRHOST

Always blank.

### UNIT-STAT

Indicates the system status.

PAUSE: The restart of the embedded database is suspended.#

STOP: The embedded database is stopped.

STARTING: The embedded database is being started.

ONLINE: The embedded database is running.

STOPPING: The embedded database is being stopped.

### #

The embedded database has terminated abnormally and cannot be restored by its automatic restart function.

### FES-STAT

Always \*\*\*\*\*\*.

### SETUP-STAT

Indicates the setup status.

#### SETUP:

In Windows, this indicates that execution of the ajsembdbbuild command has been completed and the embedded database service is running. In UNIX, this indicates that execution of the ajsembdbbuild command has been completed.

#### UNSETUP:

In Windows, this indicates that the embedded database service is not running. In UNIX, this indicates that execution of the ajsembdbunset command with the -r option specified has been completed.

### START-OPT(output only if the -s usta option was specified)

Indicates the start status of the embedded database.

NORMAL: The embedded database is starting normally.

RECOVERY: The embedded database is starting for system area recovery (the ajsembdbstart command with the -r option specified).

\*\*\*\*\*\*\*: The embedded database is not starting.

### Checking the status of the processes of the embedded database

```
ajsembdbstatus -s prc -id JF0
HOSTNAME : 127.0.0.1(110440)
STATUS PID UID
                    GID
                                         PROGRAM C-PID
                          SVID
                                 TIME
                                                                 C-GRP
                          ajs2
       856
              0
                     0
                                 102826
                                         ajsschd 3568(XXX.YYY...)
  Τ.
      1868
              0
                     0
                                 102832
                                         ajsflowd 3604(XXX.YYY...)
  Τ.
                          ajs2
      2080
              0
                     0
                                 102835
                                         ajssubd 3792(XXX.YYY...)
  L
                          ajs2
  L
      2116
              0
                     0
                          ajs2
                                 999999
  L
      2136
              0
                     0
                          ajs2
                                 999999
 :
```

HOSTNAME

### 127.0.0.1 is displayed.

The item in parentheses is the hour, minutes, and seconds (format: *HHMMSS*) of the time when the ajsembdbstatus command is executed.

### Cautionary note

If any of the conditions below is met, the host name of the embedded database installation directory is output by using no more than 32 characters. In a cluster configuration, the first host name that is set as the active server is output.

- When JP1/AJS3 Manager for Windows version 09-50 or earlier is used and the embedded database has been built on a logical host
- When JP1/AJS3 Manager for UNIX version 09-50 or earlier is used
- When JP1/AJS3 Manager version 09-50 or earlier is updated to version 10-00 or later, and IPv6 has not been set up

#### STATUS

Indicates the status of the process for accessing started by the embedded database.

- D: The process is being started or being terminated.
- L: The process is running.

#### PID

Indicates the process ID using a decimal number of 10 digits or less.

#### UID

Always 0.

#### GID

Always 0.

#### SVID

Indicates the name of the server for the process. For the processes used by JP1/AJS3, this name is ajs2. When an embedded database operation command is executed, the information that is specified in the -u option of the ajsembdbcancel command might be output.

#### TIME

Indicates the time when the embedded database is connected in the HHMMSS (hour, minutes, seconds) format.

#### PROGRAM

Indicates the name of a command or a daemon of JP1/AJS3 with upt to 30 characters.

When an embedded database operation command is executed, the name of a command, other than the executed command, might be output. The information you specify in the -u option in the <code>ajsembdbcancel</code> command is output here.

#### C-PID

Indicates the process ID of the JP1/AJS3 daemon process or command process connected to the embedded database by using a decimal number of 10 digits or less. The item in parentheses is the IP address up to 15 characters. This item is not output for the process that is not connected.

### C-GRP

Always blank.

### Checking the status of the database areas in the embedded database

```
ajsembdbstatus -db -id JF0
1684 hh:mm:ss unt1 _pd0dbst KFPK10300-I Pddbst started
1684 hh:mm:ss unt1 _pd0dbst KFPK10301-I Pddbst terminated, return code=0
pddbst 08-05(Object Option) ** RD Area Logical Analysis ** YYYY/MM/DD
hh:mm:ss
RD Area Name
             : AJS2DATA
 Server
              : ajs2
 Total Segment :
                       301 Segment Size :
                                                  10 Pages
 Unused Segment: 297 Page Size :
                                               30720 Bytes
 Historyl Hold Status : Hold Code :
                                         0 Hold Time :
 History2 Hold Status :
                           Hold Code :
                                         0 Hold Time :
_____
Table Name : AJS1ARROW
Auth Id : root
Status
           :
Reference Pending Status :
Check Pending Status :
Segment Reuse : 18 segments
 <Base row segment>
 Search Mode : INS
 Reuse Search Failure :
                               0/
                                         0
      (1)Used(Full) (2)Used(
                                   Full)
                                               Sum
          0% (0%)
0% (0%)
 Segment
          0응( 0응)
                                    0)
                                                 Ω
                                      0)
                                                 0
 Page
 Collect On Segment :
                             Ω
Table Name : AJS1BODY
Auth Id : root
Status
           :
Reference Pending Status :
Check Pending Status :
Segment Reuse :
                   18 segments
 <Base row segment>
 Search Mode : INS
 Reuse Search Failure :
                               0/
                                         0
         Used(Full)
                        Used(
                                   Full)
                                               Sum
                        0 (
 Segment 0%( 0%)
                                    0)
                                                Ο
          0% (0%)
                                                 0
 Page
                           0(
                                      0)
 Collect On Segment :
                             0
```

Table Name : AJS1CAL Auth Id : root : Status Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment
Search Mode : INS
Reuse Search Failure : 0/ 0
Used(Full) Used( Full)
Segment 0%( 0%) 0( 0)
0( 0)</pre> <Base row segment> Sum 0 0 ( 0 Collect On Segment : Table Name : AJS1ENTRY Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Houe : INSReuse Search Failure :0/Used(Full)Used(Full)Segment 0% (0%)0 (0% (0%)0 (0% (0%)0 (0% (0%)0 ( Search Mode : INS Sum 0 0 ( 0 0 Collect On Segment : Table Name : AJS1GEN Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Segment 0%( 0%) 0( 0) Page 0%( 0%) ^' Sum Page 0%( 0%) Collect 0~ 0 0 0 Collect On Segment : 0 Table Name : AJS1ID Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Search Mode : INSReuse Search Failure :0/Used(Full)Used(Segment 100% (0%)1 (Page10% (0%)1 (Collect On Segment :0 0 Full) Sum 0) 1 0) 10 Table Name : AJS1PERF Auth Id : root

Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 
 Segment
 0% (
 0%)

 Page
 0% (
 0%)
 0 ( 0) 0) 0 0 ( 0 Collect On Segment : 0 Table Name : AJS1RELS Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS 

 Reuse Search Failure :
 0/

 Used(Full)
 Used(

 Segment
 0%
 0%

 Page
 0%
 0/

 0 Sum 0 0 ( Page 0%( 0%) 0 0 Collect On Segment : Table Name : AJS1SCH Auth Id : root : Status Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Search Mode : INSReuse Search Failure :0/Used(Full)Used(Full)Segment0%0%0(00 Sum 0 Page 0%( 0%) 0 ( 0) 0 Collect On Segment : 0 Table Name : AJS1STAT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 48 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) 0( 0) Sum 0 0 ( 0응( 0응) 0) 0 Page Collect On Segment : 0 Table Name : AJS1UNIT Auth Id : root Status : Reference Pending Status :

Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS 

 Reuse Search Failure :
 0/
 0

 Used(Full)
 Used(
 Full)

 Segment 100% (
 0%)
 1 (
 0)

 Page
 10% (
 0%)
 1 (
 0)

 Sum 0) 0) 1 Page 10%( 0%) 1( 10 Collect On Segment :  $\cap$ Table Name : AJSAGTEXECCNT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment> Search Fidde : INSReuse Search Failure :0/Used(Full)Used(Full)Segment 100% (0%)1 (0)Page10% (0%)1 (0)Collect On Segment :0 Search Mode : INS Sum 1 10 Table Name : AJSEXECAGT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment> Search Mode : INS 

 Search Mode : INS

 Reuse Search Failure :
 0/
 0

 Used(Full)
 Used(
 Full)

 Segment 100% (
 0%)
 1 (
 0)

 Page
 10% (
 0%)
 1 (
 0)

 Sum 1 1( 10 Collect On Segment : 0 Table Name : AJSEXECAGTGRP Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Segment 0%( 0%) 0( 0) Page 0%( 0%) 0( 0) Conservent 0 Sum 0 0 Collect On Segment : Table Name : AJSLINKAGT Auth Id : root : Status Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments

<Base row segment> Search Mode : INS 

 Reuse Search Failure :
 0/
 0

 Used(Full)
 Used(
 Full)
 Sum

 Segment
 0%(
 0%)
 0(
 0)
 0

 Page
 0%(
 0%)
 0(
 0)
 0

 Collect On Segment :
 0
 0
 0
 0

 3952 hh:mm:ss unt1 \_pd0dbst KFPK10300-I Pddbst started 3952 hh:mm:ss unt1 \_pd0dbst KFPK10301-I Pddbst terminated, return code=0 pddbst 08-05(Object Option) \*\* RD Area Logical Analysis \*\* YYYY/MM/DD hh:mm:ss RD Area Name : AJS2INDX Server : ajs2 Total Segment :904Segment Size :10 PagesUnused Segment:885Page Size :4096 BytesHistory1 Hold Status :Hold Code :0Hold Time :History2 Hold Status :Hold Code :0Hold Time : \_\_\_\_\_ Index Name : AJS1ARROWINDEX1 Auth Id : root 

 Status
 :

 Used(Full)
 Used(
 Full)
 Sum

 Segment 100% (
 0%)
 1 (
 0)
 1

 Page
 10% (
 0%)
 1 (
 0)
 10

 Collect On Segment :
 0
 0
 10

 Index Name : AJS1BODYINDEX1 Auth Id : root 

 Auth Id
 Iteration

 Status
 :

 Used(Full)
 Used(

 Segment 100% (0%)
 1 (0)

 Page
 10% (0%)

 Collect On Segment :
 0

 Index Name : AJS1CALINDEX1 Auth Id : root Status : 

 Used(Full)
 Used(
 Full)
 Sum

 Segment 100%(
 0%)
 1(
 0)
 1

 Page
 10%(
 0%)
 1(
 0)
 10

 Collect On Segment :
 0
 0
 10
 10

 Index Name : AJS1ENTRYINDEX1 Auth Id : root Status 

 Used(Full)
 Used(
 Full)
 Sum

 Segment 100% (0%)
 1 (0)
 1

 Page
 10% (0%)
 1 (0)
 10

 Collect On Segment :
 0
 10
 10

 : Index Name : AJS1GENINDEX1 Auth Id : root : Status 

 Status
 :

 Used(Full)
 Used(
 Full)
 Sum

 Segment 100%(
 0%)
 1(
 0)
 1

 Page
 10%(
 0%)
 1(
 0)
 10

 Collect On Segment :
 0
 0
 10
 10

Index Nar Auth Id Status	ne : AJS1IDI : root :	INDEX1			
Segment Page	Used(Full) 100%( 0%) 10%( 0%)		Used( 1( 1(	Full) 0) 0)	Sum 1 10
Collect	On Segment	:	0		
Index Nar	ne : AJS1PEF	RFINDEZ	X1		
Auth Id	: root				
Status			II. a al (		Gram
Segment	100% ( 0%)		1 (	Full)	Sulli 1
Page	10% ( 0%)		1 (	0)	10
Collect	On Segment	:	0	• /	
Index Nar	<b>ης •</b> λ.τς1ρετ	<u>הדערה.</u>	<i>х</i> ೧		
Auth Td	root		12		
Status	:				
	Used(Full)		Used(	Full)	Sum
Segment	100응( 0응)		1(	0)	1
Page	10응( 0응)		1(	0)	10
Collect	On Segment	:	0		
Index Nar	ne : AJS1REI	LSINDE	X1		
Auth Id	: root				
Status	:				
~	Used(Full)		Used(	Full)	Sum
Segment	100% ( 0%)		1 (	0)	
Page Colloct	LUS (US)		т (	0)	ΤŪ
COTTECC	On Segment	•	0		
Index Nar	ne : AJS1REI	SINDE	X2		
Auth Id	: root				
Status	:				
a	Used (Full)		Used(	Fu⊥⊥)	Sum
Segment	100%(0%)		1 ( 1 (	0)	1 O
raye Collect	10% (0%)		т ( 0	0)	ΞŪ
COTTECC	On Segment	•	0		
Index Nar	ne : AJS1REI	SINDE	ХЗ		
Auth Id	: root				
Status	:		II.aod (	E1111)	Cum
Segment	100% ( 0%)		1 (	Full)	Sulli 1
Page	10% ( 0%)		1 (	0)	10
Collect	On Segment	:	- ( 0	0,	10
Index Nar	Ne · AISISCI	ITNDEY	1		
Auth Id	: root		L		
Status	:				
	Used(Full)		Used(	Full)	Sum
Segment	100응( 0응)		1(	0)	1
Page	10응( 0응)		1(	0)	10
Collect	On Segment	:	0		
Index Name : AJS1STATINDEX1					

Auth Id Status	: root : Used(Full)	Used (	Full)	Sum	
Segment	100% ( 0%)	1 (	0)	1	
Page	10%( 0%)	1 (	0)	10	
Collect	On Segment :	0			
Index Na	me : AJS1UNITINDE	Xl			
Auth Id	: root				
Status	• Used(Full)	Used (	Full)	Sum	
Segment	100% ( 0%)	1 (	0)	1	
Page	10응( 0응)	1(	0)	10	
Collect	On Segment :	0			
Index Na	me : AJS1UNITINDE	X2			
Auth Id	: root				
Status	: Used(Full)	lised (	Full)	Sum	
Segment	100% ( 0%)	1 (	0)	1	
Page	10%( 0%)	1(	0)	10	
Collect	On Segment :	0			
Index Na	me : AJSAGTEXECCN	TINDEX1			
Auth Id	: root				
Status	: Used (Full)	Used (	<b>٣</b> 111)	Sum	
Segment	100% ( 0%)	1 (	0)	1	
Page	10응( 0응)	1 (	0)	10	
Collect	On Segment :	0			
Index Na	me : AJSEXECAGTGR	PINDEX1			
Auth Id	: root				
Status	:		<b>D 1 1 1</b>	0	
Seament	100% ( 0%)	0 sed ( 1 (	FULL)	Sum 1	
Page	10% ( 0%)	1 (	0)	10	
Collect	On Segment :	0			
Index Na	me : AJSEXECAGTIN	DEX1			
Auth Id	: root				
Status	:			~	
Seament	Used(Full)	Used( 1(	Full)	Sum 1	
Page	10% ( 0%)	1 (	0)	10	
Collect	On Segment :	0			
Index Name : AJSLINKAGTINDEX1					
Auth Id	: root				
Status	:			2	
Segment	Used(Full)	Used( 1(	Fu⊥⊥) O)	Sum 1	
Page	10% ( 0%)	± ( 1 (	0)	10	
Collect	On Segment :	- 、	- /		

RD Area Name

Indicates the name of the area used by JP1/AJS3.

### AJS2DATA: Table area

#### AJS2INDX: Index area

#### Server

Always ajs2.

Total Segment

Indicates the total number of segments in the indicated area.

```
Unused Segment
```

Indicates the total number of unused segments in the indicated area.

```
Segment Size
```

Indicates the number of pages in one segment.

```
Page Size
```

Indicates the size of one page in bytes.

Historyl Hold Status Code, Hold Code, Hold Time

Information used by the system.

History2 Hold Status Code, Hold Code, Hold Time

Information used by the system.

```
Table Name
```

Indicates the name of the table used by JP1/AJS3.

Index Name

Indicates the name of the index used by JP1/AJS3.

#### Auth Id

Indicates the authorization identifier for the table or the index. For JP1/AJS3, this is usually root.

```
Segment Reuse
```

The value specified for the reuse start point (the number of segments) for the free-space reuse function is output. If the free-space reuse function is disabled, a hyphen (-) is output.

Status, Reference Pending Status, Check Pending Status, Search Mode, Reuse Search Failure, Collect On Segment Information used by the system.

```
(1) Used (Full)
```

Indicates the percentage of the segments or pages being used. The number in parentheses indicates the percentage of full segments or pages in all the segments or pages being used.

#### (2)Used( Full)

Indicates the number of segments or pages being used. The number in parentheses indicates the number of full segments or pages in all the segments or pages being used.

Sum

Indicates the total number of segments or pages allocated to the table or the index.

#### Checking the details about the database areas in the embedded database

```
ajsembdbstatus -db -d -id _JF0

3240 hh:mm:ss unt1 _pd0dbst KFPK10300-I Pddbst started

3240 hh:mm:ss unt1 _pd0dbst KFPK10301-I Pddbst terminated, return code=0

pddbst 08-05(Object Option) ** RD Area Logical Analysis ** YYYY/MM/DD

hh:mm:ss
```

```
2. Commands
```

RD Area Name : AJS2DATA XD Area Name: AUSZELLILIServer: ajs2Total Segment301Unused Segment:297Page Size: 30720 BytesHistory1 Hold Status :Hold Code :History2 Hold Status :Hold Code :0Hold Time : \_\_\_\_\_ Table Name : AJS1ARROW Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Search Mode : INS Reuse Search Failure : 0/ Used(Full) Used( Segment 0%( 0%) 0( Page 0%( 0%) 0( Collect On Segment : 0 Collect Prearranged Page : 0 Full) Sum 0 0) 0) 0 Collect Prearranged Page : 0 

 Collect Prearranged Page :

 Used Page Ratio
 Page (Ratio)

 0% :
 0 ( 0%)

 1- 10% :
 0 ( 0%)

 11- 20% :
 0 ( 0%)

 21- 30% :
 0 ( 0%)

 31- 40% :
 0 ( 0%)

 41- 50% :
 0 ( 0%)

 51- 60% :
 0 ( 0%)

 71- 80% :
 0 ( 0%)

 81- 90% :
 0 ( 0%)

 91-100% :
 0 ( 0%)

 Total 0 Table Name : AJS1BODY Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Search Mode : INS Reuse Search Failure : 0/ Used(Full) Used( Segment 0%(0%) 0( Page 0%(0%) 0( Collect On Segment : 0 Collect Prearranged Page : 0 Full) Sum 0) 0 0) 0 0 Used Page Ratio Page(Ratio) Page RatioPage (Ratio)0%:0(0%)1-10%:0(0%)11-20%:0(0%)21-30%:0(0%)31-40%:0(0%)41-50%:0(0%)51-60%:0(0%)61-70%:0(0%)

71-80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0( 0응) Total 0 Table Name : AJS1CAL Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 0응( 0응) Segment 0( 0) 0 0응( 0응) 0 Page 0 ( 0) Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page (Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0%) 41- 50% : 0( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0%) Total Ω Table Name : AJS1ENTRY Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 0( Segment 0%( 0%) 0) 0 0응( 0응) 0) 0 Page 0 ( Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 08 : 0 ( 0응) 1- 10% : 0응) 0 ( 11- 20% : 0( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 0( 41- 50% : 0응) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 0 ( 81- 90% : 0응)

91-100% : 0 ( 0응) Total Ω Table Name : AJS1GEN Auth Id : root Status : Reference Pending Status : Check Pending Status : 18 segments Segment Reuse : <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Full) Sum Used( Segment 0%( 0%) 0 ( 0) 0 Page 0%( 0%) 0 ( 0) 0 Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0%) 11- 20% : 0 ( 0%) 21- 30% : 0 ( 0%) 31- 40% : 0응) 0 ( 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0응) Total 0 Table Name : AJS1ID Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Full) Sum Used( Segment 100% ( 0%) 1( 0) 1 10응( 0응) Page 0) 10 1( Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 0% : 9( 90%) 1- 10% : 1( 10응) 11- 20% : 0 ( 0%) 21- 30% : 0( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 0 ( 61- 70% : 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0( 0응) Total 10

Table Name : AJS1PERF Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 0% ( 0%) Segment 0 ( 0) 0 0 0% ( 0%) 0 ( 0) Page 0 Collect On Segment : Collect Prearranged Page : 0 Used Page Ratio Page (Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0%) 51- 60% : 0응) 0 ( 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 0 ( 81- 90% : 0응) 91-100% : 0 ( 0응) Total 0 Table Name : AJS1RELS Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 0% ( 0%) 0 ( 0) Segment 0 Page 0% ( 0%) 0) 0 0 ( Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0%) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0응) Total 0 Table Name : AJS1SCH
Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Full) Sum Used( Segment 0% ( 0%) 0 ( 0) 0 Page 0응( 0응) 0 ( 0) 0 Collect On Segment : 0 0 Collect Prearranged Page : Used Page Ratio Page(Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0%) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0( 0응) 41- 50% : 0( 0응) 51- 60% : 0 ( 0%) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0응) 0 Total Table Name : AJS1STAT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 48 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum 0응( 0응) Segment 0( 0) 0 Page 0% ( 0%) 0 ( 0) 0 Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 08 : 0 ( 0응) 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0%) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0( 0%) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0%) Total  $\cap$ Table Name : AJS1UNIT Auth Id : root Status :

Reference Pending Status : Check Pending Status : Segment Reuse : 18 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Sum Segment 100% ( 0%) 1( 0) 1 10응( 0응) 0) 10 Page 1( 0 Collect On Segment : Collect Prearranged Page : 0 Used Page Ratio Page (Ratio) 9 ( 08 : 90%) 1- 10% : 1( 10응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 0응) 41- 50% : 0 ( 51- 60% : 0응) 0 ( 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 0 ( 0응) 91-100% : Total 10 Table Name : AJSAGTEXECCNT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment> Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Full) Sum Used( Segment 100% ( 0%) 1( 0) 1 10응( 0응) Page 1( 0) 10 Collect On Segment : 0 Collect Prearranged Page : 0 Used Page Ratio Page (Ratio) 08: 9( 90%) 1- 10% : 1( 10응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0%) 91-100% : 0 ( 0%) 10 Total Table Name : AJSEXECAGT Auth Id : root Status : Reference Pending Status : Check Pending Status :

3 segments Segment Reuse : <Base row segment> Search Mode : INS Reuse Search Failure : 0 Used(Full) Used( 0/ 0 Full) Sum Segment 100%( 0%) 1( 0) 1 Page 10응( 0응) 1( 0) 10 0 Collect On Segment : Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 9(90%) 08 : 1- 10% : 1( 10응) 11- 20% : 0( 0응) 21- 30% : 0( 0응) 

 31-40%:

 41-50%:

 51-60%:

 0( 0응) 0( 0응) 0( 0응) 61- 70% : 0( 0응) 71- 80응 : 0( 0응) 81- 90% : 0( 0응) 91-100% : 0( 0응) 10 Total Table Name : AJSEXECAGTGRP Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment> Search Mode : INS Reuse Search Failure : Used(Full) Used( 0/ 0 Full) Sum Segment 0%( 0%) 0( 0) 0 0응( 0응) 0 ( 0) 0 Page 0 Collect On Segment : Collect Prearranged Page : 0 Used Page Ratio Page(Ratio) 0( 0응) 08 : 1- 10% : 0 ( 0%) 11- 20% : 0 ( 0응) 21- 30% : 0응) 0 ( 31- 40% : 0( 0응) 41- 50% : 0( 0응) 51- 60% : 0( 0응) 61- 70% : 0( 0응) 71- 80% : 0( 0응) 81- 90% : 0응) 0 ( 91-100% : 0 ( 0%) Total 0 Table Name : AJSLINKAGT Auth Id : root Status : Reference Pending Status : Check Pending Status : Segment Reuse : 3 segments <Base row segment>

Search Mode : INS Reuse Search Failure : 0/ 0 Used(Full) Used( Full) Segment 0%(0%) 0( 0) Page 0%(0%) 0( 0) Collect On Segment : 0 Collect Prearranged Page : 0 Search Mode : INS Sum 0 0 

 Collect Prearranged Page :

 Used Page Ratio
 Page (Ratio)

 0% :
 0(0%)

 1-10% :
 0(0%)

 11-20% :
 0(0%)

 21-30% :
 0(0%)

 31-40% :
 0(0%)

 41-50% :
 0(0%)

 51-60% :
 0(0%)

 71-80% :
 0(0%)

 81-90% :
 0(0%)

 91-100% :
 0(0%)

 Total 0 4872 hh:mm:ss unt1 \_pd0dbst KFPK10300-I Pddbst started 4872 hh:mm:ss unt1 \_pd0dbst KFPK10301-I Pddbst terminated, return code=0 pddbst 08-05(Object Option) \*\* RD Area Logical Analysis \*\* YYYY/MM/DD hh:mm:ss RD Area Name : AJS2INDX Server : ajs2 Total Segment :904Segment Size :10 PagesUnused Segment:885Page Size :4096 BytesHistory1 Hold Status :Hold Code :0Hold Time :History2 Hold Status :Hold Code :0Hold Time : \_\_\_\_\_ Index Name : AJS1ARROWINDEX1 Auth Id : root Status : Used(Full)Used(Full)Segment 100%(0%)1(0)Page10%(0%)1(0)Collect On Segment :000Collect Prearranged Page :10 Sum 10 

 Collect Prearranged Page :
 0

 Collect On Page :
 0

 Used Page Ratio
 Page (Ratio)

 0% :
 10 ( 100%)

 1- 10% :
 0 ( 0%)

 11- 20% :
 0 ( 0%)

 21- 30% :
 0 ( 0%)

 31- 40% :
 0 ( 0%)

 41- 50% :
 0 ( 0%)

 51- 60% :
 0 ( 0%)

 61- 70% :
 0 ( 0%)

 71- 80% :
 0 ( 0%)

 81- 90% :
 0 ( 0%)

 91-100% :
 0 ( 0%)

 Total 10 Index Name : AJS1BODYINDEX1 Auth Id : root Status :

Used(Full) Segment 100%( 0%) Page 10%( 0%) Collect On Segment : Collect Prearranged Collect On Page : Used Page Ratio 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	Used( 1( 1( 0 Page : 0 Page (Ratio) 10(100%) 0(0%)	Full) 0) 1	Sum 1 10
Index Name : AJS1CALI Auth Id : root	NDEX1		
Status : Used(Full) Segment 100%( 0%) Page 10%( 0%) Collect On Segment : Collect Prearranged Collect On Page : Used Page Ratio 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	Used( 1( 1( 0 Page: 0 Page(Ratio) 10(100%) 0(0%)	Full) 0) 1	Sum 1 10
Index Name : AJS1ENTF Auth Id : root	RYINDEX1		
Used(Full) Segment 100%( 0%) Page 10%( 0%) Collect On Segment : Collect Prearranged Collect On Page : Used Page Ratio 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% :	Used( 1( 1( 0 Page: 0 Page(Ratio) 10(100%) 0(0%) 0(0%) 0(0%) 0(0%)	Full) 0) 0)	Sum 1 10

41- 50% : 51- 60% : 61- 70% : 0( 0응) 0( 0응) 0( 0응) 0 ( 0 %) 0 ( 0 %) 71- 80% : 81- 90% : 91-100% : 0( 0응) 10 Total Index Name : AJS1GENINDEX1 Auth Id : root Status : Used(Full) Used( Full) 100%( 0%) 1( 0) Sum Segment 100% ( 0%) Page 10% ( 0%) 1( 1 0) 10 1( Page10% (0%)1 (Collect On Segment :0Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page(Ratio) 0% : 10(100%) 1- 10% : 11- 20% : 0( 0응) 0( 0응) 
 .
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)

 0 (
 0%)
 21- 30% : 0( 0응) 21 - 30% : 31 - 40% : 41 - 50% : 51 - 60% : 61 - 70% :61- 70% : 71- 80% : 81- 90% : 0( 0응) 0( 0응) 91-100% : Total 10 Index Name : AJS1IDINDEX1 Auth Id : root Status : 

 Used(Full)
 Used(
 Full)

 Segment 100% (
 0%)
 1 (
 0)

 Page
 10% (
 0%)
 1 (
 0)

 Collect On Segment :
 0
 0
 0

 Sum 1 10 Collect Prearranged Page : 0 Collect On Page : 0 Used Page Ratio Page(Ratio) 0% : 9( 90%) 1-10% : 1( 10%) 11- 20% : 0( 0응) 21- 30% : 0( 0응) 31- 40% : 0( 0응) 31- 40% . 41- 50% : 51- 60% : 0( 0응) 0응) 0응) 0 ( 61- 70% : 0 ( 71- 80% : 0( 0응) 81- 90% : 0( 0응) 91-100% : 0( 0응) Total 10 Index Name : AJS1PERFINDEX1 Auth Id : root Status : Used(Full) Used( Full) Sum

Segment 100%( 0%) Page 10%( 0%) 1( 0) 1 10 Page10% (U%)1 (Collect On Segment :0 1( 0) Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page (Ratio) 0% : 10( 100응) 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0%) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0( 0응) 51- 60% : 0( 0응) 61- 70% : 0( 0응) 71- 80% : 0( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0응) Total 10 Index Name : AJS1PERFINDEX2 Auth Id : root Status : Used(Full) Used( Full) Sum Segment 100%( 0%) Page 10%( 0%) 1( 0) 1 0) 10 1( Collect On Segment : 0 Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page(Ratio) 10( 100%) 08 : 1- 10% : 0 ( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0응) 0 ( 51- 60% : 0응) 0 ( 0응) 61- 70% : 0 ( 71- 80% : 0( 0응) 81- 90% : 0( 0응) 91-100% : 0 ( 0응) Total 10 Index Name : AJS1RELSINDEX1 Auth Id : root Status : Used(Full) Used( Full) Sum Segment 100% ( 0%) 1( 0) 1 10응( 0응) 10 Page 1( 0) Collect On Segment : 0 Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page(Ratio) 08 : 10( 100%) 1- 10% : 0 ( 0응) 11- 20% : 0( 0응) 21- 30% : 0 ( 0응) 0 ( 31- 40% : 0응) 41- 50% : 0 ( 0응)

51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	0( 0%) 0( 0%) 0( 0%) 0( 0%) 0( 0%) 10		
Index Name : AJS1RELSI Auth Id : root	NDEX2		
Used (Full) Segment 100% ( 0%) Page 10% ( 0%) Collect On Segment : Collect Prearranged Pa Collect On Page : Used Page Ratio 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	Used( 1( 1( 0 age : 0 Page(Ratio) 10(100%) 0(0%)	Full) 0) 0) 1	Sum 1 10
Index Name : AJS1RELSI Auth Id : root Status :	NDEX3		
Used (Full) Segment 100% ( 0%) Page 10% ( 0%) Collect On Segment : Collect Prearranged Pa Collect On Page : Used Page Ratio 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	Used( 1( 1( 0 age: 0 Page(Ratio) 10(100%) 0(0%) 0	Full) 0) 0) 1	Sum 1 10
Index Name : AJSISCHIN Auth Id : root Status :	JEXT		
Used(Full) Segment 100%( 0%)	Used( 1(	Full) O)	Sum 1

Page 10응( 0응) 1( 0) 10 Collect On Segment : 0 Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page(Ratio) 0%: 10( 100%) 1- 10% : 0( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0%) 0 ( 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0( 0응) 61- 70% : 0( 0응) 71- 80% : 0( 0응) 81- 90% : 0 ( 0응) 91-100% : 0 ( 0응) Total 10 Index Name : AJS1STATINDEX1 Auth Id : root Status : Used( Full) Sum Used(Full) 1( Segment 100% ( 0%) 0) 1 10 Page 10%( 0%) 1( 0) Collect On Segment : 0 Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page(Ratio) 10( 100%) 08 : 1- 10% : 0 ( 0응) 11- 20% : 0( 0%) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0응) 0 ( 0응) 71- 80% : 0 ( 81- 90% : 0( 0응) 91-100% : 0 ( 0%) 10 Total Index Name : AJS1UNITINDEX1 Auth Id : root Status : Used(Full) Used( Full) Sum Segment 100%( 0%) 1( 0) 1 10응( 0응) Page 1( 0) 10 0 Collect On Segment : 0 Collect Prearranged Page : Collect On Page : 0 Used Page Ratio Page(Ratio) 9( 90%) 08 : 1- 10% : 1( 10응) 0 ( 11- 20% : 0응) 21- 30% : 0 ( 0응) 31- 40% : 0%) 0 ( 41- 50% : 0( 0응) 0 ( 51- 60% : 0응)

61- 70% : 71- 80% : 81- 90% : 91-100% : Total	0(0%) 0(0%) 0(0%) 0(0%) 10		
	70		
Auth Id : root	XΖ		
Status :			
Used (Full) Segment 100% ( 0%) Page 10% ( 0%) Collect On Segment : Collect Prearranged Page Collect On Page : Used Page Ratio Page 0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% :	Used( 1( 1( 0 : 0 (Ratio) 9(90%) 1(10%) 0(0%) 0(0%) 0(0%) 0(0%) 0(0%) 0(0%) 0(0%) 0(0%) 0(0%)	Full) 0) 0)	Sum 1 10
81-90% :	0(0%)		
91-100% : Total	0( 0%) 10		
Index Name : AJSAGTEXECCN Auth Id : root	FINDEX1		
Used(Full) Segment 100%( 0%) Page 10%( 0%) Collect On Segment : Collect Prearranged Page	Used( 1( 1( 0 :	Full) 0) 0)	Sum 1 10
Used Page Ratio Page	u re(Ratio)		
0% : 1- 10% : 11- 20% : 21- 30% : 31- 40% : 41- 50% : 51- 60% : 61- 70% : 71- 80% : 81- 90% : 91-100% : Total	9 ( 90%) 0 ( 0%) 0 ( 0%) 1 ( 10%) 0 ( 0%) 0 ( 0%) 10 PINDEX1		
Status :			
Used(Full)	Used(	Full)	Sum
Segment 100%( 0%) Page 10%( 0%)	1 ( 1 (	0) 0)	1 10

Collect On Segment : 0 Collect Prearranged Page : 1 Collect On Page : 0 Used Page Ratio Page (Ratio) 0% : 10( 100응) 1- 10% : 0( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0 ( 0응) 71- 80% : 0 ( 0응) 81- 90% : 0( 0응) 91-100% : 0 ( 0응) 10 Total Index Name : AJSEXECAGTINDEX1 Auth Id : root Status : Used(Full) Used ( Full) Sum Segment 100% ( 0%) 1( 0) 1 10%( 0%) 1( 0) 10 Page Collect On Segment : 0 Collect Prearranged Page : 0 Collect On Page : 0 Used Page Ratio Page(Ratio) 08 : 9( 90응) 1- 10% : 1( 10응) 0응) 11- 20% : 0 ( 21- 30% : 0응) 0 ( 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 61- 70% : 0응) 0 ( 71- 80% : 0 ( 0응) 81- 90% : 0 ( 0응) 91-100% : 0( 0응) 10 Total Index Name : AJSLINKAGTINDEX1 Auth Id : root Status : Used(Full) Sum Used( Full) 1 Segment 100% ( 0%) 1( 0) Page 10응( 0응) 1( 0) 10 0 Collect On Segment : Collect Prearranged Page : 1 0 Collect On Page : Used Page Ratio Page(Ratio) 08 : 10( 100%) 1- 10% : 0( 0응) 11- 20% : 0 ( 0응) 21- 30% : 0 ( 0응) 31- 40% : 0 ( 0응) 41- 50% : 0 ( 0응) 51- 60% : 0 ( 0응) 0 ( 61- 70% : 0응)

	71- 80%	:	0 (	0응)
	81- 90%	:	0 (	0응)
	91-100%	:	0 (	0응)
Total			10	,
TOCAT			± 0	

#### Collect Prearranged Page

Indicates the size in pages of the area that can be released by using the ajsembdbreclaim command.

Check this value to determine when to execute the ajsembdbreclaim command.

If this value is 0, no area is released even if you execute the ajsembdbreclaim command. We recommend that you execute the ajsembdbreclaim command when this value reaches 30 to 50% of the pages being used. However, this command is not very effective if the number of pages being used is 50 pages or less. If the number of pages being used exceeds 10,000, we recommend that you execute the ajsembdbreclaim command when this value reaches 20 to 30% of the pages being used.

### Collect On Page

Information used by the system.

Used Page Ratio, Page (Ratio)

Indicates the detailed information about the pages allocated to the table or the index.

When more pages are at higher percentages, storage efficiency is better. When only a few pages are at higher percentages, storage efficiency is worse.

Because the percentages in parentheses are rounded up at the decimal point, the total might add up to more than 100%.

### Checking the system log of the embedded database

ajsembdbstatus -l -id JF0

HOSTNAME	: 12	7.0.0.1(	201942)					
Group	Туре	Server	Gen No.	. Status	Run ID	Block	No.	Ex-Status
log1	sys	ajs2	1	oc-du	433a0c53	1	ae	-x
log2	sys	ajs2	0	os	00000000	0	0	-u
log3	sys	ajs2	0	os	00000000	0	0	-u
log4	sys	ajs2	0	os	00000000	0	0	-u
log5	sys	ajs2	0	os	00000000	0	0	-u
log6	sys	ajs2	0	os	00000000	0	0	-u
log7	sys	ajs2	0	os	00000000	0	0	-u
log8	sys	ajs2	0	os	00000000	0	0	-u
log9	sys	ajs2	0	os	00000000	0	0	-u
log10	sys	ajs2	0	os	00000000	0	0	-u
log11	sys	ajs2	0	os	00000000	0	0	-u
log12	sys	ajs2	0	os	00000000	0	0	-u

#### HOSTNAME

127.0.0.1 is displayed.

The item in parentheses is the hour, minutes, and seconds (format: *HHMMSS*) of the time when the ajsembdbstatus command is executed.

### Cautionary note

If any of the conditions below is met, the host name of the embedded database installation directory is output by using no more than 32 characters. In a cluster configuration, the first host name that is set as the active server is output.

- When JP1/AJS3 Manager for Windows version 09-50 or earlier is used and the embedded database has been built on a logical host
- When JP1/AJS3 Manager for UNIX version 09-50 or earlier is used
- When JP1/AJS3 Manager version 09-50 or earlier is updated to version 10-00 or later, and IPv6 has not been set up

### Group

Indicates the name of the system log file group for the embedded database with upt to eight characters.

### Туре

Always sys.

### Server

Always ajs2.

### Gen No.

Indicates the generation number of the system log with a hexadecimal number of eight digits or less. This number indicates the sequence of the system logs used by the embedded database and starts at 1. After the last system log file group has been used, the first system log file group is used again. At this time, the generation number of the system log is updated.

### Status

Indicates the status of the system log file group with seven characters:

First character:

Open status of the system log file group

o: Open

c: Closed

This character is  $\circ$  when the embedded database is running. The character is  $\circ$  when the embedded database is not running.

Second character:

Current status of the system log file group

- c: Active
- s: Standby
- n: Reserved

During operation, the system log file group currently used is indicated as c, and other system log file groups are indicated as s.

If no system log file can be accessed because, for example, the embedded database is not running or the disk that contains system log files is not mounted, n is output.

### Third character:

Unload status of the system log file group

• u: The log file group is waiting to be unloaded.

(The log file group was active, but swapped and is not currently being used.)

No action is necessary if the operation does not use the system log (that is, the ajsembdbbuild command with neither the -bs nor -br option specified was executed during embedded database environment setup).

If the operation uses the system log (that is, the ajsembdbbuild command with the -bs or -br option specified was executed during embedded database environment setup), the system log file group must be unloaded. However, normally, this unloading is automatically performed.

• -: The log file group is unloaded.

Fourth character:

Indicates whether the system log file group can be overwritten.

• d: The log file group cannot be overwritten (the system log file group contains a log required for restoring the embedded database).

If all the system log files on the server are in this status, the embedded database stops. In that case, add a system log file.

This status might occur when an extremely large job is defined in a batch job and the resulting embedded database transaction is extremely long.

• -: The log file group can be overwritten (the system log file group does not contain a log required for restoring the embedded database).

Fifth, sixth, and seventh characters:

Internal information used by the system.

Run ID

Indicates information used by the system.

Block No.

Indicates the first block number and the last block number in the system log file with hexadecimal numbers of eight digits or less.

Ex-Status

Indicates the expansion status of the system log file group with eight characters.

First character:

Internal information used by the system.

Second character:

The automatic expansion status of the system log file group.

u: The system log file group is subject to the system log file auto-increment function.

e: System log files are expanded.

x: The system log file group is not subject to the system log file auto-increment function.

-: The system log file auto-increment function is not used.

Third character:

Whether automatic expansion of the system log file group is possible.

-: Possible by using the system log file auto-increment function.

x: Not possible by using the system log file auto-increment function.

Fourth, Fifth, sixth, seventh, and eighth characters:

Indicates information used by the system.

## Checking the embedded database configuration information

```
ajsembdbstatus -c -id _JF1

HOSTNAME=lhost1

INSTALLDIR= "C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1"

SETUPID=_JF1

RAWFILE= "ajssys01=\\.\D:,ajssys11=\\.\E:"

DATADIR=

WORKDIR=" C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1\dbarea"

EMBDBPORT=22221

DBMODEL=1
```

#### HOSTNAME

The name of the host that was set when the embedded database was built is output.

#### INSTALLDIR

The installation directory of the embedded database is output.

#### SETUPID

The embedded database setup identifier is output.

### RAWFILE

The data area partition is output when a RAW file is used for the data area and the system area of the embedded database.

### DATADIR

The data area directory of the embedded database is output. When system logging is being used, the system area directory is also output.

#### WORKDIR

The work area directory is displayed.

### EMBDBPORT

The port number of the embedded database is displayed.

### DBMODEL

The database model is output:

- 1: Large scale
- m: Medium scale
- s: Small scale

### PHYSICALHOST

If a cluster configuration environment is used, the name of the primary node physical host is output.

### SYSLOGCNF

The system logging setting is displayed:

single: The system file is not duplicated.

dual: The system file is duplicated.

none: System logging is disabled.

### UNLDDIR

The directory where the unload log file has been created is output.

This information is not displayed if system logging is not used.

## EXTENDDB

The setting of the database area auto-increment function is output:

yes: The function is enabled.

no: The function is disabled.

## EXTENDLOG

The setting of the system log auto-increment function is output:

yes: The function is enabled.

no: The function is disabled.

# ajsembdbstop

# Format

```
ajsembdbstop
    [-f [-q]]
    [-id embedded-database-setup-ID]
```

## Format 1 (for normally stopping the embedded database)

```
ajsembdbstop
[-id embedded-database-setup-ID]
```

### Format 2 (for forcibly stopping the embedded database)

```
ajsembdbstop
-f
[-q]
[-id embedded-database-setup-ID]
```

## Description

Stops the embedded database.

You can execute this command only while the embedded database and all the scheduler services for which the applicable embedded database was created as the scheduler database are not running.

# **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

# Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\tools\

In UNIX:

/opt/jp1ajs2/tools/

# Arguments

### -f

Specify this option to forcibly stop the embedded database.

When you specify this option in the command you execute, the embedded database is forcibly stopped whether or not the embedded database is being accessed. It might take some time for the embedded database to start the next time you attempt starting it.

### -q

Use this option when a cluster environment is created.

Use this option to stop the embedded database when failover.

## -id embedded-database-setup-ID

Specify the setup identifier that identifies the embedded database in the  $\_JFn$  format (*n*: 0-9 or A-Z). The value specified in this argument must be the same as the value specified in the  $\_id$  option of the ajsembdbbuild command.

If you want to operate an embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database. For details on the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, the system assumes \_JF0.

## Notes

- Before you stop the embedded database normally, stop all scheduler services that use the embedded database as the scheduler database. In addition, stop the JP1/AJS3 service, the JP1/AJS3 Console Agent service, and other services that access the embedded database. If you attempt to stop the embedded database normally without stopping these services, the embedded database might be unable to stop, causing you to wait for a long time.
- If you forcibly stop the embedded database while the embedded database is being accessed, jobs being executed are forcibly terminated or access from JP1/AJS3 View is forcibly disconnected.
- This command is implemented by a script. If you specify an excessively long character string or an invalid character string or value for an option, an unexpected error might occur. You must use the number of characters allowed for a character string or a value in the option as specified in the DBMS and JP1/AJS3 specifications.
- You cannot execute this command together with any of the following commands on the same logical host:



- When JP1/AJS3 is running, the jajs\_dbmd process also stops. Note, however, that if the type of the embedded database is one used for JP1/AJS3 Manager before version 10-00, the jajs\_dbmd process does not stop.
- Do not execute this command more than once in quick succession. If you do so, the following problems might occur:
  - The message output is invalid. For example, an invalid message is output or a message that should be output is not output.
  - The command results in an error.

# **Return values**

0	Normal end
1	The embedded database is being started or stopped
2	The embedded database is being stopped
Other values	Abnormal end

# Actions to be taken if an error occurs

If a command error occurs, take the indicated action in the following table.

Message	Cause	Action to be taken
KAVS0787-E	The system administration daemon is processing.	Use the jajs_spmd_status command to check the service status, and then re-execute the command.
KAVS0996-E	The specified option contains an error.	Check the specification of the option.
KAVS2101-E	The embedded database is inactive.	The embedded database is already stopped and no action is required.
KAVS2102-E	The embedded database is being started or stopped.	Use the -s ust option of the ajsembdbstatus command to check whether the embedded database is running and then re-execute the command.
KAVS2104-E	The embedded database is not set up.	Set up the embedded database and then re-execute the command.
KAVS2116-E	The specified option contains an error.	Check the option output in the message and then re- execute the command.
KAVS2117-E	An error occurred during execution of the command.	Check the message output in the maintenance information.

# ajsentry

# Format

```
ajsentry
     [-F service-name]
     [{<u>-s</u>|-n|-f|-d[[year/]month/]day -t hours[:minutes]|
          -p schedule-information-file-name}][-g number-of-scheduled-
          future-generations]
     [-0]
     [-w]
     [-c macro-variable-specification]
     [-R]
     [-L]
     [-T]
     [-m {hours:minutes|M-minutes|unlimited} -k {number-of-
          times | unlimited } ]
     [-b [[year/]month/]day -e [[year/]month/]day]
     [-h]
     jobnet-name-or-job-group-name...
```

# Description

Registers a defined jobnet for execution. The ajsentry command also checks whether the unit specified during registration for execution satisfies any of the following conditions, and if any are satisfied, an error is returned:

- A jobnet connector is created for a jobnet with start conditions.
- A jobnet with start conditions is specified as the connection-destination jobnet.
- A root jobnet that contains a job for which a jobnet connector is defined is specified as the connection-destination jobnet.
- Start conditions are set for a unit in the planning group specified as the connection-destination jobnet.
- A root remote jobnet is defined under the planning group specified as the connection-destination jobnet.
- A jobnet connector is defined under the planning group specified as the connection-destination jobnet.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

# Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

## -s

Executes a jobnet according to the schedule defined for it (registers a jobnet for planned execution).

Unlike the -f option, this option causes the system to execute a jobnet which is scheduled to execute on the day even if you execute the command after the scheduled time for executing the jobnet has passed.

You cannot specify this option with the -n, -f, -d, -t, -p, -g, -w, -m, -k, or -h option.

### -n

Executes a jobnet immediately, ignoring any schedule defined for the jobnet (registers a jobnet for immediate execution). Note that the start conditions will be valid only when they are specified with the -m or -k option.

You cannot specify this option with the -s, -f, -d, -t, -p, -g, or -o option.

## -f

Executes a jobnet according to the next schedule after the registration of execution (registers a jobnet for planned execution).

Unlike the -s option, this option does not cause the system to execute a jobnet which is scheduled to execute on the day if you execute the command after the scheduled time for executing the jobnet has passed.

You cannot specify this option with the -s, -n, -d, -t, -p, -g, -w, -m, -k, or -h option.

## -d [[year/]month/]day

Executes the jobnet at the specified date, irrespective of the schedule defined in the jobnet (the jobnet is determined, executed, and registered). Jobnets with start conditions are immediately executed without monitoring the start conditions.

Specify this option together with the -t option.

You cannot specify this option with the -s, -n, -f, -p, -g, -w, -m, -k, or -h option.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

### -t hours[:minutes]

Executes the jobnet at the specified time, irrespective of the schedule defined in the jobnet (the jobnet is determined, executed, and registered). Jobnets with start conditions are immediately executed without monitoring the start conditions.

Specify this option together with the -d option.

You cannot specify this option with the -s, -n, -f, -p, -g, -w, -m, -k, or -h option.

<sup>2.</sup> Commands

• hours

You can specify a value between 0 (or 00) and 47 hours.

• minutes

You can specify a value between 0 (or 00) and 59 minutes. If you omit this option, the system assumes 0.

## -p schedule-information-file-name

Specify the name of the schedule information file in which you have defined execution schedule for the jobnet (so that the jobnet is registered for fixed execution). you can use the <code>ajsschedule</code> command to create a schedule information file.

You can specify a character string of 1 to 255 bytes. The file name should use the full path name.

You cannot specify this option with the -s, -n, -f, -d, -t, -w, -m, -k, or -h option.

When you specify the -p option, specify for the jobnet name only the root jobnet name that is specified when a schedule information file is created. This command ends abnormally when this option is specified together with the wildcard characters or the -R option, and the root jobnet name in the schedule information file does not match the specified root jobnet name.

## -g number-of-scheduled-future-generations

Specify the number of subsequent generations you want to execute according to the fixed schedule.

You can specify a number between 1 and 99 (logs).

You cannot specify this option with the -s, -n, -f, -d, -t, -w, -m, -k, or -h option.

-0

Does not execute a jobnet which is scheduled to execute on the day when you start the scheduler service, if its scheduled time for starting execution is prior to the time when you start the scheduler service.

You cannot specify this option with the -w, -m, -k, -n, or -h option. This option is valid if the service startup mode is set to a warm start or a disaster recovery start.

-w

Terminates the command upon the completion of executing the jobnet, if it is registered for immediate execution.

You can specify this option when registering the root jobnet for immediate execution.

Even if this option is specified, the command will terminate without waiting for the end of the jobnet in the following cases:

- The scheduler service stops during jobnet execution.
- The generation with a termination wait specified is left unexecuted using a carryover method.
- The generation with a termination wait specified is deleted. (For example, the generation that is unregistered for execution or registered for immediate execution or fixed execution discontinues its execution.)
- The generation with a termination wait specified is left unplanned.

You must specify this option with the -n option. You cannot specify this option with the -m or -k option.

## -c macro-variable-specification

Specify the information that is to be set in the macro variable used by the jobs placed under the root jobnet. At the time of job execution, this is expanded into the passing information in the specified macro variable.

You can set up to 32 items in the form of -c macro-variable-name : passing-information. If you specify more than one of the same macro variable name, the passing information in only the first one is effective. For multiple items, you can specify a string of a maximum of 4,085 bytes (including the value of the macro variable name + the passing information + 4).

• macro-variable-name

Specify this name in AJS2xxxxx form, in which xxxxx is any character string. There is no need to prefix or suffix it with a question mark (?). You can use upper-case alphabetic characters, numeric characters, and periods (.). You can specify a string of up to 62 bytes, which is calculated by subtracting 2 (two question marks at both ends) from 64.

- *passing-information* Specify any character string.
  - You can specify a string of 1 to 255 bytes.

### -R

Registers all units contained in the specified job group for execution.

If you specify this option with the -L and/or -T options, the system registers the jobnets for execution according to the specification of each option.

If you do not specify the -T option together with the -R option, all the units are registered for execution, and the execution registration processing for the units except the root jobnet ends abnormally.

### -L

Registers jobnets which have not been registered for execution.

## -**T**

Registers root jobnets.

### -m { hours: minutes | M-minutes | unlimited }

Specify the time the system will wait for the start condition to be satisfied.

You must specify this option with the -n and -k options. You cannot specify this option with the -w option.

• hour:minutes

Specify an absolute time.

You can specify a value between 0 (or 00) and 47 for the hour.

You can specify a value between 0 (or 00) and 59 for the minute.

• *M*-minutes

Specify a time relative to the scheduled start time for the jobnet. You can specify a value between 1 (or 01) and 2,879 minutes.

• unlimited

Waits for an unlimited time of period until the condition is satisfied.

### -k {*number-of-times*|unlimited}

Specify the number of times the system will wait for the start condition to be satisfied.

You must specify this option with the -n and -m options. You cannot specify this option with the -w option.

• number-of-times

You can specify a value between 1 and 999 (times).

• unlimited

Sets an unlimited number of times for waiting.

### -b [[year/]month/]day

Specify the start date of the period for executing a jobnet according to the schedule defined for the jobnet (fixed execution registration of the jobnet performed). The specified start date complies with the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You must specify this option with the -e option.

You cannot specify this option with the -s, -n, -f, -d, -t, -p, -w, -m, -k, or -h option.

### -e [[year/]month/]day

Specify the end date of the period for executing a jobnet according to the schedule defined for the jobnet (fixed execution registration of the jobnet performed). The specified end date complies with the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You must specify this option with the -b option.

You cannot specify this option with the -s, -n, -f, -d, -t, -p, -w, -m, -k, or -h option.

-h

Holds the execution of the root jobnet when the jobnet is registered for immediate execution.

You must specify this option with the -n option.

You cannot specify this option with the -s, -f, -d, -t, -p, -g, -o, -b, or -e option.

You cannot use this option in an environment where the JP1/AJS3 database uses the compatible ISAM configuration.

## jobnet-name or job-group-name

Specify the name of the jobnet you want to register for execution. You can also specify a jobnet name or job group name with the -R, -L, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one jobnet name or job group name. If you want to specify a jobnet name, however, you can specify only a root jobnet name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host as a jobnet or job group name. You cannot specify an execution ID.

## Notes

- Either of the following users can register fixed execution of a jobnet:
  - A user granted the operation privilege when all the units in the jobnet to be registered for execution were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.
- This command terminates abnormally if the scheduler service is not running.
- To register a jobnet for execution, be sure to use the same procedure as for registering the next execution schedule of the jobnet. If the next schedule of a jobnet has already been registered for planned execution, you cannot register this jobnet for planned execution. In these cases, the command terminates abnormally.
- You cannot register a jobnet for planned execution if the jobnet is scheduled to run next. The command terminates abnormally.
- A jobnet registered for immediate execution is not scheduled to be executed again, so the jobnet can be re-registered for immediate execution even if the jobnet has already been registered for immediate execution.
- If a jobnet you are going to register for execution is suspended, the command terminates abnormally.
- With the -w option specified, the ajsentry command can execute up to 50 jobnets concurrently. If you attempt to execute more than 50 jobnets, the ajsentry command terminates abnormally without registering the jobnets for execution.
- For the root jobnet under the planning group, only fixed execution registration specified by the -p option, or the -b and -e options can be performed. If you execute the command in any other way, it ends abnormally.

- If you specify the -w option to terminate the ajsentry command after the jobnet is executed, you cannot obtain the result of jobnet execution in the return value of the ajsentry command. You must separately execute the ajsshow command to obtain the result of jobnet execution.
- If you specify none of the -n, -f, -d, -t, -p, and -g options, the -s option is assumed.
- This note applies to root jobnets whose execution order is controlled by using jobnet connectors. Even though there are no jobnet generations for which a connection relation is established between a root jobnet for which a jobnet connector is defined and the connection-destination jobnet, the jobnet is registered for execution.
- If you register a release-target jobnet (a root jobnet registered for release) for immediate execution, the jobnet is executed immediately with the jobnet definition that was applied.

## **Return values**

0	Normal end
1 to 3 or multiple of 4 within the range from 4 to 124	Abnormal end

## Example1

The following command registers jobnet net1 for planned execution (executes the jobnet according to the schedule defined for it).

```
ajsentry -s net1
```

# Example2

In this example, the command sets a macro variable (AJS2ENV) and a value (/tmp/unit\_data) in a jobnet (net1), and registers the jobnet for immediate execution.

```
ajsentry -n -c AJS2ENV:/tmp/unit_data net1
```

## Example 3

In this example, the command registers jobnet net1 for fixed execution.

• Registration for fixed execution at a specific time (20:00 on July 1, 2010)

```
ajsentry -d 2010/07/01 -t 20 /net1
```

• Registration for fixed execution in a specific time period (based on the execution schedule specified in the schedule information file)

```
ajsentry -p schedule-information-file-name /net1
```

# ajsexport

# Format

```
ajsexport
-o package-file-name
export-unit-name
```

# Description

This command can be used for the packaging feature provided by JP1/AJS3. You can only use these commands in a batch file or shell script for the packaging function.

To back up ordinary units, use the ajsprint or ajsbackup command.

This command exports all units under several units into a single package file (you can import the package file using the ajsimport command).

If the AJSPRINTNETSCHPRF environment setting parameter specifies the dependency on the schedule for the upperlevel jobnet, you can specify either of the following methods to output the unit definition information for the nested jobnet having a schedule rule:

- Enable the schedule rule and do not depend on the schedule for the upper-level jobnet.
- Delete the schedule rule and depend on the schedule for the upper-level jobnet.

For details about how to set the AJSPRINTNETSCHPRF environment setting parameter, see 2.2.2(79) AJSPRINTNETSCHPRF in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

# Arguments

### -o package-file-name

Specify the name of the file in which you want to package units.

You can specify a character string of 1 to 255 bytes.

## export-unit-name

Specify the units you want to package, in the following format:

Format

scheduler-service-name:/unit-full-name

Specification method

You can specify a character string of 1 to 930 bytes.

You can specify wildcard characters only for the full last element name of the unit name.

Notes on specification

You cannot export the root job group (/).

## Notes

- Either of the following users can export a unit:
  - A user granted the reference privilege for the unit to be exported
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

- If you export more than one unit definition having the same unit name, specify a separate package file for each unit definition.
- If the command is executed for a release target jobnet (root jobnet for which release entry is made), the jobnet definitions in *Being applied* status are exported. However, the exported unit definition information does not include release information.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# ajsgtroot

# Format

```
ajsgtroot
[-F service-name]
[-e]
[-b]
[-h]
[-T]
```

# Description

Outputs information for the operating environment of scheduler services to the standard output file.

## **Execution privileges**

None

## Arguments

## -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

By default, the system assumes the main service name.

-е

Outputs the name of the error information directory.

### -b

Outputs the name of the backup directory.

-h

Outputs the name of the history information file currently used.

If the JP1/AJS3 service is not running, however, the system outputs the name of log information file 1.

### -T

Outputs the name of the temporary file directory.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Example

The following command outputs the name of the error information directory.

<sup>2.</sup> Commands

# Output example

/var/opt/jp1ajs2/jobinf

# ajsimport

# Format

```
ajsimport
[-f]
[-S]
-i package-file-name
[import-unit-name]
```

# Description

This command can be used for the packaging feature provided by JP1/AJS3. You can only use these commands in a batch file or shell script for the packaging function.

To restore ordinary units, use the ajsdefine or ajsrestore command.

Imports a package file you created with the ajsexport command.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

## Arguments

### -f

Forcibly updates the unit if the import destination contains a unit having the same name as the one you import.

If you omit this option, importing a unit to a destination containing an element having the same name will result in an error. The system does not update information.

### -s

This option makes it possible to specify the particular jobnet name as the import unit name, even for suspended jobnets that have been registered for execution. Even for suspended jobnets, however, you cannot update definitions in the following situations:

- While the definition of the root jobnet is being updated
- While the definitions of job groups containing the definition of the root jobnet are being updated
- While jobnets are being executed

### -i package-file-name

Specify the name of the package file you want to import.

You can specify a character string of 1 to 255 bytes.

### import-unit-name

Specify the units you want to import, in the following format:

### Format

scheduler-service-name:/unit-full-name

Specification method

- You can specify an arbitrary name for the import unit. By default, the name specified in *Export unit name* in the ajsexport command is used for the import process.
- You can specify a character string of 1 to 930 bytes.

## Notes on specification

You cannot use wildcard characters here.

## Notes

- Either of the following users can import a unit:
  - A user granted the update privilege for the unit at the import destination
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

- When importing a jobnet registered for execution (other than remote jobnets), you must put the jobnet at the import destination into a suspended state before specifying the -S option in this command.
- This command terminates abnormally if the jobnet specified in the import unit name is undergoing a suspended-stage change.
- You cannot import a planning group into a jobnet.
- You cannot import any unit other than a jobnet or remote jobnet into a planning group.
- You cannot update information about a root jobnet registered for execution or information about any job group or planning group containing that root jobnet.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# ajsintrpt

# Format

```
ajsintrpt
  [-F service-name]
  [-B execution-registration-number]
  [-R]
  [-E]
  [-T]
  [-X {yes|no|auto}]
  jobnet-name-or-job-group-name...
```

# Description

Stops the execution of a jobnet after the currently running job is completed.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

# Arguments

## -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -в execution-registration-number

Specify the execution registration number of the jobnet for which you want to stop execution, in the *YYYYMMDDNNN* format. The meaning of *YYYYMMDDNNN* is as follows:

YYYY: Year of the scheduled date of execution

MM: Month of the scheduled date of execution

DD: Day of the scheduled date of execution

NNN: Execution registration sequence number for the scheduled date of execution

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

### -R

Stops the execution of all jobnets contained in the specified job group and jobnet.

If you specify this option with the -E and/or -T options, the system stops the execution of jobnets according to the specification of each option.

<sup>2.</sup> Commands

Stops the execution of registered jobnets.

-**T** 

Stops the execution of the root jobnet.

## -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

• yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

• If you want to automatically select a target unit

Specify a unit name without a root jobnet name in a planning group.

• If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

## jobnet-name-or-job-group-name

Specify the name of the jobnet for which you want to stop execution. You can also specify a jobnet name or job group name with the -R, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one jobnet name or job group name. If you want to specify a jobnet name, however, you can specify only a root jobnet name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a jobnet or job group name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

# Notes

- Either of the following users can interrupt execution of a jobnet:
  - A user granted the operation privilege when the units contained in the jobnet to be interrupted were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.

- This command terminates abnormally if you execute it when a scheduler service is not running.
- This command terminates abnormally if the target jobnet is being suspended.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.
- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- For an explanation of how to specify the name of a unit in a planning group, see *Additional informations* in *ajsplan* in *2. Commands*.
- If this command is executed, communication and database updating take place in JP1/AJS3. Therefore, if this command is executed many times in a short period, the overall JP1/AJS3 system will become heavily loaded and operations might be affected. For example, processing might be delayed. If you need to repeat execution of the command, pause for a few seconds between each execution. In particular, you must be careful when you execute the command for event jobs or for a jobnet that uses event jobs, because of the limit values for event jobs. For details about the limit values for event jobs, see *B.8 Limits for the event/action control* in the *Job Management Partner 1/ Automatic Job Management System 3 System Design (Configuration) Guide*.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Additional informations

- If you stop the generation in the Now monitoring status, that generation enters the Monitor terminated status. The generation in the Now running status or the generation in the Wait for start cond status waiting for the end of the generation in the Now running status is not stopped.
- You can use the ajsrerun command to re-execute a stopped jobnet.

# Example

The following command stops the execution of jobnet net1:

ajsintrpt net1

# ajskill

# Format

```
ajskill
    [-F service-name]
    [-B execution-registration-number]
    [-R]
    [-E]
    [{-T|-J}]
    [-X {yes|no|auto}]
    job-name-or-jobnet-name-or-job-group-name...
```

# Description

Kills the execution of a job or jobnet.

If you kill a jobnet, the system aborts all jobs contained in that jobnet (including any nested jobnets). No other jobs in the jobnet will be newly created.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

## Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -в execution-registration-number

Specify the execution registration number of the job or jobnet you want to kill, in the *YYYYMMDDNNN* format. The meaning of *YYYYMMDDNNN* is as follows:

YYYY: Year of the date of execution

MM: Month of the date of execution

DD: Day of the date of execution

NNN: Execution registration sequence number for the date of execution

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

### -R

Kills all jobs and jobnets contained in the specified unit.
If you specify this option with the -E, -T, and/or -J options, the system kills the jobs or jobnets according to the specification of each option.

### -E

Kills registered jobnets.

### -**T**

Kills the root jobnet.

### -J

Kills jobs.

### -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

• yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

• If you want to automatically select a target unit

Specify a unit name without a root jobnet name in a planning group.

• If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job or jobnet you want to kill. You can also specify a job, jobnet, or job group name with the -R, -E, -T, or -J option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group name. If you want to specify a jobnet name, however, you can specify only a root jobnet name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a job, jobnet or job group name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

## Notes

• Either of the following users can kill a job:

- A user granted the operation privilege when the job and all jobnets that contain the job were defined or when their attributes were changed
- A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the operation privilege.
- Either of the following users can kill a jobnet:
  - A user granted the operation privilege when the jobs contained in the jobnet and the jobnet were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the operation privilege.
- This command terminates abnormally if you execute it when a scheduler service is not running.
- This command terminates abnormally if you attempt to kill a job or jobnet which is not running.
- You can kill only processes started by JP1/AJS3. If a process has been started by JP1/AJS3, however, you may not able to kill it depending on the status of the process.
- You cannot use this command for units subordinate to remote jobnets.
- This command terminates abnormally if the target job or jobnet is being suspended.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.
- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- For an explanation of how to specify the name of a unit in a planning group, see *Additional informations* in *ajsplan* in *2. Commands*.
- You cannot forcibly terminate a jobnet connector.
- You can forcibly terminate units that are in any of the following statuses:
  - A job that is queued or running

If the job is a queueless job, you can also forcibly terminate the job in *Waiting for execution* status.

- A root jobnet that is in *Now running*, *Running* + *Warning*, *Running* + *Abend*, or *Now monitoring* status
- If this command is executed, communication and database updating take place in JP1/AJS3. Therefore, if this command is executed many times in a short period, the overall JP1/AJS3 system will become heavily loaded and might affect operations. For example, processing might be delayed. If you need to repeat execution of the command, pause for a few seconds between each execution. In particular, you must be careful when you execute the command for event jobs or for a jobnet that uses event jobs, because of the limit values for event jobs. For details about the limit values for event jobs, see *B.8 Limits for the event/action control* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Additional informations

- If you kill a particular job, other jobs and jobnets in the jobnet containing the killed job, say jobnet A, will be executed as scheduled. To prevent other jobs and jobnets from running, you should stop the execution of jobnet A beforehand. You can use the ajsintrpt command to stop the execution of a jobnet.
- Under UNIX, the system uses SIGKILL to kill a job or jobnet, so that you can also kill any application which captures a signal.
- If you kill the generation in the Now monitoring status, that generation enters the Monitor terminated status. The generation in the Now running status or the generation in the Wait for start cond status waiting for the end of the generation in the Now running status is not killed.

## Example

The following command kills job job1. Assume that this job is contained in the root jobnet, net1, and that the job group name is set in environment variable AJSPATH (if environment variable AJSPATH contains the job group name, you can omit the specification of the job group when executing the command).

ajskill net1/job1

# ajsleave

## Format

## Description

Cancels the execution registration of a jobnet.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -в execution-registration-number

Specify the execution registration number of the jobnet whose execution registration you want to cancel.

The following table lists the execution registration numbers you can specify:

#### Table 2-9: Execution registration numbers

Execution registration number	Description
all	All execution registration information for the jobnet
schedule	Schedule information
result	Result information
YYYYMMDDNNN <sup>#</sup>	Specified execution schedule or result
YYYYMMDD <sup>#</sup>	Specified execution schedule or result

#

The meaning of the characters is as follows: *YYYY*: Year of the scheduled date of execution

MM: Month of the scheduled date of execution

DD: Day of the scheduled date of execution

NNN: Execution registration sequence number for the scheduled date of execution

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

If you omit this option, the system assumes -B all.

You cannot specify this option with the -b, -e, -v, or -w option.

### -b [[year/]month/]day

Specify the start date of the period for which you want to cancel registration as a calendar date.

The start time is the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You cannot specify this option with the -B, -v, or -w option.

### -e [[year/]month/]day

Specify the end date of the period for which you want to cancel registration as a calendar date.

The end date must be the same as or follow the start date.

If you omit this option, the system assumes the date specified with the -b option.

The end time is the base time plus 23 hours: 59 minutes; 59 seconds.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You must specify this option with the -b option. You cannot specify this option with the -B, -v, or -w option.

#### -v [[year/]month/]day

Specify the start date of the period for which you want to cancel registration as an execution date.

The start time is the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You cannot specify this option with the -B, -b, or -e option.

### -w [[year/]month/]day

Specify the end date of the period for which you want to cancel registration as an execution date.

The end date must be the same as or follow the start date.

If you omit this option, the system assumes the date specified with the -v option.

The end time is the base time plus 23 hours: 59 minutes; 59 seconds.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year in which you executed the command

year/month: The year and month in which you executed the command

You must specify this option with the -v option. You cannot specify this option with the -B, -b, or -e option.

#### -R

Cancels execution registration for all units contained in the specified job group.

If you specify this option with the -E and/or -T options, the system cancels the execution registration for jobnets according to the specification of each option.

If you do not specify the -T option together with the -R option, the registration of all the units is canceled, and the registration cancel processing for the units except the root jobnet ends abnormally.

### -E

Cancels execution registration for all registered jobnets.

#### -T

Cancels execution registration for the root jobnet.

### jobnet-name-or-job-group-name

Specify the name of the jobnet whose execution registration you want to cancel. You can also specify a jobnet name or job group name with the -R, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one jobnet name or job group name. If you want to specify a jobnet name, however, you can specify only a root jobnet name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a jobnet or job group name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

### Notes

- Either of the following users can cancel the registration of a jobnet for execution:
  - A user granted the operation privilege when the jobs contained in the jobnet and the jobnet were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges
     Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its
     default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must
     have the operation privilege.
- This command terminates abnormally if you execute it when a scheduler service is not running.
- You can cancel execution registration for the root jobnet only.
- This command terminates abnormally if the jobnet that you attempt to cancel execution registration is running.
- This command terminates abnormally if the target jobnet is being suspended.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

<sup>2.</sup> Commands

## Additional information

The specification method for the -b, -e, -v, and -w options might differ depending on the value specified in the ROOTJOBNETSCHEDULERANGE environment setting variable. The following describes how to specify the -b, -e, -v, and -w options when the schedule definition is based on 48 hours and 24 hours:

• When the root jobnet schedule definition is based on 48 hours

When the root jobnet schedule definition is based on 48 hours, an execution date may differ form the corresponding calendar date.

When the base time is 7:00, for example, registering the execution start date/time for /jobnet001 as 2010/7/2 32:00 results in the calendar date being July 3 and the execution date being July 2. (The calendar date is the date on which the jobnet will be started, assuming a day is 24 hours, so that 32:00 on July 2, 2010 is assumed as 8:00 on July 3, 2010.) You can cancel registration by specifying either of the following commands because the -b and -e options specify a calendar date while the -v and -w options specify an execution date:

• For a calendar date

ajsleave -b 2010/7/3 -e 2010/7/3 /jobnet001

• For an execution date

```
ajsleave -v 2010/7/2 -w 2010/7/2 /jobnet001
```

You cannot, however, use the -b and -e options to cancel registration of schedules after 24:00 on December 31, 2036. In such a case, use the -v and -w options. If you specify a schedule after 24:00 on December 31, 2036 as a calendar date, it means a schedule after 0:00 on January 1, 2037, which falls outside the valid range for a schedule year (1994 to 2036).

• When the root jobnet schedule definition is based on 24 hours

When the root jobnet schedule definition is based on 24 hours, an execution date equals the corresponding calendar date.

When the base time is 7:00, for example, registering the execution start date/time for /jobnet001 as 2010/7/2 32:00 results in the calendar date being July 3 and the execution date being July 3. You can cancel registration by specifying either of the following commands because the -b and -e options specify a calendar date while the -v and -w options specify an execution date:

• For a calendar date

```
ajsleave -b 2010/7/3 -e 2010/7/3 /jobnet001
```

• For an execution date

```
ajsleave -v 2010/7/3 -w 2010/7/3 /jobnet001
```

# Example

The following command cancels the execution registration of jobnet net1:

ajsleave net1

# ajslogprint

## Format

```
ajslogprint

[-b output-start-day]

[-e output-end-day]

[-k log-type]

[-F service-name]

[-u unit-name]

[-m message-ID]

scheduler-log-file-name
```

## Description

The ajslogprint command extracts log records that match the specified conditions from the scheduler log, and outputs the extracted log records.

### **Execution privileges**

None

## Arguments

#### -ь output-start-day

Specify the start day of the range (term) for which you want to output log records.

You can specify the day in [YYYY/] MM/DD format.

• *YYYY* 

Specify a numeric value from 1994 to 2036 as the year. If you omit this element, the year that the command is executed is assumed.

• *MM* 

Specify a numeric value from 1 to 12 (or 01 to 12) as the month.

• *DD* 

Specify a numeric value from 1 to 31 (or 01 to 31) as the day.

If this option is specified, the command does not extract the log records output when no is specified for the AJSLOGOUTPUTYEAR or HOSTLOGOUTPUTYEAR environment setting parameter (log records that do not include year information).

If this option is omitted, the start of the output range is set to the beginning of the log.

### -e output-end-day

Specify the end day of the range (term) for which you want to output log records.

You can specify the day in [YYYY/] MM/DD format.

• *YYYY* 

Specify a numeric value from 1994 to 2036 as the year. If you omit this element, the year that the command is executed is assumed.

• *MM* 

Specify a numeric value from 1 to 12 (or 01 to 12) as the month.

• *DD* 

Specify a numeric value from 1 to 31 (or 01 to 31) as the day.

If this option is specified, the command does not extract the log records output when no is specified for the AJSLOGOUTPUTYEAR or HOSTLOGOUTPUTYEAR environment setting parameter (log records that do not include year information).

If this option is omitted, the end of the output range is set to the end of the log.

### -k log-type

Specify the log type.

For the log types that can be specified, see *C.1 Log entries output by the scheduler services* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

If this option is omitted, all types of log records are subject to output.

#### -F service-name

Specify the name of the scheduler service for which you want to output log records.

You can specify a character string of 1 to 30 bytes.

If this option is omitted, log records for all scheduler services are subject to output.

#### -u *unit-name*

Specify the full path name of the unit for which you want to output log records.

You can specify a character string of 1 to 930 bytes.

Note that the log records for only the specified unit are subject to extraction. The log records for subordinate units of the unit are not subject to extraction. Also note that if this option is specified, the command does not search A001 to A003 (service startup logs).

If this option is omitted, log records for all units are subject to output.

#### -m message-ID

Specify a message ID if you want to output log records that contain the message ID.

You can specify a character string of 1 or 10 bytes.

To output only the log records that report normal termination of an operation from log types C001 to C512 (containing messages whose ID begins with C), specify 0.

To output log records that contain a specific message, specify the ID of the message in KAVSxxxx-Z format.

If this option is omitted, log records containing any message are subject to output.

### scheduler-log-file-name

Specify a scheduler log file name.

You can specify a character string of 1 to 255 bytes.

You can specify only one scheduler log file name.

### Notes

- If the -k, -F, -u, and -m options are specified, the conditions specified for these options are combined as an AND search.
- You cannot use a regular expression to specify service names, unit names, message IDs, or scheduler log file names.
- If you want to extract log records across two scheduler log files, merge these files into one file, and then execute the command.
- If a log record in an incorrect format is found, output the KAVS0476-E message, and resume the processing from the next line.

## Arguments that can be specified when executing the command from JP1/AJS3 - View

You can specify the following arguments when executing the ajslogprint command from JP1/AJS3 - View:

No.	Arguments	Required?
1	-b <i>output-start-day</i>	
2	-e output-end-day	
3	-k log-type	
4	-F service-name	Y
5	-u unit-name	
6	-m message-ID	
7	scheduler-log-file-name	Y

Legend:

Y: Required

--: Optional

You cannot specify any other options when executing the ajslogprint command from JP1/AJS3 - View.

For details about how to execute JP1/AJS3 commands from JP1/AJS3 - View, see 10.4 Executing JP1/AJS3 commands from JP1/AJS3 - View in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

## **Return values**

0	Normal end.
4	<ul> <li>Any of the following results:</li> <li>Arguments are specified incorrectly.</li> <li>Log records that match the conditions do not exist.</li> <li>The format of the scheduler log file is incorrect.</li> <li>The scheduler log file name is not specified.</li> <li>The scheduler log file name is too long.</li> </ul>
12	Insufficient memory
24	The specified scheduler log file cannot be accessed.
36	An error occurred while the scheduler log file is being loaded.

120	A critical error occurred (system call error).
-----	--

### Example 1

In this example, the command extracts and outputs log records related to all operations for /net1 in the period from October 1, 2010 to March 31, 2011 from the scheduler log of the scheduler service AJSROOT1.

In Windows:

```
ajslogprint -b 2010/10/01 -e 2011/03/31 -u /net1 "C:\Program Files\HITACHI
\JP1AJS2\log\schedule\AJSROOT1\ajs-log1.log"
```

In UNIX:

```
ajslogprint -b 2010/10/01 -e 2011/03/31 -u /net1 /var/opt/jplajs2/log/
schedule/AJSROOT1/ajs-log1.log
```

### Example 2

In this example, from the scheduler log of the scheduler service AJSROOT1, the command extracts and outputs log records related to unit creation (C304) in the period from October 1, 2010 to March 31, 2011.

In Windows:

```
ajslogprint -b 2010/10/01 -e 2011/03/31 -k C304 "C:\Program Files\HITACHI \JP1AJS2\log\schedule\AJSROOT1\ajs-log1.log"
```

In UNIX:

```
ajslogprint -b 2010/10/01 -e 2011/03/31 -k C304 /var/opt/jp1ajs2/log/
schedule/AJSROOT1/ajs-log1.log
```

## ajsname

## Format

```
ajsname
    [-F service-name]
    [-V]
    [-R]
    [{-L|-E}]
    [-T]
    [{-G|-N|-J}]
    [-I]
    job-name-or-jobnet-name-or-job-group-name...
```

## Description

Outputs a unit name to the standard output file.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -v

Does not output unit names in remote jobnets.

#### -R

Outputs all the unit names in a specified unit.

If you specify this option with the -L, -E, -T, -G, -N, and/or -J options, the system outputs the unit names according to the specification of each option.

#### -L

Outputs the names of the jobnets not registered for execution.

You cannot specify this option with the -E or -G option.

#### -E

Outputs the names of the jobnets registered for execution.

You cannot specify this option with the -L or -G option.

#### -T

Outputs the root jobnet name.

You cannot specify this option with the -G or -J option.

#### -G

Outputs a job group name.

You cannot specify this option with the -L, -E, -T, -N, or -J option.

#### -N

Outputs a jobnet name.

You cannot specify this option with the -G or -J option.

#### -J

Outputs a job name.

You cannot specify this option with the -T, -G, or -N option.

#### -I

Specify this option during troubleshooting to output the full unit name by specifying the unit ID that is output in an error message. Do not use the option other than for troubleshooting.

You cannot specify this option together with the -V, -R, -E, -L, -T, -G, -N, or -J option.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job, jobnet or job group that you want to output to the standard output file. You can also specify a job name, jobnet name, or job group name with the -R, -L, -E, -T, -G, -N, or -J option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job name, jobnet name or job group name.

You cannot specify a logical host name or execution ID as a job, jobnet or job group name.

When specifying the -I option, specify the unit ID in decimal notation (do not specify the unit name).

### Notes

- Either of the following users can output a unit name:
  - A user granted the reference privilege when the units contained in the unit were defined or when their attributes were defined
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

• If the command is executed for a release target jobnet (root jobnet for which release entry is made), the unit names in the jobnet definitions in *Being applied* status are output.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Example1

The following command outputs all the job names in the jobnet /GRP/net1 to the standard output file.

```
ajsname -RJ /GRP/net1
```

#### Output example 1

```
/GRP/net1/job1
/GRP/net1/job2
/GRP/net1/n1/job
/GRP/net1/n2/job
```

## Example2

The following command outputs the full name of a unit whose unit ID is 10:

```
ajsname -I 10
```

### Output example 2

/group

# ajsplan

## Format

```
ajsplan
     [-F service-name]
     [[-d[[year/]month/]day][-t hours[:minutes]][-p][-i]
          |[-b day][-c minutes][-p][-i]
          |-q[-p|-w][-i]|-p|-u]
     [-h|-r]
     [-n {priority-value|none}]
     [-s {none|hours:minutes|M-minutes|U-minutes|C-minutes}]
     [-e {none|hours:minutes|M-minutes|U-minutes|C-minutes}]
     [-f {none|minutes}]
     [-B execution-registration-number]
     [-j|-m {hours:minutes|M-minutes|unlimited}
          -k {number-of-times|unlimited}]
     [-1 \{y|n\}]
     [-xw {enable|disable} -xn unit-whose-end-is-being-waited-for]
     [-R]
     [-E]
     [-T]
     [-N|-J]
     [-X {yes|no|auto}]
     job-name-or-jobnet-name-or-job-group-name...
```

# Description

- 1. Temporarily changes the next execution schedule of a jobnet registered for execution and it follows the schedule defined for the jobnet.
- 2. Temporarily changes the execution order control method for the jobnet to which the jobnet connector is connected if the root jobnet execution order is controlled. (Note that this change applies to only root jobnets and planning groups.)
- 3. Temporarily holds, releases, cancels, or resumes a job and it follows by execution according to the attributes defined for the job.
- 4. Temporarily enables or disables a wait condition assigned to a job or jobnet. (After executing with the modified wait condition setting, the job runs according to the definition.)

This feature is only available when the database uses a standard configuration.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -d [[year/]month/]day

Specify the next execution start date to be changed temporarily.

You cannot specify this option for a job. If you set this option with the -p option in a root jobnet and push ahead the next schedule, the former schedule for the next execution is canceled. If you push ahead the next schedule without specifying the -p option, the schedule is added.

For a nested jobnet, the command only modifies the scheduled date/time regardless of whether the -p option is specified.

• year

You can specify a value between 1994 and 2036.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the year or the year/month in this option, the following values are assumed.

year: Year when the command was executed

year/month: Year and month when the command was executed

Assuming that the -t option has been specified instead of this option, the system assumes the *year/month/day* value if a jobnet with the generation as the target of temporary change is scheduled to be executed next time. Otherwise, an error takes place.

#### -t hours[:minutes]

Specify the absolute time when to start the next execution.

You cannot specify this option for a job. If you set this option with the -p option in a root jobnet and push ahead the next schedule, the former schedule for the next execution is canceled. If you push ahead the next schedule without specifying the -p option, the schedule is added.

For a nested jobnet, the command only modifies the scheduled date/time regardless of whether the -p option is specified.

If you specify this option with the -i option, the next execution schedule time for any jobnets in the specified jobnet are also changed relatively.

• hours

You can specify a value between 0 (or 00) and 47.

• minutes

You can specify a value between 0 (or 00) and 59. If you omit this option, the system assumes 0.

If you specify the -d option instead of this option, and if the jobnet of the generation for which a temporary change is being made has a schedule for execution, the scheduled time of execution (*hours : minutes*) is assumed.

If the jobnet has no schedule for execution, an error occurs.

<sup>2.</sup> Commands

You can also temporarily change the jobnet execution start time from JP1/AJS3 - View. For details about the operation procedure in JP1/AJS3 - View, see 9.3.1 Changing the execution start time of a jobnet in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

#### -p

Cancels the next execution schedule for a jobnet or job.

If you have already temporarily changed the next execution schedule, reset the current status using the -u option, then execute this command.

If you specify this option with the -d, -t, -b, -c, or -q option in a root jobnet to push ahead the next schedule, the next execution schedule is canceled.

For a nested jobnet, this option does not take effect if specified with the -d, -t, -b, -c, or -q option.

#### -ь **day**

Specify the execution start date you want to change temporarily. To specify it, use the number of days relative to the scheduled execution day in the generation for which a temporary change should be made.

If there is no schedule for execution, an error occurs.

You can specify a value between -99 and 99 (days) except 0.

If you specify the -c option instead of this option, 0 days are assumed as the relative number of days.

You cannot specify this option for a job. If you set this option with the -p option in a root jobnet and push ahead the next schedule, the former schedule for the next execution is canceled. If you push ahead the next schedule without specifying the -p option, the schedule is added.

For a nested jobnet, the command only modifies the scheduled date/time regardless of whether the -p option is specified.

If you specify this option with the -i option, the next execution schedule time for any jobnets in the specified jobnet are also changed relatively.

#### -c *minutes*

Specify the execution start time you want to change temporarily. To specify it, use the number of minutes relative to the scheduled execution time in the generation for which a temporary change should be made.

If there is no schedule for execution, an error occurs.

You can specify a value between -2,879 and 2,879 (minutes) except 0.

You cannot specify this option for a job. If you set this option with the -p option in a root jobnet and push ahead the next schedule, the former schedule for the next execution is canceled. If you push ahead the next schedule without specifying the -p option, the schedule is added.

For a nested jobnet, the command only modifies the scheduled date/time regardless of whether the -p option is specified.

If you specify this option with the -i option, the next execution schedule time for any jobnets in the specified jobnet are also changed relatively.

#### -q

The jobnet generation scheduled to be executed the next time is immediately executed as soon as the command is entered regardless of the schedule definition for the root jobnet. If you specify this option for a nested jobnet, it modifies the base time for the execution date for a root jobnet.

If you specify this option with the -p option in a root jobnet, the former schedule for the next execution is canceled. Pushing ahead the next schedule without specifying the -p option results in the addition of a schedule. Executing the command with the -p option specified or postponing the next schedule without specifying the -p option results in the moving schedule to a later time.

For a nested jobnet, the command only modifies the scheduled date/time regardless of whether the -p option is specified.

If you specify this option with the -i option, the next execution schedule time for any jobnets in the specified jobnet are also changed relatively.

You can also use JP1/AJS3 - View to immediately execute a jobnet that has already been scheduled. For details about operation in JP1/AJS3 - View, see 9.4 Immediately executing the execution schedule of a jobnet in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

#### -w

Ends the command after the end of jobnet execution.

Only specify this option to register the root jobnet for immediate execution. You cannot specify it when the root jobnet is to be held or undergo a planned temporary change.

Even if you specify this option, the command will terminate without waiting for the end of the jobnet in the following cases:

- The scheduler service stops during jobnet execution.
- The generation with a termination wait is left unexecuted when using the carryover method.
- The generation with a termination wait is deleted. (For example, the generation that is unregistered for execution or registered for immediate execution or fixed execution discontinues its execution.)
- The generation with a termination wait specified is left unplanned. (For example, the subsequent schedule is left unplanned as a result of a schedule or calendar change in a jobnet registered for planned execution)

You can specify this option only in the root jobnet. Specify together with the -q option. You cannot specify this option with the -m or -k option.

#### -i

Relatively changes the starting time for executing a specified job.

You can specify these options only for a jobnet. Specify this option with the -d, -t, -b, -c, or -q option.

#### -u

Resets the schedule changed temporarily by the -d, -t, -b, -c, or -p option to the original status.

If you temporarily change the schedule multiple times, the information prior to the first change is restored.

### -h

Temporarily holds the next jobnet or job execution.

Temporarily releases a held jobnet or job.

#### -n {*priority-value*|none}

Temporarily changes the priority of jobnet execution.

You cannot specify this option for a job.

- *priority-value*You can specify a value between 1 and 5.
  The lowest priority is 1 and the highest is 5.
- none

Sets the priority of execution defined for the jobnet.

### -s {none | hours : minutes | M-minutes | U-minutes | C-minutes }

Specify the next delayed start time.

You can specify this option only for a jobnet.

• none

Does not monitor the delayed start.

• hour:minutes

Specify absolute hours and minutes.

You can specify a value between 0 (or 00) and 47 for the hours.

You can specify a value between 0 (or 00) and 59 for the minutes.

• *M-minutes* 

Specify the next delayed start time by the relative minutes from the time when the root jobnet starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

• U-minutes

Specify the next delayed start time by the relative minutes from the time when the upper-level jobnet starts to be executed.

You can specify a value between 1 (or 01) and 2,879 (minutes).

• C-minutes

Specify the next delayed start time by the relative minutes from the time when the jobnet starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

### -e {none | hours : minutes | M-minutes | U-minutes | C-minutes }

Specify the next delayed end time.

You cannot specify this option for a job.

• none

Does not monitor the delayed end.

- hour:minutes
  - Specify an absolute time.

You can specify a value between 0 (or 00) and 47 for the hours.

You can specify a value between 0 (or 00) and 59 for the minutes.

• M-minutes

Specify the next delayed end time by the relative minutes from the time when the root job net starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

• U-minutes

Specify the next delayed end time by the relative minutes from the time when the upper jobnet starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

• C-minutes

Specify the next delayed end time by the relative minutes from the time when the jobnet starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

### -f {none|*minutes*}

Specify the end delay monitoring time using the time required to execute the next jobnet or remote jobnet.

You cannot specify this option for a job.

• none

Does not monitor the delayed end based on the time required for execution.

• minutes

Monitors the delayed end based on the time required for execution. You can specify a value between 1 (or 01) and 2,879 minutes.

### -B execution-registration-number

Specify the execution registration number of a jobnet whose next execution schedule is to be changed temporarily, in the *YYYYMMDDNNN* format. The meaning of *YYYYMMDDNNN* is as follows:

YYYY: Year of the scheduled date of execution

MM: Month of the scheduled date of execution

DD: Day of the scheduled date of execution

NNN: Execution registration sequence number for the scheduled date of execution

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

-j

Invalidates start conditions set for a jobnet.

You can specify this option only in the root jobnet. You cannot specify this option with the -m or -k option.

### -m { hours: minutes | M-minutes | unlimited }

Specify the wait time until start conditions are met.

You can specify this option only for the root jobnet. Specify this option with the -k option. You cannot specify it with the -w or -j option.

• hour:minutes

Specify the wait time by the absolute time.

You can specify a value between 0 (or 00) and 47 for the hours.

You can specify a value between 0 (or 00) and 59 for the minutes.

• *M*-minutes

Specify the wait time by relative minutes from the time when the jobnet starts to be executed. You can specify a value between 1 (or 01) and 2,879 (minutes).

• unlimited

Waits for an unlimited period of time until the conditions are met.

#### -k {*number-of-times*|unlimited}

Specify the number of times the system waits for start conditions to be met.

You can specify this option only in the root jobnet. Specify this option with the -m option. You cannot specify it with the -w or -j option.

• number-of-times

You can specify a value between 1 and 999 (times).

• unlimited

Sets an unlimited number of times for waiting until the conditions are met.

#### $-1 \{y|n\}$

Specify this option to temporarily change the execution order control method only if execution order control is enabled in the unit definition for a root jobnet or planning group.

- y: The execution order is synchronous with the jobnet connector.
- n: The execution order is asynchronous with the jobnet connector.

You can specify this option for only a jobnet or planning group to which a jobnet connector is connected.

#### -xw {enable|disable}

Specify this option to temporarily enable or disable a wait condition assigned to a job or jobnet.

• enable

Enables the wait condition.

• disable

Disables the wait condition.

You can specify this option only for units with wait conditions.

Use this option together with the -xn option. The -xn option specifies the unit whose end is being waited for to which the change applies.

This feature is only available when the database uses a standard configuration.

You cannot specify multiple -xw options. Execute the command multiple times if you want to operate on multiple units with wait conditions.

You cannot specify this option with options other than -R, -E, -T, -N, -J, -B, -X, or -F.

#### -xn unit-whose-end-is-being-waited-for

Specify the name of the unit whose end is being waited for by the job or jobnet whose wait condition you want to enable or disable by the -xw option. Note that if you specify only the unit name, the AJSPATH environment variable does not supply the rest of the path.

Specify this option together with the -xw option.

This feature is only available when the database uses a standard configuration.

You can specify a character string of 1 to 930 bytes as the name of the unit whose end is being waited for. You can also use regular expressions.

You cannot specify multiple -xn options. To modify a wait condition targeting multiple units whose ends are being waited for, either execute the command multiple times or use regular expressions to specify the unit names. If you use a regular expression, the command enables or disables the wait conditions for all units whose ends are being waited for that match the regular expression.

You cannot specify this option with options other than -R, -E, -T, -N, -J, -B, -X, or -F.

An error occurs when:

- You specify a nonexistent unit whose end is being waited for
- You specify a unit that is not assigned a wait condition
- The unit whose end is being waited for is deleted while the command is executing
- No units whose ends are being waited for match the regular expression

#### -R

Temporarily changes all the jobnets and jobs contained in the specified unit.

If you specify this option with the -E, -T, -N, and/or -J options, the system temporarily changes the jobnets or jobs according to the specification of each option.

#### -E

Temporarily changes the schedule of a jobnet registered for execution.

#### -T

Temporarily changes the schedule of the root jobnet.

#### -N

Temporarily changes the schedules of all jobnets.

You cannot specify this option with the -J option.

#### -J

Temporarily changes the job status.

You cannot specify this option with the -N option.

#### -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

#### • yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

- If you want to automatically select a target unit Specify a unit name without a root jobnet name in a planning group.
- If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

#### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job or jobnet whose schedule or status you want to temporarily change. You can also specify a job, jobnet, or job group name with the -R, -N, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group names. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a job, jobnet or job group name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

### Notes

- Either of the following users can change the jobnet schedule temporarily:
  - A user granted the operation privilege when the units contained in the jobnet whose schedule is to be changed were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges
     Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its
     default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must
     have the operation privilege.
- Either of the following users can change the job status temporarily:
  - A user granted the operation privilege for the jobnets that contain the job whose status is to be changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.

- This command terminates abnormally if you execute it when a scheduler service is not running.
- If the jobnet or job to be changed temporarily is being executed, this command terminates abnormally. If you temporarily set the hold attribute for the jobnet or job that has ended execution or cancel the hold attribute for such a jobnet or job, the change takes place when the unit is re-executed. For details, see 4.5.6 Temporarily changing the hold attribute of a job or jobnet in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.
- You cannot use this command for units subordinate to remote jobnets.
- Temporary changes to the priority of execution for remote jobnets do not take effect on the agent at the destination.
- When making temporary changes to the schedules for remote jobnets, you should pay attention to the post-change execution date and the starting date for executing a jobnet.

For the execution date, see 3.3.1 *Time formats and schedule rules for root jobnets* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview* or 3.3.2 *Defining a schedule* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.

- If the 48-hour schedule is used and you want to change the scheduled execution time of a root jobnet to a time after 24:00, specify the new execution time as an absolute time in the -t option. The new execution time, which is after 24:00, is treated as a continuation of the previous day. However, if you specify the new execution time as a relative time, it is treated as a time on the next day.
- If the 48-hour schedule is used for the schedule definition of a root jobnet, be careful with the base time. If the base time is not 0:00, operation might become complicated because the specified time might be different from the time in JP1/AJS3, or units that are specified to be executed in succession might not be executed in the intended order. For details, see 3.3.2 Defining a schedule in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.
- This command terminates abnormally if the target jobnet or job is being suspended.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.
- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- This command will terminate normally even if you use the -r option to release a unit that is not held.
- For a release target jobnet (root jobnet for which release entry is made), you cannot perform the following operations:
  - Changing the execution start date in a jobnet definition in *Being applied* status to a date after the release date, or canceling the date changing to set the execution start date to a date after the release date
  - Changing the execution start date in a jobnet definition in *Release wait* status to a date before the release date, or canceling the date changing to set the execution start date to a date before the release date

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Additional informations

- You can also temporarily change the schedule of a jobnet registered for immediate execution or the state of a job.
- The following example definition describes how to specify the name of a unit in a planning group:

#### Example planning group definition

Assume you modify a unit named /net1/job1 to create root jobnets named net1-1 and net1-2 in a planning group named /net1. Under net1-1 and net1-2, you create a job named job1 and a nested jobnet named net1-2.



When yes is specified for the -x option

When specifying a unit name in the command, omit a root jobnet name in a planning group.

This causes the command to automatically select the current unit for operation from the root jobnets in the planning group.

Example: Specifying /net1 for a unit name

ajsplan -h -X yes /net1

Explanation:

In this case, the command automatically selects the current unit for operation from /net1/net1-1 and / net1/net1-2.

For units under root jobnets in the planning group, the command selects the current unit for operation from the units having the same path name under a root jobnet.

Example: Specifying /net1/job1 for a unit name

ajsplan -h -X yes /net1/job1

Explanation:

In this case, the command automatically selects the current unit for operation from /net1/net1-1/job1 and /net1/net1-2/job1.

#### When no is specified for the -X option

Specify a unit name in the planning group without omitting a root jobnet name.

Example: Specifying /net1/net1-1/job1 for a unit name

ajsplan -h -X no /net1/net1-1/job1

Explanation:

In this case, the command operates for the specified unit /net1/net1-1/job1.

When auto is specified for the -X option

Whether a target unit will automatically be selected depends on how the unit name is specified.

If you want to automatically select a target unit

The specification format is the same as that used when yes is specified for the -x option.

If the command cannot find a unit having the path name with a root jobnet name omitted in the planning group, however, it assumes that you specified the unit name without omitting a root jobnet name and operates for the specified unit.

Example 1: Specifying /net1 for a unit name

ajsplan -h -X auto /net1

Explanation:

In this case, the command assumes that a unit name is omitted, and automatically selects the current unit for operation from /net1/net1-1 and /net1/net1-2.

Example 2: Specifying /net1/net1-2 for a unit name

```
ajsplan -h -X auto /net1/net1-2
```

Explanation:

In this case, the command assumes that a unit name is omitted, and automatically selects the current unit for operation from /net1/net1-2/net1-2 and /net1/net1-2/net1-2.

If you want to execute the command for /net1/net1-2, specify either of the following:

- Specify no for the -X option.
- Specify NO for the AJSAUTOJUDGE environment variable without specifying the -X option.

If you do not want to automatically select a target unit

The specification format is the same as that used when  $n \circ is$  specified for the -X option. However, if there is a unit having the same name as the path name specified without the root jobnet name in the planning group, the root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

Example: Specifying /net1/net1-1 for a unit name

ajsplan -h -X auto /net1/net1-1

Explanation:

In this case, the command attempts to operate assuming that a unit name is omitted. There is, however, no unit having the unit name without a root jobnet in the planning group, so that the command operates for /net1/ net1-1.

#### When -x option is not specified

According to the value specified in the AJSAUTOJUDGE environment variable, the command determines the target unit in the planning group.

• AJSAUTOJUDGE is set to YES.

The specification format is the same as that used when yes is specified for the -X option.

• AJSAUTOJUDGE is set to NO.

The specification format is the same as that used when no is specified for the -x option.

• AJSAUTOJUDGE is set to AUTO or not set

The specification format is the same as that used when auto is specified for the -X option.

• For details about a planning group, see 10.1 Using a planning group to change the plans for root jobnets in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

## Example 1

The following command temporarily changes the start time of the jobnet net1 to 17:00.

ajsplan -t 17:00 net1

## Example 2

The following command temporarily stops the unit with wait conditions, *job1* (/RootJobNet1/job1), from waiting for the unit whose end is being waited for, *job2* (/RootJobNet2/job2).

ajsplan -xw disable -xn /RootJobNet2/job2 /RootJobNet1/job1

To disable all wait conditions for *job1* (/RootJobNet1/job1), execute the command as follows:

```
ajsplan -xw disable -xn * /RootJobNet1/job1
```

# ajsplanout

## Format

```
ajsplanout
  [-F service-name]
  [-b output-start-date]
  [-d|-c]
  [-R]
  [-E]
  [-T]
  job-name-or-jobnet-name
```

## Description

Outputs to the standard output about temporary changes information made to the execution schedule of a root jobnet, or a jobnet or job defined under a root jobnet.

## **Execution privileges**

You must have any of the following JP1 privileges for the root jobnet:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

### Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -ь output-start-date

Specify the start date of the range for which you want to output temporary change information, in the format *yyyy/mm/dd*.

You can specify a value in the range from 1994/01/01 to 2036/12/31.

If you omit this option, the command outputs temporary change information for the current date onwards.

-d

Outputs temporary change information.

You cannot specify this option together with the -c option.

If you omit both the -d and -c options, the system assumes the -d option.

<sup>2.</sup> Commands

-c

Outputs temporary change information to the command line.

You cannot specify this option together with the -d option.

If you omit both the -d and -c options, the system assumes the -d option.

#### -R

Outputs temporary change information for all specified units including subordinate units.

If you specify this option together with the -E and -T options, the command outputs temporary change information according to the specification of each option.

If you do not specify the -T option together with the -R option, the command applies to all unit types and the output processing of temporary change information ends abnormally for units other than the root jobnet.

#### -E

Outputs temporary change information for units that have been registered for execution.

### -**T**

Outputs temporary change information for the root jobnet.

#### job-name-or-jobnet-name

Specify the name of the jobnet for which to output temporary change information, or the name of the job group if specified together with the -R, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one jobnet name or job group name. However, if you want to specify a jobnet name, you can specify only a root jobnet name. You cannot specify a manager job group name or manager jobnet name.

### Notes

- Either of the following users can execute this command:
  - A user granted the reference privilege for the root jobnet to be specified
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

• If you re-executed a temporary change in the Temporary Changes dialog box of JP1/AJS3 - View, the command does not output the first attempted execution of the temporary change that was later re-executed. It only outputs the temporary change information for the re-execution of the change.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

## Example 1

The following command outputs the temporary change information for generations of root jobnet (net1) and its subordinate units scheduled for execution from today to the standard output file.

```
ajsplanout -d /net1
```

# Example 2

The following command outputs the temporary change information for generations of root jobnet (net1) and its subordinate units scheduled for execution on 2011/08/01 or later to the standard output file.

```
ajsplanout -d -b 2011/08/01 /net1
```

## Example 3

The following command outputs the temporary change information for generations of root jobnet (net1) and its subordinate units scheduled for execution on 2011/08/01 or later to standard output as an executable command line.

```
ajsplanout -c -b 2011/08/01 /net1
```

## Output example 1

The following shows an output example when the -d option is specified.

```
(1) Root jobnet = /net
(2) Output time = 2011/10/01 21:45:40
                                                             (7)
(3)
               (4)
                             (5)
                                     (6)
Re-executed
               Start date
                                                            Operation user
                              Seq
                                     Operation time
(8)
Command
                2011/10/15
                              001
                                      2011/10/01 08:20:23
                                                            jp1admin
ajsplan -F AJSROOT1 -d 2011/10/15 -t 15:00 -B 20111015001 -X no /net1
               2011/10/15
                             002
                                     2011/10/01 10:50:10
                                                            jp1admin
Operated
ajsplan -F AJSROOT1 -p -B 20111015002 -X no /net1/netA
                2011/10/14
                             001
                                      2011/10/01 18:00:01
                                                            jp1admin
TZ=JST-9 ajsentry -F AJSROOT1 -d 2011/10/14 -t 10:00 /net1
Operated
                2011/10/11
                             001
                                     2011/10/01 20:45:40
                                                            jp1admin
ajsplan -F AJSROOT1 -p -B 20111011001 -X no /net1
```

### Explanation of the output items

• When temporary change information exists for the target root jobnet Outputs lines (1) to (8).

If more than one piece of temporary change information is associated with the root jobnet, the command repeats lines (3) to (8) without the title portion.

• When no temporary change information exists for the target root jobnet Outputs lines (1) and (2) and the message KAVS4670-I before terminating abnormally.

#### (1) Root jobnet

The full path name of the root jobnet whose temporary change information is being output.

#### (2) Output time

The date and time when the ajsplanout command output the temporary change information (according to the locale setting of the scheduler service), in the format *YYYY/MM/DD HH*:*MM*:*SS*.

(3) Re-executed

Outputs Operated if the temporary change has been re-executed.

This field displays a hyphen (-) if the temporary change has not been re-executed.

(4) Start date

Outputs the scheduled start date component (*YYYYMMDD*) of the execution registration number (*YYYYMMDDNNN*) in the format *YYYY/MM/DD*.

Single-digit *MM* or *DD* values are prefixed with 0 (for example: 2012/01/01). \*\*\*\*/\*\*/\*\* appears in this field if you used the -d or -t option of the ajsentry command to add an execution date, or added a fixed execution schedule in the Daily Schedule or Monthly Schedule window.

(5) Seq

Outputs the sequence number component (NNN) of the execution registration number (YYYYMMDDNNN)

\*\*\* appears in this field if you used the -d or -t option of the ajsentry command to add an execution date, or added a fixed execution schedule in the Daily Schedule or Monthly Schedule window.

(6) Operation time

Outputs the date and time when the temporary change was executed in the format YYYY/MM/DD HH:MM:SS.

(7) Operation user

Outputs the name of the user who executed the temporary change.

(8) Command

Outputs executed temporary changes as an executable command line.

Lines for temporary changes that were scheduled for execution with a TZ environment variable set are prefixed with the value of the TZ environment variable.

Depending on the target environment, you might not be able to execute the command line as output. In this case, modify the command line to suit the target environment.

## Output example 2

The following shows an output example when the -c option is specified.

```
Output time = 2011/10/01 21:45:40
ajsplan -F AJSROOT1 -d 2011/10/15 -t 15:00 -B 20111015001 –X no /net1
ajsplan -F AJSROOT1 -p -B 20111015002 –X no /net1/netA
TZ=JST-9 ajsentry -F AJSROOT1 -d 2011/10/14 -t 10:00 /net1
ajsplan -F AJSROOT1 -p -B 20111011001 –X no /net1
```

#### Explanation of the output items

The command outputs the date and time the temporary change information were output, and details of each temporary change in the form of an executable command line. For a description of the contents of the Output time and Command fields, see items (2) and (8) in output example 1.

This command does not output the root jobnet name or the title row. If no temporary change information exists for the root jobnet, the command outputs the Output time field and the message KAVS4670-I before terminating abnormally.

# ajsprint

# Format

```
ajsprint
    [-F service-name]
    {<u>-a</u>|-c year[/month[/day]]|-d|-f format-indicator|-v}
    [-t format-indicator]
    [-s {yes|no}]
    [-J|-N|-G]
    [-R]
    [-L|-E]
    [-T]
    job-name-or-jobnet-name-or-job-group-name...
```

## Description

Outputs definitions of a unit to the standard output file.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

## Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -a

Specify this option to output the unit definition information of the specified unit and its subordinate units in the format available for the ajsdefine command.

With this option specified, you cannot specify the root job group "/" as its argument.

You cannot specify this option with the -t option.

You can use the AJSPRINTNETSCHPRF environment setting parameter to specify either of the following output formats when outputting unit definition information for a nested jobnet having a schedule rule with a specification depending on the schedule for the upper-level jobnet:

- Enable the schedule rule and do not depend on the schedule for the upper-level jobnet.
- Delete the schedule rule and depend on the schedule for the upper-level jobnet.

For details about how to set the AJSPRINTNETSCHPRF environment setting parameter, see 2.2.2(79) AJSPRINTNETSCHPRF in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

### -c year[/month[/day]]

Specify the date when you want to output calendar information (open or closed day).

You can specify this option with the -t option, but cannot specify it with the -J, -N, -L, -E, or -T option.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify value between 1 and 12 for the month.

• day

You can specify a value between 1 and 31 for the day.

You can select one of the following output formats. (Also see *Example 1* later.)

• year/month/day

Outputs calendar information on that day.

• year/month

Outputs calendar information on one month after the base date<sup>#</sup>.

• year

Outputs calendar information on the 12 months from the base date<sup>#</sup> for each of January to December.

#

You can use the ajscalendar command to specify the base date.

If you specify this option, you can specify only a job group name as the argument for the unit. (If you specify a job or jobnet name, no characters are output.)

If you define a job group under another job group, the calendar information of the job group you defined and the calendar information of all upper-level job groups are merged, as shown in the example below.

Example:



#### -d

Outputs the calendar information parameter needed to deliver calendar information.

If you specify this option, you can specify only a job group name as the argument for the unit. (If you specify a job or jobnet name, no characters are output.) You can specify the root job group "/" as well.

Output information is the unit definition parameters for the open and closed days. By outputting the information in a file, you can specify the file as the calendar information file in the -df option in the ajscalendar command. For details about their format, see 4.1 Creating a unit definition file in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

You cannot specify this option with the -J, -N, -L, -E, -T or -t option.

### -f format-indicator

Outputs the information specified by the format indicator.

Specify the format indicator by % followed by a one- or two-byte string of alphabetic characters. For details about the format indicator, see *Additional informations* later.

Characters are output as specified, except for the format indicator enclosed in double quotation marks (").

You can specify this option with the -t option.

#### -v

Searches for units that are placed in a particular directory and are using macro variables. The option thus outputs three items of information about such units, if any, in list form. The information refers to the full name of the unit, the definition item name (the unit definition parameter name), and the macro variable name in the definition information. The three items of information correspond to a single line of output data. If two or more of the same item are found, there will be

as many outputs as there are lines. Even when one definition item in a single unit has several macro variables defined, one line of data is divided and output on several lines.

The output format is shown below (also see *Example 3* later in this section):

 information-1 information-2 information-3 information-1: Full name of the unit information-2: Unit definition parameter name information-3: Macro variable name in the definition information These items of information are separated by single-byte spaces before they are output.

If the units under the particular directory have no units using macro variables, then nothing is output and the command terminates normally.

You cannot specify this option together with the -a, -c, -d, -f, or -t option.

#### -t format-indicator

Outputs the information specified by the format indicator to the title row.

Specify the format indicator by % followed by a one- or two-byte string of alphabetic characters. For details about the format indicator, see *Additional informations* later.

Characters are output as specified, except for the format indicator enclosed in double quotation marks (").

You can specify this option with the -c and -f options, but cannot specify this option with the -a option.

#### -s {yes|no}

Specifies whether to fix the order of relation line information entries that are output in unit definition information when the -f or -a option is specified. If the -f option is specified, each entry of relation line information is output as a value represented by the %ar format indicator. If you specified the -a option, each entry of relation line information is output as the ar parameter.

• yes

Fixes the output order of relation line information entries for units. The following rules apply when relation line information entries are output:

- 1. Entries are output in ascending order of the character codes of the preceding unit names.
- 2. If the preceding units are the same, entries are output in ascending order of character codes of the succeeding unit names.
- no

Does not fix the output order of relation line information entries for units. The output order of relation line entries depends on the unit creation order.

If you omit this option, the value specified for the AJSPRINTSORTUNITINF environment setting parameter (yes or no) is used for operation. If you omit both the -s option and the AJSPRINTSORTUNITINF environment setting parameter, no is assumed.

If the values of the -s option and the AJSPRINTSORTUNITINF environment setting parameter are different, the - s option takes precedence over the parameter.
For details about how to set the AJSPRINTSORTUNITINF environment setting parameter, see 2.2.2(107) AJSPRINTSORTUNITINF in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

Use the -s yes option to compare definition information of two units when, for example, you migrate an environment or customize a defined unit as shown below:

- In the environment before migration, execute the ajsprint command to output unit definition information. Then, in the environment after migration, execute the ajsdefine command to import the unit definition information.
- Create a jobnet by executing a defined jobnet, and then customize the definition of the original jobnet.

To compare information as shown above, specify yes for the -s option to output definition information. Thus, relation line information entries are output in alphabetical order of unit name for the original jobnet, its copy, and a new jobnet created by the ajsdefine command. This prevents unintended differences from being generated.

For examples of using the -s option, see *Example 4* later and 13.1.8 Editing units defined by JP1/AJS3 - View and comparing definitions before and after editing in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide.

### -J

Outputs job definitions.

You cannot specify this option with the -c, -d, or -T option.

#### -N

Outputs jobnet definitions.

You cannot specify this option with the -c or -d option.

#### -G

Outputs job group definitions.

You cannot specify this option with the -L, -E, and/or -T option.

### -R

Outputs the definitions of all the job groups, jobnets, and jobs contained in the specified unit. The items are output repeatedly on a layer-by-layer basis.

If you specify this option with the -L, -E, and/or -T options, the system outputs the definitions of the unit according to the specification of each option.

It is recommended that you avoid specifying this option together with the -a option. If you specify this option together with the -a option, an attempt to specify the output result in the unit definition information in the ajsdefine command may fail to define the unit correctly.

### -L

Outputs definitions of a jobnet not registered for execution.

You cannot specify this option with the -c, -d, or -G option.

### -E

Outputs definitions of a jobnet registered for execution.

You cannot specify this option with the -c, -d, or -G option.

### -T

Outputs definitions of the root jobnet.

You cannot specify this option with the -c, -d, -J, or -G option.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job, jobnet, or job group that you want to output definitions.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group names. If you set the -c and -d options, however, you can specify only a job group name.

With the -a option specified, you cannot specify the root job group "/" as its argument.

With the -d option specified, you can specify the root job group "/" as its argument.

You can specify a logical host name as a job, jobnet or job group name. You cannot specify an execution ID.

### Notes

- Either of the following users can output the unit definition:
  - A user granted the reference privilege when the unit whose definition is output was defined or when its attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.
- When you specify the -a option to output the unit definition information in the unit, if the defined content is equal to the default value of a parameter, the parameter is not output. If the parameter is not output, then its default value is defined as in the table below. For details about individual parameters, see 4.2 Definition format and parameters in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

Unit type	Parameter	Default value
Job group	Gty	n
Jobnet	Wt	N, no
	Wc	N, no
	Cftd	N, no
	Rg	1
	На	n
	Cd	no

Table 2-10: Parameter default values

Unit type	Parameter	Default value
Jobnet	De	У
	Ms	sch
	mp	n
	mm	and
	nmg	n
	ega	none
	uem	n
start condition	ab	exec
	mcs	m
	cgs	У
UNIX/PC job	soa	new
	sea	new
	jd	cod
	abr	n
	ha	n
	eu	ent
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
Queue job	jd	cod
	abr	n
	ha	n
	eu	ent
	mm	and
	nmg	n
	ega	none
	uem	n
Judgment job	ej	gt
	ejm	ge
	eju	le
JP1 event reception-monitoring job	evtmc	n
	ha	n
	eu	ent

Unit type	Parameter	Default value
JP1 event reception-monitoring job	evesc	no
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
File monitoring job	flwc	с
	flwi	60
	flco	n
	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
Email reception-monitoring job	pfm	р
	mlsav	У
	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
Message queue reception-monitoring job	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
MSMQ reception-monitoring job	ha	n
	eu	ent
	ets	kl

Unit type	Parameter	Default value
MSMQ reception-monitoring job	mm	and
	nmg	n
	ega	none
	uem	n
Log file monitoring job	lfdft	S
	lfsrc	n
	lfcre	n
	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
Windows event log monitoring job	ntnsr	У
	ntncl	У
	ntnei	У
	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
Execution interval control job	etn	n
	ha	n
	eu	ent
	ets	kl
	mm	and
	nmg	n
	ega	none
	uem	n
JP1 event sending job	pfm	q
	ha	n
	eu	ent

Unit type	Parameter	Default value
JP1 event sending job	evsrt	n
	evspl	10
	evsrc	0
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
Email sending job	pfm	р
	ha	n
	eu	ent
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
Message queue sending job	mqprm	n
	pfm	р
	ha	n
	eu	ent
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
MSMQ sending job	msmod	h
	msjnl	n
	msunr	n
	ha	n
	eu	ent
	jty	đ
	mm	and
	nmg	n
	ega	none
	uem	n

Unit type	Parameter	Default value
OpenView status report job	cmsts	un
	pfm	р
	ha	n
	eu	ent
	jty	d
	mm	and
	nmg	n
	ega	none
	uem	n
Local power control job	pwlt	f
	pwlf	f
	pfm	р
	ha	n
	eu	ent
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
Remote power control job	pwrn	a
	pwrr	n
	pwrw	n
	pwrp	р
	pfm	q
	ha	n
	eu	ent
	jty	q
	mm	and
	nmg	n
	ega	none
	uem	n
Custom UNIX/PC job	jd	cod
	abr	n
	ha	n
	eu	ent

Unit type	Parameter	Default value
Custom UNIX/PC job	soa	new
	sea	new
	mm	and
	nmg	n
	ega	none
	uem	n
Jobnet connector	mm	and
	nmg	n
	ega	none
	uem	n

• If the command is executed for a release target jobnet (root jobnet for which release entry is made), only the jobnet definitions in *Being applied* status are output.

# Arguments that can be specified when executing the command from JP1/AJS3 - View

You can specify the following arguments when executing the ajsprint command from JP1/AJS3 - View:

No.	Arguments	Required?
1	-F service-name	Y
2	-a	
3	-c year [/month [/day]]	
4	-d	
5	-f format-indicator	
6	-v	
7	-s {yes no}	
8	-t format-indicator	
9	-J	
10	-N	
11	-G	
12	-R	
13	-L	
14	-E	
15	-T	
16	job-name-or-jobnet-name-or-job-group-name	Y

## Legend:

- Y: Required
- --: Optional

You cannot specify any other options when executing the ajsprint command from JP1/AJS3 - View.

For details about how to execute JP1/AJS3 commands from JP1/AJS3 - View, see 10.4 Executing JP1/AJS3 commands from JP1/AJS3 - View in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional informations

- This section describes how to migrate information (job groups, jobnets, jobs, calendar information, etc.) specified on one server ("Server A") to another ("Server B"), as well as an example in which the command is actually used. You can use this procedure when information defined on a development server is migrated to a server for actual operation.
  - 1. Execute the ajsprint command on Server A and output (save) the definition information to a file.

```
ajsprint */** > temporary-file-name
```

2. Execute the ajsdefine command on Server B and recover the information saved in step 1.

```
ajsdefine -d / temporary-file-name
```

Cautionary note

With this method, you cannot save or recover the calendar information and other items defined in root job groups. This procedure is mentioned later in *Example 2*.

• *Table 2-11* lists the format indicators to output definitions of units. You can set all the format indicators listed in the table for the -f option. For the -t option, you can set only the format indicators with a superscript (<sup>#1</sup>).

Depending on the unit type, there are restrictions for which you can specify format indicators. If you specify a format identifier that cannot be specified for a unit type, the information corresponding to the format identifier is not output. Abbreviations are used to specify which format indicators are applicable to which unit types. For these abbreviations, see the ty parameter in 4.2.1 Attribute definition in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

Table 2-12 lists the other format indicators.

Table 2-13 provides the output formats of the format indicators.

Table 2-14 lists the indications of the permission mode.

### Table 2-11: Format indicators for unit output

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%JN <sup>#1</sup>	Full name of a unit Character string of up to 930 bytes	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%jn <sup>#1</sup>	unit-name Character string of up to 30 bytes	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%ap <sup>#1</sup>	Character string set for AJSCONF= or AJSPATH= Character string specified with %JN except the part that follows the right-most slash (/)	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj,

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ap <sup>#1</sup>	Character string set for AJSCONF= or AJSPATH= Character string specified with %JN except the part that follows the right-most slash (/)	mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%TΥ <sup>#1</sup>	Unit type mgroup: Manager job group group: Job group mnet: Manager jobnet condn: Start condition (. CONDITION) net: Jobnet met: Remote jobnet rmet: Remote jobnet rmet: Remote jobnet for recovery job: UNIX job rjob: UNIX job for recovery job: UNIX job for recovery job: UDIX job for recovery job: UDIX job for recovery job: QUEUE job rradio: QUEUE job for recovery jdjob: Judgment job rjdjob: Judgment job rjdjob: Judgment job for recovery orjob: OR job for recovery ewijb: OpenView status report job for recovery ewijb: DPI event reception monitoring job remsjb: OpenView status report job for recovery mlwjb: File monitoring job for recovery mlwjb: File monitoring job for recovery mlwjb: File monitoring job for recovery mlwjb: Stall reception monitoring job for recovery mlwjb: Email reception monitoring job for recovery mlwjb: Email reception monitoring job for recovery mlwjb: Email reception monitoring job remsjb: MSMQ reception monitoring job friwjb: Log file monitoring job for recovery mlwjb: Log file monitoring job rftwijb: Log file monitoring job for recovery mlwjb: Email reception monitoring job rftwijb: Log file monitoring job rftwijb: Log file monitoring job for recovery mlwjb: Email reception monitoring job rftwijb: Log file monitoring job rftwijb: ID event sending job for recovery mtwjb: Execution interval control job for recovery mtwjb: Execution interval control job rftwijb: IPI event sending job revsjb: JPI event sending job revsjb: JPI event sending job revsjb: MSMQ sending job rmsjb: MSMQ sending job rmsjb: MSMQ sending job rmsjb: MSMQ sending job rmsjb: Local power control job rmsjb: Local power control job rmsjb: Local power control job	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%TY <sup>#1</sup>	rpwrjb: Remote power control job for recovery cuujb: Custom UNIX job rcuujb: Custom UNIX job for recovery cupjb: Custom PC job rcupjb: Custom PC job for recovery	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%ow <sup>#1</sup>	Owner name Character string of up to 31 bytes. By default, no characters are output.	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%gr <sup>#1</sup>	Group name Character string of up to 63 bytes. By default, no characters are output.	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%ud <sup>#1</sup>	Last updated time <sup>#2</sup>	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%CM	Comment Character string of up to 80 bytes. By default, no characters are output.	mg, g, mn, n, rm, j, pj, qj, jdj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc
%mh	Manager host name Character string of up to 255 bytes. By default, no characters are output.	mg, mn
%mu	Manager unit name Character string of up to 961 bytes. By default, no characters are output.	mg, mn
%en	Name of a unit contained in the specified unit Character string of up to 30 bytes	g, n, rm
%Ce	Whether to enable linkage of root jobnet execution order control between scheduler services y: Linkage between scheduler services is enabled. n: Linkage between scheduler services is disabled.	g, n, nc
%Ch	Connection host name Character string of no more than 255 bytes. By default, no characters are output.	g, n, nc
%Cs	Connection service name Character string of no more than 30 bytes. By default, no characters are output.	g, n, nc
%et	Type of a unit contained in the specified unit See %TY.	g, n, rm
%eH	Horizontal display position of a unit contained in the specified unit 0 to 16,000 pixels	g, n, rm
%eV	Vertical display position of a unit contained in the specified unit 0 to 10,000 pixels	g, n, rm
%sH	How many units contained in the specified unit are to be displayed horizontally 1 to 100	g, rc, n, rm

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%sV	How many units contained in the specified unit are to be displayed vertically 1 to 100	g, rc, n, rm
%op	Open day (Specify a particular day.) <sup>#2</sup>	g
%cl	Closed day (Specify a particular day.) <sup>#2</sup>	g
%w0 to %w6	Standard-week value %w0: Sunday %w1: Monday %w2: Tuesday %w3: Wednesday %w4: Thursday %w5: Friday %w6: Saturday o: Open day x: Closed day -: None	g
%sd	Base date 1 to 31: day xx:n: Day of the week (xx is su, mo, tu, we, th, fr or sa) and week (n is 1 to 5) None	g
%md	Base month this: Current month next: Next month -: None	g
%st	Base time <i>hh:mm</i> : Hours ( <i>hh</i> is 0 to 23 hours, and <i>mm</i> is 0 to 59 minutes.) **:**: None	g
%Sd	Date when the jobnet execution is started <sup>#2</sup>	n, rm
%St	Time when the jobnet execution is started <sup>#2</sup>	n, rm
%sy	Time when the jobnet start is delayed <sup>#2</sup>	n, rm
%еу	Time when the jobnet end is delayed <sup>#2</sup>	n, rm
%ln	Link number N, n: N indicates a rule number (1 to 144) when multiple schedules are defined. n indicates a link number (1 to 144). Nothing is output if the rule number is the same as the link number. -,-: None (The related jobnet does not have any link number to be output).	n, rm
%cy %sh	Processing cycle N, n, X: N indicates a rule number when multiple schedules are defined (1 to 144). n is the value corresponding to X, being 1 to 31 (year, month, week or day). X indicates the type of a processing cycle, being y, m, w or d. n, y: Year (n is 1 to 9.) n, m: Month (n is 1 to 12.) n, w: Week (n is 1 to 5.) n, d: Day (n is 1 to 31.) -,-,-: None Method of substitution	n, rm
0.011		11, 1111

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%sh	<ul> <li>N, XXXX: N indicates a rule number when multiple schedules are defined (1 to 144).</li> <li>XXXX indicates the method of substitution, being before, after, cancel or none.</li> <li>before: Execute on the previous day</li> <li>after: Execute on the next day</li> <li>cancel: Do not execute</li> <li>none: Execute without shift</li> </ul>	n, rm
%hd	Maximum number of shift days $N, XX: N$ indicates a rule number when multiple schedules are defined (1 to 144). $XX$ indicates the maximum number of shift days, being 1 to 31.	n, rm
%Wt	Waiting time for an event {N, t, HH: MM   N, r, MMMM   N, u   N, -}: N indicates a rule number when multiple schedules are defined (1 to 144). t, r, u and - provide the types of waiting time for an event. HH:MM (HH is hours of 0 to 47, and MM is minutes of 0 to 59) and MMMM (1 to 2,879 minutes) provide waiting time for an event. t: Absolute time r: Relative minutes u: Unlimited -: None	n, rm
%WC	Number of times the event is awaited { <i>N</i> , w, n   <i>N</i> , u   <i>N</i> , -}: <i>N</i> indicates a rule number when multiple schedules are defined (1 to 144). w, n, u and - provide the types of the number of times the event is awaited. <i>n</i> indicates the number of times the event is awaited (0 to 999). w: Specifies the number of events to be awaited. u: Specifies an unlimited number of times for waiting. -: None	n, rm
%Cf	Shift information $\{N, m, C   -, c   -\}$ : <i>N</i> indicates a rule number when multiple schedules are defined (1 to 144). <i>m</i> indicates a shift type, being a, b, db, da, or n. <i>C</i> indicates shift days, being 1 to 31. <i>c</i> indicates the maximum number of shift days, being 1 to 31. – means none. If <i>m</i> is n, – is output in place of <i>C</i> or <i>c</i> . If <i>m</i> is db or da, – is output in place of <i>c</i> . b: Execute on an open day preceding the previous day. a: Execute on an open day following the next day. db: Execute on a day preceding the previous day. da: Execute on an open day following the next day. n: None	n, rm
%Ej	Name of a jobnet not to be executed concurrently Character string of up to 30 bytes. By default, no characters are output.	n, rm
%ed	Term until the jobnet can be executed <sup>#2</sup>	n, rm
%rg	Number of logs to keep 1 to 99 You can, however, enable the system setting option to output up to 999 generations.	n, rm
%Ni	Execution priority of a jobnet 1 to 5. The default is	n, rm

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%jc	Calendar information Character string of up to 930 bytes. By default, no characters are output.	n, rm
%cd	Time-out period for waiting for an event 1day: Waits for one day. 2day: Waits for two days. unlimited: Waits without any limit. -: None	n, rm
%de	Dependence on the schedule of the upper-level jobnet yes: Depends. no: Does not depend.	n, rm
%ms	Schedule option skip: Schedule skip muti: Multi-schedule	n, rm
qm%	Concurrent execution attribute yes: Permitted no: Not permitted	n, rm
%ha	Hold attribute yes: Holds no: Does not hold ifAbend: Hold if the previous state was abend ifAbendW: Hold if the previous state was warning	n, rm, j, pj, qj, jdj, cj, cpj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj
%Rh	Name of the execution manager defined for the jobnet Character string of up to 255 bytes. By default, no characters are output.	n, rm
%ar	Order in which units are executed preceding-unit-name, succeeding-unit-name, connection-type Specify the name of a unit name. Use a character string of up to 30 bytes. The connection type is s or c. The default is -, s: Sequential connection c: Conditional connection	n, rm
%CO	Start condition and: AND or: OR	гс
%eU	JP1 user for job execution ent: User who registered the job def: User who defined the job	j, pj, qj, jdj, cj, cpj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj
%cn	Custom job name Character string of up to 16 bytes. By default, no characters are output.	cj, cpj
%Te	Command text Character string of up to 1,023 bytes. By default, no characters are output.	j, cj, cpj
%sc	Script file name (for UNIX), or target file name (for Windows) Character string of up to 511 bytes. By default, no characters are output.	j, pj, qj, cj, cpj
%pm	Parameter Character string of up to 1,023 bytes. By default, no characters are output.	j, pj, qj, cj, cpj
%wk	Work path name Character string of up to 511 bytes. By default, no characters are output.	j, pj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ev	Environment variable file name Character string of up to 511 bytes. By default, no characters are output.	j, pj
%En	Environment variable Character string of up to 20,479 bytes. By default, no characters are output.	ј, рј, сј, срј
%si	Standard input file name Character string of up to 511 bytes. By default, no characters are output.	j, pj
%s0	Standard output file name Character string of up to 511 bytes. By default, no characters are output.	ј, рј, сј, срј
%se	Standard error output file name Character string of up to 511 bytes. By default, no characters are output.	ј, рј, сј, срј
%oa	Option to update information in the standard output file new: Outputs information to a new standard output file. add: Adds information to the existing standard output file.	j, pj
%ea	Option to update information in the standard error output file new: Outputs information to a new standard error output file. add: Adds information to the existing standard error output file.	j, pj
%Et	Time-out period 1 to 1,440 minutes	j, pj, jdj, cj, cpj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj
%pr	Execution priority of a jobnet or job 1 to 5. The default is	n, rm, j, pj, qj, cj, cpj
%rh	Target host name Character string of up to 255 bytes. By default, no characters are output.	n, rm, j, pj, jdj, cj, cpj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj
%un	Target user name Character string of up to 63 bytes. By default, no characters are output.	j, pj, cj, cpj
%jd	End judgment normal: Always normal abnorm: Always abnormal code: Return code exist: Normal if a file is created modify: Normal if the file is updated	j, pj, qj, cj, cpj
%wt	Threshold for the end with warning 0 to 2,147,483,647. The default is	j, pj, qj, cj, cpj
%Th	Threshold for the abnormal end 0 to 2,147,483,647	j, pj, qj, cj, cpj
%jf	End judgment file name Character string of up to 260 bytes. By default, no characters are output.	ј, рј, сј, срј
%Ab	Retry on abnormal end y: Automatic retry is performed for an abnormal end. n: Automatic retry is not performed for an abnormal end.	j, pj, qj, cj, cpj
%rs	Lower limit of the return code for automatic retry	j, pj, qj, cj, cpj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%rs	1 to 4,294,967,295. If omitted, – is output. In this case, <i>abnormal threshold</i> + 1 for end judgment is assumed at execution. Nothing is output if automatic retry is not performed on abnormal end.	j, pj, qj, cj, cpj
%re	Upper limit of the return code for automatic retry 1 to 4,294,967,295. If omitted, – is output. In this case, 4,294,967,295, which is the maximum value, is assumed at execution. Nothing is output if automatic retry is not performed on abnormal end.	j, pj, qj, cj, cpj
%rc	Maximum number of retry executions 1 to 12 (times). Nothing is output if automatic retry is not performed on abnormal end.	j, pj, qj, cj, cpj
%ri	Retry interval 1 to 10 (minutes). Nothing is output if automatic retry is not performed on abnormal end.	j, pj, qj, cj, cpj
%qu	Queue name Character string of up to 63 bytes. By default, no characters are output.	qj
%qm	Queue manager host name Character string of up to 255 bytes. By default, no characters are output.	qj
%rq	Job name Character string of up to 63 bytes. By default, no characters are output.	qj
%s1 to %s4	Transfer source file name Character string of up to 511 bytes. By default, no characters are output. %s1: Name of transfer source file 1 %s2: Name of transfer source file 2 %s3: Name of transfer source file 3 %s4: Name of transfer source file 4	j, pj, qj
%d1 to %d4	Transfer destination file name Character string of up to 511 bytes. By default, no characters are output. %d1: Name of transfer destination file 1 %d2: Name of transfer destination file 2 %d3: Name of transfer destination file 3 %d4: Name of transfer destination file 4	j, pj, qj
%T1 to %T4	Option to delete the transfer destination file after the end of job execution save: Saves the file. delete: Deletes the file.	j, pj
%ej	Judgment method greater: Greater than the judgment value greater: equal Equal to or greater than the judgment value less: Less than the judgment value less equal: Equal to or less than the judgment value equal: Equal to the judgment value not equal: Not equal to the judgment value range in: Within the judgment value range range out: Outside the judgment value range exist: A file is created. not exist: No file is created. variable greater: The variable is greater than the judgment value. variable greater equal: The variable is equal to or greater than the judgment value.	jdj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ej	variable less: The variable is less than the judgment value. variable less equal: The variable is equal to or less than the judgment value. variable equal: The variable is equal to the judgment value. variable not equal: The variable is not equal to the judgment value. variable range in: The variable is within the judgment value range. variable range out: The variable is outside the judgment value range. string equal: The variable is equal to the judgment string. string part equal: The variable includes the judgment string. string not equal: The variable is not equal to the judgment string. string part equal: The variable is not equal to the judgment string. string not equal: The variable does not include a judgment string. string not null: The value of the variable exists.	jdj
%eC	Return code for judgment 0 to 4,294,967,295	jdj
%el	Lower limit end judgment code 0 to 4,294,967,295 This information is output when the judgment method is <i>within the judgment value</i> <i>range</i> or <i>outside the judgment value range</i> .	jdj
%eh	Upper limit end judgment code 0 to 4,294,967,295 This information is output when the judgment method is <i>within the judgment value</i> <i>range</i> or <i>outside the judgment value range</i> .	jdj
%ef	End judgment file name Character string of up to 511 bytes. By default, no characters are output.	jdj
%jV	Variable name String of up to 64 bytes. By default, nothing is output.	jdj
%jT	Judgment string for variables String of up to 511 bytes. By default, nothing is output.	jdj
%jI	Judgment value for variables Value of 0 to 2,147,483,647	jdj
%jS	Lower limit variable judgment numeric value 0 to 2,147,483,647 This information is output when the judgment method indicates <i>the variable is within</i> <i>the judgment value range</i> or <i>the variable is outside the judgment value range</i> .	jdj
%jG	Upper limit variable judgment numeric value 0 to 2,147,483,647 This information is output when the judgment method indicates <i>the variable is within</i> <i>the judgment value range</i> or <i>the variable is outside the judgment value range</i> .	jdj
%1P	Boundary condition (lower limit) of the return code or variable judgment numeric value greater: Greater than the judgment value greater equal: Equal to or greater than the judgment value This information is output when the judgment method is <i>within the judgment value range</i> , <i>outside the judgment value range</i> , <i>the variable is within the judgment value range</i> , or <i>the variable is outside the judgment value range</i> .	jdj
%uP	Boundary condition (upper limit) of the return code or variable judgment numeric value less: Smaller than the judgment value	jdj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%uP	less equal: Equal to or smaller than the judgment value This information is output when the judgment method is <i>within the judgment value</i> <i>range, outside the judgment value range, the variable is within the judgment value</i> <i>range,</i> or <i>the variable is outside the judgment value range.</i>	jdj
%CI	Additional status information reported to HP NNM Character string of up to 256 bytes. By default, no characters are output.	cmsj
%CC	Status reported to HP NNM un: Unknown no: Normal wa: Warning mi: Minor ma: Major cr: Critical re: Restricted te: Testing di: Disabled	cmsj
%ED	Detailed event information Character string of up to 1,024 bytes. By default, no characters are output.	evwj
%Eg	Event issue source group ID -1 to 9,999,999,999. The default is *******.	evwj
%EG	Event issue source group name Character string of up to 20 bytes. The default is *******.	evwj
%EH	Event issue source host name, event destination host name Character string of up to 255 bytes. By default, no characters are output.	evsj, evwj
%EI	Monitor event ID Character string of up to 17 bytes. The default is *******.	evwj
%eI	Send event ID Character string of up to 8 bytes. The default is *******.	evsj
%Ei	Event issue source IP address Character string of up to 15 bytes. The default is *******.	evwj
%eM	Event message information (Send) Character string of up to 1,023 bytes. By default, no characters are output.	evsj
%EM	Event message information (Receive) Character string of up to 1,024 bytes. By default, no characters are output.	evwj
%Ep	Event issue source process ID Character string of up to 10 bytes. The default is *******.	evwj
%eS	Event level for the extended attribute of an event (Send) em: Sets Emergency. al: Sets Alert. cr: Sets Critical. er: Sets Error. wr: Sets Error. wr: Sets Warning. no: Sets Notice. in: Sets Information. db: Sets Debug.	evsj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ES	Event level for the extended attribute of an event (Receive) em: Sets Emergency as the condition to be met. al: Sets Alert as the condition to be met. cr: Sets Critical as the condition to be met. er: Sets Error as the condition to be met. wr: Sets Warning as the condition to be met. no: Sets Notice as the condition to be met. in: Sets Information as the condition to be met. db: Sets Debug as the condition to be met.	evwj
%Ef	Optional extended attribute of an event (Send) Character string of up to 128 bytes. By default, no characters are output.	evsj
%ET	Conditions of end judgment n: Always normal end a: Always abnormal end n, <i>file-name</i> : Normal end if the message matches the contents of the specified file a, <i>file-name</i> : Abnormal end if the message matches the contents of the specified file d, <i>file-name</i> : Normal end if detailed information matches the contents of the specified file b, <i>file-name</i> : Abnormal end if detailed information matches the contents of the specified file The file name consists of a character string of up to 256 bytes.	evwj
%Eu	Event issue source user ID -1 to 9,999,999,999. The default is ******.	evwj
%EU	Event issue source user name Character string of up to 20 bytes. The default is *******.	evwj
%EF	Optional extended attribute of an event (Receive) Character string of up to 2,048 bytes. By default, no characters are output.	evwj
%FC	Monitoring conditions c: Monitors file creation. d: Monitors file deletion. s: Monitors file resizing. m: Monitors the changes in the updating time of the last file.	flwj
%FF	Name of a file to be monitored Character string of up to 255 bytes. By default, no characters are output.	flwj
%FI	Monitoring interval 1 to 600 seconds	flwj
%FO	When there is a file to be monitored y: Conditions are met (Normal termination). n: Monitoring is continued.	flwj
%Lw	Error option for a file not created yes: Error no: Not error	lfwj
%Ld	Output data format for log files s: Sequential file (Data is appended to one log file, and when the file is filled to its capacity, a new log file is created with another name, and new log data is written to the new file.)	lfwj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%Ld	<ul><li>s2: Sequential file (A log file with the same name is continuously used for logging by creating a new file with the same name after backing up the current file with another name or deleting the current file.)</li><li>w1: Wraparound (When log data is written to the end of the log file, the existing data</li></ul>	lfwj
	is overwritten with new data, starting with the beginning of the file.) w2: Wraparound (When log data is written to the end of the log file, the existing data is deleted and then new data is written from the beginning of the file.)	
%LF	Log file name Character string of up to 256 bytes. By default, no characters are output.	lfwj
%LL	Header 1: Number of rows (0 to 99,999 rows) s: Size (0 to 9,999,999 rows) -: None	lfwj
%LM	Data other than log information (the distinction between AND and OR is not output.) Character string of up to 1,024 bytes. By default, no characters are output.	lfwj
%Lm	Data other than log information Character string of up to 1,024 bytes. By default, no characters are output. A colon (:) is output for AND. A linefeed is output for OR. Output example: For "AAA" and "BBB" or "CCC"	lfwj
	"AAA":"BBB" "CCC"	
%LX	Maximum length of event data 2 to 512 (bytes)	lfwj
%LR	Record format of log data v: Delimits the row by a variable-length record (consisting of a character string of 3 to 4 bytes). f: Delimits the row by a fixed-length record (consisting of a character string of 1 to 9,999,999 bytes).	lfwj
%LI	File search interval 1 to 86,400 seconds	lfwj
%Ls	Search start option yes: Enters data from its top. no: Does not enter data from its top.	lfwj
%LD	Data to be trapped (the distinction between AND and OR is not output.) Character string of up to 2,048 bytes. By default, no characters are output.	lfwj
%LT	Data to be trapped Character string of up to 2,048 bytes. By default, no characters are output. A colon (:) is output for AND. A linefeed is output for OR. Output example: For "AAA" and "BBB" or "CCC"	lfwj
	"AAA":"BBB" "CCC"	
%MA	<pre>"email-address", or xxx: "email-address" (Only for an email sending job) to: "email-address": Sends email to the destination. cc: "email-address": Sends an email copy to the destination. bcc: "email-address": Sends an email copy to the destination; like paper BBC (blind carbon copy), this copy is hidden from other recipients. The email address consists of a character string of up to 256 bytes.</pre>	mlsj, mlwj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ML	Received email list name Character string of up to 255 bytes. By default, no characters are output.	mlwj
%MP	Profile name Character string of up to 256 bytes. By default, no characters are output.	mlsj, mlwj
%Ms	Email saving yes: Saves email. no: Does not save email.	mlwj
%MS	Subject Character string of up to 256 bytes. By default, no characters are output.	mlsj, mlwj
%MF	Name of a folder to save the attached file Character string of up to 256 bytes. By default, no characters are output.	mlwj
%mF	Attached file name Character string of up to 256 bytes. By default, no characters are output.	mlsj
%mf	Name of a list file to list the attached file Character string of up to 256 bytes. By default, no characters are output.	mlsj, mlwj
%Mt	Name of a file to save text Character string of up to 256 bytes. By default, no characters are output.	mlwj
%MT	Text Character string of up to 512 bytes. By default, no characters are output.	mlsj, mlwj
%mt	Text file name Character string of up to 256 bytes. By default, no characters are output.	mlsj
%QC	Correlation ID Character string of up to 24 bytes. The default is	mqsj, mqwj
%QD	Message ID Character string of up to 24 bytes. The default is	mqsj, mqwj
%qE	Dead letter queue name Character string of up to 48 bytes. The default is	mqsj
%dH	Holding time 1 to 9,999,999 minutes. The default is	mqsj
%QM	Model queue name Character string of up to 48 bytes. The default is	mqsj, mqwj
%qd	Message data file name Character string of up to 256 bytes. By default, no characters are output.	mqsj
%qF	Message format name Character string of up to 8 bytes. The default is	mqsj
%qM	Queue manager name Character string of up to 48 bytes. The default is	mqsj
\$db	Program name for related queue management Character string of up to 48 bytes. The default is	mqsj
%qR	Priority 0 to 9. The default is	mqsj
%qP	Permanence	mqsj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%db	yes: Permanent no: Not permanent	mqsj
%QQ	Queue name Character string of up to 48 bytes. The default is	mqsj, mqwj
%QS	Message storage file name Character string of up to 256 bytes. By default, no characters are output.	mqwj
%SA	Application information 0 to FFFFFFFF. The default is	mssj, mswj
%SH	Holding time -1 to 2,147,483,647 (seconds)	mssj
%sJ	Message storage to the journal queue yes: Stores the message. no: Does not store the message.	mssj
%SM	Message label Character string of up to 249 bytes. The default is	mssj, mswj
%sL	Delivery limit time -2 to 2,147,483,647 (seconds)	mssj
%sM	Delivery mode h: High-speed mode r: Recoverable mode	mssj
%sP	Priority 0 to 7	mssj
%sl	Queue label name Character string of up to 124 bytes. The default is	mssj
ξΩ	Queue path name Character string of up to 259 bytes. By default, no characters are output.	mssj, mswj
%SR	Correlation ID Character string of up to 20 bytes. The default is	mssj, mswj
%SF	Message storage file name Character string of up to 256 bytes. By default, no characters are output.	mswj
%sF	Text file name Character string of up to 259 bytes. By default, no characters are output.	mssj
%sT	Text type 0 to FFFFFFF. The default is	mssj
%sU	Message storage to the dead letter queue yes: Stores the message. no: Does not store the message.	mssj
%NJ	Classification judgment conditions yes: Judges the classification. no: Does not judge classification.	ntwj
%NC	Classification Character string of up to 255 bytes. By default, no characters are output.	ntwj
%ND	Explanation	ntwj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%ND	Character string of up to 1,024 bytes. By default, no characters are output.	ntwj
%Nj	Judgment conditions for an event ID yes: Judges the classification. no: Does not judge classification.	ntwj
%NI	Event ID Character string of up to 16 bytes. The default is	ntwj
%NE	Event type v: Monitors the verbose event. I: Monitors the information event. w: Monitors the warning event. e: Monitors the error event. c: Monitors the critical event. s: Monitors the success audit event. f: Monitors the failure audit event.	ntwj
%NL	Log type sys: Monitors the system log. sec: Monitors the security log. app: Monitors the application log. dns: Monitors the DNS Server log (for Windows 2000 only). dir: Monitors the Directory Service log (for Windows 2000 only). frs: Monitors the file reproduction service log (for Windows 2000 only). oth: Monitors the log type specified for %Nt (any log type).	ntwj
%Nt	Any log type Character string of up to 255 bytes. By default, no characters are output.	ntwj
%Ns	Judgment conditions for a source yes: Judges the classification. no: Does not judge classification.	ntwj
%NS	Source Character string of up to 255 bytes. The default is	ntwj
ąj\$	Macro variable Character string of up to 2,048 bytes. By default, no characters are output.	evwj, flwj, lfwj, mlwj, mqwj, mswj, ntwj, tmwj
%Mp	Platform type u: Execution in the UNIX environment p: Execution in the Windows environment and Windows-compatible environment	cmsj, evsj, mlsj, mlwj, mqsj, pwlj
%PT	Type of execution f: Turns off the power supply. r: Shuts down, than restarts the power supply. s: Shuts down.	pwlj
%Pf	Type of an end request m: Termination with monitoring r: Restrictive termination f: Kill p: Planned termination	pwlj
%PH	Target host name Character string of up to 255 bytes. By default, no characters are output.	pwrj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%PF	Request type o: Turns on the power supply. m: Termination with monitoring r: Restrictive termination f: Kill p: Forced termination s: Forced stop	pwrj
%PN	Time when the power supply is turned on next n: Does not set the next power-on time. a: Validates the next power-on time set for the agent. c: { [mm/dd.] hh: mm } Next power-on time mm: 1 to 12 (month) dd: 1 to 31 (day) hh: 0 to 23 (hour) mm: 0 to 59 (minute)	pwrj
%PR	Restart yes: Restarts the agent host. no: Does not restart the agent host.	pwrj
% PW	Waiting for the end of power-off yes: If you turns off the power supply for a remote power agent, the system waits for a shutdown. no: Does not wait for a shutdown. The end of power-off means that the JP1/Power Monitor on the agent host reports the start of a shutdown to the manager host of the JP1/Power Monitor.	pwrj
%PM	Type of platform subject to power control u: Execution in the UNIX environment p: Execution in the Windows environment and Windows-compatible environment	pwrj
%Tw	Waiting time 1 to 1,440 minutes.	tmwj
%Tn	Whether the unit is completed immediately after it starts y: Completed n: Not completed	tmwj
%LN	Link network group name Character string of up to 13 bytes. By default, no characters are output.	hln
%SP	Starting point n: None s: Select a: All	hln
%Sh	Jobnet name for the mainframe that you want to select as the starting point. Character string of up to 17 bytes. UP to 16 jobnet names are output. By default, no characters are output.	hln
%EP	Ending point n: None s: Select a: All	hln
%Eh	Jobnet name for the mainframe that you want to select as the ending point.	hln

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%Eh	Character string of up to 17 bytes. UP to 16 jobnet names are output. By default, no characters are output.	hln
%gt	Job group type n: Job group p: Planning group No characters are output for a group other than a job or planning group.	g
%Ed	Date and time of creation	mg, g, mn, rc, n, rm, j, pj, qj, jdj, cj, cpj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, hln, nc
%jt	Job queuing attribute type q: Has the queuing attribute. n: Does not have the queuing attribute.	j, pj, evsj, mlsj, mqsj, mssj, cmsj, pwlj, pwrj
%es	Event job time-out state kl: Killed nr: Ended normally wr: Ended with warning an: Ended abnormally	evwj, flwj, lfwj, mlwj, mqwj, mswj, ntwj, tmwj
%Ee	Searches for events before execution Searches for the JP1 events that occurred since the specified minutes before the JP1 event reception monitoring job was executed. 1 to 720 minutes. no: Does not search for previous JP1 events.	evwj
%eK	Event arrival check y: Checks the arrival of the event. n: Does not check the arrival of the event.	evsj
%eP	Event arrival check interval. 3 to 600 seconds. If you do not check the arrival of the event, specify –.	evsj
%eR	Number of times event arrival is checked 0 to 999 times. If you do not check the arrival of the event, specify –.	evsj
%fd	Time required for executing the jobnet or remote jobnet for which the end delay is monitored 1 to 2,879 minutes. Alternatively, the time required for executing the job. 1 to 1,440 minutes. By default, no characters are output.	n, rm, j, pj, qj, cj, cpj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj
%AB	Operation that occurs after a jobnet with start conditions terminates abnormally exec: Start the execution of the jobnet. hold: Hold the execution of the jobnet. stop: Stop the monitoring of start conditions.	гс
%mS	Startup of multiple monitoring generations multi: Another monitoring generation starts. wait: Another monitoring generation waits for the current monitoring generation to terminate. skip: Another monitoring generation does not start.	rc

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%gs	Whether to stay an execution generation whose start conditions are satisfied yes: Execution of the jobnet is not repeated so that the generation stays. no: Execution of the jobnet is repeated so that the generation does not stay.	гс
%Nl	Whether to control the root jobnet execution order y: The root jobnet execution order is controlled. n: The root jobnet execution order is not controlled.	g, n
%Nn	Jobnet connector name Character string of no more than 930 bytes By default, no characters are output.	g, n
%Nm	Root jobnet execution order control method y: Root jobnets are executed synchronously with jobnet connectors. n: Root jobnets are executed asynchronously with jobnet connectors. -: The root jobnet execution order is not controlled.	g, n
%Nr	Name of the root jobnet to be connected Character string of no more than 930 bytes. By default, no characters are output.	nc
%Ud	Last update time of a unit including its subordinate units Cautionary note If the ajsprint command is executed with the %Ud format indicator specified, processing takes time because the command references information about all units subordinate to the target units. The processing time depends on the total number of subordinate units.	mg, g, mn, rc, n, rm, j, pj, qj, jdj, orj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, hln, nc
%mm	<ul> <li>Wait method</li> <li>and: Starts executing when all units whose ends are being waited for have finished executing.</li> <li>or: Starts executing when any one of the units whose ends are being waited for has finished executing.</li> <li>If no units whose ends are being waited for are defined for the wait condition, nothing is output.</li> </ul>	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj
%NM	<ul><li>Behavior when there are no applicable generations of units whose ends are being waited for</li><li>y: Start executing.</li><li>n: Do not start executing.</li><li>If no units whose ends are being waited for are defined for the wait condition, nothing is output.</li></ul>	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj
%EN	Name of unit whose end is being waited for You can specify a character string of 1 to 930 bytes. If no units whose ends are being waited for are defined for the wait condition, nothing is output. If more than one unit whose end is being waited for is defined for the wait condition, each unit appears on its own line.	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj
%an	Execution order relationship to unit whose end is being waited for The unit whose end is being waited for and the target unit are output in the following format: <i>unit-whose-end-is-being-waited-for, target-unit-name</i> The full path name of each unit is output as a character string of no more than 930 bytes. If no units whose ends are being waited for are defined for the wait condition, nothing is output.	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj

Format indicator	Output information	Unit type abbreviations <sup>#3</sup>
%an	If more than one unit whose end is being waited for is defined for the wait condition, each unit appears on its own line.	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj
%ga	Behavior when there is an abnormal end in the execution generation. No information is output if there is no unit whose end is being waited for. exec: Start executing. execdeffer: Do not start executing. Note, however, that if the execution generation is in the <i>Skipped so not exe</i> . status, execution starts. none: Do not start executing.	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj
%um	<ul><li>Behavior when the monitoring generation is in the <i>Unmonitored</i> + <i>Ended</i> status.</li><li>No information is output if there is no unit whose end is being waited for.</li><li>y: Start executing.</li><li>n: Do not start executing.</li></ul>	n, j, pj, qj, cmsj, evsj, evwj, flwj, lfwj, mlsj, mlwj, mqsj, mqwj, mssj, mswj, ntwj, pwlj, pwrj, tmwj, nc, cj, cpj

### #1

Format indicator that can be set for the -t option

#### #2

For details about the output format, see *Table 2-13*.

### #3

For details about the abbreviations of unit types, see the description of the parameter  $t_y = in 4.2.1$  Attribute *definition* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

### Table 2-12: Other format indicators

Format indicator	Output information
0 0 0 0	%
%n	Line feed character
%t	Tab character
%X	Current date#
%X	Current time <sup>#</sup>

### #

Time at which you started executing the ajsprint command. For details about the output format, see the following table:

# Table 2-13: Output format of format indicators

Format indicator	Output format
%ud %Ed	MMM DD YYYY hh:mm:ss Example:
%Ud	DEC 30 2006 18:39:12
%cl	YYYY/MM/DD
%op	Example:
%ed	2006/12/30
%x	When not specified: ****/**/**

Format indicator	Output format
%X	<i>hh:mm:ss</i> Example: 12:30:30
*Sd	<pre>[N,]{[[yyyy/]mm/]{[+ * @]dd [+ * @]b[-DD] [+]{su mo tu we th fr sa} [:{n b}]}en ud} • N indicates a rule number when multiple schedules are defined (1 to 144). • yyyy indicates a year of four digits. • mm indicates a month. • + indicates relative days. • * indicates relative days. • &amp; indicates a closed day. • dd indicates a closed day. • dd indicates a day in a month. • b indicates the last day. • -DD indicates the number of days from the last date (1 to 35). • su, mo, tu, we, th, fr and sa indicate the days of the week beginning with Sunday (Sunday to Saturday). • n indicates the n-th week (1 to 5). By default, the system assumes the start date to be the next day of the week after the date when the jobnet was registered for execution and the date when the ajsschedule command was executed. If you do not specify anything when either year or month is specified for the execution start date, the system assumes the first week when you register anything for execution and when you execute the ajsschedule command. • b indicates the last day of the month. • en indicates the specified day to start execution. • ud indicates "undefined."</pre>
%St	<ul> <li>[N, ] [+] hh: mm</li> <li>N indicates a rule number when multiple schedules are defined (1 to 144).</li> <li>+ indicates relative time.</li> <li>hh indicates hours (0 to 47).</li> <li>mm indicates minutes (0 to 59).</li> <li>When not specified: **:**</li> </ul>
%sy %ey	<ul> <li>[N, ] {hh:mm   Pmmmm }</li> <li>N indicates a rule number when multiple schedules are defined (1 to 144).</li> <li>hh indicates hours (0 to 47).</li> <li>mm indicates minutes (0 to 59).</li> <li>P indicates M (from the root jobnet), U (from the upper-level jobnet) or C (from the jobnet itself).</li> <li>mmmm indicates minutes (0 to 2,879).</li> <li>When not specified: **:**</li> </ul>

# Table 2-14: Indications of the permission mode

Digit	Meaning	value
1	Sets a set user ID bit and a set group ID bit for a job.	Set user ID bit provided 4 or 5
		Set group ID bit provided 2 or 3
		Both provided 6 or 7
		Neither provided 0 or 1

Digit	Meaning	value
2 to 4	Octal value indicating the update, manipulation, reference, or no privilege for the owner (2nd digit), group (3rd digit), and others (4th digit)	Update: 7 Manipulation: 5 Reference: 4 or 6 No privilege: 0, 1, 2, or 3

# Example 1

The following commands output calendar information on job group group1 to the standard output file.

The base date is the 21st.

(1) When information on one day (October 30, 2010) is output:

```
ajsprint -c 2010/10/30 /group1
```

Output example

```
o (open day) or x (closed day)
o
```

(2) When information on one month (October 2010) is output:

```
ajsprint -c 2010/10 /group1
```

Output example

```
First Date of Output/Day of week/Standard Day/o (open day) or x(closed day)...Oct 2010WedOct 21 2010 o o o o x x o o o o xx ......
```

(3) When information on 12 months (2010) is output:

```
ajsprint -c 2010 /group1
```

Output example

```
First Date of Output/Day of week/Standard Day/o (open day) or x(closed day)...Jan 21 2010 o o o o x x o o o o o xJan 2010WedJan 21 2010 o o o o x x o o o o xx ...Feb 2010SatFeb 2010SatFeb 21 2010 o x x o o o o o x x o oo ...(Omitted)Dec 2010MonDec 21 2010 x o x o o o x x x x x x
```

# Example 2

Use the following commands to save and recover all the unit definition information and calendar information under the root job group "/".

### **Using Windows version JP1/AJS3**

The procedure for saving is explained below together with how to specify commands.

1. Save the unit definition information in all the units.

ajsprint -a /\* > c:\temp\winbackup.txt

2. Save the calendar information for the open and closed days in the root job group "/" (that is, the root job group AJSROOT).

ajsprint -d / > c:\temp\rootcal.txt

3. Save the base time, base day, and month term of AJSROOT.

ajsprint -f"-lt %st -ld %sd -md %md" / > c:\temp\calopt.txt

4. Save the comment, ownership, and group of AJSROOT.

ajsprint -f"-C %cm -o %ow -g %gr" / > c:\temp\chgopt.txt

For the recovery procedure, you would specify the commands as follows:

```
1.ajsdefine c:\temp\winbackup.txt
2.ajscalendar -df c:\temp\rootcal.txt /
3.for /F "tokens=*" %i in (c:\temp\calopt.txt) do ajscalendar %i /
4.for /F "tokens=*" %i in (c:\temp\chgopt.txt) do ajschange %i /
```

#### Using the UNIX version JP1/AJS3

The procedure for saving is explained below together with how to specify commands.

1. Save the unit definition information in all the units.

```
ajsprint -a "/*" > /tmp/unitbackup.txt
```

2. Save the calendar information for the open and closed days in the root job group "/" (that is, the root job group AJSROOT).

ajsprint -d / > /tmp/rootcal.txt

3. Save the base time, base day, and month term of AJSROOT.

ajsprint -f"-lt %st -ld %sd -md %md" / > /tmp/calopt.txt

4. Save the comment, ownership, and group of AJSROOT.

ajsprint -f"-C %cm -o %ow -g %gr" / > /tmp/chgopt.txt

For the recovery procedure, you would specify the commands as follows:

```
1.ajsdefine /tmp/unitbackup.txt
2.ajscalendar -df /tmp/rootcal.txt /
3.ajscalendar 'cat /tmp/calopt.txt' /
```

4.ajschange 'cat /tmp/chgopt.txt' /

```
2. Commands
```

- When you save and recover the unit definition information and calendar information according to the above procedure, make sure that none of the jobnets contained in the destination's unit are currently being executed. For this reason, we recommend that you first stop the scheduler service using the jajs spmd stop command.
- Steps 2, 3, and 4 above are intended when all of the following options have been set: the calendar information, base time, base day, treat as, comment, ownership, and group. If any of these options is missing, using the above procedure may cause you to receive inappropriate information or encounter an error during recovery. You should confirm the contents of unit settings and select options to be specified during the recovery procedure. The following describes how to confirm the contents and how to specify options for recovery.
  - Confirm the file specified in step 2 during the saving procedure. If the file contains no output of calendar information, step 2 for recovery is unnecessary.
  - Confirm the file specified in steps 3 and 4 during the saving procedure. If the file's ajscalendar or ajschange command contains no option value setting or contains an initial value, such as a hyphen (-), you must delete the option before moving on to the recovery procedure.
- If a file created during saving is copied to another host and the copied file is recovered, you can copy all the hierarchical levels below the root job group "/".

# **Example 3**

Search for macro variables defined in the unit placed under the jobnet (/net1) and output them in list form. One assumption is that there are three jobs (job1, job2, and job3) under this jobnet. Let us also assume that the parameter (prm) of job1 has ?AJS2PARAM? defined and that the definition of the environment variable (env) of job3 has ? AJS2ENV1? and ?AJS2ENV2? defined.

ajsprint -F AJSROOT1 -v /net1

#### Output example

```
/net1/job1 prm ?AJS2PARAM?
/net1/job3 env ?AJS2ENV1?
/net1/job3 env ?AJS2ENV2?
```

# Example 4

Collect unit definition information files for defined jobnet 1 (/net1), and jobnet 2 (/net2) created by copying jobnet 1. To ensure that no difference is generated when comparing these two files, execute the command with the -s yes option specified for jobnets 1 and 2.

The following shows the defined jobnet 1:



```
ajsprint -F AJSROOT1 -s yes /net1 > C:\temp\net1.txt
```

Example of output of relation line information for jobnet 1 when the -s yes option is specified:

```
:
ar=(f=JobA,t=JobB,seq);
ar=(f=JobC,t=JobB,seq);
ar=(f=JobD,t=JobA,seq);
ar=(f=JobD,t=JobC,seq);
:
```

The following shows jobnet 2 created by copying jobnet 1:



Unit creation order

```
ajsprint -F AJSROOT1 -s yes /net2 > C:\temp\net2.txt
```

Example of output of relation line information for jobnet 2 when the -s yes option is specified:

```
:
ar=(f=JobA,t=JobB,seq);
ar=(f=JobC,t=JobB,seq);
ar=(f=JobD,t=JobA,seq);
ar=(f=JobD,t=JobC,seq);
:
```

Because the -s yes option is specified, relation line information entries are output in alphabetical order of unit names. Therefore, no difference is generated between jobnets 1 and 2.

Cautionary note

When you collect and compare unit definition information files for two units, confirm that the character set of the scheduler service (value of the AJSCHARCODE environment setting parameter) is the same. If the character set differs, the output order of unit definition information entries might change.

# ajsprofalter

# Format

```
ajsprofalter
  [-F service-name]
  -t {agent|unit}
  -m {set|unset}
```

# Description

Specify this command to enable, disable, or change the settings of an operation profile.

For details, see 3. Operation Profiles in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privileges

# Arguments

### -F service-name

Specify the name of the scheduler service whose operation profile you want to modify. You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

### -t {agent|unit}

Specify the type of operation profile whose settings you want to change.

• agent

Changes the settings of an execution agent profile.

• unit

Changes the settings of a unit attribute profile.

#### -m {set|unset}

Enables, disables, or changes the settings of an operation profile.

• set

Applies the operation profile stored in the environment settings file storage folder<sup>#</sup>. Specify the operation profile type in the -t option, and the target scheduler service in the -F option.

If you apply a disabled operation profile, that operation profile becomes active. If you apply an operation profile that is already active, the operation profile settings are changed to those in effect when the command is executed.

• unset

Disables the operation profile stored in the environment settings file storage folder<sup>#</sup>. Specify the operation profile type in the -t option, and the target scheduler service in the -F option.

If the operation profile you specify is already disabled, the command outputs an error message and terminates abnormally.

#

The environment settings file storage folder refers to the following folder:

For a physical host:

Windows: JP1/AJS3-Manager-installation-folder\conf

UNIX:/etc/opt/jp1ajs2/conf

For a logical host:

Windows: *shared-folder*\jp1ajs2\conf UNIX: *shared-directory*/jp1ajs2/conf

# Notes

- For details on timing when changes to operation profiles take effect, see 8.10 Changing an operation profile in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide.
- If the command terminates abnormally when you use the -m option to enable, disable, or change the settings of an operation profile, the settings in effect before the command was executed are retained.
- When you use the -munset option to disable an operation profile, the operation profile takes effect again the next time the JP1/AJS3 service starts. If you want the operation profile to stay disabled, delete the operation profile or move it to another location.
- This command can be executed regardless of whether the scheduler service is running. For this reason, it does not output log entries to the scheduler log.
- You cannot execute this command together with any of the following commands on the same logical host:

ajsprofalter command

ajsembdbstart command

ajsembdbstop command

<code>ajsstart</code> command

ajsstop command

jajs\_hstd command

 $jajs_hstd_stop$  command

jajs\_spmd command

jajs\_spmd\_status command

jajs\_spmd\_stop command

jajs\_start command (UNIX only)

jajs\_start.cluster command (UNIX only)

jajs stop command (UNIX only)

jajs\_stop.cluster command (UNIX only)

# **Return values**

0	Normal end
Other values	Abnormal end

# Example 1

Enables the unit attribute profile for the scheduler service AJSROOT2.

```
ajsprofalter -F AJSROOT2 -t unit -m set
```

# Example 2

Disables the execution agent profile for the scheduler service AJSROOT1.

```
ajsprofalter -F AJSROOT1 -t agent -m unset
```

# ajsprofstatus

# Format

```
ajsprofstatus
  [-F service-name]
  -t {agent|unit}
  [-s|-p]
```

# Description

Outputs the status and definition of an operation profile to the standard output file.

# **Execution privileges**

None

# Arguments

### -F service-name

Specify the name of the scheduler service whose operation profile information you want to output. You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

### -t {agent|unit}

Specify the type of operation profile for which to output information.

• agent

Outputs information for the execution agent profile.

• unit

Outputs information for the unit attribute profile.

### [-s|-p]

Specify the output format of the standard output file.

The operation profile to be output is stored in the environment settings file storage folder<sup>#</sup>. Specify the operation profile type by the -t option, and the target scheduler service by the -F option.

#

The environment settings file storage folder refers to the following folder:

For a physical host:

Windows: *JP1/AJS3-Manager-installation-folder*\conf UNIX: /etc/opt/jp1ajs2/conf

For a logical host:

Windows: *shared-folder*\jp1ajs2\conf UNIX: *shared-directory*/jp1ajs2/conf

### If this option is omitted, -s is assumed.
• -s

Outputs the type, status, date and time of application, and full name of the operation profile. If the operation profile is disabled, the command does not output the date and time of application or the full profile name.

• -p

Outputs the definition of the active operation profile.

If the operation profile is disabled, the command outputs an error message and terminates abnormally.

### **Return values**

0	Normal end
Other values	Abnormal end

# Example 1

Outputs the status of the unit attribute profile for AJSROOT1 to the standard output file.

```
ajsprofstatus -F AJSROOT1 -t unit
```

# Example 2

Outputs the definition of the execution agent profile applied to AJSROOT2 to the standard output file.

```
ajsprofstatus -F AJSROOT2 -t agent -p
```

# Output example 1

The following shows an output example when the unit attribute profile applied to AJSROOT1 is active and you execute the command with the -s option specified.

```
(1) Unit-attribute profile
(2) Status has an effect
(3) Apply date Jul 30 2011 20:15
(4) Operation profile name /etc/opt/jplajs2/conf/ajsprof_AJSROOT1_unit.conf
```

### Explanation of the output items

(1) Unit-attribute profile

The type of operation profile to be output, as specified in the -t option.

(2) Status

The status of the operation profile.

(3) Apply date

If the operation profile is active, this line displays the date and time when the operation profile was applied. This line is not output if the operation profile is disabled.

(4) Operation profile name

Outputs the full profile name if the operation profile is active. This line is not output if the operation profile is disabled.

2. Commands

# Output example 2

The following shows an output example when the execution agent profile applied to AJSROOT2 is active and you execute the command with the -p option specified.

```
(1) @SYS_RESTRICT_START
(2) unit_path=/Group1/Work
(3) View=on
(4) ViewCheckLevel=error
(5) JobExec=on
(6) @SYS_AGENTLIST_START
(7) AGT1
(8) @SYS_AGENTLIST_END
(9) @SYS_RESTRICT_END
(10)KAVS8007-I Output of the operation profile information ended.
```

### Explanation of the output items

(1) to (9) Definition of operation profile

Outputs the operation profile definition.

If the operation profile contains settings for multiple units, the command output repeats lines (1) to (9).

(10) Output completion message

A message indicating that output of the definition of the operation profile has completed.

# ajsrelease

# Format

### Format1 (for making release entry)

```
ajsrelease

[-F service-name]

-a release-target-root-jobnet-name

-rid release-ID

[-rcm release-comment]

-rdy release-date

[-rti release-time]

-ru release-source-root-jobnet-name
```

### Format2 (for making release cancellation)

```
ajsrelease
[-F service-name]
-c release-target-root-jobnet-name
```

### Format3 (for outputting release information)

```
ajsrelease
[-F service-name]
-i release-target-root-jobnet-name...
```

# Description

The ajsrelease command can be used to perform the following operations on a root jobnet:

• Making release entry

To enter the time that the jobnet definition will be switched, and the definition to be switched

• Making release cancellation

To cancel the switching of the definition of a jobnet for which release entry has been made

• Outputting release information

To output release information

If you register a jobnet-definition release specifying a release-target jobnet for which the upper-level unit-attribute inheritance function is set, the owner and JP1 resource group of that jobnet will be set by the function. For details on this function, see 6.4.1(4)(a) Overview of the upper-level unit-attribute inheritance function in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

<sup>2.</sup> Commands

# **Execution privileges**

You must have any of the following JP1 privileges:

For making release entry or release cancellation:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege and JP1\_AJS\_Operator privilege

For outputting release information:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

# Arguments

#### -F service-name

Specify the name of the scheduler service in which the target root jobnet (the release-target root jobnet) has been defined.

You can specify a character string of 1 to 30 bytes.

#### -a release-target-root-jobnet-name

Specify this option when making release entry.

Specify the full name of the release target root jobnet, which has the definitions to be switched to the new definition.

You can specify a character string of 1 to 930 bytes.

You can specify this option only if the release target root jobnet does not have jobnet definitions in *Release wait*, *Delete wait*, or *Release entry wait* status.

If the specified root jobnet does not exist, an error occurs. You cannot specify the following root jobnets:

- Root jobnet in a planning group
- Remote jobnet
- Jobnet for recovery
- Manager jobnet

#### -c release-target-root-jobnet-name

Specify this option when canceling the switching of the jobnet definition to a jobnet definition for which release entry is made.

Specify the full name of the root jobnet for which you want to cancel the switching of the definition.

You can specify a character string of 1 to 930 bytes.

If you specify this option, the command deletes the jobnet definitions in the *Release wait*, *Delete wait*, and *Release entry wait* statuses.

<sup>2.</sup> Commands

-i

Specify this option to output release information for the root jobnet.

If you specify this option, the command outputs information about the jobnet definitions in *Being applied*, *Release wait*, *Delete wait*, and *Release entry wait* statuses as release information. The command does not output release information about the jobnet definitions in other statuses.

### -rid release-ID

Specify the release ID of the root jobnet (release-target root jobnet) definition for which the command is to be executed. You can specify a character string of 1 to 30 bytes.

You must specify this option with the -a option.

You must specify this option if you specify the -a option.

You cannot specify the following release IDs:

- A release ID associated with the release-target jobnet for which the command is to be executed.
- A release ID that begins with AJS (upper case)
- A release ID that includes a space, tab, linefeed, or any of the following characters:
  - ( ) , / : ; = " & ' \* <> ? [ \ ] ^ ` { | } ~

You cannot specify this option with the -c and -i option.

#### -rcm release-comment

Specify a comment on the release entry you are making.

You can specify a character string of 1 to 80 bytes.

You must specify this option with the -a option.

You cannot specify this option with the -C and -i option.

If you omit this option, no release comment is registered.

#### -rdy release-date

Specify in the YYYY/MM/DD format the date on which the jobnet definition will be switched.

You can specify a value in the range from 1994/01/01 to 2036/12/31.

You must specify this option if you specify the -a option.

You cannot specify this option with the -c and -i option.

If you specify a date in the past, an error occurs. An error also occurs if you specify the same date as the release date of a jobnet definition for which release entry is already made.

#### -rti release-time

Specify in the *hh*: *mm* format the time at which the jobnet definition will be switched.

You can specify a value in the range from 00:00 to 23:59. If you omit this option, the system assumes 00:00.

You must specify this option with the -a option.

You cannot specify this option with the -c and -i option.

If you specify a time in the past, an error occurs.

### -ru release-source-root-jobnet-name

Specify the full name of the release source root jobnet, the definition of which is to be applied to another root jobnet.

You can specify a character string of 1 to 930 bytes.

You cannot specify any of the following root jobnets:

- Root jobnet for which release entry is made
- Root jobnet in a planning group
- Remote jobnet
- Jobnet for recovery
- Manager jobnet

You must specify this option if you specify the -a option.

You cannot specify this option with the -c and -i option.

### release-target-root-jobnet-name . . .

Specify the root jobnets for which you want to switch the definition.

You can specify multiple units or wildcard characters of units.

You cannot specify a character string that contains a logical host name, service name, or execution ID.

You can specify a character string of 1 to 930 bytes.

You must specify this option if you specify the -i option.

You cannot specify this option with the -a and -c option.

### Notes

- Either of the following users can register or cancel release:
  - A user granted the operation privilege and the update privilege for the unit to be released
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the operation and the update privileges.
- Either of the following users can output release information:
  - A user granted the reference privilege for the unit to be output
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

### Notes on registering jobnets for release

- A jobnet whose schedule is later than the release time and which has been registered for fixed execution with either a period or a date specified cannot be specified as a release target. In such cases, cancel the registration or prohibit the execution of schedules after the release time, and then register the jobnet-definition release. Note, however, that if a number of future generations is also specified for the jobnet registered for fixed execution, you can register the jobnet-definition release time.
- You cannot use the jobnet release function for jobnets of different scheduler services.
- The following jobnets cannot be specified as a release source:
  - A jobnet that has already been specified as a release target
  - A suspended jobnet
  - A jobnet being edited
  - A jobnet being used by another user
  - A jobnet for which at least two of the following are defined: a jobnet connector, a connection-destination jobnet, or a start condition (.CONDITION)
- The following jobnets cannot be specified as release targets:
  - A suspended jobnet
  - A jobnet whose status is Shutdown
  - A jobnet being edited
  - A jobnet being used by another user

If the other user is setting or releasing a hold attribute that applies to a unit under a jobnet whose status is *Being applied*, the jobnet can be specified as a release target.

- A jobnet for which at least two of the following are defined: a jobnet connector, a connection-destination jobnet, or a start condition (.CONDITION)
- A jobnet whose definition is in *Release wait*, *Delete wait* or *Release entry wait* status cannot be specified as a releasetarget jobnet. If you want to register a jobnet definition in the *Release wait* status, wait for the jobnet status to change to *Being applied*. For a jobnet definition in *Delete wait* or *Release entry wait* status, cancel the jobnet-definition release, and then re-register it.
- The scheduler service needs to be running to register a release.
- Registering a jobnet-definition release creates a system load that is equal to or greater than the load created by the definition for the release-source jobnet. Do not register a jobnet-definition release during peak job execution times.
- If you register a jobnet-definition release specifying a release-target jobnet for which the upper-level unit-attribute inheritance function is set, the owner and JP1 resource group of that jobnet are set by the function.
- When you register a jobnet-definition release, generations after the release date are re-created based on the registered jobnet definition. Therefore, any changes made by temporarily changing the plan before the registering the jobnet-definition release are not passed to the generations after the release date (The information specified during registration for execution, such as macro variables and JP1 user, is passed). You can reinstate temporary plan changes for generations of a jobnet after its release date by using the temporary change re-execution function to re-execute of temporary changes made prior to its release. For details on this function, see *4.5.16 Displaying and re-executing temporary change operations for a job or jobnet* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.
- Even if you register, for release, a jobnet definition that (in the schedule definition) will have no next scheduled generation created, no scheduled generation will be created from that definition. Therefore, use JP1/AJS3 View or the ajsshow command to make sure that a scheduled generation has been created correctly from the jobnet

definition that was released. If a scheduled generation has not been created, cancel the jobnet-definition release, review the release-source jobnet definition, and then re-reregister the jobnet-definition release.

- When fixed execution registration is used, the jobnet definition returns to the unregistered status if:
  - Generations exist only after the specified release date, and

- A jobnet-definition release is registered for a jobnet definition for which (in the schedule definition) no next scheduled generation is created.

In such cases, cancel the registration of the jobnet-definition release, review the release-source jobnet definition, again register the jobnet-definition release, and then re-register the jobnet definition for execution.

- If you want to change the definition of a jobnet whose release status is *Release wait*, cancel the release, change the definition, and then perform release entry. If you do not have enough time to cancel the release or to re-do release entry, or if you want to change the definition whose status is *Being applied*, suspend the jobnet and then change the definition.
- If release entry fails, the jobnet definition remains in the *Release entry wait* status and release entry is not performed. To prevent this problem, after you perform release entry, check whether the release status of the released jobnet definition changes from *Release entry wait* to *Being applied* or *Release wait*. If release entry fails and a definition remains in the *Release entry wait* status, cancel the release to delete the definition.
- Release of the following jobnets cannot be canceled:
  - A suspended jobnet
  - A jobnet whose status is Shutdown
  - A jobnet being edited
  - A jobnet being used by another user

If the other user is setting or releasing a hold attribute that applies to a unit under a jobnet whose status is *Being applied*, the release of the jobnet can be canceled.

#### Cautionary notes on canceling a release

- You cannot cancel release of a root jobnet that is being operated on by another user.
- You cannot cancel a release for a root jobnet that has been suspended. In such cases, release the suspension of the root jobnet and try again to cancel the release.
- You cannot cancel a release for a root jobnet in shutdown status. In such cases, cancel the execution registration of the root jobnet and try again to cancel the release.
- The scheduler service needs to be running to cancel a release.
- Canceling a release creates a system load that is equal to or greater than the load caused by deleting the jobnet definitions in the release information. Do not cancel a release during peak job execution times.
- When you cancel a release, generations are re-created based on the jobnet definition whose status becomes *Being applied* after the release is canceled. Therefore, any changes made by temporarily changing the plan before canceling the release are not passed to the jobnets after the release is canceled. Note, however, that the information specified during registration for execution, such as macro variables and JP1 users, is passed.
- If no next scheduled generation is created because of cancellation of the release of a jobnet definition whose status became Being applied after the cancellation, no scheduled generation will be created from that definition. Therefore, use JP1/AJS3 View or the ajsshow command to make sure that the scheduled generation has been created correctly after the release is canceled. If a scheduled generation has not been created, review the jobnet definition that is in the *Being applied* status.
- When fixed execution registration is used, the jobnet definition returns to the unregistered status if:
  - Generations exist only in the jobnet definition whose release is to be canceled, and

- No next scheduled generation is created because the release was cancelled for a jobnet definition whose status became *Being applied* after the cancellation.

Review the jobnet definition that is in *Being applied* status after the release was canceled, and then re-register the jobnet for execution.

#### Cautionary notes on outputting release information

• When extracting data from the output information, extract the data based on its delimiting spaces, not by fixed byte count.

#### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Example 1

In the following example, the command applies the definition of the *test-environment*/Rel001 jobnet to the / *production-environment*/unit001/ jobnet as release 001 at 20:00 on August 10, 2010.

```
ajsrelease -F AJSROOT1 -a / production-environment /unit001 -rid 001 -rcm 2010/08/10 release-definition -rdy 2010/08/10 -rti 20:00 -ru / test-environment /Rel001
```

### Example 2

In the following example, the command removes the release entry for the */production-environment/unit001* root jobnet.

```
ajsrelease -F AJSROOT1 -c / production-environment /unit001
```

### Example 3

In the following example, the command displays the release information for the */production-environment/* unit001 root jobnet.

```
ajsrelease -F AJSROOT1 -i / production-environment /unit001
```

### Output example

The following shows a sample execution of the command with the -i option specified:

```
upper job group name = /production-environmentUnit nameRelease IDRelease timeRelease statusRelease commentRelease source jobnetunit00100108 10 20XX 20:00being appliedAug 10-Sep 4/test/release-model-2unit00200209 05 20XX 08:30release waitFinal release/test/release-model-3
```

The following shows the meaning of the output.

upper job group name

The name of the upper-level job group is indicated here.

Unit name

Unit names are listed in this column.

Release ID

Release IDs are listed in this column.

```
Release time
```

Release times are listed in MM DD YYYY HH:MM format in this column.

```
Release status
```

Any of the following release statuses is displayed in this column.

• release wait:

The unit is waiting for the new definition to be applied.

• being applied:

The jobnet definition registered by release entry is currently applied.

• delete wait:

There is a definition for which release cancellation failed.

• release entry wait:

There is a definition for which release entry failed. Alternatively, release entry was successful but the status has not changed to *Release wait* yet.

```
Release comment
```

Comments specified when release entry was made are displayed in this column.

Release source jobnet

The name of the release source jobnet whose definition is used as the new definition is displayed in this column.

# ajsrerun

# Format

```
ajsrerun
    [-F service-name]
    [-B execution-registration-number]
    [{-t|-s|-n|<u>-a</u>|-w|-f|-p|-e}]
    [-h]
    [-c]
    [-R]
    [-E]
    [-T]
    [-N|-J]
    [-X {yes|no|auto}]
    job-name-or-jobnet-name-or-job-group-name...
```

# Description

Re-executes a jobnet. (Upon re-execution specification, the jobnet is executed immediately.) You can place a jobnet or job in the hold state and re-execute it later.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -в execution-registration-number

Specify the execution registration number of the jobnet you want to re-execute in the *YYYYMMDDNNN* format. The following gives the contents of *YYYYMMDDNNN*.

YYYY: Year of the date of execution

MM: Month of the date of execution

*DD*: Day of the date of execution

NNN: Execution registration sequence number for the date of execution

For details of the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

#### -t

Re-executes the jobnet from the top.

You can also re-execute a jobnet which has ended normally or ended with warning.

You can specify this option only in the root jobnet.

#### -s

Re-executes the jobnet containing an abnormally ended job from the top.

You can specify this option only in the root jobnet.

### -n

Re-executes the jobs from the next job of an abnormally ended one.

You can specify this option only in the root jobnet.

### -a

Re-executes the jobs from an abnormally ended one.

You can specify this option only in the root jobnet.

### -w

Re-executes a job ended with warning.

If the re-execution of a job which has ended with warning results in an abnormal end, you can further re-execute the job as a job ended with warning. (For example, job A has ended with warning and you re-execute the job (first re-execution). If job A terminates abnormally during the first re-execution, you can specify the -w option to further re-execute job A (second re-execution).

You can specify this option only in the root jobnet.

### -f

Starts re-execution by first re-executing a specified jobnet or job.

### -p

Re-executes a specified jobnet or job.

#### -е

Re-executes the jobnets or jobs from the next jobnet or job of a specified one.

You cannot specify this option for the root jobnet. You cannot specify this option with the -h option.

### -h

Temporarily holds and then re-executes the target job or jobnet.

You cannot specify this option for jobnet connector. You cannot specify this option with the -e option.

#### -c

Re-executes an abnormal preceding job or jobnet after placing it in the "ended with warning" status.

### -R

Re-executes all jobnets and jobs contained in the specified unit.

If you specify this option with the -E and/or -T options, the system re-executes jobnets and jobs according to the specification of each option.

### -E

Re-executes a jobnet registered for execution.

### -**T**

Re-executes the root jobnet.

# -N

Starts re-execution by first re-executing a jobnet.

### -J

Starts re-execution by first re-executing a job.

### -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

• yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

- If you want to automatically select a target unit Specify a unit name without a root jobnet name in a planning group.
- If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

### job-name-or-jobnet-name-or-job-group-name

Specify the name of the job or jobnet you want to re-execute. You can also specify a job, jobnet, or job group name with the -R, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a job, jobnet, or job group name. If you specify an execution ID, however, the -B option is disabled. For details about how to specify the execution ID, see *1.1 Command syntax*.

<sup>2.</sup> Commands

# Notes

- Either of the following users can re-execute a jobnet:
  - A user granted the operation privilege when the units contained in the jobnet to be re-executed were defined or when their attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges
     Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.
- This command terminates abnormally if you execute it without a scheduler service running.
- With the -f, -p, or -e option specified, this command terminates abnormally if:
  - The root jobnet is placed in the Being held or Waiting for the start time status.
  - The nest jobnet or job is placed in any of the following statuses: Now running, Now rerunning, Being held, Waiting for the start time, Waiting for previous to end, Now queuing, or Waiting to execute.
- If you re-execute a jobnet or a job during the execution of the jobnet by specifying the -f or -e option when the re-execution start point is before the job being executed, the job being executed is executed twice.
- This command terminates abnormally if the target job is a judgment job.
- If the job that is to be re-executed is a dependent job and no is set for the RERUNSUBORDINATE environment setting parameter, this command ends abnormally. For details about the RERUNSUBORDINATE environment setting parameter, see 2.2.2(104) RERUNSUBORDINATE in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.
- You cannot use this command for units subordinate to remote jobnets.
- This command terminates abnormally if the target jobnet or job is being suspended.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.
- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- For an explanation of how to specify the name of a unit in a planning group, see *Additional informations* in *ajsplan* in *2. Commands*.
- If you specify none of the -t, -s, -n, -w, -f, -p, and -e options, the -a option is assumed.
- When you specify the -s, -n, and -a options, the following states are treated as abnormal end states:
  - Ended abnormally (abnormal)
  - Not executed + Ended (unexec)
  - Interrupted
  - Killed
  - Invalid exe. seq.
  - Failed to start (fail)
  - Unknown end status (unknown)
  - Skipped, so not executed (skipped so not exe)
- When monitoring of start conditions ends and the status changes from *Now monitoring* to any of the following, the status of the units in the root jobnet changes to *Not execute* + *Ended*:

- Unmonitored + Ended
- Monitor terminated
- Monitor-end normal

The *Not execute* + *Ended* status is treated as abnormal termination. Keep this in mind when you re-execute a generation in any of the above statuses.

• Care must be taken when a root jobnet or preceding unit is re-executed as a result of a judgment job. For details, see 2.4.3 Dynamically changing a process depending on the result of a preceding job (example of defining a jobnet that uses a judgment job) in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information

If you attempt to re-execute a jobnet which ended on or before the previous day, schedule information for the previous execution is applied to this re-execution. The following gives an example of the re-execution.

Example:

Jobnet A that is executed every day and jobnet B that is executed only on Friday are operated as one jobnet X.

Because jobnet A ended abnormally on Thursday, however, this jobnet is re-executed on Friday.

In this example, only jobnet A is executed on Friday. As definition information for the previous execution (on Thursday) applies to the re-execution, jobnet B scheduled to be executed only on Friday is not executed.

# Example

The following command re-executes the jobnet (net1) interrupted by the ajsintrpt command from the top.

```
ajsrerun -t net1
```

# ajsrestore

# Format

```
ajsrestore
    [-F service-name]
    [-b backup-information-directory-name]
    [-d restoration-destination-unit-name]
    [{-i|<u>-e</u>|-f}]
    [-t]
    [-S]
    -n backup-box-name
    [backup-file-name...]
```

# Description

Restores a unit backed up to the backup box to the unit definition information directory.

We recommend that the user who executes this command have superuser privileges (in UNIX systems) or be logged on as a member of the Administrators group (in Windows systems).

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege

We recommend that the user who executes this command be logged on as a member of the Administrators group (in Windows systems) or have superuser privileges (in UNIX systems).

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -ь backup-information-directory-name

Specify the full path of the directory if you use a directory other than the backup information directory<sup>#</sup> specified at the time of configuration.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the backup information directory<sup>#</sup> specified at the time of configuration.

#

It refers to the directory name specified by the AJSBKUROOT environment setting parameter.

#### -d restoration-destination-unit-name

When restoring a unit backed up, specify a job group or jobnet name to be used in the restoration destination.

You can specify a character string of 1 to 899 bytes.

### -i

If the restoration destination contains a unit having the same name as a unit to be restored, this option displays a message and a prompt for confirmation.

### -е

An error occurs if the restoration destination contains a unit having the same name as a unit to be restored. No information is updated.

### -f

Forcibly updates the unit even if the restoration destination contains a unit having the same name as a unit to be restored.

### -t

Outputs a list of names of the units backed up in the backup box to the standard output file.

You can change the output format by setting the AJSDISPSUBUNITTYPE environment variable.

• When outputting a job group type

Set the AJSDISPSUBUNITTYPE environment variable to YES.

Note

A job group type is displayed only when the type of the saved unit is a job group.

- When not outputting a job group type Select either of the following:
  - Set the AJSDISPSUBUNITTYPE environment variable to NO.
  - Specify no value for the AJSDISPSUBUNITTYPE environment variable.

For details about the AJSDISPSUBUNITTYPE environment variable, see *Table 1-6* in *1.4 Environment variables*.

### -s

Even for suspended jobnets that have been registered for execution, this option makes it possible to update the unit in these jobnets. Even for suspended jobnets, however, you cannot update definitions if any of the following situations occur:

- When the definition of the root jobnet is being updated
- When the definitions of job groups containing the definition of the root jobnet are being updated
- When jobnets are being executed

### -n backup-box-name

Specify a backup box name.

You can specify a character string of 1 to 50 bytes.

The name of the backup box depends on the file system of your operating system. It is case-sensitive if you are using UNIX and case-insensitive if you are using Windows.

# backup-file-name

Specify the name of a file to be restored in the backup box.

You can specify a value from 0001 to 1024.

You can specify multiple backup file names.

If you omit this option, all the backup files in the backup box are restored.

### Notes

- Either of the following users can restore a unit:
  - A user who has the update privilege for the unit to be restored
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the update privilege.

- You cannot restore the unit in the following cases:
  - You do not have the reference privilege for both the backup box and backup file.
  - The restoration destination contains no units.
  - Restoration would result in an invalid hierarchical structure, such as restoring a job group in a jobnet.
  - The number of nests in the job group or jobnet exceeds 30 (10 if the DEFLENTYPE environment setting parameter is set to sjis), the maximum allowed.
- If the restoration destination contains a unit having the same name as a unit to be restored, delete that unit before attempting to restore a unit.
- Before restoring a root jobnet registered for execution and the job group or planning group containing the root jobnet, you must use the ajsleave command to cancel the registration (Otherwise, the restore process is not effective). For those units other than in the root jobnet, the job group containing the root jobnet, and the remote jobnet, however, specifying the -s option in this command while keeping the target jobnet suspended makes it possible to conduct the delete process without having to cancel the registered jobnet. (If the target unit is currently being executed, the delete process is not effective even if the -s option is specified.)
- This command terminates abnormally if the jobnet specified at the destination's unit is undergoing a suspendedstate change.
- You cannot restore a planning group into a jobnet.
- You cannot restore any unit other than a jobnet or remote jobnet into a planning group.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional informations

- If you omit a backup file name, the backup files are restored in the order in which they were created.
- The place where a recovered unit appears in the Jobnet Editor window of JP1/AJS3 View is determined automatically. The unit with the same name appears in the same location as before restoration.

# Example 1

The following command forcibly restores all the backup files saved in backup box BOX1 to job group /Materials/ ShipManagement although it contains a unit having the same name as the unit to be restored.

ajsrestore -f -d /Materials/ShipManagement -n BOX1

# Example 2

The following command outputs a list of the units (jobnets) saved in backup box BOX1.

```
ajsrestore -t -n BOX1
```

#### Output example:

```
0001:/Materials:Template:g
0002:/Materials/ShipManagement:ShipSlipCreation:n
```

# Example 3

The following command outputs a list of the units (jobnet connectors) saved in backup box BOX1.

```
ajsrestore -t -n BOX1
```

### Output example

```
0001:/Materials:Template:g
0002:/Materials/ShipManagement/ShipSlipCreation:JobnetExecutionWait:nc
```

# ajsrgexport

# Format

```
ajsrgexport
   [-F service-name]
   [-R]
   [-e {s|f}]
   [-o file-of-registered-execution-schedule-information-for-jobnet-name]
   [-m]
   unit-name...
```

# Description

The ajsrgexport command exports registered execution-schedule information about the root jobnet registration for execution.

### **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes. If you omit this option, the system assumes the default scheduler service name.

#### -R

If this option is specified, all root jobnets included in the specified units, in addition to the specified units themselves, are subject to exporting.

#### -e {s|f}

Specify the execution registration type or types of jobnets for which you want to export registered execution-schedule information.

The command exports registered execution-schedule information about root jobnets that have been registered for planned execution.

• f

The command exports registered execution-schedule information about root jobnets that have been registered for fixed execution.

<sup>•</sup> s

If you want to export registered execution-schedule information about root jobnets that have been registered for planned execution and also root jobnets that have been registered for fixed execution, specify -e sf.

If you omit this option, the command exports information about root jobnets that have been registered for planned execution and also root jobnets that have been registered for fixed execution.

If no root jobnets have been registered for the specified type of execution or if the specified root jobnets will no longer be executed, a message to that effect is output.

You can suppress this message output by specifying the -m option.

-m

Specify this option if you do not want a message to be output.

#### -o file-of-registered-execution-schedule-information-for-jobnet-name

Specify the name of the file to which registered execution-schedule information will be exported.

You can specify a character string of 1 to 255 bytes. If the length of the specified file name exceeds 255 bytes, an error message is output. If this option is omitted, the registered execution-schedule information is output to the standard output file. If the name of an existing file is specified, the existing file is overwritten.

Please do not modify this file. If a modified file is imported, the system might be unable to operate correctly.

#### unit-name . . .

Specify the names of root jobnets or job groups to be exported. The maximum total length of the names is 930 bytes.

Note that you can specify scheduler service names but cannot specify host names and execution IDs.

### **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Notes

- Either of the following users can execute this command:
  - A user who has the reference privilege for the unit to be exported
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

- This command can export registered execution-schedule information about only root jobnets that have been registered for planned or fixed execution.
- This command cannot be executed remotely.
- If there is no information to be exported, the command outputs the following message: KAVS4837-I There is no information to be exported.
- Do not export or import registered execution-schedule information between systems that use different time zones. Before you execute the ajsrgexport or ajsrgimport commands, make sure that the time zone settings on the systems on which you execute these commands are the same.

• If the target root jobnet is or contains a release target jobnet (a root jobnet for which release entry is made), and has been registered for fixed execution, the data to be exported changes on the release date. On and after the release date, the new jobnet definition (the definition of the release-source jobnet) is exported.

# Example 1

The following command exports registered execution-schedule information about the root jobnets in job group / GROUPA.

```
ajsrgexport -F AJSROOT1 -o /tmp/unitreg.txt /GROUPA/*
```

# Example 2

The following command exports registered execution-schedule information about root jobnet /GROUPA/JOBNETA only.

```
ajsrgexport -F AJSROOT1 -o /tmp/unitreg net.txt /GROUPA/JOBNETA
```

# Example 3

The following command exports registered execution-schedule information about the root jobnets in job group /GROUPA.

```
ajsrgexport -F AJSROOT1 -R -o /tmp/unitreg_net.txt /GROUPA
```

# ajsrgimport

# Format

```
ajsrgimport
  [-F service-name]
  [-f]
  [-u unit-name]
  [-o unit-name]
  -i file-of-registered-execution-schedule-information-for-jobnet-name
```

# Description

The ajsrgimport command imports jobnet registered execution-schedule information, and registers root jobnets for execution based on the imported information.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

# Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes. If you omit this option, the system assumes the default scheduler service name.

#### -f

Specify this option if you do not want to execute jobnets that have been scheduled for execution on the current day and the execution time has already passed. This option is valid for all jobnets specified in the file of registered execution-schedule information for jobnets regardless of whether the type of execution registration is planned execution or fixed execution.

#### -u unit-name

Specify the unit name of a root jobnet or job group you want to import. You can use a maximum of 930 bytes to specify the unit name. Note that you cannot use wildcard characters. Also, you cannot specify a scheduler service name, host name, or execution ID.

You can specify multiple -u options in the -u unit-name -u unit-name ... format.

If root jobnets that have the same name as the specified unit names are found in the registered execution-schedule information file, these root jobnets are registered for execution. Similarly, if root jobnets belonging to job groups that have the same name as the specified unit names are found in the registered execution-schedule information file, these root jobnets are registered for execution.

If you specify neither the  $-\circ$  option nor this option, registered execution-schedule information about all units specified in the file of registered execution-schedule information for jobnets specified in the -i option is imported.

You cannot specify the -u option together with the -o option.

#### -o unit-name

Specify the unit name of a root jobnet or job group you do not want to import. You can use a maximum of 930 bytes to specify the unit name. Note that you cannot use wildcard characters. Also, you cannot specify a scheduler service name, host name, or execution ID.

You can specify multiple  $-\circ$  options in the  $-\circ$  *unit-name*  $-\circ$  *unit-name* ... format.

If root jobnets that have the same name as the specified unit names are found in the registered execution-schedule information file, the other root jobnets are registered for execution. Similarly, if root jobnets belonging to job groups that have the same name as the specified unit names are found in the registered execution-schedule information file, the other root jobnets are registered for execution. If a specified unit name is not found in the file, this option is ignored.

If you specify neither the -u option nor this option, registered execution-schedule information about all units specified in the file of registered execution-schedule information for jobnets specified in the -i option is imported.

You cannot specify the -o option together with the -u option.

### -i file-of-registered-execution-schedule-information-for-jobnet-name

Specify the name of the file to which registered execution-schedule information has been exported.

You can specify a character string of 1 to 255 bytes. If the length of the specified file name exceeds 255 bytes, the following message is output: KAVS4829-E Specified file name (*file-name*) is too long.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

### Notes

- Either of the following users can execute this command:
  - A user who is the same JP1 user as the export JP1 user and who has the operation privilege for the units that are in the root jobnet to be imported and that are coded in the registered execution-schedule information file
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.

• When fixed execution of the root jobnet is performed by multiple users, only the JP1 user who is mapped to an OS user with Administrators or superuser privileges can execute this command. Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.

If a JP1 user who cannot execute the ajsrgimport command performs import, the KAVS4824-E message appears, and registered execution-schedule information cannot be imported.

- You can import registered execution-schedule information about only root jobnets registered for planned or fixed execution.
- You cannot execute this command remotely.

• Do not export and import registered execution-schedule information between systems that use different time zones. Before you execute the ajsrgexport or ajsrgimport commands, make sure that the time zone settings on the systems on which you execute these commands are the same.

# Example 1

The following command imports all contents of the file of registered execution-schedule information for jobnets.

```
ajsrgimport -F AJSROOT1 -i unitreg.txt
```

# Example 2

The following command imports information about a specific unit (/GROUPA/JOBNETA) specified in the file of registered execution-schedule information for jobnets.

ajsrgimport -F AJSROOT1 -i unitreg.txt -u /GROUPA/JOBNETA

# ajsschedule

# Format

```
ajsschedule
  [-F service-name]
  -b[[year/]month/]day
  -e[[year/]month/]day
  root-jobnet-name
```

# Description

Creates a jobnet execution schedule for a certain period. The result of the creation is output to the standard output file according to the format of the schedule information parameter. For details about the schedule information parameter, see 4.4 Creating a schedule information file in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

# Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

### -b [[year/]month/]day

Specify the start date of the period applied to a schedule to be created.

The start time is the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the year or the year/month in this option, the following values are assumed.

year: Year when the command was executed

year/month: Year and month when the command was executed

### -e [[year/]month/]day

Specify the end date of the period applied to a schedule to be created. The end date must be the same as or follow the start date.

The end time is the base time plus 23 hours: 59 minutes: 59 seconds.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the year or the year/month in this option, the following values are assumed.

year: Year when the command was executed

year/month: The year and month in which you executed the command

### root-jobnet-name

Specify the name of a target root jobnet by using a maximum of 930 bytes.

Note that you cannot use wildcard characters to create an execution schedule for multiple root jobnets. If you specify a character string that includes a wildcard character and the specification can represent multiple root jobnets, an execution schedule is created for only one root jobnet.

Also note that you cannot specify a logical host name or execution ID for *root-jobnet-name*.

# Notes

- Either of the following users can create an execution schedule:
  - A user granted the reference privilege when the jobnet was defined or when its attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges

Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have the reference privilege.

- The execution date can be specified in the -b or -e option. For the execution date, see 3.3.1 Time formats and schedule rules for root jobnets in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.
- If the 48-hour schedule is used for the schedule definition of a root jobnet, be careful with the base time. If the base time is not 0:00, for a root jobnet that will be executed across two days, the schedule information output by this command might be different from the schedule that is actually defined. For details about the execution date output by the command, see 3.3.1 *Time formats and schedule rules for root jobnets* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*. For the execution time of a nested jobnet, a time in the range from 0:00 to 23:59 is output, even if the jobnet is executed across two days. The concept of the base time is not necessary for a nested job because a nested job follows the root jobnet, which uses the base time for execution. For this reason, the 24-hour schedule is used for the execution time output for a nested job.

• If the specified root jobnet is a release target root jobnet (a root jobnet for which release entry has been made), the definition of the schedule to be created changes on the release date. On and after the release date, the new jobnet definition (the definition of the release-source jobnet) is applied.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example

The following command creates the schedule of jobnet net1 for June 20XX.

```
ajsschedule -b 20XX/6/1 -e 20XX/6/30 /net1
```

# **Output example**

```
PN=net1:20XX06050000:h::::;;
{
 PJ=job:y:y:h;
}
PN=net1:20XX06120000:h::::;;
{
PJ=job:y:y:h;
}
PN=net1:20XX06190000:h::::;;
{
PJ=job:y:y:n;
}
PN=net1:20XX06260000:h::::;;
{
PJ=job:y:y:n;
}
```

# ajsshow

# Format

```
ajsshow
     [-F service-name]
     [{-s|-p|<u>-1</u>|-xw [-xi {b|c}]|-r|-f "format-indicator"|
          -i "two-byte-format-indicator"}]
     [-t "format-indicator"]
     [-k]
     [-q {number-of-generations|a}
         |-b year/month[/day] [-e year/month[/day]]
         |-v year/month[/day] [-w year/month[/day]]
         [-B execution-registration-number]
     [-u user-name]
     [-c]
     [-R]
     [-E]
     [-T]
     [-N|-J]
     [-d [[year/]month/]day]
     [-h hours[:minutes]]
     [-X {yes|no|auto}]
     job-name-or-jobnet-name-or-job-group-name...
```

# Description

Outputs the results of the past execution, the current status, the next execution schedule, and other information on a jobnet or job already registered for execution to the standard output file. (For details about the output format, see *Additional information 1* later.)

# **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Editor privilege
- JP1\_AJS\_Operator privilege
- JP1\_AJS\_Guest privilege

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

-s

Outputs execution registration information scheduled to be performed in the specified jobnet in the next cycle.

If there is nothing scheduled for subsequent execution, the option outputs the execution registration information for the jobnet that was executed in the previous cycle or is currently being executed.

Note that for a jobnet that has been registered for planned execution, if the next execution is not scheduled, a non-scheduled generation is generated for the next execution. Therefore, if you specify this option when the next execution is not scheduled, Not sched. to exe. is output as the status.

When you use the function that automatically selects a unit being operated, select a jobnet scheduled to be executed in the next cycle from those in the root jobnet under the planning group, and output the execution registration information. If there is nothing scheduled for subsequent execution, the option selects the jobnet that was executed in the previous cycle or is currently being executed and outputs the execution registration information.

You cannot specify this option for a job.

You cannot specify this option with the -p, -l, -xw, -r, -f, -i, -g, -b, -e, -v, -w, -B, or -J option.

You cannot specify this option if you specify the execution ID for a job, jobnet, or job group name.

#### -p

Outputs information on the next execution schedule of a specified jobnet.

If you are using the function for automatically selecting a target unit, the command outputs information on the next execution schedule of the jobnet scheduled to be executed next under the root jobnets in a planning group.

You cannot specify this option for a job.

You cannot specify this option with the -s, -l, -xw, -r, -f, -i, -g, -b, -e, -v, -w, -B, or -J option.

You cannot specify this option if you specify the execution ID for a job, jobnet, or job group name.

-1

Outputs execution result information on a specified jobnet, and jobs and jobnets in it.

If you are using the function for automatically selecting a target unit, the command outputs result information for the jobnets or jobs that belong to as many generations as the number specified with the -g option, starting from generation number 1, under the root jobnets in a planning group.

You cannot specify this option with the -s, -p, -xw, -r, -f, -i, -b, -e, -v, -w, or -B option.

You cannot specify this option if you specify the execution ID for a job, jobnet, or job group name.

#### -xw

Outputs the status of the specified unit with wait conditions and the units whose ends are being waited for. Information about the units whose ends are being waited for relates to the generation whose end is currently being waited for.

When a jobnet with start conditions for which wait conditions are set is to be output, specify c for the -xi option. If a jobnet with start conditions for which wait conditions are set is output without c being specified for the -xi option, the ajsshow command ends abnormally. For details, see the -xi option.

For details about checking units whose ends are being waited for, see 2.2.5(7) Checking units whose ends are being waited for in the Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide.

If you are using the function for automatically selecting a target unit, the command outputs results for a number of generations of jobnets or jobs equivalent to the number specified with the -g option, starting from generation number 1, under the root jobnets in a planning group.

You cannot specify this option together with the -1, -s, -p, -r, -f, -i, -b, -e, -v, or -w option.

This option is only available when the database uses a standard configuration.

If you specify an execution ID in the –B option or as the unit name, the command outputs information only for that generation.

If you specify a value of 1 or greater for the -g option, the command outputs information for a number of generations of jobnets or jobs equivalent to the number specified with the -g option, starting from generation 1. If generation 1 does not exist, the command outputs information for generation 0.

If you specify 0 in the -g option, the command outputs results for generation 0.

If you omit the -B option, an execution ID, and the -g option, the system assumes 1 as the value of the -g option.

#### -xi {b|c}

Specify the output format of wait information. Specify this option together with the -xw option. If it is omitted, b is assumed.

When a jobnet with start conditions for which wait conditions are set is to be output, the generation to be output (monitoring generation or execution generation) differs depending on the specification (b or c).

• b

Outputs information about the units with wait conditions or the information set as a wait condition. Note, however, that settings information for **A jobnet with start conditions is waiting** is not output.

To output a jobnet with start conditions, output both monitoring and execution generations. Note, however, that if the execution generation does not have wait information, the ajsshow command ends abnormally.

• C

Information about units with wait conditions or the information set as wait conditions are output. Settings information for **A jobnet with start conditions is waiting** is also output.

When a jobnet with start conditions is to be output, only the monitoring generation is output. The execution generations are not output. If you use the -g option to output only the execution generations, the ajsshow command ends abnormally.

The following table describes the differences between generations that are output according to the argument of the – xi option.

# Table 2–15: Differences between the generations that are output according to the argument specified for the -xi option

No.	-xi option argument	How generations are specified	Jobnet generation where a start condition is used		Jobnet generation where no start condition is used
			Monitoring generation	Execution generation	
1	b	Execution ID or execution registration number	Y	Е	Y
2		-g option	Y	Е	Y

No.	-xi option argument	How generations are specified	Jobnet generation where a start condition is used		Jobnet generation where no start condition is used
			Monitoring generation	Execution generation	
3	с	Execution ID or execution registration number	Y	N	Y
4	-	-g option	Y	N or E <sup>#</sup>	Y

Legend

Y: Information is subject to output, and is output.

N: Information is not subject to output

E: Information is subject to output, but the ajsshow command ends abnormally.

#

If the -g option is used to include all generations, information is not to be output. If the -g option is used to output the execution generation only, the ajsshow command ends abnormally.

For output examples of the -xi option, see *Example 8*.

#### -r

Outputs the standard error output file name for a specified job.

If the specified job does not send information to the standard error output, the default standard error output file name is output.

You cannot specify this option with the -s, -p, -l, -xw, -f, -i, -T, or -N option.

#### -f "format-indicator"

Outputs the information specified by the format indicator for a specified jobnet or job.

Specify the format indicator by % followed by an alphabetic character of one byte. For details about the format indicator, see *Additional information 1* later.

Characters are output as specified, except for the format indicator enclosed in double quotation marks (").

#### -i "two-byte-format-indicator"

Outputs the information specified by the format indicator for a specified jobnet or job.

Specify the format indicator by % followed by an alphabetic character of two bytes. For details about the format indicator, see *Additional information 1* later.

Characters are output as specified, except for the format indicator enclosed in double quotation marks (").

#### -t "format-indicator"

Outputs the information specified by the format indicator to the title row.

Specify the format indicator by % followed by an alphabetic character of one byte. For details about the format indicator, see *Additional information 1* later.

Characters are output as specified, except for the format indicator enclosed in double quotation marks (").

You must specify this option with the -f or -i option. Specify this option with the -f option. If you specify it with the -s, -p, -1, -xw, or -k option, it is disabled.

-k

Does not output the title row.

When you specify this option with the -s, -p, -1, or -xw option, only the AJSPATH= row is output.

### -g {number-of-generations|a}

Outputs execution result information in descending order from the latest generation to the specified generation.

The default is 1. However, even when you specify 1 for *number-of-generations*, if generation number 1 does not exist, 0 is assumed as the number of generations.

If you are using the function for automatically selecting a target unit, the command outputs information about the jobnets or jobs that belong to as many generations as the specified number, starting from generation number 1 or 0, under the root jobnets in a planning group.

You cannot specify this option with the -s, -p, -b, -e, -v, -w, or -B option.

• number-of-generations

You can specify 0 to 99 generations. You can, however, enable the system setting option to expand the number of generations up to 999.

If you set 0, the system outputs information on the jobnets not executed and jobnets being held (in this case, you cannot specify this option with the -1 option).

Even though a nest jobnet is not executed or is being held, the number of generations is assumed to be 1 if its root jobnet is being executed.

If the number of generations is other than 0, the generation number is output to the title row when you specify the -1 option.

• a

Outputs execution result information on all the generations.

When you execute this command for a unit that has never been executed, the results of generation 0 are output. When you execute this command for a unit that has already been executed, the results of generation 1 or greater are output.

### -ь year/month[/day]

Specify the start date of the period of information output as a calendar date.

The start time is the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31. If you omit this option, the system assumes the base date for the specified year and month.

Specify the end date of the information output period in the -e option.

<sup>2.</sup> Commands

The command outputs information for specified units that have results or have schedule information in the period from the start date to the end date.

If the specified unit has no result or no schedule information in the period from the start date to the end date, the command does not output information.

If you are using the function for automatically selecting a target unit, the command outputs information about the units having result or schedule information for the specified period under the jobnets in a planning group.

Specify this option together with the -f or -i option. You cannot specify it with the -s, -p, -l, -xw, -g, -v, -w, or -B option.

See the usage examples below for details on how to use this option.

#### -e year/month[/day]

Specify the end date of the period of information output as a calendar date.

For the end date, specify a date the same as or following the start date.

If you omit this option, the system assumes the date specified with the -b option.

The end time is the base time plus 23 hours: 59 minutes: 59 seconds.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31. If you omit this option, the system assumes the base date for the specified year and month. (For example, if you set the base date to 20, the system assumes 19 as the end date.)

Specify this option with the -f or -i option and the -b option. You cannot specify it with the -s, -p, -1, -xw, -g, -v, -w, or -B option.

#### -v year/month[/day]

Specify the start date of the period of information output as an execution date.

The start time is the base time.

• year

You can specify a value between 1994 and 2036 for the year.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31. If you omit this argument, the system assumes the base date in the specified month and year.

The command outputs information for specified units whose root jobnets have results or have schedule information in the period from the start date to the end date.

<sup>2.</sup> Commands

If results or schedule information exists for the upper-level root jobnet in the period from the start date to the end date, but none exists for the specified unit in the period specified by the -v and -w options, the command outputs information for all units (including unscheduled units) defined under the specified unit.

If you are using the function for automatically selecting a target unit, the command outputs information about the units having result or schedule information for the specified period under the jobnets in a planning group.

Specify this option together with the -f or -i option. You cannot specify it with the -s, -p, -l, -xw, -g, -b, -e, or -B option.

See the usage examples below for details on how to use this option.

### -w year/month[/day]

Specify the end date of the period of information output as an execution date.

For the end date, specify a date the same as or following the start date.

If you omit this option, the system assumes the date specified with the -v option.

The end time is the base time plus 23 hours: 59 minutes: 59 seconds.

• year

You can specify a value between 1994 and 2036.

• month

You can specify a value between 1 (or 01) and 12.

• *day* 

You can specify a value between 1 (or 01) and 31. If you omit this option, the system assumes the base date for the specified year and month. (For example, if you set the base date to 20, the system assumes 19 as the end date.)

Specify this option with the -f or -i option and the -v option. You cannot specify it with the -s, -p, -l, -xw, -g, -b, -e, or -B option.

#### -в execution-registration-number

Specify the execution registration number of the jobnet whose information you want to display in the *YYYYMMDDNNN* format. The following gives the contents of *YYYYMMDDNNN*.

*YYYY*: Year of the date of execution

*MM*: Month of the date of execution

*DD*: Day of the date of execution

NNN: Execution registration sequence number for the date of execution

For details about the execution registration number, see 4.5.13 Methods of specifying generations when executing commands in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

If you are using the function for automatically selecting a target unit, the command outputs information about the units having an execution registration number under the jobnets in a planning group.

You cannot specify this option with the -s, -p, -l, -g, -b, -e, -v, or -w option. Specify this option together with the -f, -i, -r, or -xw option.

<sup>2.</sup> Commands

#### -u user-name

To output information on a jobnet registered by a specified user, specify the user name.

You can specify a character string of 1 to 31 bytes.

#### -c

Obtains information for the specified jobnet or job, and then outputs it in the high-speed mode.

You cannot obtain information about a job or jobnet that is added while it is suspended.

Format indicators %B, %b, %O, and %o are displayed in the \*\*\*\*/\*\*/\*\* \*\*:\*\* or \*\*\*\*/\*\*/\*\* /\*\* \*\*:\*\* format.

Format indicator a is displayed in the 00:00:00 format.

Specify this option with the -f, -i, or -r option.

You cannot specify this option with the -s, -p, -l, -xw, -b, -e, -v, -w, or -R option. However, you can specify this option with the -R option if you also specify the -T option.

#### -R

Outputs information on all the jobnets or jobs contained in a specified unit.

If you specify this option with the -E, -T, -N, and/or -J options, the system outputs information on the jobnets or jobs according to the specification of each option.

#### -E

Outputs information on a jobnet already registered for execution.

#### -т

Outputs information on the root jobnet.

You cannot specify this option with the -r or -J option.

#### -N

Outputs information on a jobnet.

You cannot specify this option with the -r or -J option.

-J

Outputs information on a job.

You cannot specify this option with the -s, -p, -T, or -N option.

# -d [[year/]month/]day

Specify the starting date for re-executing the root jobnet. Use this option when you specify the 2-byte format indicator %ab or %an for the -i option to obtain the estimated required time.

• year

You can specify a value between 1994 and 2036.

• month
You can specify a value between 1 (or 01) and 12.

• day

You can specify a value between 1 (or 01) and 31.

If you omit the specification of the year or both the year and month for this option, the system assumes the following values:

year: The year when the command was executed

year/month: The year and month in which you executed the command

By default, the system assumes the date on which you execute the command.

This option is invalid if you do not specify the 2-byte format indicator %ab or %an for the -i option.

You cannot specify this option with the -s, -p, -l, -xw, -r, -f, -g, -B, or -c option.

You must specify this option with the -i option and either the -b or -v option.

# -h hours[:minutes]

Specify the starting time for re-executing the root jobnet. Use this option when you specify the 2-byte format indicator ab or an for the -i option to obtain the estimated required time.

• hours

You can specify a value between 0 (or 00) and 24.

• minutes

You can specify a value between 0 (or 00) and 59. If you do not specify a value, 0 is assumed.

By default, the system assumes the time at which you execute the command.

This option is invalid if you do not specify the 2-byte format indicator %ab or %an for the -i option.

You cannot specify this option with the -s, -p, -l, -xw, -r, -f, -g, -B, or -c option.

You must specify this option with the -i option and either the -b or -v option.

# -X {yes|no|auto}

Specify whether to automatically select the current unit for operation from the units listed in a planning group. The units in the job group are not, however, automatically selected regardless of the specified value. You cannot omit a root jobnet name.

• yes

Specify this to automatically select a target unit.

When specifying a unit name in the command, omit a root jobnet name in a planning group.

• no

Specify this if you do not want to automatically select a target unit.

You must specify a unit for which the command will operate. You cannot omit a root jobnet name in a planning group.

• auto

Whether a target unit will automatically be selected depends on how the unit name is specified.

• If you want to automatically select a target unit

Specify a unit name without a root jobnet name in a planning group.

• If you do not want to automatically select a target unit

Specify a unit name with a root jobnet name in a planning group. The command will operate for the specified unit only. However, if there is a unit having the same name as the path name specified without a root jobnet name in a planning group, a root jobnet name is assumed to be omitted so that a target unit will be selected automatically.

# job-name-or-jobnet-name-or-job-group-name

Specify the name of the job or jobnet whose information you want to output. You can also specify a job, jobnet, or job group name with the -R, -E, -T, -N, or -J option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one job, jobnet, or job group name. You cannot specify a manager job group name or manager jobnet name.

You can specify a logical host name or execution ID as a job, jobnet or job group name. If you specify an execution ID, however, the -g, -b, -e, -v, -w, and -B options are disabled.

To specify an execution ID as a job, jobnet or job group name, also specify the -f, -i, -r, or -xw option. You cannot specify the execution ID with the -s, -p, or -1 (default) option. For details about how to specify the execution ID, see *1.1 Command syntax*.

# Notes

- When extracting data from the output information, extract the data based on its delimiting spaces, not by fixed byte count.
- Either of the following users can output unit information:
  - A user granted the reference privilege when the unit whose information is to be output was defined or when its attributes were changed
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges
     Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its
     default, even a JP1 user who was mapped to an OS user with Administrators or superuser privileges must have
     the reference privilege.
- The period of information output can be specified through a combination of the -b and -e options or the -v and -w options. Such different combinations give different output results. For details, see *Example 5*.
- If you use the -b, -e, -v, or -w option to set the period of information output, the information is output in ascending order starting from the oldest generation.
- Information about a unit added to a suspended root jobnet is not output until the root jobnet is released from suspension. After the root jobnet is released from suspension, simulated results are output. Therefore, the results output when the root jobnet is suspended are different from the results output after the root jobnet is released from suspension.
- You may specify multiple units with the -c option and the -g option that specifies the number of generations. In this case, the system outputs execution result information on each jobnet or job in descending order from the latest generation to the specified generation.
- When you specify that a target unit automatically be selected from the units in a planning group, an error occurs if you do not have the appropriate operation privilege for the automatically selected unit.

- When the -X option is omitted, a target unit in a planning group is determined according to the value specified for the AJSAUTOJUDGE environment variable.
- For an explanation of how to specify the name of a unit in a planning group, see *Additional informations* in *ajsplan* in *2. Commands*.
- If you specify none of the -s, -p, -r, -f, and -i options, the -l option is assumed.
- If you specify the -1, -r, -f, or -i option without specifying the -g, -b, -e, -v, -w, or -B option or execution ID, the system assumes -g 1.
- If you specify the -b, -e, -v, or -w option, a schedule simulation and an execution simulation are performed. When you specify -g (default), -B, or an execution ID, no simulation is performed. For details about simulations, see *4.4.2 Simulation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.

# Arguments that can be specified when executing the command from JP1/AJS3 - View

You can specify the following arguments when executing the ajshow command from JP1/AJS3 - View:

No.	Arguments	Required?
1	-F service-name	Y
2	-s	
3	-p	
4	-1	
5	-xw	
6	-xi {b c}	
7	-r	
8	-f "format-indicator"	
9	-i "two-byte-format-indicator"	
10	-t "format-indicator"	
11	-k	
12	-g {number-of-generations   a }	
13	-b year/month[/day]	
14	-e year/month[/day]	
15	-v year/month [/day]	
16	-w year/month[/day]	
17	-B execution-registration-number	
18	-u user-name	
19	-c	
20	-R	
21	-E	
22	-T	
23	-N	

No.	Arguments	Required?
24	-J	
25	-d [[year/]month/]day	
26	-h hours [:minutes]	
27	-X {yes no auto}	
28	job-name-or-jobnet-name-or-job-group-name	Y

Legend:

Y: Required

--: Optional

You cannot specify any other options when executing the ajslogprint command from JP1/AJS3 - View.

For details about how to execute JP1/AJS3 commands from JP1/AJS3 - View, see 10.4 Executing JP1/AJS3 commands from JP1/AJS3 - View in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information 1

Table 2-16 lists the format indicators to output jobnet and job definitions.

Table 2-17 lists the two-byte format indicators to output jobnet and job definitions.

Table 2-18 lists the other format indicators.

Table 2-19 provides the output formats of the format indicators.

# Table 2–16: Format indicators for jobnet and job output.

Format indicator	Output information	-f	-t
۶J	Jobnet or job full-path name	Yes	Yes
%j	Jobnet or job name Character string of up to 30 bytes	Yes	Yes
%A	Character string specified for AJSPATH= Character string specified with %J except the part that follows the right-most slash (/)	Yes	Yes
<b>%</b> ፹	Unit type mgroup: Manager job group group: Job group mnet: Manager jobnet condn: Start condition (.CONDITION) net: Jobnet rnet: Jobnet for recovery rmnet: Remote jobnet rrnet: Remote jobnet for recovery job: UNIX job	Yes	Yes

Format indicator	Output information	-f	-t
%T	rjob: UNIX job for recovery job: PC job for recovery gib: PC job for recovery gib: QUEUE job for recovery gib: Judgment job for recovery orgib: OR job for recovery orgib: OR job for recovery emsjb: OpenView status report job remsjb: OpenView status report job for recovery ewwjb: JP1 event reception monitoring job rewib: JP1 event reception monitoring job rflwjb: File monitoring job for recovery mlwjb: Email reception monitoring job for recovery mlwjb: MSMQ reception monitoring job for recovery mswjb: MSMQ reception monitoring job for recovery liwjb: Log file monitoring job for recovery liwjb: Log file monitoring job for recovery liwjb: Windows event-log monitoring job rtwjb: Execution interval control job for recovery mwjb: Execution interval control job for recovery mujb: Execution interval control job for recovery majb: Email sending job rmajb: MSMQ seeding job for recovery majb: Email sending job for recovery majb: MSMQ seeding job rmajb: MSMQ seeding job for recovery mujb: Local power control job rmajb: MSMQ seeding job for recovery pwjb: Local power control job rpwib: Remote power control job for recovery pwjb: Remote power control job for recovery eupjb: Custom UNIX job for recov	Yes	Yes
°€C	Jobnet or job status	Yes <sup>#10</sup>	
%U	User name of a jobnet registered for execution Character string of up to 31 bytes	Yes <sup>#9</sup>	
۶D	Time when the jobnet was registered for execution <sup>#7</sup>	Yes <sup>#9</sup>	
%L	Number of jobnet nests with respect to the root jobnet as 0	Yes <sup>#9</sup>	Yes

Format indicator	Output information	-f	-t
°5p <sup>#3</sup>	Whether the next execution is scheduled exist none	Yes <sup>#27</sup>	
%P#3	Date and time of the next execution schedule <sup>#7</sup>	Yes <sup>#1</sup>	
%M <sup>#3</sup>	Next execution method schedule plan shift	Yes <sup>#1</sup>	
%R	Return value or signal code *** if there is no return value or signal code	Yes <sup>#2</sup>	
°∂S	Date and time when jobnet execution is started or when a job is submitted <sup>#7</sup>	Yes <sup>#12</sup>	
° S	Date and time when jobnet execution is started or when a job is submitted <sup>#7</sup>	Yes <sup>#12</sup>	
%K	Date and time when jobnet re-execution is started <sup>#7</sup>	Yes <sup>#1,</sup> #15	
%k	Date and time when jobnet re-execution is started <sup>#7</sup>	Yes <sup>#1,</sup> #15	
%E	Date and time when jobnet or job execution is ended <sup>#7</sup>	Yes	
%e	Date and time when jobnet or job execution is ended <sup>#7</sup>	Yes	
%V	Date and time when jobnet or job execution is started in another host <sup>#7</sup>	Yes <sup>#2</sup>	
%Q	Date and time when jobnet or job execution was ended in another host <sup>#7</sup>	Yes <sup>#2</sup>	
%W	<i>\$LANG</i> value	Yes <sup>#9</sup>	Yes
%Ζ	<i>\$TZ</i> value	Yes <sup>#9</sup>	Yes
°sG	Generation number <sup>#8</sup> (0 or less for scheduled generations) (1 or greater for generations being executed or execution result generations)	Yes <sup>#8</sup>	Yes
%N	Priority of execution <sup>#24</sup> A value of 1 to 5	Yes	
%Η	Agent host name	Yes <sup>#2</sup>	
%I	Job number	Yes <sup>#2,</sup> #17	
%Y	The number of executions of jobnets or jobs that ended normally after the registration for execution <sup>#13</sup>	Yes	
%В	Scheduled execution start date and time obtained from a computed processing cycle <sup>#7</sup>	Yes <sup>#4,</sup> #18, #22	
%b	Scheduled execution start date and time obtained from a computed processing cycle <sup>#7</sup>	Yes <sup>#4,</sup> #19	
%a	Estimated time required for execution <sup>#7</sup>	Yes <sup>#5,</sup> #16, #22	

Format indicator	Output information	-f	-t
%O	Scheduled execution end date and time obtained from a computed processing cycle <sup>#7</sup>	Yes <sup>#4,</sup> #14, #20, #22	
%0	Scheduled execution end date and time obtained from a computed processing cycle <sup>#7</sup>	Yes <sup>#4,</sup> #14, #21, #22	
%v	Start time of the period that schedule and result information is output <sup>#7</sup>	Yes <sup>#6</sup>	Yes <sup>#6</sup>
%₩	End time of the period that schedule and result information is output <sup>#7</sup>	Yes <sup>#6</sup>	Yes <sup>#6</sup>
%F	Hold attribute of the next execution schedule <sup>#26</sup> yes no Before Abnormal End Before Warning End	Yes	
%i	Type of registration for execution immediate definit planned simulation	Yes <sup>#9</sup>	
81	Execution registration number <sup>#7</sup>	Yes <sup>#8</sup>	
%r	Standard error output file name If the standard error output file does not exist, the default standard error output file name is output. The standard error output file will not exist when, for example, no jobs have been executed or no errors have occurred. Output example: /var/opt/jplajs2/jobinf/7.14a.0.8.err	Yes <sup>#8,</sup> #23	
%d	Delay status none start-delay nest-start-delay end-delay nest-end-delay	Yes <sup>#25</sup>	
8#	execution-ID	Yes <sup>#8</sup>	
%m	Time at which start conditions are effective unlimited <sup>#7</sup>	Yes <sup>#11</sup>	
%d	Number of times by which start conditions are effective A decimal value unlimited	Yes <sup>#11</sup>	

### Legend:

Yes: Format indicators specifiable in the -f or -t option

--: Format indicators not specifiable in the -f or -t option

# #1

Valid only for a unit type of net. In the other cases, an asterisk (\*) is output.

#2

Valid only for a unit type of job. In the other cases, an asterisk (\*) is output.

#### #3

Information about a jobnet having a generation number of 0.

### #4

\*\*\*\*/\*\*/\*\* \*\*:\*\* and \*\*\*\*/\*\* \*\*:\*\* are output if you also specify the -g option.

### #5

For a jobnet and job not executed, a value of 1 is assumed.

## #6

\*\*\*\*/\*\*/\*\* \*\*:\*\* is output if you do not specify the -b -e, -v, or -w option.

### #7

For details about the output format, see Table 2-19

### #8

For simulation, three asterisks (\*\*\*) are output.

# #9

Effective only when the unit type is net. Otherwise, three asterisks (\*\*\*) are output.

# #10

For a unit that is added while it is suspended, its output reads "plan unexecuted" if the existing upper-level unit is completed. Otherwise, the output reads "unplanned".

### #11

Effective only when the unit type is net or condn. Otherwise, three asterisks (\*\*\*) are output.

### #12

For a job, the submitted time is output. For a queueless job, the time when the execution of the job was requested is output.

### #13

The total count after registration is output, regardless of the number of logs to keep or generations to be output.

### #14

The sum of the values of *Scheduled execution start date and time obtained from a computed processing cycle* and *Estimated time required for execution* is output as the time.

### #15

The start time at which the unit was re-executed is displayed.

When the unit is re-executed, the date/time re-execution started is set at the point re-execution of the upper-level jobnets started. If the root jobnet is being executed, however, the date/time of re-execution start is not set for the root jobnet.

When the root jobnet has been completed, the date/time re-execution started is set only for the root jobnet if the root jobnet is specified at the point re-execution started.

### #16

Output when -b, -e, -v, -w, -B, or an execution ID is specified.

In other cases, 00:00:00 is output.

### #17

For a queueless job, three asterisks (\*\*\*) are output.

#### #18

For a jobnet or job that has been completed, the date/time that is output here is the same as the actual date/time execution started for the jobnet or job (%St).

### #19

For a jobnet or job that has been completed, the date/time that is output here is the same as the actual date/time execution started for the jobnet or job (%st).

#### #20

For a jobnet or job that has been completed, the date/time that is output here is the same as the actual date/time execution was completed for the jobnet or job (&E).

### #21

For a jobnet or job that has been completed, the date/time that is output here is the same as the actual date/time execution was completed for the jobnet or job (%e).

#### #22

A result of execution simulation is output. For details about execution simulations, see 4.4.2(2) Execution simulation in the manual Job Management Partner 1/Automatic Job Management System 3 Overview.

If the schedule is changed temporarily, execution simulation is performed based on the new time.

#### #23

Effective only when the unit type is job, netcn, or a connection-destination jobnet.

Otherwise, three asterisks (\* \* \*) are output.

### #24

Effective only when the unit type is net.

Otherwise, none is output (when the language type is English).

### #25

Effective only when the unit type is any of the following:

```
net, pjob, job, qjob, evwjb, flwjb, mlwjb, mqwjb, mswjb, lfwjb, ntwjb, tmwjb, evsjb, mlsjb, mqsjb, mssjb, cmsjb, pwljb, pwrjb, cupjb, cuujb
```

Otherwise, three asterisks (\*\*\*) are output.

### #26

For a generation that is not scheduled to be executed the next time (*Result*, *Now running*, or *Not sched. to exe.*), three asterisks (\*\*\*) are output.

### #27

Effective only when the unit type is net or rmnet. Otherwise, three asterisks (\*\*\*) are output.

### Table 2–17: Two-byte format indicators for outputting definition information about jobnets and jobs

Two-byte format indicator	Output information
%SP	The state of being suspended (or not) exist none
%OP	Execution date for a jobnet <sup>#1</sup>
%St	Actual execution start date and time of a jobnet or job <sup>#1</sup>
%st	Actual execution start date and time of a jobnet or job <sup>#1</sup>

Two-byte format indicator	Output information
%Pt	Date and time at which jobnet execution is to start <sup>#2, #10</sup>
%Jm	Full-path jobnet or job name (a root jobnet name is omitted for a unit in a planning group)
%Am	Character string specified with AJSPATH= (a root jobnet name is omitted for a unit in a planning group). Character string specified with %Jm except the part that follows the right-most slash (/).
%Ed	Whether or not to suppress the execution if the scheduled time for execution has passed during startup of the scheduler service. <sup>#3</sup> yes: Suppress the execution no: Do not suppress the execution
%cm	Comment <sup>#4</sup> (character string of up to 80 bytes)
%ab	Estimated time between the start of the abnormally ended job and the end of the root jobnet#1, #5
%an	Estimated time between the start of the unit next to the abnormally ended job and the end of the root jobnet <sup>#1, #5</sup>
%FG	Number of future generations <sup>#6</sup> (from 1 to 99)
%ds	Date/time for monitoring the start delay <sup>#1</sup>
%de	Date/time for monitoring the termination delay #1, #7
%Ft	Hold attributes hold: Holds not-hold: Does not hold abend-hold: Holds if the previous state was abend warning-hold: Holds if the previous state was warning hold-set: Sets the hold attribute temporarily, or sets hold when jobs or jobnets are registered for execution hold-release: Releases the hold attribute temporarily
%MV	Macro variable name and passing information specified at the time jobnets are registered for execution or the macro variable name and inherit result information taken over when jobs are executed <sup>#1, #4, #8, #9</sup>
%CN	Unit full name of the connection-destination <sup>#11, #14</sup> If a jobnet connector is specified, the unit full name of the connection-destination jobnet is output. If a connection-destination jobnet is specified, the unit full name of the jobnet connector is output.
%CI	Execution ID of the connection-destination <sup>#11, #12</sup> If a jobnet connector is specified, the execution ID of the connection-destination jobnet is output. If a connection-destination jobnet is specified, the execution ID of the jobnet connector is output.
%CS	Method for controlling the execution order of the connection-destination jobnet <sup>#13</sup>
%CH	Host name of the connection-destination <sup>#11, #15</sup> If this format indicator is specified for a jobnet connector, the host name of the connection-destination jobnet is output. If this format indicator is specified for a connection-destination jobnet, the host name of the jobnet connector is output.
%CF	Name of the scheduler service for the connection-destination <sup>#11, #15</sup> If this format indicator is specified for a jobnet connector, the name of the scheduler service for the connection- destination jobnet is output. If this format indicator is specified for a connection-destination jobnet, the name of the scheduler service for the jobnet connector is output.
%RI	Release-ID <sup>#16</sup>

Two-byte format indicator	Output information
%50	Standard output file name <sup>#17, #18</sup> The assumed standard output file name is output even if the standard output file does not exist. For example, the file does not exist if you specify a unit that does not use the standard output (an OR job, judgment job, event job, jobnet connector, or connection-destination jobnet) or specify a job that has not been executed.
% PW	Whether any aspect of the wait condition is yet to be satisfied. exist: The wait condition is not satisfied none: The wait condition is satisfied ***: No wait condition is defined
%RY	Number of retry executions <sup>#19</sup>
%RC	Retry status wait: An error occurred in an executable file of a job. Waiting is in progress for the time set as the retry interval to pass. exec: The job is being executed as a retry execution. end: They retry execution of the job finished. ***: No retry execution is performed.
%RS	Retry registration time <sup>#1, #20</sup> The date and time of submission for a retry execution (year, month, date, hour, and minute are output)
%Rs	Retry registration time <sup>#1, #20</sup> The date and time of submission for a retry execution (year, month, date, hour, minute, and second are output)
%RT	Retry start time <sup>#1</sup> The execution start date and time for a retry execution (year, month, date, hour, and minute are output)
%Rt	Retry start time <sup>#1</sup> The execution start date and time for a retry execution (year, month, date, hour, minute, and second are output)

### Note

The format indicators shown in *Table 2-16* allow specifying a set of two alphabetic characters as a two-byte format indicator. For example, \$S can be specified as -i \$SS. The -f and -t options will not accept two-byte format indicators. That is, all of the following are incorrect: -f \$JJ, -t \$JJ, and -f \$SP.

### #1

For details about the output format, see Table 2-19.

### #2

Effective only when the unit is a jobnet. Otherwise, an asterisk (\*) is output.

### #3

Effective only when the type of the unit is net, netcn, rmnet, or hlnet. Otherwise, three asterisks (\*\*\*) are output.

### #4

Double quotation marks (") are output at the beginning and end of the character string. If there is no value to be output, only "" is output.

#### #5

The required time is estimated based on the execution result after the root jobnet is registered for execution only when the -b, -e, -v, or -w option is specified. One minute is the estimate for a job that has never been executed in the generation containing a job that has ended abnormally. 0 seconds is the estimate for a job that has already ended normally. The information about a unit that has ended without being executed is not output by specifying the -b or -e option. To output the information about a unit that has ended without being executed, use the -v or -w option.

For details about the estimated required time, see Additional information 3 below.

#### #6

The \* \* \* string is output if the number of future generations is not specified at the time of registration for execution. This is the information about the root jobnet, which is 0 in the generation number sequence.

### #7

If you use the time-required-for-execution to monitor the date/time for end delay, the monitoring date/time is not output. The \* string is output instead.

#### #8

This is effective only when the unit type is root jobnet (excluding remote jobnets) or job. Otherwise, the \*\*\* string is output.

### #9

The "" string is output for a pseudo schedule.

### #10

The date and time that execution has been scheduled is output. If the schedule is temporarily changed, the new schedule is output.

### #11

This is effective only when the unit type is a jobnet connector or jobnet (connection-destination jobnet).

Otherwise, the \*\*\* string is output. The \*\*\* string is also output when permission to view the jobnet connector or connection-destination jobnet is not granted.

If an invalid unit is specified as the unit to be connected by the jobnet connector or connection-destination jobnet, the execution ID, unit full name, host name, and scheduler service name are displayed. However, the status of the unit changes to *Ended abnormally* because a definition error occurs during execution.

To check whether the definition is correct, specify the jobnet connector in the ajschkdef command. For details on the ajschkdef command, see *ajschkdef* in 2. *Commands* and 8. *Definition Pre-Check* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

### #12

If a jobnet connector or connection-destination jobnet is defined on a different host or in a different scheduler service, the \*\*\* string is output for a generation scheduled to be executed.

For details about how to check the execution ID of a jobnet connector or connection-destination jobnet defined on a different host or in a different scheduler, see *Additional information 4* below.

### #13

This is effective only for a connection-destination jobnet. Otherwise, three asterisks (\*\*\*) are output.

### #14

If Connection range is Other service, the information defined for the unit is output.

### #15

If Connection range is Same service, the \*\*\* string is output.

#16

For a release target jobnet (a root jobnet for which release entry is made) or its subordinate unit, the release ID is output. Otherwise, three asterisks (\*\*\*) are output.

## #17

This is effective only when the unit type is any of the following:

```
net,pjob,job,qjob,evwjb,flwjb,mlwjb,mqwjb,mswjb,lfwjb,ntwjb,tmwjb,evsjb,mlsjb,mqsjb,
mssjb,cmsjb,pwljb,pwrjb,cuujb,cuujb,orjob,jdjob,netcn
Otherwise, three asterisks (***) are output.
```

#18

For simulation, three asterisks (\* \* \*) are output.

#19

0 is output if retry execution is not performed. For units that are not subject to automatic retry, \*\*\* is output.

#20

For a job, the time when the job was submitted is output. For a queueless job, the time when job execution was requested is output.

Table 2-18:	Other format	indicators
-------------	--------------	------------

Format indicator	Output information
€ <sup>6</sup>	%
%n	Line feed character
%t	Tab character
%x	Current date <sup>#</sup>
%Χ	Current time <sup>#</sup>

#

Time at which you started executing the ajsshow command. For details about the output format, see the following table:

# Table 2-19: Output format of format indicators

Format indicator	Output format					
	Japanese	English				
<pre>%D %P %S %E %K %V %Q %B %O %m %St %Pt %ds %de</pre>	<pre>YYYY/MM/DD hh:mm For MM, DD, hh and mm, a zero (0) is prefixed. Example:     2009/07/01 12:30     Note, however, that if there is no information to be     output for the unit, ****/** **:** is output.</pre>	<pre>MMM DD YYYY hh:mm For DD, if the value to be output is one digit, a space is prefixed. For hh and mm, a zero (0) is prefixed. Example:     Jul 1 2010 12:30     Note, however, that if there is no information to be     output for the unit, *** ** **** **:** is     output.</pre>				

Format indicator	Output format					
	Japanese	English				
%RS %RT	<pre>YYYY/MM/DD hh:mm For MM, DD, hh and mm, a zero (0) is prefixed. Example:     2009/07/01 12:30     Note, however, that if there is no information to be     output for the unit, ****/** **:** is output.</pre>	<ul> <li>MMM DD YYYY hh:mm</li> <li>For DD, if the value to be output is one digit, a space is prefixed. For hh and mm, a zero (0) is prefixed.</li> <li>Example: <ul> <li>Jul 1 2010 12:30</li> <li>Note, however, that if there is no information to be output for the unit, *** ** **** **:** is output.</li> </ul> </li> </ul>				
%s %e %k %b %o %v %w %st %Rs %Rt	<pre>YYYY/MM/DD hh:mm:ss For MM, DD, hh, mm and ss, a zero (0) is prefixed. Example:     2009/07/01 12:30:00     Note, however, that if there is no information to be     output for the unit, ****/** **:**:** is     output.</pre>	<pre>MMM DD YYYY hh:mm:ss For DD, if the value to be output is one digit, a space is prefixed. For hh and mm, a zero (0) is prefixed. Example:     Jul 1 2010 12:30:00     Note, however, that if there is no information to be     output for the unit, *** ** **** **:** is     output.</pre>				
%x %OP	<pre>YYYY/MM/DD For MM and DD, a zero (0) is prefixed. Example:     2009/07/01     Note, however, that if there is no information to be     output for the unit, ****/*** is output.</pre>	<pre>MMM DD YYYY For DD, if the value to be output is one digit, a space is prefixed. Example:     Jul 1 2010     Note, however, that if there is no information to be     output for the unit, *** ** **** **: ** is     output.</pre>				
%X %a %ab %an	<i>hh:mm:ss</i> Example: 12:30:30					
81	YYYYMMDDNNN         Example:         Job whose execution registration number is 20100701001         20100701001					
%MV	<pre>20100701001 "information-1:information-2"[]] information-1: macro variable name information-2: passing information, or inherit result information (Example 1) For the root jobnet     "AJS2ENV:/data/job_report", "AJS2COM:c:\temp\test.exe" (Example 2) For a job     "AJS2ENV:/data/job report", "AJS2COM:c:\temp\test.exe"</pre>					

# **Additional information 2**

The following table shows differences between information output when a target unit is automatically selected from the units in a planning group and that output when a target unit is not automatically selected.

# Table 2–20: Differences in output information depending on whether a target unit is automatically selected from the units in a planning group

Format indicator	When a target unit is automatically selected	When a target unit is not automatically selected			
8p 8P 8M	Information about the unit to be executed next in the planning group	Schedule for the next execution of the specified unit			
۶G	Generation number obtained by integrating execution information for the root jobnets in the planning group	Generation number for the specified unit only			
%1	Execution registration number obtained by integrating execution information for the root jobnets in the planning group	Execution registration number for the specified unit only			
%Y %a	This information is maintained for each unit. Information for each unit is output even if you specify the function for automatically selecting a target unit.				
%B %b %O %o	Information obtained from processing cycle calculation is calcul Information for each unit is output even if you specify the function	ated based on information maintained for each unit. on for automatically selecting a target unit.			

The following example planning group definition shows differences in information output with P, RG, and l depending on the specification with the -X option.

Example planning group definition

Planning group (/group1) has three units, /group1/jobnet001, /group1/jobnet002, and /group1/ jobnet003.

The scheduled start times for the units are as follows:

The scheduled start time for /group1/jobnet001 is 08:00 (absolute time).

The scheduled start time for /group1/jobnet002 is 09:00 (absolute time).

The scheduled start time for /group1/jobnet003 is 10:00 (absolute time).



Example 1:

Information output with P when the -X option is set to yes.

ajsshow -f "Next schedule=%P %C %J" -g 1 -X yes /group1

### Output result

Next schedule=Aug 13 20XX 08:00 normal /group1/jobnet003

### Explanation:

In this case, the command outputs the next scheduled execution time for the unit to be executed next (/group1/jobnet001) under the root jobnets in the planning group.

#### Example 2:

Information output with P when the -X option is set to no.

```
ajsshow -f "Next schedule=%P %C %J" -g 1 -X no /group1/jobnet003
```

Output result

Next schedule=Aug 15 20XX 10:00 normal /group1/jobnet003

#### Explanation:

In this case, the command outputs the next scheduled execution time for the specified unit (/group1/jobnet003).

#### Example 3:

Information output with G when the -X option is set to yes.

```
ajsshow -f "Generation=%G Start time=%S %C %J" -g 3 -X yes /group1
```

Output result

```
Generation=1 Start time=Aug 12 20XX 10:00 normal /group1/jobnet003
Generation=2 Start time=Aug 11 20XX 09:00 normal /group1/jobnet002
Generation=3 Start time=Aug 10 20XX 08:00 normal /group1/jobnet001
```

Explanation:

In this case, the command outputs the generation number obtained by integrating execution information for the root jobnets in the planning group.

#### Example 4:

Information output with %G when the -X option is set to no.

```
ajsshow -f "Generation=%G Start time=%S %C %J" -g 3 -X no /group1/
jobnet001
```

Output result

```
Generation=1 Start time=Aug 10 20XX 08:00 normal /group1/jobnet001
Generation=2 Start time=Aug 7 20XX 08:00 normal /group1/jobnet001
Generation=3 Start time=Aug 4 20XX 08:00 normal /group1/jobnet001
```

Explanation:

In this case, the command outputs the generation number based on execution information for the specified unit.

Example 5:

Information output with \$1 when the -x option is set to yes.

```
ajsshow -f "Registration number=%l Start time=%S %C %J" -b 20XX/8/3 -X yes /group1
```

Output result

```
Registration number=20XX0803001 Start time=Aug 3 20XX 08:00 normal / group1/jobnet001
Registration number=20XX0803002 Start time=Aug 3 20XX 09:00 normal /
```

```
group1/jobnet002
Registration number=20XX0803003 Start time=Aug 3 20XX 10:00 normal /
group1/jobnet003
```

Explanation:

In this case, the command outputs the execution registration number obtained by integrating execution information for the root jobnets in the planning group.

Example 6:

Information output with %1 when the -X option is set to no.

```
ajsshow -f "Registration number=%l Start time=%S %C %J" -b 20XX/8/3 -X no /group1/jobnet003
```

Output result

```
Registration number=20XX0803001 Start time=20XX/08/03 10:00 Normal end /group1/jobnet003
```

Explanation:

In this case, the command outputs the execution registration number based on execution information for the specified jobnet.

# **Additional information 3**

The following example shows how to calculate the estimated required time for a job that has ended abnormally.

Example 1:

The following describes how to calculate the estimated required time to determine whether to immediately re-execute a job that has ended abnormally, using the example jobnet configuration as shown below.

	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	
jobnet1											
_ nestjobnet001											
job1											
job2											
_ job3											
L nestjobnet002											
└ job1											
_ job2											
_ job3											
L job4											
	•	•		•				-			

Legend:

: Ended abnormally : Ended normally : Not executed + Ended

The jobs /jobnet1/nestjobnet001/job3 and /jobnet1/nestjobnet002/job2 have ended abnormally.

The following shows the output information and output results for %ab when the -v and -w options are specified.

Output information

```
ajsshow -i "Estimated required time=%ab UnitName=%JJ" -v 20XX/2/12 -w 20XX/2/12 -RN /jobnet1
```

Output result

```
Estimated required time=07:00:00 UnitName=/jobnet1
Estimated required time=07:00:00 UnitName=/jobnet1/nestjobnet001
Estimated required time=03:00:00 UnitName=/jobnet1/nestjobnet002
```

Explanation:

The output results indicate that the execution of jobnet001 will require seven hours so that you might decide to re-execute only this unit (jobnet1/nestjobnet001) at night or immediately re-execute only the jobnet1/nestjobnet002 unit, which will require three hours.

### Example 2:

Suppose the jobnet that follows the abnormally ended job has a scheduled start time specified. The result of calculating the estimated required time may vary with whether the time when the job ends due to the start of reexecution precedes or follows the scheduled start time for the next jobnet.

• If the time when the job ends due to the start of re-execution precedes the scheduled start time for the next jobnet



The job /jobnet1/nestjobnet001/job2 has ended abnormally. The scheduled start time for the next jobnet(/jobnet1/nestjobnet002) is 05:00.

If re-execution starts at 03:00, the job /jobnet1/nestjobnet001/job2 is executed between 03:00 and 04:00 and nestjobnet001 ends at 04:00. The jobnet nestjobnet002 waits until 05:00 (scheduled start time) and then starts at 05:00 and ends at 07:00. The following shows the output information and output results:

### Output information

```
ajsshow -i "Estimated required time=%ab UnitName=%JJ" -v 20XX/8/21 -w 20XX/8/21 -d 20XX/8/21 -h 3:00 -RN /jobnet1
```

Output result

```
Estimated required time=04:00:00 UnitName=/jobnet1
Estimated required time=01:00:00 UnitName=/jobnet1/nestjobnet001
Estimated required time=02:00:00 UnitName=/jobnet1/nestjobnet002
```

### Explanation:

The output results indicate that jobnet1 will require four hours, 3:00 to 7:00.

• If the time when the job ends due to the start of re-execution follows the scheduled start time for the next jobnet



The job /jobnet1/nestjobnet001/job2 has ended abnormally. The scheduled start time for the next jobnet (/jobnet1/nestjobnet002) is 05:00.

If re-execution starts at 05:00, the job /jobnet1/nestjobnet001/job2 is executed between 05:00 and 06:00 and nestjobnet001 ends at 06:00. The jobnet nestjobnet002, for which the scheduled start time, 05:00 is already passed, is immediately executed and ends at 08:00. The following shows the output information and output results:

Output information

```
ajsshow -i "Estimated required time=%ab UnitName=%JJ" -v 20XX/8/21 -w 20XX/8/21 -d 20XX/8/21 -h 5:00 -RN /jobnet1
```

Output result

```
Estimated required time=03:00:00 UnitName=/jobnet1
Estimated required time=01:00:00 UnitName=/jobnet1/nestjobnet001
Estimated required time=02:00:00 UnitName=/jobnet1/nestjobnet002
```

Explanation:

The output results indicate that jobnet1 will require three hours, 5:00 to 8:00.

As shown above, you can specify the -d and -h options when calculating the estimated required time to determine how long re-execution will take depending on the time when re-execution is started.

# Additional information 4

If a jobnet connector or a connection-destination jobnet connector is defined on a different host or in a different scheduler service, \*\*\* is output even if CI is specified in the -i option.

If you want to check the execution ID of a jobnet connector or connection-destination jobnet defined on a different host or in a different scheduler, remotely execute the ajshow command as described in the following procedure.

To check the execution ID of a jobnet connector or connection-destination jobnet defined on a different host or in a different scheduler:

1. Remotely execute the ajsshow command to display the host name, scheduler service name, and unit full name of the connection-destination.

Execute the following command:

ajsshow -v 20XX/07/01 -i "%CH %CF %CN" unit-name

2. Display the execution ID of the connection-destination from the information displayed in step 1.

Execute the following command:

```
host-name-displayed-in-step-1:scheduler-service-name-displayed-in-
step-1:ajsshow -v 20XX/07/01 -i "%CI" unit-name
```

# Additional information 5

If you specify a for the -g option, execution result information for jobnets with start conditions specified is output in order from the generation with the latest scheduled start time to the one with the earliest.

If you register a jobnet for execution with start conditions specified, a generation for monitoring the start conditions is created when the start time is reached. At the same time, generations in the Wait for start cond. status are also created and are executed when the start conditions are satisfied.

The scheduled start time for the generation being monitored is also assumed for the generations in the Wait for start cond. status and the generations executed when start conditions are satisfied. If you are using jobnets with start conditions and jobnets without start conditions, note the order in which the execution result information is output.

The following shows an example when the number of logs to keep is 10. In this example, a jobnet (net) with start conditions specified is registered for execution, and later a jobnet without start conditions specified is registered for execution.

• When the number of logs to keep is 10



As shown, a jobnet (net) with start conditions specified is registered for execution on March 1 and a generation for monitoring the start conditions is created (1-0 in the figure). At the same time, generations in the Wait for start cond. status are created. These generations are executed on March 2, March 4, and March 5 when their start conditions are satisfied (1-1, 1-2, and 1-3 in the figure).

In addition, a jobnet (net) without start conditions specified is registered for execution on March 3(2 in the figure).

Output information

ajsshow -f "Generation=%G %J %# %C" -g a -T /net

Output result

```
Generation=1 /net @A103 Normal end
Generation=2 /net @A105 Wait for start cond.<sup>#</sup>
Generation=3 /net @A104 Normal end<sup>#</sup>
Generation=4 /net @A102 Normal end<sup>#</sup>
Generation=5 /net @A101 Normal end<sup>#</sup>
Generation=6 /net @A100 Now monitoring<sup>#</sup>
```

# Execution result information for a generation with start conditions specified

Explanation:

When you execute the ajsshow command to output execution result information, the result of executing the jobnet that was registered for execution on March 3 is output as generation 1, since it is the latest execution result of the jobnet (net). For generations 2 to 6, the results of executing the jobnet with start conditions registered for execution on March 1 are output in order by generation according to the generation whose start conditions were satisfied last.

# Example 1

The following command outputs the results of executing jobnet net1, and jobnets and jobs in it to the standard output file.

ajsshow -1 net1

# Example 2

The following command outputs two generations of results of executing a jobnet in the job group group1. The information to be displayed is the full-path jobnet name, the execution start time, and the execution end time.

ajsshow -t"Generation: %G" -g2 -f"%J %S %E" -RE /group1

Output example

```
Generation: 1
/group1/net1 Jun 8 20XX 10:00 Jun
                                    8 20XX
                                           12:00
Generation: 2
/group1/net1 Jun 1 20XX
                        10:00 Jun
                                    1 20XX
                                            11:30
Generation: 1
/group1/net2 Jun 8 20XX
                        11:00 Jun
                                    8 20XX
                                            11:30
Generation: 2
/group1/net2 Jun 1 20XX
                        11:00 Jun
                                    1 20XX
                                           12:00
```

# Example 3

The following command outputs scheduled execution information (jobnet name, generation number and execution start time) on jobnet net for July 2010 (July 1, 2010 to July 31, 2010), displaying the target output period on the title row.

ajsshow -t "Period %v-%w" -f" %j %G %B"-b 2010/7/1 -e 2010/7/31 /net

Output example

Period	Jul	1	2010	00:00:00-Jul	31	2010	23:59:59
net -5	Jul	7	2010	10:00			
Period	Jul	1	2010	00:00:00-Jul	31	2010	23:59:59

```
net -6 Jul 14 2010 10:00
Period Jul 1 2010 00:00-Jul 31 2010 23:59:59
net -7 Jul 21 2010 10:00
Period Jul 1 2010 00:00-Jul 31 2010 23:59:59
net -8 Jul 31 2010 10:00
```

# Example 4

The following command outputs the name of the standard error output file for job job1 in jobnet net, whose execution registration number is 20100701001. Assume that the job error information directory (/var/opt/jplajs2/jobinf) is set for the JOBINFDIR environment setting parameter.

```
ajsshow -B 20100701001 -r /net/job1
```

### Output example

```
/var/opt/jp1ajs2/jobinf/e/67/0.e.err
```

# Example 5

For the following jobnet (net) and jobs (job1, job2, and job3) under the jobnet, this example specifies the period using the -b, -e, -v, and -w options to output the execution start and end dates and times.



### Specifying 2010/07/21 in the -b and -e options

```
ajsshow -b 2010/07/21 -e 2010/07/21 -f "%S %E %J" -R /net
```

Output example

Jul 21 2010 10:00 Jul 22 2010 06:00 /net Jul 21 2010 16:00 Jul 21 2010 21:00 /net/job1 Jul 21 2010 21:00 Jul 22 2010 02:00 /net/job2

Explanation:

The calendar date is the target of output.

The output covers the information about net as well as job1 and job2 under net where execution is started on 2010/07/21.

Specifying 2010/07/21 in the -v and -w options

ajsshow -v 2010/07/21 -w 2010/07/21 -f "%S %E %J" -R /net

Output example

Jul 21 2010 10:00 Jul 22 2010 06:00 /net Jul 21 2010 16:00 Jul 21 2010 21:00 /net/job1 Jul 21 2010 21:00 Jul 22 2010 02:00 /net/job2 Jul 22 2010 02:00 Jul 22 2010 06:00 /net/job3

Explanation:

The execution date for the jobnet is the target of output.

The output covers the information about net as well as the three jobs under net where execution is started on 2010/07/21.

Specifying 2010/07/22 in the -b and -e options

ajsshow -b 2010/07/22 -e 2010/07/22 -f "%S %E %J" -R /net

Output example

```
Jul 21 2010 10:00 Jul 22 2010 06:00 /net
Jul 22 2010 02:00 Jul 22 2010 06:00 /net/job3
```

Explanation:

The calendar date is the target of output.

The output covers the information about job3 where execution is started on 2010/07/22.

Specifying 2010/07/22 in the -v and -w options

ajsshow -v Jul 22 2010 -w Jul 22 2010 -f "%S %E %J" -R /net

Explanation:

The execution date for the jobnet is the target of output.

The output covers no information even if you specify 2010/07/22 in the -v and -w options because the execution date for net is 2010/07/21.

# Example 6

This example explains how you can output information about a jobnet connector or connection-destination jobnet by using the -i option.

• jobnet connector

host name: HOSTA scheduler service name: AJSROOT1 unit name: /JC/jobnet-connector execution ID: @A544

 connection-destination jobnet host name: HOSTB scheduler service name: AJSROOT2 unit name: /JC-NET execution ID: @A546

When a jobnet connector is specified for the -i option:

ajsshow -i "%JJ %TT %CH %CF %CN %CI %CS" /JC/jobnet-connector

Output example

/JC/jobnet-connector netcn HOSTB AJSROOT2 /JC-NET @A546 \*\*\*

When a connection-destination jobnet is specified for the -i option:

ajsshow -i "%JJ %TT %CH %CF %CN %CI %CS" /JC-NET

Output example

/JC-NET net HOSTA AJSROOT1 /JC/jobnet-connector @A544 nosync

# Example 7

The following command outputs the name of the standard output file used by job job1 in jobnet net executed in the period from 2010/08/06 to 2010/08/07. Assume that the job information storage directory (C:\Program Files \HITACHI\JP1AJS2\jobinf) is set for the JOBINFDIR environment setting parameter.

ajsshow -b 2010/08/06 -e 2010/08/07 -i "%so" /net/job1

#### Output example

C:\Program Files\HITACHI\JP1AJS2\jobinf\d\6e\0.e.std

# Example 8

The following figure shows an example of using the -xi option for registering jobnet execution. 7/1 is registered when a start condition is used, and 7/2 is registered when a start condition is not used.



Information about the jobnet (netB) in the figure is output.

Example 1: When all generations are output and the -xib option is specified

```
ajsshow -xw -xi b -g a /netB
```

Output example

AJSPA	TH = /								
An unit	with wait co	ndition		Unit whose end is being waited for					
Name	Generatior	Execution ID	Status	Wait me	thod	No generations to wait for			
Wait sta	itus	Status	Execution ID	Comment	Name				
netB	1	@A245	monitor-norma	al OR		Execute			
Incomp	lete	no entry	***	***	/netA				
KAVS07	780-E Speci	fied Jobnet (/netE	3) has no informa	ation for disp	lay.				
KAVS07	780-E Speci	fied Jobnet (/netE	3) has no informa	ation for disp	lay.				
AJSPA	TH = /								
An unit	with wait co	ndition		Unit	whose	end is being waited for			
Name	Generatior	Execution ID	Status	Wait me	thod	No generations to wait for			
Wait sta	itus	Status	Execution ID	Comment	Name				
netB	4	@A242	abnormal	OR		Execute			
Incomp	lete	no entry	***	***	/netA				

Explanation:

Information about the monitoring generations, execution generations, and generations that do not use a start condition are output. Generations 1 to 4 in the figure are subject to output. Note, however, that the <code>ajsshow</code> command ends abnormally because generations 2 and 3 are execution generations and there is no wait information.

Example 2: When all generations are output with the -xi c option specified

ajsshow -xw -xi c -g a /netB

Output example

AJSPATH = /						
An unit with wait	condition		Unit whose end is being waited for			
Name Genera	tion Executior	n ID Status		Wait method	No generations to wait for	
When Unmonitor	ed + Ended	Abnormal ei	nd for an ex	kecution generati	on Wait status	
Status	Execution ID	Comment	Name			
net B 1	@A245	monito	or-normal	OR	Execute	
Execute		Execute			Incomplete	
no entry	***	***	/netA			
AJSPATH = /						
An unit with wait	condition		Unit whose end is being waited for			
Name Genera	tion Executior	n ID Status		Wait method	No generations to wait for	
When Unmonitor	ed + Ended	Abnormal e	execution generat	tion Wait status		
Status	Execution ID	Comment	Name			
net B 4	@A242	abnori	nal	OR	Execute	
Execute		Execute			Incomplete	
no entry	***	***	/netA			
					$\sim$	
					Ň	

Explanation:

Generations 1 and 4 are subject to output, because information about the monitoring generation and generations that do not use a start condition is to be output. Generations 2 and 3 are not output because they are execution generations.

# **Output example 1**

• When you specify the -s option



• When you specify the -p option



### • When you specify the -l option

AJSPATH = /aj	spath/				
Name <b>ajsnet1</b>	Type <b>net</b>	Status abnormal	Code ***	Start time Aug 1 20XX 8:40	End time Aug 1 20XX 8:43
AJSPATH = /aj	spath/ajsr	net1/			
Name ajsnet21 ajsnet22 job3	Type net net job	Status normal abnormal unknown	Code *** *** ***	Start time Aug 1 20XX 8:40 Aug 1 20XX 8:43	End time Aug 1 20XX 8:43 Aug 1 20XX 8:50
AJSPATH = /aj	ispath/ajs	net1/ajsnet21/			
Name	Туре	Status	Code	Start time	End time
job211	job	normal	0	Aug 120XX 8:40	Aug 1 20XX 8:41
job212	job	normal	0	Aug 120XX 8:41	Aug 120XX 8:43
AJSPATH = /aj	spath/ajsr	net1/ajsnet22/			
Name	Туре	Status	Code	Start time	End time
job221	job	normal	0	Aug 1 20XX 8:43	Aug 1 20XX 8:45
job222	job	abnormal	12	Aug 1 20XX 8:45	Aug 1 20XX 8:47
rjob222	rjob	normal	0	Aug 1 20XX 8:47	Aug 1 20XX 8:50

# Explanation of the output items

### AJSPATH=

Indicates the contents of the full-path jobnet or job name except the jobnet or job name covered in name.

### Name

Indicates a jobnet or job name.

# Туре

Indicates the type of a unit. mgroup: Manager job group group: Job group mnet: Manager jobnet

condn: Start condition (.CONDITION) net: Jobnet rnet: Jobnet for recovery rmnet: Remote jobnet rrnet: Remote jobnet for recovery job: UNIX job rjob: UNIX job for recovery pjob: PC job rpjob: PC job for recovery gjob: QUEUE job rgjob: QUEUE job for recovery jdjob: Judgment job rjdjob: Judgment job for recovery orjob: OR job rorjob: OR job for recovery cmsjb: OpenView status report job rcmsjb: OpenView status report job for recovery evwjb: JP1 event reception monitoring job revwjb: JP1 event reception monitoring job for recovery flwjb: File monitoring job rflwjb: File monitoring job for recovery mlwjb: Email reception monitoring job rmlwjb: Email reception monitoring job for recovery mqwjb: Message queue reception monitoring job rmqwjb: Message queue reception monitoring job for recovery mswjb: MSMQ reception monitoring job rmswjb: MSMQ reception monitoring job for recovery lfwjb: Log file monitoring job rlfwjb: Log file monitoring job for recovery ntwjb: Windows event-log monitoring job rntwjb: Windows event-log monitoring job for recovery tmwjb: Execution interval control job rtmwjb: Execution interval control job for recovery evsjb: JP1 event sending job revsjb: JP1 event sending job for recovery mlsjb: Email sending job rmlsjb: Email sending job for recovery mqsjb: Message queue sending job rmqsjb: Message queue sending job for recovery mssjb: MSMQ sending job rmssjb: MSMQ sending job for recovery pwljb: Local power control job

rpwljb: Local power control job for recovery

pwrjb: Remote power control job

rpwrjb: Remote power control job for recovery

cuujb: Custom UNIX job

rcuujb: Custom UNIX job for recovery

cupjb: Custom PC job

rcupjb: Custom PC job for recovery

netcn: Jobnet connector

n: Job group

p: Planning group

# Status

Indicates the status of a jobnet or job.

# Plan

Indicates whether the displayed jobnet or job is scheduled to be executed next.

exist: The jobnet or job is scheduled to be executed next.

none: The jobnet or job is not scheduled to be executed next.

# Registrant

Indicates the name of the user who registered the jobnet for execution.

# Registered time

Indicates the date and time when the jobnet was registered for execution.

# Next execution time

Indicates the scheduled next execution time.

If the next execution time is not scheduled, \*\*\* \*\* \*\*\* \*\*\* \*\* is displayed.

# Method

Indicates the method of the next execution. schedule: Follows the planned execution schedule for execution. plan: Changes the plan temporarily for execution

shift: Shift for execution

# Code

Indicates the return value or the cancellation signal code.

If there is no return value or signal code, \*\*\* appears.

# Start time

Indicates the execution start date and time.

If execution is not started, \*\*\* \*\* \*\*\*\* \*\*:\*\* appears.

# End time

Indicates the execution end date and time.

If execution is not ended, \*\*\* \*\* \*\*\* \*\*:\*\* appears.

# Output example 2

• When the -xw and -xib options are specified

AJSPAT	H = /ajspath/				
An unit	with wait cond	ition		Unit	t whose end is being waited for
Name	Generation	Executior	ID Status	Wait method	No generations to wait for
Wait sta	tus	Status	Execution ID	Comment	Name
job1	1234	@A101	term-wait	AND	Execute
Comple	te_manually	normal	@825903647	task A	/netA

• When the -xw and -xi c options are specified

AJSPATH = /					
An unit with wait c	ondition		Un	t whose end is	being waited for
Name Generatio	on Execution I	D Status	Wait method	No generatio	ns to wait for
When Unmonitore	d + Ended Ab	normal end fo	r an execution	generation	Wait status
Status	Execution ID (	Comment Na	ime		
job1 1234	@A101	term-wait	AND	Execute	
Execute	Ex			Complete_manually	
monitor-normal	@A120 \	NorkA /ne	etA		

# Explanation of the output items

AJSPATH=

The full path name of the jobnet or job without the unit name output as the Name item.

### An unit with wait condition

Indicates that the following information relates to a unit with wait conditions.

Name

The jobnet name or job name of the unit with wait conditions.

#### Generation

The generation number of the unit with wait conditions. If you specified a future generation, this item outputs a negative value.

### Execution ID

The execution ID of the unit with wait conditions.

#### Status

The status of the unit with wait conditions.

Indicates the status of the monitoring generation when a unit with wait conditions is a jobnet with start conditions.

### Wait method

The wait method.

AND: The wait condition is satisfied when all units whose ends are being waited for finish executing.

OR: The wait condition is satisfied when any one of the units whose ends are being waited for finishes executing.

No generations to wait for

The behavior of the unit with wait conditions when there are no applicable generations of the units whose ends are being waited for.

Execute: When there are no applicable generations of the units whose ends are being waited for, the unit starts executing.

Do not execute: When there are no applicable generations of the units whose ends are being waited for, the unit with wait conditions continues waiting for the wait condition to be satisfied.

### When Unmonitored + Ended

Indicates the behavior of a unit with wait conditions when the unit with wait conditions is a jobnet with start conditions, and the monitoring generation is in the *Unmonitored* + *Ended* status.

Execute: When the monitoring generation is in the Unmonitored + Ended status, the unit with wait conditions starts execution.

Do not execute: When the monitoring generation is in the Unmonitored + Ended status, the unit with wait conditions does not start execution.

Abnormal end for an execution generation

Indicates the behavior of a unit with wait conditions when a unit with wait conditions is a jobnet with start conditions, and the execution generation ended abnormally.

Execute: If the execution generation ends abnormally, the unit with wait conditions starts execution.

Do not execute: When the execution generation ends abnormally, the unit with wait conditions does not start execution.

### Wait status

The wait status with respect to the unit whose end is being waited for

Incomplete: The end of the waiting-target unit is still being waited for.

Complete: The wait process has completed.

Incomplete\_manually: The end of the waiting-target unit is still being waited for, as a result of manual reinstatement of the wait condition.

Complete\_manually: The end of the waiting-target unit is no longer being waited for, as a result of manual deactivation of the wait condition.

### Unit whose end is being waited for

Indicates that the following information relates to a unit whose end is being waited for.

### Status

The status of the unit whose end is being waited for. If the target of the wait condition is a planning group, this item displays the status of the unit in the planning group whose end is actually being waited for.

Asterisks (\* \* \*) appear for this item when:

- The definition of the unit whose end is being waited for is invalid
- There are no applicable generations of the unit whose end is being waited for
- The unit whose end is being waited for is not registered

## Execution ID

The execution ID of the unit whose end is being waited for. If the target of the wait condition is a planning group, this item displays the execution ID of the unit in the planning group whose end is actually being waited for. Asterisks (\*\*\*) appear for this item when:

- The definition of the unit whose end is being waited for is invalid
- There are no applicable generations of the unit whose end is being waited for
- The unit whose end is being waited for is not registered

## Comment

The comment defined for the unit whose end is being waited for. If the target of the wait condition is a planning group, this item displays the comment for the unit in the planning group whose end is actually being waited for. Asterisks (\*\*\*) appear for this item when:

- The definition of the unit whose end is being waited for is invalid
- There are no applicable generations of the unit whose end is being waited for
- The unit whose end is being waited for is not registered
- You do not have reference permission for the unit whose end is being waited for

### Name

The full path name of the unit whose end is being waited for.

# ajsstart

# Format

```
ajsstart
    [-c|-o|-t]
    [-F service-name]
    [-s {none|EXEC}]
    [-w]
    [-R]
    [-D]
```

# Description

Starts the scheduler service for JP1/AJS3 and executes any jobnet registered for execution.

To execute this command, a user must have superuser privileges (in UNIX systems), or be logged on as a member of the Administrators group (in Windows systems).

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

# Arguments

-c

Forcibly cancels the execution registration of all jobnets and starts ("cold-starts") the scheduler service.

The following situations require a cold start:

- When the database table structure in the JP1/AJS3 scheduler has been modified
- When you cannot start a scheduler service

When you cold-start a scheduler service, you must re-register the jobnet for execution after the scheduler service is started.

Cold-starting a scheduler service deletes all execution results for all the previous generations for all jobnets. We recommend that you store any necessary log information before attempting to perform cold start.

You cannot specify this option together with the -R or -D option.

-0

Does not execute a jobnet which is scheduled to execute on the day when you start the scheduler service, if its scheduled time for starting execution is prior to the time when you start the scheduler service.

If you omit this option, the system automatically executes a jobnet when you start the scheduler service, even if its scheduled time for starting execution is prior to the time when you start the scheduler service.

If you specify this option together with the -R option, this option is disabled.

-t

Does not execute a jobnet scheduled for planned execution or fixed execution for the day.

If you specify this option together with the -R option, this option is disabled.

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

### -s{none|EXEC}

Specify whether you want to suppress the execution of a jobnet or job, or cancel suppression.

• none

Cancels the suppression of execution for a jobnet or job.

• EXEC

Suppresses the execution of a jobnet or job. Once the system has completed the execution of the jobnet or job currently being executed, it will not start any subsequent jobnet or job.

### -w

Terminates the command once the scheduler service is started.

### -R

Continues the execution of any jobnet or job which was running when the scheduler service was previously stopped. (A hot start is performed.)

### Jobnet

Continues execution with the status when the scheduler service was stopped.

This option also executes any jobnet that has passed the scheduled start time after the scheduler service is started.

# Job

Obtains the job status when the scheduler service was stopped, and continues execution with that status.

You cannot specify this option together with the -c or -D option.

# -D

Starts the scheduler service in disaster recovery mode. For details on disaster recovery mode, see 7.2.1 Temporarily changing the start mode of JP1/AJS3 in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide.

You cannot specify this option with the -c, -R, or -s option.

You cannot use this option if the JP1/AJS3 database uses the compatible ISAM configuration.

# Notes

• Before executing this command, you must start JP1/AJS3.

For UNIX, use the <code>jajs\_spmd</code> command to start the JP1/AJS3 process.

For Windows, use the Service dialog box or the Service window to start the JP1/AJS3 service.

- If you move the system date or time backward, cold-start the entire JP1/AJS3 system.
- If you use the ajslocaldate command to change the local date and time of a scheduler service, cold-start the scheduler service.
- This command terminates abnormally if a scheduler service is already started.
- If neither the -c nor -R option is specified, the scheduler service is warm-started.
- When you have to cold start a scheduler service if a failure occurs, we recommend that you collect necessary log information beforehand. For how to collect log information, see *1.3 Data to be collected when a problem occurs* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* and *1.4 Collecting data for troubleshooting* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* and *1.4 Collecting data for troubleshooting* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.
- The scheduler service will not start if the environment settings<sup>#</sup> are invalid.

The environment settings for the scheduler service.

- If you want to cold start the scheduler service which uses the ISAM database, ensure that no process is accessing the database (you have not used any JP1/AJS3 command after logging off JP1/AJS3 View) before attempting the cold start. If any process is accessing the database, the system fails to erase registered information so that it cannot start the service, resulting in abnormal end with the KAVS0218-E The database is still being accessed, so the cold start of the scheduler service (*scheduler-service-name*) ended abnormally. error message output to the Windows event log or Syslog.
- If you perform a hot start with the -R option specified or a warm start for the scheduler service and cannot acquire the status of a job, the job might have been placed in Unknown end status and then terminated. For details about the conditions when the job status cannot be acquired, see the *Job (standard job, action job, custom job)* column in *Table 7-3 Jobnet and job statuses when a hot-start is performed (-hot)* or *Table 7-4 Jobnet and job statuses when a warm-start is performed (-hot)* or *Table 7-4 Jobnet and job statuses when a warm-start is performed (-warm)* in 7.2.1(3) *Jobnet and job statuses for each start mode* in the *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*.
- When you use this command to start the scheduler service, the value of the OVERSCHEDULE environment setting parameter has no effect. Instead, execution follows ajsstart command operation. The following table shows the relationship between the OVERSCHEDULE environment setting parameter and the ajsstart command options.

# Table 2–21: Relationship between the OVERSCHEDULE environment setting parameter and ajsstart command options

OVERSCHEDULE setting	ajsstart command options
The OVERSCHEDULE environment setting parameter is set to exec.	The $-t$ and $-o$ options are not specified.
The OVERSCHEDULE environment setting parameter is set to skip.	The $-\circ$ option is specified.
The OVERSCHEDULE environment setting parameter is set to plan.	The -t option is specified.

• You cannot execute this command together with any of the following commands on the same logical host:

ajsprofalter command	
----------------------	--

- ajsembdbstart command
- ajsembdbstop command
- ajsstart command
- ajsstop command
- jajs\_hstd command
- jajs\_hstd\_stop command
- jajs\_spmd command

<sup>#</sup>
jajs\_spmd\_status command jajs\_spmd\_stop command jajs\_start command (UNIX only) jajs\_start.cluster command (UNIX only) jajs\_stop command (UNIX only) jajs\_stop.cluster command (UNIX only)

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example

The following command cold-starts a scheduler service:

ajsstart -c

# ajsstatus

# Format

```
ajsstatus
[-F service-name]
[-h host-name]
[-v]
```

# Description

The current operating environment of a scheduler service, and connection information about JP1/AJS3 - View connected to JP1/AJS3 - Manager is output to the standard output file. For details about the output format, see *Output example 1*, and *Output example 2* later in this section.

# **Execution privileges**

None

However, either of the following settings is required when you use the -h option to execute the ajsstatus command for other hosts:

- The name of the OS user who executes the command is mapped to the JP1 user of the execution target host.
- The JP1 user of the execution target host is specified in the environment variable JP1\_USERNAME.

# Arguments

#### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

#### -h host-name

If you want to output the current operating environment for a scheduler service on another host, specify the name of the host containing the target scheduler service.

You can specify a character string of 1 to 255 bytes.

If you omit this option, the system assumes the current host name (the name of the JP1/AJS3 - Manager host being used).

#### -v

Specify this option to output the connection information of JP1/AJS3 - View connected to JP1/AJS3 - Manager.

When you specify this option, the operating environment of the scheduler service is not output. When you specify this option together with -F, the -F option has no effect. In addition, if <code>ajsinetd</code> (network control process) is not running, connection information is not output.

## Arguments that can be specified when executing the command from JP1/AJS3 - View

You can specify the following arguments when executing the ajslogprint command from JP1/AJS3 - View:

No.	Arguments	Required?
1	-F service-name	Y

Legend:

Y: Required

--: Optional

You cannot specify any other options when executing the ajslogprint command from JP1/AJS3 - View.

For details about how to execute JP1/AJS3 commands from JP1/AJS3 - View, see 10.4 Executing JP1/AJS3 commands from JP1/AJS3 - View in the Job Management Partner 1/Automatic Job Management System 3 Operator's Guide.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example1

The following command outputs the current operating environment for a scheduler service to the standard output file:

ajsstatus

## Example2

The following command outputs the connection information of JP1/AJS3 - View connected to JP1/AJS3 - Manager to the standard output file.

ajsstatus -v

# Output example 1

The following gives an output example of the current operating environment for a scheduler service, restrictions imposed on the output items, and the description of each output item.

#### **Output example**

Г

(1)	Service name	AJSROOT1
(2)	AJS status	active
(3)	Suppress function	Job execution
(4)	AJS start time	20XX/08/01 10:25
(5)	Termination restriction	schedule
(6)	Database type	ISAM
(7)	Database file install directory	/var/opt/ais6/aisroot
(8)	Table. File name	
(-)	Unit management:	AJSUNIT
	Unit relation definition:	AJSARROW
	Unit definition:	AJSBODY
	Schedule definition:	AJSSCH
	Calendar definition:	AJSCAL
	Unit condition:	AJSSTAT
	Execution regist:	AJSENTRY
	Generation management:	AJSGEN
	Statistic information:	AJSPERF
(9)	Manager character code type	С
(10)	Job error information directory	/usr/lib/jp1_ajs/stderr
(11)	Backup information directory	/usr/lib/jp1_ajs/backup
(12)	AJS start/stop message output	none
(13)	Jobnet start/stop message output	all
(14)	Job start/stop message output	abend
(15)	Scheduler log file size	100 KB
(16)	Scheduler log file in use	/usr/lib/jp1_ajs/log/ajs_log1
(17)	Alternate scheduler log file	/usr/lib/jp1_ajs/log/ajs_log2
(18)	AJS start/stop log output	all
(19)	Jobnet start/stop log output	all
(20)	Job start/stop log output	all
(21)	Operation log output	ALTER STOP ENTRY LEAVE
		PLAN INTRPT RERUN KILL
		CHANGE CALENDAR DELETE RESTORE
		DEFINE COPY CHGST SUSPEND
<u>,</u>		
(22)	A schedule of route job net	24 hours
(23)	Suspend function	
(24)	Reference log output	
(25)	operation management for temp, changes	SCHEDULE SHOW
(23)	operation management for temp, changes	has no effect
l		
	$\backslash$ /	

#### **Restrictions on output items**

- Items (4), (5), (16), and (17) are not displayed if the scheduler service has been terminated.
- Items (16) and (17) are not displayed in the following cases:
  - If the size of the scheduler log file is 0 in item (15)
  - If output of log data is disabled during environment setup (that is, 0 is specified for the LOGSIZE environment setting parameter)

### **Description of output items**

(1) Service name

Indicates the name of the scheduler service.

(2) AJS status

Indicates whether operation with JP1/AJS3 has been started (whether the scheduler service is running). active: Operation with JP1/AJS3 has been started. inactive: Operation with JP1/AJS3 is stopped. Maintenance: Operation with JP1/AJS3 is stopped.

(3) Suppress function

Indicates the status of the suppression function of JP1/AJS3. Job execution: Suppresses the execution of a job. none: Does not suppress the execution of a job.

(4) AJS start time

Indicates the date and time at which operation with JP1/AJS3 was started (the scheduler service was started).

- (5) Termination restriction
  - Indicates that the ajsstop command has been used to terminate operation with JP1/AJS3.

schedule: The system is monitoring termination according to schedule restrictions.

jobnet: The system is monitoring termination according to jobnet restrictions.

job: The system is monitoring termination according to job restrictions.

none: The ajsstop command has not been executed.

forced stop: The system is stopped forcibly.

stop: The system is being stopped.

restricted stop: The termination restriction is being canceled.

(6) Database type

Indicates the database type.

ISAM: Stores information in an ISAM file.

EmbedDB: Stores information in an embedded database.

(7) Database file install directory

Indicates the name of the directory that stores the ISAM and unit lock files.

(8) Table, File name

For ISAM, indicates the name of the file that stores each piece of information (base name of the file). For embedded database, indicates the name of the table that stores each piece of information.

(9) Manager character code type

Indicates the type of the character set used to store information in the database.

SJIS: Uses the Shift-JIS character set.

EUC: Uses the EUC cahracter set

UTF-8: Uses the UTF-8 character set.

C: Uses the 7-bit ASCII character set.

(10) Job error information directory

Indicates the name of the job error information directory.

(11) Backup information directory

Indicates the name of the backup information directory.

(12) AJS start/stop message output

Indicates whether the system outputs the JP1/AJS3 operation start and end messages to the Windows event log or Syslog.

none: Outputs no messages.

all: Outputs all the messages.

(13) Jobnet start/stop message output

Indicates whether the system outputs the jobnet start and end messages to the Windows event log or Syslog. none: Outputs no messages.

abend: Outputs only jobnet abnormal end messages.

warning: Outputs only jobnet warning end messages.

hold: Outputs only jobnet hold notification messages.

start\_delay: Outputs only jobnet delayed start notification messages.

end\_delay: Outputs only jobnet delayed end notification messages.

start\_condition\_monitor\_start/end: Outputs only messages reporting the start or end of monitoring
jobnet start conditions.

skipped so not exe.: Outputs only messages reporting the jobnet skipped so not exe. status.

preceding\_unit\_wait: Outputs messages relating to the wait condition of a jobnet, and wait condition hold notification messages

all: Outputs all messages (jobnet start and normal end messages, abnormal and warning end messages, hold notification messages, delayed start notification messages, delayed end notification messages, messages reporting the start or end of monitoring jobnet start conditions, messages reporting *skipped so not exe*. status, all unregistered jobnets, jobnet connector connection errors, and wait condition hold notification messages).

### (14) Job start/stop message output

Indicates whether the system outputs the job start and end messages to the Windows event log or Syslog.

none: Outputs no messages.

abend: Outputs only job abnormal end messages.

warning: Outputs only job warning end messages.

hold: Outputs only job hold notification messages.

 $preceding\_unit\_wait: Outputs messages relating to the wait condition of a jobnet, and wait condition hold notification messages$ 

retry\_execution: Outputs only the automatic retry notification message when a job ends abnormally.

all: Outputs all messages (job start, normal end, abnormal end, end with warning, end-delay, wait condition hold notification messages, and automatic retry when a job ends abnormally).

(15) Scheduler log file size

Indicates the size of the scheduler log file (in kilobytes).

(16) Scheduler log file in use

Indicates the name of the scheduler log file that the scheduler service uses.

(17) Alternate scheduler log file

Indicates the name of the alternate scheduler log file to be used next when the log information output to the log file has reached the specified size.

(18) AJS start/stop log output

Indicates whether the system outputs log information when starting and ending operation with JP1/AJS3.

none: Outputs no logs.

all: Outputs all the logs.

### (19) Jobnet start/stop log output

Indicates whether the system outputs log information when starting and ending a jobnet. none: Outputs no logs.

abend: Outputs only jobnet abnormal end logs.

warning: Outputs only jobnet warning end logs.

hold: Outputs only jobnet hold notification logs.

start\_delay: Outputs only jobnet delayed start notification logs.

end\_delay: Outputs only jobnet delayed end notification logs.

start\_condition\_monitor\_start/end: Outputs only logs reporting the start or end of monitoring jobnet start conditions.

skipped so not exe .: Outputs only logs reporting the jobnet skipped so not exe. status.

preceding\_unit\_wait: Outputs jobnet wait conditions and the retention history of the wait conditions.

all: Outputs all the logs (jobnet start, abnormal end, end with warning, hold notification, delayed start notification, delayed end notification, start condition monitoring start/end notification, skipped so not exe. notification, all unregistered jobnets, and wait condition hold notification messages).

## (20) Job start/stop log output

Indicates whether the system outputs log information when starting and ending a job.

none: Outputs no logs.

abend: Outputs only job abnormal end logs.

warning: Outputs only job warning end logs.

hold: Outputs only job hold notification logs.

preceding\_unit\_wait: Outputs jobnet wait conditions and the retention history of the wait conditions.

retry\_execution: Outputs only the automatic retry notification history when the job ends abnormally.

all: Outputs all the logs (job start, abnormal end, end with warning, end-delay, wait condition hold notification messages, and automatic retry when a job ends abnormally).

## (21) Operation log output

Indicates whether the system outputs operation log information.

none: Outputs no logs.

ALTER: Outputs logs for operation with the ajsalter command.

STOP: Outputs logs for operation with the ajsstop command.

ENTRY: Outputs operation logs for registering jobnets for execution.

LEAVE: Outputs operation logs for canceling execution registration for jobnets.

PLAN: Outputs operation logs for temporarily modifying jobnet schedules.

INTRPT: Outputs operation logs for interrupting jobnet execution.

RERUN: Outputs operation logs for rerunning jobnets.

KILL: Outputs operation logs for killing jobs.

CHANGE: Outputs operation logs for modifying definition for units.

CALENDAR: Outputs operation logs for modifying calendar information.

DELETE: Outputs operation logs for deleting units.

RESTORE: Outputs operation logs for restoring units.

DEFINE: Outputs operation logs for manipulating definition for units.

COPY: Outputs operation logs for copying and moving units.

CHGST: Outputs operation logs for modifying the job status.

SUSPEND: Outputs logs of the jobnet's suspension operation and suspension canceled operation.

IMPORT: Outputs operation logs for importing units.

START: The operation log for the ajsstart command is output.

RGIMPORT: Operation log data related to importing of registration information is output.

RELEASE: Operation log data related to release information about the root jobnet is output.

all: Outputs all the logs.

(22) A schedule of route job net

Indicates the time system used in the schedule of root jobnet definition. 24 hours: Defines the schedule in a 24-hour schedule.

- 48 hours: Defines the schedule in a 48-hour schedule.
- (23) Suspend function

Indicates whether the suspend function has an effect or not. has an effect: Indicates that the suspend function is effective. has no effect: Indicates that the suspend function is ineffective.

#### (24) Reference log output

Indicates whether the system outputs reference log information.

none: Outputs no reference log information.

BACKUP: Outputs reference logs for backing up units.

EXPORT: Outputs reference logs for exporting units.

NAME: Outputs reference logs for outputting names for units.

PRINT: Outputs reference logs for printing definitions for units.

SCHEDULE: Outputs reference logs for outputting schedule information for jobnets.

SHOW: Outputs reference logs for outputting status for units.

RELEASE: Outputs reference logs for release information about root jobnets.

RGEXPORT: Outputs reference logs for exporting registration information.

all: Outputs all the logs.

(25) operation management for temp. changes

Indicates whether the operation management for temp. changes has an effect or not.

has an effect: The operation management for temp. changes is effective.

has no effect: The operation management for temp. changes is ineffective.

## **Output example 2**

The following gives an output example of the connection information of JP1/AJS3 - View connected to JP1/AJS3 - Manager, restrictions imposed on the output items, and the description of each output item.

#### Output example

Connection target scheduler sen	vico	ID1 Llear	Process ID	
	(E)	JF I USEI	FIOCESS ID	(6)
	(5)			(6)
Connection start date and time	Conn	ection source	e IP address	Connection source host
AJSROOT1		jp1admin	2085	
20XX/04/25 13:25:35	133.1	08.132.1		jp1host1
AJSROOT1		jp1admin	2565	
20XX/04/30 18:55:32	133.1	08.132.4		jp1host2
AJSROOT2		jp1admin	2811	
20XX/05/15 18:55:32	133.1	08.132.1		jp1host1
AJSROOT3		jp1admin	6953	
20XX/05/25 23:59:05	133.1	08.132.1		jp1host1
AVS0832-L The View connection	on infor	mation output	t is complete (	7)

#### **Restrictions on output items**

If there is no connection information of JP1/AJS3 - View, or ajsinetd process has not been started, only the headers of items (1) to (6) and the message of items (7) are output.

## Description of output items

(1) Connection target scheduler service

Indicates the name of the connected scheduler service. If the service name cannot be acquired because connection processing is being performed, \*\*\* is output as the scheduler service name.

(2) JP1 user

Indicates the name of the JP1 user who has logged in to JP1/AJS3 - View.

(3) Process ID

Indicates the process ID of ajsmonsvr that manages the connection of JP1/AJS3 - View. All the output items on the same line are information about the process with this process ID. The output information exists for the period between the completion of login to JP1/AJS3 - View and logout from JP1/AJS3 - View. The information about the ajsmonsvr process is not output if the process is generated when another host remotely executes a command for JP1/AJS3 - Manager.

(4) Connection start date and time

Indicates the date and time when the connection from JP1/AJS3 - View is started in the following format:

YYYY/MM/DD hh:mm:ss

The output format is the same for both Japanese and English environments. If the output number of digits for any of the items is insufficient, the beginning of the item is padded with zeros.

Example: 10 o'clock 2 minutes 5 seconds on July 1, 2010

2010/07/01 10:02:05

(5) Connection source IP address

Indicates the IP address of the host running JP1/AJS3 - View that is connected to JP1/AJS3 - Manager in the following format:

xxx . xxx . xxx . xxx

If the output number of digits for any of the segments is insufficient, the segment is left-justified.

Example: 133.108.132.1

133.108.132.1

(6) Connection source host

Outputs the host name converted from the IP address. If an IP address cannot be converted to a host name, the IP address is output as is. The host name is determined and output by performing a reverse lookup of the IP address of the connection source, which is JP1/AJS3 - View.

This host name might differ from the host name of the JP1/AJS3 - View host itself. In a DNS environment, the domain name is added to the original host name and the name is displayed in the FQDN format. If the IP address has alias host names and multiple host names are set for one IP address, the formal host name is displayed here.

#### (7) Message

A KAVS0831-I Cannot get View connection information because the JP1/AJS2 service is not started. message is output if the ajsinetd process has not been started.

In other cases, a KAVS0832-I The View connection information output is complete. message is output after all the information is output.

For details about how to start or stop the ajsinetd process separately, see *jajs\_hstd* in 2. *Commands* and *jajs\_hstd\_stop* in 2. *Commands*.

# ajsstop

# Format

```
ajsstop
[-F service-name]
[<u>-s</u>|-n|-j|-k|-c|-r]
[-f]
[-w]
```

# Description

Terminates the JP1/AJS3 scheduler service.

You must terminate the scheduler service in the following cases:

- When terminating scheduler service operation as planned
- When restoring a database
- When modifying any environment setting parameter

This command also cancels any schedule restriction or jobnet restriction, previously requested by this command, to return the operation to the original status.

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

# Arguments

### -F service-name

Specify the name of the target scheduler service.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

#### -s

Terminates the scheduler service after all jobnets that are scheduled to execute on the day on which the command is executed are terminated (this is called *schedule restriction*).

The following examples show the termination of a scheduler service when a jobnet registered for execution belongs to a job group in which a base time has been set. In the examples, jobnets to be executed are marked "E" while those not to be executed are marked with "N".

Example 1:

Job group A: Base time: 9:00 Scheduler service started at 9:00 Jobnet to be executed at 12:00 and 7:00



Job group A:

Base time: 9:00 Scheduler service started at 9:00 Jobnet to be executed at 12:00 and 7:00

Job group B:

Base time: 10:00 Scheduler service started at 10:00 Jobnet to be executed at 13:00 and 8:00 Command entered at 11:00



If the scheduled date of jobnet execution is shifted to the date on which the command is entered, the system handles the jobnet as a jobnet executed on the date on which the command is entered.

Monitored generations of a jobnet with a start condition that are in *Now monitoring* status enter *Interrupted monitoring* status after all jobnets scheduled for execution on the day on which the command is executed have terminated. If the wait condition of a monitored jobnet that is subject to schedule restriction is met while the generation is still in *Now monitoring* status, the jobnet is executed.

#### -n

Terminates the scheduler service after all the jobnets that are running when the command is entered are terminated. (This is called *jobnet restriction*.)

A jobnet that is subject to schedule restriction will not start executing when:

- The start time is reached
- The previous generation ends when the jobnet is in Wait for prev. to end status
- The start condition of a unit with a start condition is satisfied<sup>#</sup>
  - #

Execution generations generated when a start condition is met during schedule restriction are executed after you use this command with the -r option to cancel the schedule restriction, or you restart the scheduler service.

Monitored generations of a jobnet with start conditions that are in *Now monitoring* status enter *Interrupted monitoring* status after all jobnets running when the command is executed have ended.

### -j

Terminates the scheduler service after all the jobs that are running and jobnet connectors that are in a running status<sup>#</sup> when the command is entered are terminated. (This is called *job restriction*.) The effect on running root jobnets is the same as if you interrupted the root jobnet.

### #

A running status here refers to any of the following statuses:

- Now running
- Running + Warning
- Now fault detecting

A jobnet that is subject to schedule restriction will not start executing when:

- The start time is reached
- The previous generation ends when the jobnet is in Wait for prev. to end status
- The start condition of a jobnet with a start condition is satisfied<sup>#</sup>

Execution generations generated when a start condition is met during job restriction are executed after you restart the scheduler service.

Monitored generations of a jobnet with start conditions that are in *Now monitoring* status enter *Interrupted monitoring* status immediately when the command is entered.

-k

Terminates the scheduler service immediately when the command is entered. This option causes the system to kill all the jobs that are running when the scheduler service is terminated. (This process is called *forced termination (kill) of jobs.*) The effect on running root jobnets is the same as if you killed the root jobnet.

A jobnet that is subject to forced job termination will not start executing when:

- The start time is reached
- The previous generation ends when the jobnet is in Wait for prev. to end status
- The start condition of a jobnet with a start condition is satisfied<sup>#</sup>
  - #

Execution generations generated when a start condition is met for a job killed by forced job termination are executed after you restart the scheduler service.

Generations of a jobnet with start conditions that are in *Now monitoring* status enter *Interrupted monitoring* status immediately when the command is entered.

-c

Terminates the scheduler service immediately when the command is entered. This option, however, allows the system to continue all the jobs that are running when the service is terminated. (This process is called *forced termination (kill) of the scheduler service*.)

You can specify this option to kill all processes quickly, preventing the scheduler service process from being killed, when you want to stop the system in emergency.

#### -r

Cancels any schedule restriction (-s option) or jobnet restriction (-n option) applied, to return the operation to the original status.

#### -f

Accepts a request to stop the scheduler service even in the following status, in which no normal stop request can be accepted:

• Start processing of the scheduler service requested to start is in progress

You cannot specify this option together with the -s, -n, -j, or -r option.

You must specify this option together with the -c or -k option.

If you execute the command without specifying the -f option before the scheduler service requested to start becomes up and running, an error occurs.

#### -w

Specify this option to terminate the command when the scheduler service completely stops. If you specify this option together with the -r option, the command terminates when the schedule restriction or the jobnet restriction is completely canceled.

## Notes

- This command terminates abnormally if you execute it when a scheduler service is not running.
- You cannot cancel a job restriction (you can cancel schedule and jobnet restrictions using the -r option).
- The system performs restriction processing before starting termination processing for the scheduler service. You cannot cancel restrictions after the system starts termination processing. You can view the current status using the ajsstatus command.
- To insure the stop of the scheduler service, specify the -w option. (If you omit the -w option, the ajsstop command terminates immediately after issuing a stop request to the scheduler service. The execution of the next command may, therefore, start before the processing for stopping the scheduler service is completed.)
- If a jobnet connector is used to control the execution order of jobnets, then, depending on the status of the connection-destination jobnet, the jobnet connector might be placed in a running status.<sup>#</sup> If the jobnet connector is placed in a running status, the root jobnet that includes the jobnet connector is also placed in a running status. In this case, you cannot restrict how the scheduler service stops. If this situation occurs, stop the scheduler service by specifying the -k or -c option, or by changing the status of the jobnet connector.

# A running status here refers to any of the following statuses:

- Now running
- Running + Warning
- Now fault detecting
- This note applies when a jobnet connector is used to control the execution order of root jobnets. When the -j option is specified, if the connection-destination root jobnet contains a unit that is waiting for the preceding unit to end, the status of the root jobnet that contains the jobnet connector does not change from *Now running*. In this case, you cannot stop the scheduler service. If this situation occurs, stop the scheduler service by specifying the -k or -c option.
- You cannot rerun a job or jobnet that is subject to job restriction or forced job termination.
- You cannot perform automatic retry on abnormal end for a job that is subject to job restriction or forced job termination. The job enters an end status without retry execution regardless of the return code or the number of retry executions.
- If you perform forced job termination while a large number of remote jobnets are running, a lack of desktop heap resources might cause termination of the remote jobnets to fail and prevent the scheduler service from stopping. When there is a large number of active remote jobnets, terminate the remote jobnets before you perform forced job termination.
- The system cannot terminate a suspended root jobnet. To stop the scheduler service, you must release any suspended root jobnets before executing the command.
- You cannot execute this command together with any of the following commands on the same logical host:

ajsprofalter command ajsembdbstart command ajsembdbstop command ajsstart command ajsstop command jajs\_hstd command jajs\_hstd\_stop command jajs\_spmd command jajs\_spmd\_status command jajs\_spmd\_stop command jajs\_start command (UNIX only) jajs\_start.cluster command (UNIX only) jajs\_stop command (UNIX only) jajs\_stop.cluster command (UNIX only)

# **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example

The following command terminates the scheduler service after the currently running service is terminated:

ajsstop -n

# ajssuspend

# Format

```
ajssuspend
  [-F service-name]
  {-S [-n]|-C [<u>-r</u>|-h|-p]|-U}
  [-R]
  [-E]
  [-T]
  root-jobnet-name-or-job-group-name...
```

# Description

Suspends a root jobnet. This command also releases the suspension of a root jobnet.

## **Execution privileges**

You must have any of the following JP1 privileges:

- JP1\_AJS\_Admin privilege
- JP1\_AJS\_Manager privilege
- JP1\_AJS\_Operator privilege

## Arguments

#### -F service-name

Specify the service name of the corresponding scheduler service.

You can specify a character string of 1 to 30 bytes.

#### -s

Suspends a root jobnet.

However, any root jobnet as the target will not be suspended if it is being executed. If you suspend a root jobnet being currently executed, you must specify this with the -n option.

#### -n

Suspends a root jobnet being currently executed.

By default, the root jobnet being executed will not be suspended.

-C

Cancels the suspension of the root jobnet.

When suspending a root jobnet being executed and adding units under the root jobnet, you can specify the -r, -h, or -p option to determine how the additional units will be handled after the suspension is canceled. Without the -r, -h, or -p option specified, the root jobnet being executed and all the units added below the root jobnet will be executed after the suspension is canceled.

#### -r

Executes a unit added during the state of suspension after the suspension is canceled.

#### -h

Holds a unit added during the state of suspension after the suspension is canceled.

## -p

Does not execute a unit added during the state of suspension after the suspension is canceled.

### -U

Deletes any ineffective unit records remaining in a database.

#### -R

Suspends a specified root jobnet or all the jobnets contained in a job group, or cancels the suspension.

If you specify this option with the -E and/or -T options, the system suspends the target jobnets or cancels the suspension according to the specification of each option.

### -E

Suspends a root jobnet registered for execution, or cancels the suspension.

## -**T**

Suspends a root jobnet, or cancels the suspension.

### root-jobnet-name-or-job-group-name

Specify the name of the root jobnet you want to suspend. You can also specify a jobnet name or job group name with the -R, -E, or -T option.

You can specify a character string of 1 to 930 bytes.

You can specify more than one root jobnet name or job group name. Note that you cannot specify a manager jobnet name or manager job group name.

You can specify a logical host name as the root jobnet name or job group name. You cannot specify an execution ID.

## Notes

- Either of the following users can suspend the root jobnet or cancel the suspend status:
  - A user granted the operation privilege when the jobs and jobnets contained in the root jobnet were defined or when their attributes were changed.
  - A JP1 user mapped to the OS user who has Administrators or superuser privileges Note, however, that if yes is set after changing the ADMACLIMIT environment setting parameter from its default, even a JP1 user who was mapped to an OS user who has Administrators or superuser privileges must have the operation privilege.
- This command terminates abnormally if the scheduler service is not running.
- Only a root jobnet can be suspended/de-suspended.
- This command terminates abnormally if a jobnet to be suspended is monitoring start conditions.
- This command terminates abnormally if a root jobnet to be suspended has already been suspended.

- This command terminates abnormally if a root jobnet to be suspended is currently in the suspension process.
- This command terminates abnormally if a root jobnet to be suspended has already been de-suspended.
- This command terminates abnormally if a root jobnet to be suspended is currently in the de-suspension process.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Additional information

This command terminates only after a root jobnet becomes suspended. It also terminates only after the suspension is canceled.

# Example 1

The following command suspends the jobnet (net1).

```
ajssuspend -S net1
```

# Example 2

The following command cancels a root jobnet (net1) being suspended. Because the root jobnet was being executed before the suspension, it continues its execution after it is de-suspended. However, units have been added during suspension will be held.

ajssuspend -C -h net1

# ajstrsetsz

## Format

```
ajstrsetsz
[-s size]
```

## Description

Modifies the size of the trace log file.

If you execute this command, without specifying any arguments, the system outputs the size of the current trace log file to the standard output file.

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

## Arguments

#### -s size

Specify the size of a trace log file.

You can specify a value between 64 and 2,097,151 (kilobytes).

## Notes

- If you use this command to reduce the size of a trace log file, the contents of the trace log file before resizing are deleted.
- Always separate the option and its value by at least one space character.

## **Return values**

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

# Example 1

The following command extends the size of the trace log file from the default to 3 megabytes (3,072 kilobytes).

```
ajstrsetsz -s 3072
```

# Example 2

Outputs the size of the currently selected trace log to the standard output file.

ajstrsetsz

## Output example:

SIZE:64KB

# jajs\_hstd

# Format

```
jajs_hstd
[-h logical-host-name]
-n detail-process-name
```

# Description

The jajs\_hstd command starts a separate detailed process of the host service management function (jajs\_hstd).

## **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privileges

# Arguments

#### -h logical-host-name

In a cluster system, specify the name of the logical host on which you want to start the host service.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

#### -n detail-process-name

Specify the name of the detailed process you want to start. You can specify any of the process names listed in the following table.

Detailed process to be started	Detailed process name to be specified in the -n option	
	Windows	UNIX
ajshlogd	hlogd	ajshlogd
ajsinetd	ajsinetd	ajsinetd
ajsnetwd	network	ajsnetwd
ajsagtmd	agentm	ajsagtmd
ajsovstatd	ajsovstatd	ajsovstatd
ajsgwmasterd	gatewayd	ajsgwmasterd
jpqman	submitqueue	jpqman_hst
jpomanager	hostevam	jpomanager_hst

## Notes

- Before you execute this command, make sure that JP1/AJS3 is running.
- You cannot execute this command together with any of the following commands on the same logical host:

jajs\_hstd command jajs\_hstd\_stop command jajs\_spmd command jajs\_spmd\_status command jajs\_spmd\_stop command jajs\_start command (UNIX only) jajs\_start.cluster command (UNIX only) jajs\_stop command (UNIX only) jajs\_stop.cluster command (UNIX only)

• In Windows, this command cannot be executed using short file names.

# **Return values**

0	Normal end.
Values other than 0	Abnormal end.

# Example

The following command starts the network control process (ajsinetd) on logical host lhost1.

```
jajs_hstd -h lhost1 -n ajsinetd
```

# jajs\_hstd\_stop

## Format

```
jajs_hstd_stop
[-h logical-host-name]
-n detail-process-name
```

# Description

```
The jajs_hstd_stop command stops a separate detailed process of the host service management function (jajs_hstd).
```

## **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privileges

# Arguments

#### -h logical-host-name

In a cluster system, specify the name of the logical host on which you want to stop the host service.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

#### -n detail-process-name

Specify the name of the detailed process you want to stop. You can specify any of the process names listed in the following table.

Detailed process to be stopped	Detailed process name to be specified in the -n option	
	Windows	UNIX
ajshlogd	hlogd	ajshlogd
ajsinetd	ajsinetd	ajsinetd
ajsnetwd	network	ajsnetwd
ajsagtmd	agentm	ajsagtmd
ajsovstatd	ajsovstatd	ajsovstatd
ajsgwmasterd	gatewayd	ajsgwmasterd
jpqman	submitqueue	jpqman_hst
jpomanager	hostevam	jpomanager_hst

## Notes

• Before you execute this command, make sure that JP1/AJS3 is running.

- By stopping ajsinetd separately, you can forcibly disconnect JP1/AJS3 View from the scheduler service running on the specified logical host.
- Independently terminating a detailed process other than <code>ajsinetd</code> or <code>ajscdinetd</code> must be done only when a failure needs to be addressed. Normally, if a detailed process of the host service management function (<code>jajs\_hstd</code>) is stopped, operation might be affected. For example, you might no longer be able to execute jobs.
- You cannot execute this command together with any of the following commands on the same logical host:

```
jajs_hstd command
jajs_hstd_stop command
jajs_spmd command
jajs_spmd_status command
jajs_spmd_stop command
jajs_start command (UNIX only)
jajs_start.cluster command (UNIX only)
jajs_stop command (UNIX only)
jajs_stop.cluster command (UNIX only)
```

• In Windows, this command cannot be executed using short file names.

## **Return values**

0	Normal end.
Values other than 0	Abnormal end.

## Example

The following command stops the network control process (ajsinetd) on logical host lhost1.

```
jajs_hstd_stop -h lhost1 -n ajsinetd
```

# jajs\_killall.cluster (UNIX only)

## Format

```
jajs_killall.cluster
[logical-host-name]
```

# Description

Forcibly terminates the JP1/AJS3 process during operation on a cluster system.

An attempt to execute the jajs\_stop.cluster command at a failover may fail to stop the process, sometimes resulting in an unsuccessful failover. This command should be executed only when you want to forcibly stop a process that will not stop.

## **Execution privileges**

Superuser privilege

# Storage directory

```
/etc/opt/jp1ajs2/
```

## Arguments

#### logical-host-name

Specify the name of the logical host that is set in JP1/Base.

You can specify a character string of 1 to 32 bytes.

By default, the system assumes the host name specified in the JP1\_HOSTNAME environment variable. (The first 32 bytes of the logical host name are valid.) With this option omitted, the command terminate abnormally if the JP1\_HOSTNAME environment variable contains nothing.

## Notes

- This command applies only to UNIX. You cannot use this command in Windows.
- This command should be executed only when an attempt to execute the jajs\_stop.cluster command fails to stop the process.
- When a request to forcibly stop the JP1/AJS3 process is issued, the shared disk might be disconnected from JP1/AJS3. If this occurs, change the log output destination of the shell script for forcibly stopping JP1/AJS3 (jajs\_killall.cluster) to the log file storage directory on the physical host before you execute the shell script. The following shows how you can modify the shell script.

Before modification:

```
LOGDIR=`jbsgetcnf -h "$JP1_HOSTNAME" | grep '^"JP1AJS2_LOGDIR"=' | \
sed -e 's/^[^=]*=//' -e 's/^"//' -e 's/"$//'`
COMNAME=`basename "$0"`
```

#### After modification:

```
LOGDIR="/var/opt/jplajs2/log" #Changed to log file storage directory on
physical host
COMNAME=`basename "$0"`
```

## **Return values**

0	Normal end
Values other than 0	Abnormal end

# Additional informations

- This command is stored in the /etc/opt/jplajs2/ path.
- This command forcibly terminates the process on a logical host basis. Of the JP1/AJS3 processes, however, those listed below are out of the target of forced termination.

Process name	Description
jp1mqsup	MQ monitor process at the time of TP1/Message Queue linkage SUP under TP1 control
jpocwtmqmaii	MQ monitor process at the time of MQSeries linkage

The processes in the table do not need a failover together with the JP1/AJS3 service. You can terminate a process, as necessary.

• This command outputs log information to a file. The system keeps five generations of the log file. The default log file storage directory and file names are as follows:

Log file storage directory

```
shared-directory/jp1ajs2/log
```

(or /var/opt/jplajs2/log if you changed the output destination to the log file storage directory on the physical host)

Log file name:

jajs\_killall.cluster\_logical-host-name.{1|2|3|4|5}.log

# Format

```
jajs_log | _04
  [-h logical-host-name]
  [-f storage-directory]
  [-s]
  [-t]
  [-u]
  [-e]
  [-b]
  [additional-file]
```

# Description

The data collection tool obtains maintenance information, such as the JP1/AJS3 definitions, operating information, and information about the OS.

\_04 is the data collection tool for JP1/AJS3 10-10 or earlier. For JP1/AJS3 10-50 or later, you can also use jajs\_log as the data collection tool.

Both data collection tools have the same basic functionality. Use either tool depending on the purpose of use and whether customization is required.

The following table describes the purpose of jajs\_log and \_04, and whether they can be customized.

Table 2 22. Talpede el data dellection teole and whether they can be edetermized
--

Data collection tool	Purpose	Customization
jajs_log	Use this tool if the log output destinations have not been changed from the defaults, or if you need to collect data by default only.	Ν
_04	Customize this tool before using it if you have changed log output destinations from the defaults, or if you need to collect data other than the default data. <sup>#</sup>	Y

Legend:

Y: The tool can be customized.

N: The tool cannot be customized.

#

For details about the customization method, see 16.1.1 Setting up the data collection tools in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

By default, the results of executing the data collection tool are output to the following files under /tmp/jplajs2/trouble/.

For physical hosts:

1.JP1\_DEFAULT\_1st.tar.Z

The data for the first reports is output.

- 2.JP1\_DEFAULT\_2nd.tar.Z
  - The data for the second reports is output.
- 3.JP1\_DEFAULT\_3rd.tar.Z

```
All the other data is output.
```

For logical hosts:

- 1. *logical-host-name\_lst.tar.Z* The data for the first reports is output.
- 2. *logical-host-name\_*2nd.tar.Z The data for the second reports is output.
- 3. *logical-host-name\_*3rd.tar.Z All the other data is output.

# **Execution privileges**

Superuser privilege

# Storage directory

```
For jajs_log
   /opt/jp1ajs2/tools
For_04
   /opt/jp1ajs2/lib/sample_script
```

# Arguments

## -h logical-host-name

Specify the name of the target logical host.

The data collection tool collects the data on the physical host in addition to the data on the specified logical host.

If you do not specify a name, the data collection tool obtains the physical host logs.

## -f storage-directory

Use a full path without space characters to specify the directory used to store the collected information. If the specified directory name contains a space character, the system assumes that the character string before the space is the storage directory name and treats the characters after the space as other arguments.

When you use a relative path to specify a storage directory, the specified path is created under the root directory and the collected data is stored there.

If you specify a directory that does not exist, a new directory with that name is created. If data has already been collected in the specified storage directory, a message asking whether you want to overwrite the data appears.

If you omit this option, the collected data is output to /tmp/jplajs2/trouble/.

-s

Specify this option if you do not want to collect information about the database used by JP1/AJS3.

If you do not specify this option, the data collection tool collects information about the database.

-t

Specify this option if you do not want to obtain the hosts, services, and passwd files.

-u

Specify this option if you do not want to obtain the core file.

Although you specify this option, the back trace information is collected.

-е

Specify this option if you do not want to collect detailed information about the embedded database.

The detailed information about the embedded database is the data for the second report, which is output to the embdbinfo directory.

If you do not specify this option, the data collection tool collects detailed information about the embedded database.

When this option is not specified, it is automatically determined whether to collect the information. Therefore, do not specify this option if you are unsure about whether detailed information about the embedded database needs to be collected.

Specify this option only when you want to suppress the collection of detailed information about the embedded database.

-b

Specify this option if you do not want to collect detailed information about JP1/Base.

The detailed information about JP1/Base is the data for the second report, which is output to the JP1BASE\_INFO directory.

If you do not specify this option, the data collection tool collects detailed information about JP1/Base.

When this option is not specified, it is automatically determined whether to collect the information. Therefore, do not specify this option if you are unsure about whether detailed information about JP1/Base needs to be collected.

Specify this option only when you want to suppress the collection of detailed information about JP1/Base.

If free disk space at the output destination is insufficient, execute the data collection tool with the -b option specified, and then execute the data collection tool for JP1/Base (jbs\_log) to collect detailed information about JP1/Base. For details about the data collection tool for JP1/Base (jbs\_log), see the *Job Management Partner 1/Base User's Guide*.

### additional-file

Use a full path without space characters to specify a file that is not usually obtained by using the data collection tool, such as the core file of the JP1/AJS3 commands. If the specified file name contains a space character, the system assumes that the character string before the space is an additional file name and treats the characters after the space as other arguments.

Using this argument, you can collect information that is not automatically collected by the data collection tool.

If the core file is specified as an additional file, the core file is collected even if you specify the -u option.

You can specify a directory name for *additional-file*. If you specify a directory, all the data in the specified directory is collected.

## Notes

1. If you collect data about a logical host in a cluster system, you must mount the shared disk for the logical host.

2. The data collection tool compresses the collected data as follows for each OS.

#### In Linux:

The data collection tool uses the gzip command to compress the data. If the gzip command is not installed in the environment in which the data collection tool is executed, the data collection tool uses the tar command to compress and output the data; it does not use the compress command. If the tar command is not installed, the data collection tool terminates abnormally, and processing ends.

In UNIX other than Linux:

The data collection tool uses the compress command to compress the data. If the compress command is not installed in the environment in which the data collection tool is executed, the tool uses the gzip command instead. If neither the compress command nor the gzip command is available, the data collection tool uses the tar command to archive and output the data. If the tar command is not installed, the data collection tool terminates abnormally, and processing ends.

- 3. Because the user might not have reference permission for a file contained in the script, the superuser must execute the script.
- 4. If you have already created a file containing the results of executing the script, JP1/AJS3 outputs a message asking for permission to overwrite the file. Enter y to overwrite the file. If you do not want to overwrite the file, enter n.
- 5. If no core dump file is output, a message (Status of tar: core? is unknown. The file is not dumped.) appears. This is not a problem.
- 6. If the target product is not installed or is being used by another process, or a file that cannot be accessed because of its file attribute is detected, a message reporting that there is no applicable directory or file or that the target file cannot be accessed might appear during the collection of data. This is not a problem.
- 7. Because the ajs2collectcore command is executed internally while the data collection tool is being executed, some data cannot be collected, depending on the OS.For details, see *ajs2collectcore (UNIX only)* in *2. Commands.*
- 8. If there is no data to be collected, a file containing the execution result of the data collection tool is not created.
- 9. Do not execute more than one data collection tool at the same time. Do not execute jajs\_log and \_04 at the same time.
- The data collection tool executed by an AJS administrator cannot collect information that requires superuser privileges. We recommend that a user with superuser privileges executes the data collection tool. To execute the data collection tool, the following operations must be performed:
  - The output destination file must be deleted before the data collection tool is executed.
  - The JP1 administrator group must be granted write permissions for the output destination directory.
  - The JP1 administrator group must be granted access permissions for the root directory.
  - To add the additionally collected data, the JP1 administrator group must be granted access permissions.
- 11. When you specify options, do not specify characters or symbols that have special meanings in the script. If you specify such characters and symbols, an unexpected error might occur.

## **Return values**

0	Normal end
Value other than 0	Abnormal end

### Messages

Message	Description	System action
Directory <i>directory-name</i> is created	A directory is created.	Continues processing.

<sup>2.</sup> Commands

Message	Description	System action
Some data could not be collected by AJS Administrator.	Some data could not be collected because an AJS administrator executed the data collection tool.	Continues processing.
Overwrite file ( <i>file-name</i> ) ok?	This message asks you whether you want to overwrite <i>file-name</i> . Press y to continue the processing, or press n to cancel the processing.	Waits for a user response.
[CAUTION] When a target program is not installed, or when file access fails because some other process is using the file or because a necessary file-access permission is lacking, a message might be output that states that file access failed or a directory or file does not exist. Such a message does not indicate a problem.	This message is displayed when the specified file is being used or was not found during data collection. However, there is no problem.	Continues processing.
Output file name :( <i>file-name</i> )	The file indicated by <i>file-name</i> has been created.	Terminates the processing.
Write permission error ( <i>directory-name</i> )	<ul> <li>You do not have write permission. Possible reasons are as follows:</li> <li>You do not have permission to create a directory.</li> <li>The directory is being used by another process.</li> <li>Correct the error, and then re-execute the data collection tool.</li> </ul>	Terminates the processing.
Make directory ( <i>directory-name</i> ) is unsuccessful	<ul> <li>The directory could not be created. Possible reasons are as follows:</li> <li>You do not have permission to create a directory.</li> <li>The directory is being used by another process.</li> <li>Correct the error, and then re-execute the data collection tool.</li> </ul>	Terminates the processing.
Read permission error( <i>file-name</i> )	You do not have read permission. Obtain read permission, and then re-execute the data collection tool.	Terminates the processing.
File <i>file-name</i> is not found	The directory or file specified as the additional file was not found. Specify a correct path, and then re-execute the data collection tool.	Terminates the processing.
[-s][-f <i>output-file</i> ][-h <i>Logical-Host-Name</i> ][-t][-u] [-e][-b][ <i>add-in-file</i> ]	The options are specified incorrectly. Specify the options correctly, and then re-execute the data collection tool.	Terminates the processing.
The collection of detailed information on EmbedDB _JF* <sup>#</sup> begins.	Collection of detailed information about the embedded database has started.	Continues processing.
The collection of detailed information on EmbedDB_JF* <sup>#</sup> ended.	Collection of detailed information about the embedded database has ended.	Continues processing.
The collection of detailed information on JP1/Base begins.	Collection of detailed information about JP1/Base has started.	Continues processing.

Message	Description	System action
The collection of detailed information on JP1/Base ended.	Collection of detailed information about JP1/Base has ended.	Continues processing.

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). Detailed information is collected for each identifier.

# Example 1

The following command collects data about a physical host:

For jajs\_log:

jajs\_log

If you use \_04 customized to trouble.sh:

trouble.sh

## Example 2

The following command collects data about a logical host (cluster):

```
For jajs_log:
```

jajs log -h cluster

If you use 04 customized to trouble.sh:

```
trouble.sh -h cluster
```

## Example 3

The following command outputs information, including the core file (/tmp/core), to a specified file (/tmp/trouble):

For jajs\_log:

jajs\_log -f /tmp/trouble /tmp/core

If you use 04 customized to trouble.sh:

```
trouble.sh -f /tmp/trouble /tmp/core
```

## Data that can be collected

#### For physical hosts:

• The data for first reports (/tmp/jp1ajs2/trouble/JP1\_DEFAULT\_1st.tar.Z<sup>#1</sup>)

Name of directory or file containing collected data	Description
/etc/hosts	hosts file
/etc/passwd	passwd file
/etc/services	services file

Name of directory or file containing collected data	Description
/etc/.hitachi	Information about installed Hitachi products
<ol> <li>/etc/opt/jp1ajs2/conf</li> <li>/etc/opt/jp1ajs2cm/conf</li> <li>/etc/opt/jp1base/conf</li> </ol>	Directories containing the environment settings files
/opt/jp1/hcclibcnf/regdir	Common definition
<ol> <li>/opt/jplajs2/PatchHistory</li> <li>/opt/jplajs2/PatchLog</li> <li>/opt/jplajs2v/PatchHistory</li> <li>/opt/jplajs2v/PatchLog</li> </ol>	Patch information
<ol> <li>/var/adm/syslog/syslog.log(for HP-UX)</li> <li>/var/adm/messages(for Solaris)</li> <li>/var/adm/syslog(for AIX)</li> <li>/var/adm/messages*(for Linux)</li> </ol>	syslog and the directories containing syslog
<pre>1./opt/hitachi/HNTRLib/spool 2./var/opt/hitachi/HNTRLib2/spool</pre>	Integrated trace logs
/var/opt/jp1ajs2/log	Directory containing log files
/var/opt/jplajs2/log/_04.filelist	List of files
/var/opt/jplajs2/log/_04.osinfo	OS-related information
/var/opt/jp1ajs2/log/_04.processlist	List of processes
/var/opt/jp1ajs2/log/_04.backtrace	Back trace information
/var/opt/jplajs2/log/ajsagtshow.txt	Execution result of the ajsagtshow command
/var/opt/jp1ajs2/log/ajsagtprint.txt	Execution result of the ajsagtprint command
/var/opt/jplajs2/log/jajs_status.txt	Execution result of the jajs_status command
<pre>/var/opt/jplajs2/log/jajsadminusr_{1 2}.log</pre>	Setting and reference log for AJS administrators
<pre>/var/opt/jp1ajs2/log/ajsprof_scheduler-service- name_agent_stat.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus (-t agent -s option)
<pre>/var/opt/jp1ajs2/log/ajsprof_scheduler-service- name_agent_def.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus (-t agent -p option)
<pre>/var/opt/jp1ajs2/log/ajsprof_scheduler-service- name_unit_stat.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus (-t unit -s option)
<pre>/var/opt/jp1ajs2/log/ajsprof_scheduler-service- name_unit_def.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus (-t unit -p option)
/var/opt/jp1ajs2/log/jajs_pmtcon_m.txt	Execution result of the jajs_pmtcon (-m -v option)
/var/opt/jp1ajs2/log/jajs_pmtcon_a.txt	Execution result of the jajs_pmtcon (-a -v option)
/var/opt/jp1ajs2/sys	Directory containing the system files
/var/opt/jp1ajs2/tmp/schedule/pd*.trc	Trace information related to the embedded database
<ol> <li>/var/opt/jplajs2cm/log</li> <li>/var/opt/jplajs2v/log</li> <li>/var/opt/jplbase/log</li> </ol>	Directories containing log files

Name of directory or file containing collected data	Description
/tmp/jp1ajs2/trouble <sup>#1</sup> /EMBDB/_JF* <sup>#3</sup> /conf	Embedded database definition file
/tmp/jp1ajs2/trouble <sup>#1</sup> /EMBDB/_JF* <sup>#3</sup> /spool	Embedded database failure investigation file
/tmp/jplajs2/trouble <sup>#1</sup> /EMBDB/_JF* <sup>#3</sup> /etc	Other information related to the embedded database that is needed for investigation

Output destination when the -f option is omitted.

#2

Information about all scheduler services on the host is collected.

#3

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A directory is created for each identifier.

# • The data for second reports (/tmp/jplajs2/trouble/JP1\_DEFAULT\_2nd.tar.Z<sup>#1</sup>)

Name of directory or file containing collected data	Description
<ol> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/coreinfo- ISAM.shmdump.tar.2<sup>#2</sup></li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/coreinfo- Scheduler.shmdump.tar.2<sup>#2</sup></li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR///core.2<sup>#2</sup></li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR///coreinfo- analyze.tar.2<sup>#2</sup></li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/ProgMon.shmdump</li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/coreinfo-host.shmdump</li> <li>/tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/coreinfo-</li> </ol>	Shared memory information used by ISAM and the scheduler, core dump files, shared library information, operation profile information, and information about the shared memory for the connection source restriction function
hostprof.shmdump	
8./tmp/jp1ajs2/trouble <sup>#1</sup> /CARDIR/coreinfo- pmtcon_m.shmdump	
<pre>9./tmp/jplajs2/trouble<sup>#1</sup>/CARDIR/coreinfo- pmtcon_a.shmdump</pre>	
<pre>l./var/opt/jplajs2/database</pre>	Database storage directories
<pre>2./var/opt/jplajs2cm/database</pre>	
$3./tmp/jp1ajs2/trouble^{\#1}/embdatabase/_JF^{\#3}$	
/tmp/jp1ajs2/trouble <sup>#1</sup> /embdbinfo/_JF* <sup>#3</sup>	Detailed information about the embedded database
/tmp/jp1ajs2/trouble <sup>#1</sup> /JP1BASE_INFO <sup>#5</sup>	Detailed information about JP1/Base
/ additionally-collected-data <sup>#4</sup>	Additionally collected data

#1

Output destination when the -f option is omitted.

#2

This file is output to the directory containing the core dump file that has been obtained.

#3

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A directory is created for each identifier.

#4

This file is created when *additional-file* is specified as the argument.

The detailed information about JP1/Base is created as data for the second physical hosts report, regardless of the data for physical hosts or logical hosts.

• The data for third reports (/tmp/jp1ajs2/trouble/JP1\_DEFAULT\_3rd.tar.Z<sup>#</sup>)

Name of directory or file containing collected data	Description
/var/opt/jplajs2/jobinf	Directory containing information about jobs

#

Output destination when the -f option is omitted

#### For logical hosts:

# • The data for first reports (/tmp/jplajs2/trouble/logical-host-name\_lst.tar.Z<sup>#1</sup>)

Name of directory or file containing collected data	Description
/shared-directory-name/jplajs2/backup	Directory containing backup files
/shared-directory-name/jplajs2/conf	Directory containing environment settings files
/shared-directory-name/jplajs2/log	Directory containing log files
/shared-directory-name/jplajs2/sys	Directory containing the system files
/shared-directory-name/jplajs2/tmp	Directory containing work files
/shared-directory-name/jplbase/conf	Directory containing the environment settings files
/shared-directory-name/jplbase/log	Directory containing log files
/shared-directory-name/jplajs2/log/ajsagtshow.txt	Execution result of the ajsagtshow command
/ <i>shared-directory-name</i> /jp1ajs2/log/ ajsagtprint.txt	Execution result of the ajsagtprint command
/ <i>shared-directory-name</i> /jplajs2/log/ jajs_status.txt	Execution result of the jajs_status command
<pre>/shared-directory-name/jplajs2/log/ ajsprof_scheduler-service-name_agent_stat.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus command (-t agent -s option)
<pre>/shared-directory-name/jplajs2/log/ ajsprof_scheduler-service-name_agent_def.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus command (-t agent -p option)
<pre>/shared-directory-name/jplajs2/log/ ajsprof_scheduler-service-name_unit_stat.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus command (-t unit -s option)
<pre>/shared-directory-name/jplajs2/log/ ajsprof_scheduler-service-name_unit_def.txt<sup>#2</sup></pre>	Execution result of the ajsprofstatus command (-t unit -p option)
/ <i>shared-directory-name</i> /jp1ajs2/log/ jajs_pmtcon_m.txt	Execution result of the jajs_pmtcon (-m -v option)
/ <i>shared-directory-name</i> /jp1ajs2/log/ jajs_pmtcon_a.txt	Execution result of the jajs_pmtcon (-a -v option)
/tmp/jplajs2/trouble <sup>#1</sup> /EMBDB_ <i>logical-host-name/</i> _JF* <sup>#3</sup> /conf	Embedded database definition file
/tmp/jp1ajs2/trouble <sup>#1</sup> /EMBDB_ <i>logical-host-name/</i> _JF* <sup>#3</sup> /spool	Embedded database failure investigation file

Name of directory or file containing collected data	Description
/tmp/jp1ajs2/trouble <sup>#1</sup> /EMBDB_ <i>logical-host-name/</i> _JF* <sup>#3</sup> /etc	Other information related to the embedded database that is needed for investigation

Output destination when the -f option is omitted.

#2

Information about all scheduler services on the host is collected.

#3

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A directory is created for each identifier.

# • The data for second reports (/tmp/jplajs2/trouble/logical-host-name\_2nd.tar.Z<sup>#1</sup>)

Name of directory or file containing collected data	Description
<pre>1./tmp/jplajs2/trouble<sup>#1</sup>/CARDIR_logical- host-name/ProgMon.shmdump</pre>	Shared memory dumps
<pre>2./tmp/jplajs2/trouble<sup>#1</sup>/CARDIR_logical- host-name/coreinfo-host.shmdump</pre>	
<ol> <li>/shared-directory-name/jplajs2/database</li> <li>/shared-directory-name/jplajs2cm/database</li> <li>/tmp/jplajs2/trouble#1/ embdatabase_logical-host-name/_JF*#2</li> </ol>	Database storage directories
/tmp/jplajs2/trouble <sup>#1</sup> /embdbinfo_ <i>logical-</i> <i>host-name</i> /_JF* <sup>#2</sup>	Detailed information about embedded database

#1

Output destination when the -f option is omitted.

#### #2

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A directory is created for each identifier.

# • The data for third reports (/tmp/jplajs2/trouble/logical-host-name\_3rd.tar.Z<sup>#</sup>)

Name of directory or file containing collected data	Description
/shared-directory-name/jplajs2/jobinf	Directory containing information about jobs

#

Output destination when the -f option is omitted
## Format

```
jajs_log.bat | _04.bat
    [-h logical-host-name]
    [-f storage-directory]
    [-s]
    [-t]
    [-u]
    [-e]
    [-b]
```

## Description

The data collection tool obtains maintenance information, such as the JP1/AJS3 logs and information about the OS.

\_04.bat is the data collection tool for JP1/AJS3 10-10 or earlier. For JP1/AJS3 10-50 or later, you can also use jajs\_log.bat as the data collection tool.

Both data collection tools have the same basic functionality. Use either tool depending on the purpose of use and whether customization is required.

The following table describes the purpose of jajs\_log.bat and \_04.bat, and whether they can be customized.

Table 2-23: Purpose of data collection tools and whether they can be customized

Data collection tool	Purpose	Customization
jajs_log.bat	Use this tool if the log output destinations have not been changed from the defaults, or if you need to collect data by default only.	Ν
_04.bat	Customize this tool before using it if you have changed log output destinations from the defaults, or if you need to collect data other than the default data. <sup>#1, #2</sup>	Y

Legend:

Y: The tool can be customized.

N: The tool cannot be customized.

#### #1

For details about the customization method, see 7.1.1 Setting up the data collection tools in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

#### #2

If you have changed the installation destination folder from the default, use jajs\_log.bat unless output destinations for log files were changed after installation.

By default, the results of executing the data collection tool are output to the following folders under %TEMP% \jplajs2\backlog.

### For physical hosts:

1.JP1\_DEFAULT\JP1\_DEFAULT\_1st

The data for the first reports is output.

- 2.JP1\_DEFAULT\JP1\_DEFAULT\_2nd
- The data for the second reports is output.
- 3.JP1\_DEFAULT\JP1\_DEFAULT\_3rd

All other data is output.

For logical hosts:

- 1. *logical-host-name*\*logical-host-name*\_1st The data for the first reports is output.
- 2. *logical-host-name*\*logical-host-name*\_2nd The data for the second reports is output.
- 3. *logical-host-name*\*logical-host-name*\_3rd All other data is output.

## **Execution privileges**

Administrators privileges

## Storage directory

For jajs\_log.bat:
 JP1/AJS3-installation-folder\tools

For \_04.bat: JP1/AJS3-installation-folder\tools

## Arguments

### -h logical-host-name

Specify the name of the target logical host.

The data collection tool collects the data on the physical host in addition to the data on the specified logical host.

If you do not specify a name, the data collection tool obtains the physical host logs.

### -f storage-directory

Use the absolute path to the folder to which collected data is output. You can also use a relative path from the location in which the command is executed. However, you cannot specify the root directory.

To specify a path that contains spaces, enclose the entire path in double quotation marks (").

If you specify a folder that does not exist, a new folder with that name is created.

If data has already been collected under the specified storage folder, a message asking whether you want to overwrite the files appears.

If you specify too long a path to the storage folder, data collection might fail. If data collection fails, specify a shorter path, and then retry collecting data.

If you omit this option, the collected data is output to %TEMP%\jplajs2\backlog. If you specify this option, the value of this option overrides the storage folder that was changed from the default by customizing the tool.

### -s

Specify this option if you do not want to collect information about the database used by JP1/AJS3 or information about the database used by JP1/AJS3 Console.

If you do not specify this option, the data collection tool collects information about these databases.

-t

Specify this option if you do not want to obtain the hosts and services files.

-u

Specify this option if you do not want to obtain dump files.

You cannot obtain dump files for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista.

-е

Specify this option if you do not want to collect detailed information about the embedded database.

The detailed information about the embedded database is the data for the second report, which is output to the embdbinfo folder.

If you do not specify this option, the data collection tool collects detailed information about the embedded database.

When this option is not specified, it is automatically determined whether to collect the information. Therefore, do not specify this option if you are unsure about whether detailed information about the embedded database needs to be collected.

Specify this option only when you want to suppress the collection of detailed information about the embedded database.

-b

Specify this option if you do not want to collect detailed information about JP1/Base.

The detailed information about JP1/Base is the data for the second report, which is output to the JP1BASE\_INFO folder.

If you do not specify this option, the data collection tool collects detailed information about JP1/Base.

When this option is not specified, it is automatically determined whether to collect the information. Therefore, do not specify this option if you are unsure about whether detailed information about JP1/Base needs to be collected.

Specify this option only when you want to suppress the collection of detailed information about JP1/Base.

If free disk space at the output destination is insufficient, execute the data collection tool with the -b option specified, and then execute the data collection tool for JP1/Base (jbs\_log) to collect detailed information about JP1/Base. For details about the data collection tool for JP1/Base (jbs\_log), see the *Job Management Partner 1/Base User's Guide*.

### Notes

- 1. If you execute the data collection tool without the -s option specified during startup of the JP1/AJS3 service, the job might end abnormally. In such a case, JP1/AJS3 does not collect information about the ISAM database.
- 2. To collect data about a logical host in a cluster system, execute the data collection tool on the host on which the logical host runs.
- 3. The data collection tool does not compress the data if collects. To compress the data, use a data compression tool.
- 4. If you have already created a file containing the execution results of batch files, JP1/AJS3 outputs a message asking for permission to overwrite the file. To overwrite the file, specify y. If you do not want to overwrite the file, specify n.

- 5. While a batch file is being executed, JP1/AJS3 might display an error message reporting that a sharing violation has occurred for a file in the *JP1/AJS3 Manager-or-JP1/AJS3 Agent-installation-folder*\sys folder. This is not a problem.
- 6. If you perform an operation on the collected data such as, moving it or deleting it immediately after the execution of the data collection tool has finished, a message reporting that the process cannot access a file because another process is currently using the file might appear. This message appears because a process that collects OS information internally is still being executed despite termination of the tool. If this message appears, wait a while and then retry the operation.
- 7. If you execute the data collection tool while using Outlook, the following message might appear:

The program is attempting to access email addresses in Outlook. Is this all right?

The program indicated in this message is the machine configuration collection program (msinfo32) executed internally by the data collection tool. This program does not affect the operation of the data collection tool or Outlook. The data collection tool does not collect email addresses. If this message appears, click the **No** button.

8. When you execute the data collection tool in Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista, you must open the Command Prompt window as an administrator. If you

- Windows Server 2008, or Windows Vista, you must open the Command Prompt window as an administrator. If you are not an administrator, UAC will frequently open a confirmation dialog box. If you turn UAC off, you will not need to open the Command Prompt window as an administrator.
- 9. Do not execute more than one data collection tool at the same time. Do not execute jajs\_log.bat and \_04.bat at the same time.
- 10. When you specify options, do not specify characters or symbols that have special meanings in the bat file. If you specify such characters and symbols, an unexpected error might occur.

## **Return values**

0	Normal end
Value other than 0	Abnormal end

### Messages

Message	Description	Action
Finished. Press any key.	The process ended normally. Press any key.	Wait for a user response.
Failed. Press any key.	The process did not end normally. Press any key. See the output OS messages, remove the cause of the error, and then re-execute the process.	Wait for a user response.
File <i>file-name</i> is exist. Delete to continue? (y/n)	A file created the last time this process was executed exists. Press $y$ to delete the file and continue processing, or press n to stop processing.	Wait for a user response.
Directory <i>directory-name</i> is exist. Delete to continue? (y/n)	A directory created the last time this process was executed exists. Press $y$ to delete the directory and continue processing, or press n to stop processing.	Wait for a user response.
Error exist in option.	An option is specified incorrectly. Specify the option correctly, and then re-execute the process.	Complete the process.
The following logical hosts exist, other than the specified logical host. : <i>logical-host-name</i>	A logical host environment other than the one specified for the -h option exists. If necessary, re-execute the process.	After this message, the following message is output: Finished. Press any key.

Message	Description	Action
The collection of detailed information on EmbedDB _JF* <sup>#</sup> begins.	Collection of detailed information about the embedded database has started.	Continue processing.
The collection of detailed information on EmbedDB_JF* <sup>#</sup> ended.	Collection of detailed information about the embedded database has ended.	Continue processing.
The collection of detailed information on JP1/Base begins.	Collection of detailed information about JP1/Base has started.	Continue processing.
The collection of detailed information on JP1/Base ended.	Collection of detailed information about JP1/Base has ended.	Continue processing.
The collection of Event Log in text format begins.	Collection of event log data in text format has started.	Continue processing.
The collection of Event Log in text format ended.	Collection of event log data in text format has ended.	Continue processing.

#

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). Detailed information is collected for each identifier.

### Example 1

The following command collects physical host materials:

For jajs\_log:

```
jajs_log.bat
```

If you use \_04 customized to trouble.bat:

```
trouble.bat
```

### Example 2

The following command collects physical host materials when the JP1/AJS3 service is running:

```
For jajs_log:
```

```
jajs_log.bat -s
```

If you use \_04 customized to trouble.bat:

```
trouble.bat -s
```

### Example 3

The following command collects data about a logical host (cluster):

For jajs\_log:

jajs\_log.bat -h cluster

If you use \_04 customized to trouble.bat:

trouble.bat -h cluster

### Data that can be collected

### For physical hosts:

• The data for first reports (%TEMP%\jp1ajs2\backlog\JP1\_DEFAULT\JP1\_DEFAULT\_1st)

Name of folder or file containing collected data	Description
\FILELIST.txt	List of files under the JP1/AJS3 installation folder
\GETERROR.log	Log information that is output by the data collection tool (_04.bat)
\HOSTS	hosts file
\services	services file
<ol> <li>\JP1AJS2.DAT</li> <li>\JP1AJS2C.DAT</li> <li>\JP1AJS2CONSOLE.DAT</li> <li>\JP1AJS2DA.DAT</li> <li>\JP1AJS2SE.DAT</li> <li>\JP1AJS2V.DAT</li> <li>\JP1AJS2WOA.DAT</li> <li>\JP1BASE.DAT</li> </ol>	Registry information about each product
\regdata.dat	JP1 registry information
\WIN.DAT	Windows registry information
\ajsqlstatus.txt	Execution result of ajsqlstatus.exe
\ajsagtshow.txt	Execution result of ajsagtshow.exe
\ajsagtprint.txt	Execution result of ajsagtprint.exe
\jajs_status.txt	Execution result of jajs_status.exe
\ajsprof_ <i>scheduler-service-name</i> _agent_stat.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe(-t agent - s option)
\ajsprof_ <i>scheduler-service-name</i> _agent_def.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe(-t agent - p option)
\ajsprof_ <i>scheduler-service-name</i> _unit_stat.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe(-t unit - s option)
\ajsprof_ <i>scheduler-service-name</i> _unit_def.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe(-t unit - p option)
\jajs_pmtcon_m.txt	Execution result of jajs_pmtcon.exe (-m -v option)

Name of folder or file containing collected data	Description
\jajs_pmtcon_a.txt	Execution result of jajs_pmtcon.exe (-a -v option)
\OSINFO.txt	OS version, Windows environment variables, IP configuration, network configuration, statistics
\PERMISSIONINFO.TXT	Access permissions for JP1/AJS3 folders
\WINMSD.TXT	Information, such as a system overview, collected by using the msinfo32 command and the tasks and services being executed. For Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista, all system information that is collected by using the msinfo32 command
<ol> <li>\ALLUSERSPROFILE\conf\JP1AJS2 (for Windows Server 2012 or Windows Server 2008)</li> <li>\conf\JP1AJS2 (for Windows Server 2003)</li> <li>\conf\jp1ajs2cm</li> <li>\conf\JP1AJS2DA</li> <li>\conf\JP1AJS2V (for Windows Server 2003 or Windows XP Professional)</li> <li>\ALLUSERSPROFILE\conf\JP1AJS2V (for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista)</li> </ol>	Environment-settings file storage folder
7. \conf\JP1AJS2WOA	
\drwtsn\Windows2003\drwtsn32.log(for Windows Server 2003)	Dr. Watson logs <sup>#2</sup>
\EMBDB\_JF* <sup>#3</sup> \conf	Embedded database definition file
\EMBDB\_JF* <sup>#3</sup> \spool	Embedded database failure investigation file
\EMBDB\_JF* <sup>#3</sup> \etc	Other information related to the embedded database that is needed for investigation
\HNTRLib2\spool	Integrated trace log
<ol> <li>\ALLUSERSPROFILE\JP1AJS2 (for Windows Server 2012 or Windows Server 2008)</li> <li>\JP1AJS2 (for Windows Server 2003)</li> <li>\JP1AJS2C</li> <li>\jp1ajs2cm</li> <li>\JP1AJS2DA (for Windows Server 2003 or Windows XP Professional)</li> <li>(ALLUSERSPROFILE\JP1AJS2DA (for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista)</li> <li>\JP1AJS2HC</li> <li>\JP1AJS2V (for Windows Server 2003 or Windows XP Professional)</li> <li>\ALLUSERSPROFILE\JP1AJS2V (for Windows Server 2003 or Windows XP Professional)</li> <li>\ALLUSERSPROFILE\JP1AJS2V (for Windows Server 2003 or Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2003 or Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2003 or Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista)</li> </ol>	Folders containing log files
<ol> <li>\PATCHLOG\JP1JAJS2\PATCHLOG.txt</li> <li>\PATCHLOG\JP1JAJS2C\PATCHLOG.txt</li> <li>\PATCHLOG\JP1JAJS2console\PATCHLOG.txt</li> <li>\PATCHLOG\JP1JAJS2DA\PATCHLOG.txt</li> </ol>	Patch log files

Name of folder or file containing collected data	Description
5. \PATCHLOG\JP1JAJS2V\PATCHLOG.txt	Patch log files
6.\PATCHLOG\JP1JAJS2WOA\PATCHLOG.txt	
\resource\JP1AJS2V	Folder containing resource files
1. \ALLUSERSPROFILE\sys\JP1AJS2 (for Windows Server 2012 or Windows Server 2008)	Folders containing the system files
2. \sys\JP1AJS2 (for Windows Server 2003)	
3.\sys\jp1ajs2WOA	
4. \sys\JP1AJS2V (for Windows Server 2003 or Windows XP Professional)	
5. \ALLUSERSPROFILE\sys\JP1AJS2V (for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista)	
1. \ALLUSERSPROFILE\tmp\JP1AJS2DA (for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista)	Folders containing temporary files for execution
2. \tmp\JP1AJS2DA (for Windows Server 2003 or Windows XP Professional)	
1. \ALLUSERSPROFILE\tmp\schedule\pd*.trc (for Windows Server 2012 or Windows Server 2008)	Embedded database trace logs
2. \tmp\schedule\pd*.trc (for Windows Server 2003)	
\user_acl	Folder containing user mapping and authentication settings files
\jplcommon_ajs2	Folder containing product information files
\hcdinst <sup>#4</sup>	Hitachi integrated installation log
\jp1common	JP1/Base installation log

#1

Information about all scheduler services on the host is collected.

#2

This data cannot be collected for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista.

#3

-3

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A folder is created for each identifier.

With the exception of Windows Server 2003 (x64), this data cannot be collected for Windows Server 2003.

• The data for second reports (%TEMP%\jp1ajs2\backlog\JP1\_DEFAULT\JP1\_DEFAULT\_2nd)

Name of folder or file containing collected data	Description
\ADD	Folder for additional collected data
<ol> <li>\cmdatabase</li> <li>\database</li> <li>\embdatabase\_JF*<sup>#1</sup></li> </ol>	Database storage folders
<ol> <li>\eventlog\AppEvent(Backup).evt</li> <li>\eventlog\AppEvent(Backup).txt</li> </ol>	Application event log
<ol> <li>\eventlog\SysEvent(Backup).evt</li> <li>\eventlog\SysEvent(Backup).txt</li> </ol>	System event log
<ol> <li>\SHMDUMP\coreinfo-ISAM.shmdump</li> <li>\SHMDUMP\coreinfo-Scheduler.shmdump</li> </ol>	Shared memory information

<sup>#4</sup> 

Name of folder or file containing collected data	Description
3.\SHMDUMP\ProgMon.shmdump	Shared memory information
4.\SHMDUMP\coreinfo-host.shmdump	
5. $\ \$ be the second	
$6. \SHMDUMP\coreinfo-pmtcon_m.shmdump$	
7. $SHMDUMP\coreinfo-pmtcon_a.shmdump$	
1.\USERDUMP\*.dmp	Dump files <sup>#2</sup>
2.\WTSNDUMP\*.dmp	
\embdbinfo\_JF* <sup>#1</sup>	Detailed information about the embedded database
\jp1base_info <sup>#3</sup>	Detailed information about JP1/Base

```
#1
```

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A folder is created for each identifier.

#2

The data collection tool cannot collect this data for Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista.

#3

The detailed information about JP1/Base is created as data for the second physical hosts report, regardless of the data for physical hosts or logical hosts.

• The data for third reports (%TEMP%\jplajs2\backlog\JP1\_DEFAULT\JP1\_DEFAULT\_3rd)

Name of folder or file containing collected data	Description
<ol> <li>\ALLUSERSPROFILE\jobinf (for Windows Server 2012 or Windows Server 2008)</li> <li>\jobinf (for Windows Server 2003)</li> </ol>	Folder containing information about jobs

### For logical hosts:

• The data for first reports (%TEMP%\jplajs2\backlog\*logical-host-name*\_lst)

Name of folder or file containing collected data	Description
\jpomanevshow.txt	Execution result of jpomanevshow.exe
\ajsqlstatus.txt	Execution result of ajsqlstatus.exe
\ajsagtshow.txt	Execution result of ajsagtshow.exe
\jajs_status.txt	Execution result of jajs_status.exe
\ajsprof_ <i>scheduler-service-name</i> _agent_stat.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe (-t agent -s option)
\ajsprof_ <i>scheduler-service-name_</i> agent_def.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe (-t agent -p option)
\ajsprof_scheduler-service-name_unit_stat.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe (-t unit -s option)
\ajsprof_ <i>scheduler-service-name</i> _unit_def.txt <sup>#1</sup>	Execution result of ajsprofstatus.exe (-t unit -p option)
\jajs_pmtcon_m.txt	Execution result of jajs_pmtcon.exe (-m -v option)
\jajs_pmtcon_a.txt	Execution result of jajs_pmtcon.exe (-a -v option)
\JP1AJS2_LOGICAL	Folder containing log files

Name of folder or file containing collected data	Description
\JP1BASE	Folder containing JP1/Base log files
\EMBDB\_JF* <sup>#2</sup> \conf	Embedded database definition file
\EMBDB\_JF* <sup>#2</sup> \spool	Embedded database failure investigation file
\EMBDB\_JF* <sup>#2</sup> \etc	Other information related to the embedded database that is needed for investigation
\sys\JP1AJS2	System folder
\tmp\schedule\pd*.trc	Embedded database trace log
\user_acl	Folder containing user mapping and authentication settings files

#1

Information about all scheduler services on the host is collected.

#2

\_JF\* indicates an embedded database identifier (\_JF0, \_JF1, \_JF2, and so on). A folder is created for each identifier.

• The data for second reports (%TEMP%\jplajs2\backlog\*logical-host-name*\_2nd)

Name of folder or file containing collected data	Description
<ol> <li>\cmdatabase</li> <li>\database</li> <li>\embdatabase\_JF*<sup>#</sup></li> </ol>	Database storage folders
\SHMDUMP\ProgMon.shmdump	Information about the shared memory for monitoring processing status
\SHMDUMP\coreinfo-host.shmdump	Information about the shared memory for the system management function
\SHMDUMP\coreinfo-hostprof.shmdump_logical-host-name	Information about the shared memory for the operation profile
<ol> <li>\SHMDUMP\coreinfo-pmtcon_m.shmdump</li> <li>\SHMDUMP\coreinfo-pmtcon_a.shmdump</li> </ol>	Information about the shared memory for the connection source restriction function
\embdbinfo\_JF* <sup>#</sup>	Detailed information about the embedded database

#

 $\_JF*$  indicates an embedded database identifier ( $\_JF0$ ,  $\_JF1$ ,  $\_JF2$ , and so on). A folder is created for each identifier.

• The data for third reports (%TEMP%\jplajs2\backlog\*logical-host-name*\_3rd)

Name of folder or file containing collected data	Description
\jobinf	Folder containing information about jobs

## Format

For JP1/AJS3 - Manager

```
jajs_pmtcon
    [-h logical-host-name]
    {-a|-m}
    [<u>-v</u>|-u]
```

For JP1/AJS3 - Agent

```
jajs_pmtcon
[-h logical-host-name]
-a
[<u>-v</u>|-u]
```

## Description

Performs either of the following operations depending on the specified options:

- Enables the contents of the connection permission configuration file.
- Outputs a list of the hosts that are currently permitted to connect.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Arguments

### -h logical-host-name

Specifies the name of the logical host for the processing.

You can specify a character string of 1 to 255 bytes.

If you omit this option, the logical host name specified in environment variable JP1\_HOSTNAME is assumed. If the JP1\_HOSTNAME environment variable has not been specified, the physical host is assumed.

If the local host name is specified and if the local host name is the same as the logical host name, the local host acts as a logical host. If the name is not the same as the logical host name, the host acts as if the physical host had been specified.

If JP1\_DEFAULT is specified in the -h option, the KAVS0103-E message is output and the command terminates abnormally. If JP1\_DEFAULT is specified in the JP1\_HOSTNAME environment variable, the KAVS0187-E message is output and the command terminates abnormally.

### -a

Specifies that the connection source restriction function for agents is used for the processing.

If the -m option is specified concurrently, the KAVS0116-E message is output and the command terminates abnormally.

-m

Specifies that the connection source restriction function for managers is used for the processing.

If the -a option is specified concurrently, the KAVS0116-E message is output and the command terminates abnormally.

The -m option can be specified only in JP1/AJS3 - Manager. If it is specified in JP1/AJS3 - Agent, the KAVS0100-E message is output and the command terminates abnormally.

-v

Outputs the status of the connection source restriction function, the date and time applied, and a list of the IP addresses of the hosts that are currently permitted to connect. If the connection source restriction function is disabled, the date and time and the list are not output.

If the -u option is specified concurrently, the KAVS0116-E message is output and the command terminates abnormally.

For an example of the output of this option, see Output example.

-u

Enables the contents of the connection permission configuration file.

For details about the connection permission configuration file, see 4.4 Settings for restricting connections to JP1/ AJS3 in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1 (for Windows) or 14.4 Settings for restricting connections to JP1/AJS3 in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1 (for UNIX).

If the -v option is specified concurrently, the KAVS0116-E message is output and the command terminates abnormally.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Example

The following command enables the agent connection permission configuration file:

jajs\_pmtcon -a -u

The following command outputs a list of hosts that are permitted to connect to the agent:

```
jajs_pmtcon -a -v
```

## **Output example**

The following shows an example of outputting a list of hosts that are permitted to connect to the agent.

Conn	ection source	restriction function of the agent	
	Status Apply date	restricted Aug 18 2013 10:12:01	
List o	f the connectio	n permitted host of the agent	
192.1 ::1 KAVS	68.0.128 88030-I The co	nnection permitted hosts are listed successfully.	

### Notes

- If you want to delete a manager host IP address from the agent connection permission configuration file, make sure that a job has not been requested to execute from the manager host before you execute the command. If you attempt the deletion during execution of a job, internal JP1/AJS communication is refused, and the job cannot be forcibly terminated. If you mistakenly delete the IP address of the manager host and need to forcibly terminate a running job, add the IP address of the manager host to the agent connection permission configuration file and then retry.
- Do not execute multiple instances of this command concurrently. If you do so, the contents of the connection permission configuration file might not be updated correctly.
- If the shared memory used by the connection source restriction function is inadvertently deleted, this command will not operate correctly as explained in the following:
  - If this command is executed with the -v option specified, the command outputs *not restricted* as the results, even though the actual status is *restricted*.
  - If this command is executed with the -u option specified, the KAVS8034-E message is output and the command terminates abnormally.

For this command to operate correctly, stop both the JP1/AJS3 service and JP1/AJS3 Queueless Agent service, and then restart both services.

# jajsshowadminusr (UNIX only)

## Format

jajsshowadminusr

## Description

Outputs information about the AJS administrator that has been set.

## **Execution privileges**

Superuser privileges

### Arguments

None

### Notes

- If an argument is specified, an error message appears, and the command ends abnormally.
- Information current at the time JP1/AJS3 was installed is output. Accordingly, if information about a user or a group is changed by using an OS function or a JP1/Base function after JP1/AJS3 was installed, correct information is not output.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

## Format

For JP1/AJS3 - Manager

```
jajs_spmd
  [-h logical-host-name]
   [-n jajs_agtd |
        -n jajs_schd [-F scheduler-service-name]|
        -n jajs_dbmd [-id embedded-database-setup-ID]]
   [-hot|-warm|-cold [-q {clear|noclear}]|-disaster]
   [-HA]
```

For JP1/AJS3 - Agent

```
jajs_spmd
[-h logical-host-name]
[-cold]
[-HA]
```

## Description

For JP1/AJS3 - Manager

The <code>jajs\_spmd</code> command starts the process that corresponds to a JP1/AJS3 function.

For JP1/AJS3 - Agent

 $The \verb"jajs\_spmd" command starts the JP1/AJS3 service or starts the process that corresponds to a JP1/AJS3 function.$ 

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\bin\ JP1/AJS3 - Agent-installation-folder\bin\

In UNIX:
 /opt/jplajs2/bin/

## Arguments

## -h logical-host-name

Specify the name of the logical host starting the process or services on a cluster system.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

#### -n process-name

Specify the name of the process you want to start. You can specify any of the process names shown below.

For JP1/AJS3 - Manager

- jajs\_schd (Scheduler-service-management)
- jajs\_agtd (Agent-service-management)
- jajs\_dbmd (DB management)

If you want to start the scheduler service, specify  $jajs\_schd$  in the -n option, and specify the name of the scheduler service in the -F option. To start the scheduler service of the logical host, specify both the -h and -F options.

If you want to start the embedded database, specify  $jajs\_dbmd$  in the -n option, and specify the embedded database setup identifier in the -id option. To start the embedded database of the logical host, specify both the -h and -id options.

### -F scheduler-service-name

Specify the name of the scheduler service you want to start. You can specify this option only when you specify jajs\_schd in the -n option.

If you want to start the scheduler service with advanced options specified, use the ajsstart command. For details on the ajsstart command and the ajsagtprint command, see *ajsstart* in 2. Commands.

If you omit this option, the system assumes the default scheduler service name.

### -id embedded-database-setup-ID

Specify  $\_JFn$  (where *n* is a value from 0 to 9 or A to Z) as the setup identifier used to identify the embedded database. Specify the value that was specified in the -id option of the ajsembdbbuild command.

To operate the embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database that will be used. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

To start the embedded database with advanced options specified, use the ajsembdbstart command. For details about the ajsembdbstart command, see *ajsembdbstart* in 2. Commands.

If this option is omitted, \_JF0 is assumed.

### -hot|-warm|-cold

Specify the startup mode for the JP1/AJS3 process or services. For the states of jobnets and jobs for each startup mode, see the explanation of states of jobnets and jobs for each startup mode in 7.2.1 Temporarily changing the start mode of JP1/AJS3 in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide.

If you specify none of these options when JP1/AJS3 - Manager is used, the value of the STARTMODE environment setting parameter is assumed.

• -hot

Performs a hot start of JP1/AJS3 (starts the process or services while holding the state available at the end of the previous process or services). You cannot specify this option when you specify  $jajs_agtd$  or  $jajs_dbmd$  in the -n option.

• -warm

Performs a warm start of JP1/AJS3 (starts the process or services while holding the state available at the end of the previous process or services. However, any jobnet being executed at the end of the process or services will be completed and execution will be made according to the schedule on the process or services start day.) You cannot specify this option when you specify jajs\_agtd or jajs\_dbmd in the -n option.

• -cold

Performs a cold start of JP1/AJS3 (starts the process by canceling the state available at the end of the previous process or services.) You cannot specify this option when you specify jajs\_dbmd in the -n option.

### -q {clear|noclear}

Selects whether or not to initialize the job information in the job execution environment database at the time of a cold start.

You can specify this option with the -cold option, not with any other options.

If this option is omitted, the value of the ColdStartMode environment setting parameter is assumed. If specification of the ColdStartMode environment setting parameter is in the default status, the job information for the job execution environment database is initialized.

• clear

Initializes the job information in the job execution environment database at the time of a cold start. However, initialization does not occur if there is a scheduler service whose setting is not specified as automatic start.

• noclear

Does not initialize the job information about the job execution environment database at the time of a cold start.

#### -disaster

This option starts JP1/AJS3 in disaster recovery mode.

Specify this option to start JP1/AJS3 in disaster recovery mode when operation switches from the main site to the remote site and vice versa.

In disaster recovery mode, JP1/AJS3 - Manager starts with job and jobnet execution suppressed as a precaution.

#### -HA

Terminates all processes for the JP1/AJS3 process or service, instead of performing a reduced operation, when there is something wrong with the JP1/AJS3 process or services.

Specify this option to fail over the cluster if some JP1/AJS3 processes or services have failed.

If this option is used for a logical host, regardless of the restart option specified in the extended startup process definition file, the processes or services are not restarted. If you want these to be restarted in a cluster system, set cluster software so that they are restarted.

### Notes

• You cannot specify the -n option while JP1/AJS3 is not running. You can specify the option only when JP1/AJS3 is running and you want to start a process separately.

- If you specify both the -n and -HA options, the -HA option is valid for only the child process specified in the -n option.
- Do not execute this command concurrently with the jajs\_start or jajs\_start.cluster command. JP1/ AJS3 may not start successfully.
- The command terminates without waiting for the process or services to complete its startup. Use the jajs\_spmd\_status command to check whether the JP1/AJS3 process or services has started.
- For the JP1/AJS3 Manager agent service management function and JP1/AJS3 Agent, if a process or service error occurs, all agent service management function processes or all JP1/AJS3 services are terminated regardless of the -HA option specification. Reduced operation is not performed.
- In Windows, to start a JP1/AJS3 service, use the Services dialog box that is displayed by double-clicking **Administrative Tools** and then **Services** in Windows Control Panel. This operation is equivalent to executing the command without any options in UNIX (on a logical host, the -h and -HA options have effect).
- Do not execute this command if the process of system termination is being conducted from JP1/Power Monitor during linkage with JP1/Power Monitor.
- You cannot execute this command together with any of the following commands on the same logical host:
  - ajsprofalter command ajsembdbstart command ajsembdbstop command
  - ajsstart command
  - ajsstop command
  - jajs\_hstd command
  - jajs\_hstd\_stop command
  - jajs\_spmd command
  - jajs\_spmd\_status command
  - jajs\_spmd\_stop command
  - jajs\_start command (UNIX only)
  - jajs\_start.cluster command (UNIX only)
  - jajs\_stop command (UNIX only)
  - jajs stop.cluster command (UNIX only)
- In UNIX, if you want to execute the jajs\_spmd command by using a remote shell command, disconnect the standard input, standard output, and standard error output. That is, assign /dev/null to the standard input, standard output, and standard error output. If you execute the command without disconnecting these, the remote shell command might be unable to terminate when JP1/AJS3 processes or services are started.
- In UNIX, if you have started the JP1/AJS3 service by using this command, do not delete the current directory from which you executed the command. If you are planning to delete the current directory from which you started the JP1/AJS3 service, make sure that the service has terminated before deleting the directory.
- In Windows, this command cannot be executed using short file names.
- If you operate JP1/AJS3 in disaster recovery mode, before executing this command, execute the jajs\_rpsite command with the -v or -v option specified to confirm that disaster recovery mode has been set up correctly.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Example 1

The following command cold-starts JP1/AJS3.

jajs\_spmd -cold

## Example 2

The following command is used to restart only JP1/AJS3 scheduler service AJSROOT1 after the scheduler service has terminated abnormally and the cause of the problem has been solved.

```
jajs_spmd -n jajs_schd -F AJSROOT1
```

## Format

For JP1/AJS3 - Manager

```
jajs_spmd_status
    [-h logical-host-name]
    [-s|<u>-a</u>]
    [-t time]
```

For JP1/AJS3 - Agent

```
jajs_spmd_status
[-h logical-host-name]
[-t time]
```

## Description

Checks the state of the jajs\_spmd sub-processes against the jajs\_spmd process or services.

For details about the jajs\_spmd sub-processes or services, see *B. List of Processes* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Storage directory

In Windows: JP1/AJS3 - Manager-installation-folder\bin\ JP1/AJS3 - Agent-installation-folder\bin\ In UNIX: /opt/jp1ajs2/bin/

## Arguments

### -h logical-host-name

Specify the name of the logical host that you want to check for its status on a cluster system.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

### -s|<u>-a</u>

Specify the objects whose status you want to display for JP1/AJS3 - Manager.

• -s

Specify this option to display only the process status of each component service.

• -a

Specify this option to display the process status of each component service and the status of all processes subordinate to each component service.

### -t *time*

Specify the timeout value for JP1/AJS3 status confirmation. The specified value applies to each process, and is not the timeout value for the entire command execution.

You can specify a value between 0 and 32,767 (seconds).

The default value is 60 seconds. Even if you specify 0, the system assumes that a value of 60 seconds is specified.

If confirmation by the jajs\_spmd\_status command is not terminated within a specified period of time, it is considered that execution of the jajs\_spmd\_status command has failed.

### Notes

- Do not execute this command if the process of system termination is being conducted from JP1/Power Monitor during linkage with JP1/Power Monitor.
- You cannot execute this command together with any of the following commands on the same logical host:

```
ajsprofalter command
```

ajsembdbstart command

ajsembdbstop command

- ajsstart command
- ajsstop command
- jajs\_hstd command

```
jajs_hstd_stop command
```

- jajs\_spmd command
- $\verb"jajs\_spmd\_status" command$
- jajs\_spmd\_stop command
- jajs start command (UNIX only)
- jajs start.cluster command (UNIX only)
- jajs stop command (UNIX only)
- jajs stop.cluster command (UNIX only)
- In Windows, this command cannot be executed using short file names.

### **Return values**

0	<ul> <li>Any of the following:</li> <li>All processes are being started.</li> <li>Some processes have been stopped by the jajs_spmd_stop command with the -n option specified or by the ajsstop command.</li> <li>The command is being stopped. (There are no abnormally terminated processes.)</li> </ul>
1	<ul> <li>Any of the following:</li> <li>An error occurred in, for example, communication with process management.</li> <li>The shared folder (shared directory) has not been mounted in a cluster system.</li> <li>Execution permission is not granted.</li> </ul>

4	<ul> <li>Any of the following:</li> <li>Some of the processes are being started (There are abnormally terminated processes.).</li> <li>The command is being started.</li> <li>The command is being stopped. (There are abnormally terminated processes.)</li> </ul>
8	All processes are being terminated.
12	<ul> <li>Any of the following:</li> <li>An error occurred during the processing of the jajs_spmd_status command, and the process status could not be obtained.</li> <li>A request to obtain the status of JP1/AJS3 timed out.</li> <li>The jajs_spmd_status command could not obtain the status. This could be a temporary error, so take the following action:</li> <li>Wait a while, and then re-execute the jajs_spmd_status command.</li> <li>If you execute the jajs_spmd_status command several times and the error persists, handle the situation as an abnormal condition.</li> </ul>

### Example

The following command outputs the status of each JP1/AJS3 component service and the status of processes that belong to each JP1/AJS3 component service on logical host lhost.

```
jajs spmd status -h lhost -a
```

## Output example 1

The following shows an output example when the -a option is specified for JP1/AJS3 - Manager.



## **Output example 2**

The following shows an output example when the -s option is specified for JP1/AJS3 - Manager.

KNAD3690-I Processi Display the running p	ng to report the st rocesses	tatus of JP1/AJS3 has started.
process name jajs_dbmd jajs_hstd jajs_agt	process ID xxxx xxxx xxxx xxxx	attribute _JF0
jajs_schd	XXXX	AJSROOT1
KNAD3691-I All the pr	ocesses have sta	irted.

## Output example 3

The following shows an output example for JP1/AJS3 - Agent.

ocess name	process ID	
queuea	XXXX	
vactiona	XXXX	
91-I All the pro	ocesses have started.	

The following shows the meaning of the output.

#### process name

Indicates the process name.

Note that database indicates the embedded database service, and ajsembdb indicates the embedded database process. Therefore, database is displayed in Windows only. Both database and ajsembdb are managed by the embedded database service and commands. For this reason, if database or ajsembdb is displayed as process name, a hyphen (-) is displayed for process ID.

#### process ID

Indicates the process ID.

#### attribute

Indicates the setup identifier that identifies the embedded database or the scheduler service name.

## Format

For JP1/AJS3 - Manager

```
jajs_spmd_stop
    [-h logical-host-name]
    [-n jajs_agtd |
    -n jajs_schd [-F scheduler-service-name]|
    -n jajs_dbmd [-id embedded-database-setup-ID]]
    [-job|-kill]
```

For JP1/AJS3 - Agent

```
jajs_spmd_stop
[-h logical-host-name]
[-job|-kill]
```

## Description

The jajs\_spmd command stops the JP1/AJS3 service or stops the process that corresponds to a JP1/AJS3 function.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

### Storage directory

```
In Windows:
    JP1/AJS3 - Manager-installation-folder\bin\
    JP1/AJS3 - Agent-installation-folder\bin\
In UNIX:
    /opt/jp1ajs2/bin/
```

## Arguments

### -h logical-host-name

Specify the name of the logical host terminating the process or services on a cluster system.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

### -n process-name

Specify the name of the process you want to stop. You can specify any of the process names shown below.

### For JP1/AJS3 - Manager

- jajs\_schd (Scheduler-service-management)
- jajs\_agtd (Agent-service-management)
- jajs\_dbmd (Database-management)

If you want to stop the scheduler service, specify  $jajs\_schd$  in the -n option, and specify the name of the scheduler service in the -F option. To stop the scheduler service of the logical host, specify both the -h and -F options.

If you want to stop the embedded database, specify  $jajs\_dbmd$  in the -n option, and specify the embedded database setup identifier in the -id option. To stop the embedded database of the logical host, specify both the -h and -id options.

If this option is omitted, the command stops all running processes that are specified in the process definition file.

### -F scheduler-service-name

Specify the name of the scheduler service you want to stop. You can specify this option only when you specify jajs\_schd in the -n option.

If you want to stop the scheduler service with advanced options specified, use the ajsstop command. For details on the ajsstop command, see *ajsstop* in 2. *Commands*.

If you omit this option, the system assumes the default scheduler service name.

### -id embedded-database-setup-ID

Specify  $\_JFn$  (where *n* is a value from 0 to 9 or A to Z) as the setup identifier used to identify the embedded database. Specify the value that was specified in the -id option of the ajsembdbbuild command.

To operate the embedded database created by using the jajs\_setup, jajs\_setup\_cluster, and jajs\_migrate commands, use the ajsembdbidlist command to check the setup identifier of the embedded database that will be used. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

To stop the embedded database with advanced options specified, use the ajsembdbstop command. For details about the ajsembdbstop command, see *ajsembdbstop* in 2. Commands.

If this option is omitted, \_JF0 is assumed.

### -job|-kill

Specify the termination mode for the JP1/AJS3 process or services.

By default, the command issues a kill request to the jobs that are running with the JP1/AJS3 service specified as an agent (jobs started as processes subordinate to the JP1/AJS3 service), causing the process to be forcibly terminated without waiting for the currently running jobs and jobnets to terminate.

• -job

The process or services is terminated after all jobs being executed are terminated.

• -kill

The process or services is terminated after all jobs being executed are forcibly terminated.

If you execute the command with this option specified when the JP1/AJS3 service is starting or undergoing a planned termination, the command intervenes and immediately kills the process or service. If the JP1/AJS3 service is starting when you execute the command and you do not specify the -kill option, an error occurs.

### Notes

- This command does not allow you to terminate the following process states:
  - jpomlsrv (for Windows)
- This command terminates without waiting for the end of process or services termination. Use the jajs\_spmd\_status command to check whether the JP1/AJS3 process or services has ended.
- Do not execute this command if the process of system termination is being conducted from JP1/Power Monitor during linkage with JP1/Power Monitor.
- You cannot execute this command together with any of the following commands on the same logical host:

```
ajsprofalter command
ajsembdbstart command
ajsembdbstop command
ajsstart command
ajsstop command
jajs_hstd_stop command
jajs_spmd_status command
jajs_spmd_status command
jajs_start command (UNIX only)
jajs_start.cluster command (UNIX only)
jajs_stop command (UNIX only)
```

```
jajs stop.cluster command (UNIX only)
```

- If the event job execution continuation option is used, the status of an event job on the manager host does not change from *Now running* even if you use this command to stop JP1/AJS3 on the agent host. Therefore, if the -job option is used so that the process or services are terminated after all jobs are terminated, the command cannot stop JP1/AJS3. If you use both the event job execution continuation option and the -job option, you must ensure that the command is executed when no event jobs are running. For example, wait for the running event jobs to terminate, forcibly terminate running event jobs, or schedule execution of the command so that the command is always executed when event jobs are terminated.
- In Windows, this command cannot be executed using short file names.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Example

The following command stops JP1/AJS3 services after all running jobs terminate.

# jajs\_start (UNIX only)

### Format

jajs\_start

### Description

The jajs\_start command starts JP1/AJS3 on the physical host.

This command is executed when the system starts.

The following explains the command's flow of processing.

- 1. Starts the queueless agent service if it has not started.
- 2. Starts the queueless file transfer service if it has not started.
- 3. Starts JP1/AJS3.
- 4. Starts the JP1/AJS3 Check Manager service if it has not started.
- 5. Starts the JP1/AJS3 Check Agent service if it has not started.
- 6. Executes the jajs\_spmd\_status command, and then waits for a maximum of 60 seconds until JP1/AJS3 starts.
- 7. Executes the jajs\_spmd\_status command to display the status of JP1/AJS3 processes.

In the initial status when JP1/AJS3 is installed, the definition for startup processing is commented out. That is, startup processing is disabled. If necessary, customize the definition so that startup processing is enabled. For details about customization, see 15.7.1 Setting automatic startup and termination of the JP1/AJS3 service in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

### **Execution privileges**

Superuser privilege

### Storage directory

/etc/opt/jp1ajs2/

### Notes

- This command cannot be executed in Windows.
- JP1/AJS3 might not start correctly if you execute this command together with any of the following commands: ajsprofalter command

ajsembdbstart command

ajsembdbstop command

ajsstart command

ajsstop command

jajs hstd command

jajs\_hstd\_stop command

jajs\_spmd command

jajs\_spmd\_status command

jajs\_spmd\_stop command
jajs\_start command (UNIX only)
jajs\_stop command (UNIX only)

- Execute this command in an environment in which the JP1\_HOSTNAME environment variable has not been set. If you execute this command in an environment in which the JP1\_HOSTNAME environment variable has been set, the command attempts to start JP1/AJS3 on the logical host set in the variable, not JP1/AJS3 on the physical host. If you want to start JP1/AJS3 on the physical host, delete the JP1\_HOSTNAME environment variable. This command does not support a logical host.
- If you want to execute this command by using a remote shell command, beforehand, make sure that the standard input, the standard output, and the standard error output are disconnected (that is, assign /dev/null to these). If you execute the command without disconnecting these, the remote shell command might not terminate when startup of the JP1/AJS3 service is completed.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Format

```
jajs_start.cluster
    [logical-host-name]
    [jajs_spmd-command-options]
```

## Description

Starts JP1/AJS3 in the logical host environment.

This command is used to control the startup of JP1/AJS3 in a cluster system. Before using this command, you must register it in the cluster system.

The following explains the command's flow of processing.

- 1. Starts the queueless agent service if it has not started.
- 2. Starts the queueless file transfer service if it is not started.
- 3. Attaches a logical host to the queueless agent service if no logical host is attached to the service.
- 4. Executes the jajs spmd command to start a JP1/AJS3 process.
- 5. Starts the JP1/AJS3 Check Manager service if it has not started.
- 6. Starts the JP1/AJS3 Check Agent service if it has not started.
- 7. Executes the jajs\_spmd\_status command, and then waits for a maximum of 60 seconds until JP1/AJS3 starts. If JP1/AJS3 is unable to start, the logical host of the queueless agent service is detached.
- 8. Executes the jajs\_spmd\_status command to display the status of JP1/AJS3 processes.

In the initial status when JP1/AJS3 is installed, the definitions for starting services except the JP1/AJS3 processes are commented out. If necessary, customize the definitions so that startup processing is enabled. For details about customization, see 17.2.8 Specifying the settings that control startup and termination of JP1/AJS3 in a logical host environment in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

### **Execution privileges**

Superuser privilege

### **Storage directory**

/etc/opt/jp1ajs2/

### Arguments

### logical-host-name

Specify the name of the logical host in the logical host environment that will start JP1/AJS3.

You can specify a character string of 1 to 63 bytes.

By default, the system assumes the host name specified in the JP1\_HOSTNAME environment variable. With this option omitted, the command terminate abnormally if the JP1 HOSTNAME environment variable contains nothing.

### jajs\_spmd-command-options

Specify the options of the jajs\_spmd command. Note that you cannot specify the -h option, which is used to specify the logical host name, of the jajs\_spmd command. For details about the options, see the description of the *jajs\_spmd* in 2. Commands command.

### Notes

- This command cannot be executed in Windows.
- If you specify options for this command, be sure to specify a logical host name for the first option of the argument.
- You must specify the logical host name if you specify the jajs\_spmd command options.
- JP1/AJS3 might not start correctly if you execute this command together with any of the following commands on the same logical host:

```
ajsprofalter command
```

- ajsembdbstart command
- $\verb"ajsembdbstop" command"$
- ajsstart command

```
ajsstop command
```

jajs\_hstd command

```
jajs_hstd_stop command
```

```
jajs_spmd command
```

```
jajs_spmd_status command
```

```
\verb"jajs\_spmd\_stop" command"
```

```
jajs_start.cluster command (UNIX only)
```

```
jajs_stop.cluster command (UNIX only)
```

• If you want to execute this command by using a remote shell command, beforehand, make sure that the standard input, the standard output, and the standard error output are disconnected (that is, assign /dev/null to these). If you execute the command without disconnecting these, the remote shell command might not terminate when startup of the JP1/AJS3 service is completed.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## jajs\_status

## Format

```
jajs_status
    [-h logical-host-name | -F scheduler-service-name | -v]
    [<u>-s</u>|-e|-a]
```

### Format1 (for checking the operating information about the logical host)

```
jajs_status
-h logical-host-name
[<u>-s</u>|-e|-a]
```

### Format2 (for checking the operating information about the scheduler service)

```
jajs_status
-F scheduler-service-name
[<u>-s</u>|-e|-a]
```

### Format3 (for checking the connection information about JP1/AJS3 - View)

```
jajs_status
-v
```

## Description

The jajs\_status command is used to check JP1/AJS3 operating information. The command outputs either of the following types of information, or both, according to the specified option:

- Operating information about the system
- Information about the environment setting parameters that are valid during operation

## **Execution privileges**

None

## Arguments

### -h logical-host-name

Specify the name of the logical host for which you want to check operating information.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If environment variable JP1\_HOSTNAME is not specified, the physical host name (which can be determined by the hostname command) is assumed.

### -F scheduler-service-name

If you want to check operating information about a specific scheduler service only, specify the name of the scheduler service.

You can specify a character string of 1 to 30 bytes.

### -v

Specify this option to check connection information about JP1/AJS3 - View connected to JP1/AJS3 - Manager.

You can specify this option when the JP1/AJS3 service is running.

You cannot specify this option together with other options.

The information output by this command is the same as the information output by the ajsstatus command with the -v option specified. For details on the ajsstatus command, see *ajsstatus* in 2. Commands.

### -s

Specify this option to output the operating information about the system.

You must specify this option with the -h and -F option. You cannot specify this option with the -v option.

### -е

Specify this option to output the information about the environment setting parameters that are valid during operation.

You must specify this option with the -h and -F option. You cannot specify this option with the -v option.

### -a

Specify this option to output the operating information about the system and the information about the environment setting parameters that are valid during operation.

You must specify this option with the -h and -F option. You cannot specify this option with the -v option.

### Notes

- If none of the -h, -F, or -v options are specified, the command assumes that the -h option has been specified.
- If none of the -s, -e, or -a options are specified, the command assumes that the -s option has been specified.
- If the JP1/AJS3 service is not running, the command terminates abnormally.

### **Return values**

0	Normal end
Values other than 0	Abnormal end

## Example 1

The following command outputs the operating information about logical host HOST\_A.

```
jajs status -h HOST A -s
```

## Example 2

The following command outputs the operating information about scheduler service AJSROOT1 and the information about the environment setting parameters that are valid during operation.

<sup>2.</sup> Commands

## **Output example 1**

The following shows an example of information output when the -h option is specified, and explains the output items.

KAVS0829-I Reporting the effective information of JP1/AJS has started.				
<logical basis="" host="" information=""></logical>				
Logical host	HOST A			
Status	active			
Start time	Oct 23 20XX 15:26			
DB construction	standard			
Scheduler log file in use	C:\Program Files\HITACHI\JP1AJS2\log\ais-host-log1.log			
Alternate scheduler log file	C:\Program Files\HITACHI\JP1AJS2\log\ais-host-log2.log			
· ····································				
<logical host="" information="" service=""></logical>				
DB service count	1			
DB service	JF0			
Status	active			
Start time	Oct 23 20XX 15:26			
restart count	0			
Host service	-			
Status	active			
Start time	Oct 23 20XX 15:26			
restart count	0			
Agent service	-			
Status	active			
Start time	Oct 23 20XX 15:26			
restart count	0			
Scheduler service count	1			
Scheduler service	AJSROOT1			
Status	active			
Start time	Oct 23 20XX 15:26			
restart count	0			
EmbedDB setup ID	JF0			
<logical environment="" host="" information<="" td=""><td>ation&gt;</td></logical>	ation>			
IHOST A\JP1AJS2\DB1				
DBLOGFILE1	"C:\Program Files\HITACHI\JP1AJS2\log\ais-db-log1.log"			
DBLOGFILE2	"C:\Program Files\HITACHI\JP1AJS2\log\ais-db-log2.log"			
DBLOGSIZE	dword:00002800			
DLOGDLOG	"none"			
DLOGDSYSLOG	"none"			
[HOST A\JP1AJS2\HOST]				
HLOGDLOG	"none"			
HLOGDSYSLOG	"none"			
HOSTLOGFILE1	"C:\Program Files\HITACHI\JP1AJS2\log\ais-host-log1.log"			
HOSTLOGFILE2	"C:\Program Files\HITACHI\JP1AJS2\log\ais-host-log2.log"			
HOSTLOGSIZE	dword:00002800			
HOSTLOGDIR	"C:\Program Files\HITACHI\JP1AJS2\log"			
HOSTSYSDIR	"C:\Program Files\HITACHI\JP1AJS2\svs"			
:	J			
KAVS0830-I Reporting the effective	e information of JP1/AJS has terminated.			

The following shows the meaning of the output.

<Logical host basis information>

Logical host

Indicates the logical host name.

Status

The status of the logical host is output.

• active:

Indicates that JP1/AJS3 on the logical host is operating.

• inactive:

Indicates that JP1/AJS3 on the logical host has stopped.

#### Start time

If Status is active, the logical host start time is output in the *MMM DD YYYY hh:mm* format. If Status is inactive, \*\*\* \*\* \*\*\*\* \*\* is output.

DB construction

If Status is active, the database configuration (standard or compatible ISAM) is output. If Status is inactive, \*\*\* is output.

Scheduler log file in use

If Status is active, the name of the scheduler log file in use is output.

If Status is inactive, \*\*\* is output.

Alternate scheduler log file

If Status is active, the name of the alternate scheduler log file is output.

If Status is inactive, \*\*\* is output.

#### <Logical host service information>

The following items are output for each service:

DB service count

The number of database services is output.

DB service

The setup identifier of the database service is output.

#### Status

The status of the database service is output.

• active:

Indicates that the database service is operating.

• inactive:

Indicates that the database service has stopped.

Start time

If Status is active, the database service start time is output in the MMM DD YYYY hh: mm format.

If Status is inactive, \*\*\* \*\* \*\*\*\* \*\*: \*\* is output.

```
restart count
```

If Status is active, the number of times the database service was restarted is output.

If Status is inactive, \*\*\* is output.

```
Host service
```

### Status

The status of the host service is output.

• active:

Indicates that the host service is operating.

• inactive:

Indicates that the host service has stopped.

Start time

If Status is active, the host service start time is output in the MMM DD YYYY hh: mm format.

If Status is inactive, \*\*\* \*\* \*\*\*\* \*\*: \*\* is output.

#### restart count

If Status is active, the number of times the host service was restarted is output.

If Status is inactive, \*\*\* is output.

```
Agent service
```

#### Status

The status of the agent service is output.

• active:

Indicates that the agent service is operating.

• inactive:

Indicates that the agent service has stopped.

```
Start time
```

If Status is active, the agent service start time is output in the MMM DD YYYY hh: mm format.

If Status is inactive, \*\*\* \*\* \*\*\* \*\*:\*\* is output.

```
restart count
```

If Status is active, the number of times the agent service was restarted is output.

If Status is inactive, \*\*\* is output.

```
Scheduler service count
```

The number of scheduler services is output.

```
Scheduler service
```

The name of the scheduler service is output.

### Status

The status of the scheduler service is output.

• active:

Indicates that the scheduler service is operating.

inactive:

Indicates that the scheduler service has stopped.

If the database is in a compatible ISAM configuration, inactive is always displayed regardless of the actual status. For the actual status in this case, see the Status under Scheduler function under <Scheduler service function information> output when the -F option is specified.

```
Start time
```

If Status is active, the scheduler service start time is output in the MMM DD YYYY hh: mm format.

If Status is inactive, \*\*\* \*\* \*\*\*\* \*\*: \*\* is output.

### restart count

If Status is active, the number of times the scheduler service was restarted is output.

If Status is inactive, \*\*\* is output.

#### EmbedDB setup ID

The embedded database setup identifier is output.

Information about the environment setting parameter for the definition keys below is output. These definition keys are available while a logical host is running.

- [{JP1\_DEFAULT|*logical-host-name*}\JP1AJS2\DB]
- [{JP1\_DEFAULT|logical-host-name}\JP1AJS2\HOST] and the definition key in the directory
- [{JP1\_DEFAULT|*logical-host-name*}\JP1AJS2COMMON]

For details about environment setting parameter, see 2. Environment Setting Parameters in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

## **Output example 2**

The following shows an example of information output when the -F option is specified, and explains the output items.

KAVS0829-I Reporting the effective information of JP1/AJS has started.		
<scheduler basis="" information<="" service="" td=""><td>&lt;</td></scheduler>	<	
Scheduler service	AJSROOT1	
Status	active	
Start time	Oct 23 20XX 15:26	
restart count		
EmbedDB setup ID	JEO	
Scheduler log file in use	_: C:\Program Files\HITACHI\.IP1A.IS2\log\ais-host-log1 log	
Alternate scheduler log file	C:\Program Files\HITACHI\ IP1A IS2\log\ajs-host-log2 log	
· · · · · · · · · · · · · · · · · · ·		
<scheduler function="" information<="" service="" td=""><td>tion&gt;</td></scheduler>	tion>	
Scheduler function		
Status	active	
Start time	Oct 23 20XX 15:29	
restart count		
Termination restriction	none	
<scheduler environment="" info<="" service="" td=""><td>rmation&gt;</td></scheduler>	rmation>	
[JP1_DEFAULT\JP1AJSMANAGER]		
DEFAULTSERVICENAME	"AJSROOT1"	
EVENTRETRY	"no"	
IPC LOCALTIMEOUT	dword:0000000	
	dword:0000000	
	dword:00000003	
IPCRETRYINTERVAL	dword:00000001	
QLMANCHARCODE	"none"	
REUSELOGON	"no"	
TRACELOGFILE	"C:\Program Files\HITACHI\.IP1A.IS2\log\tracelog"	
	"F"	
VRSHIFT INTRERUN	ъ "5"	
	•	
[JP1 DEFAULT\JP1AJSMANAGER]		
AJSINETDLOGSIZE	dword:0000080	
AUTHLOG	"none"	
AUTHSYSLOG	"none"	
EVACONDREQRTT	dword:000001d6	
HIDEOTHERLHOST	"ves"	
LOGONSHMAX	dword:0000032	
MAXSESSION	dword:0000002	
MONLOG	"none"	
MONSYSLOG	"none"	
REUSELOGON	"no"	
KAVS0830-I Reporting the effective information of JP1/AJS has terminated.		

The following shows the meaning of the output.
<Scheduler service basis information>

Scheduler service

Indicates the scheduler service name.

#### Status

The status of the scheduler service is output.

• active:

Indicates that the scheduler service is operating.

• inactive:

Indicates that the scheduler service has stopped.

If the database is in a compatible ISAM configuration, inactive is always displayed regardless of the actual status. For the actual status in this case, see the Status under Scheduler function under <Scheduler service function information>.

```
Start time
```

If Status is active, the scheduler service start time is output in the MMM DD YYYY hh: mm format.

If Status is inactive, \*\*\* \*\* \*\*\*\* \*\*: \*\* is output.

restart count

If Status is active, the number of times the scheduler service was restarted is output.

If Status is inactive, \*\*\* is output.

EmbedDB setup ID

The embedded database setup identifier is output.

Scheduler log file in use

If Status is active, the name of the scheduler log file in use is output.

If Status is inactive, \*\*\* is output.

Alternate scheduler log file

If Status is active, the name of the alternate scheduler log file is output.

If Status is inactive, \*\*\* is output.

<Scheduler service function information>

The following items are output as information about the specified scheduler service:

Status

The status of the scheduler function is output.

• active:

Indicates that the scheduler function is operating.

• inactive:

Indicates that the scheduler function has stopped.

```
Start time
```

If Status is active, the scheduler function start time is output in the *MMM DD YYYY hh:mm* format. If Status is inactive, \*\*\* \*\* \*\*\*\* \*\*: \*\* is output.

restart count

If Status is active, the number of times the scheduler function was restarted is output.

If Status is inactive, \*\*\* is output.

#### Termination restriction

If Status is active, the termination restriction status is output.

• none:

Indicates that the ajsstop command has not been executed.

- schedule:
- Indicates that the system is monitoring termination according to schedule restrictions.
- jobnet:
- Indicates that the system is monitoring termination according to jobnet restrictions.
- job:
- Indicates that the system is monitoring termination according to job restrictions.
- kill:
- Indicates that the system has been stopped forcibly.
- terminate:
- Indicates that the system has stopped.
- reset:

Indicates that termination restriction has been reset.

If Status is inactive, \*\*\* is output.

<Scheduler service environment information>

Information about the environment setting parameter for the definition keys below is output. These definition keys are available while a scheduler service is running.

• [JP1\_DEFAULT\JP1AJSMANAGER]

The environment setting parameters that are common to the system

• [{JP1 DEFAULT | *logical-host-name*}\JP1AJSMANAGER]

The environment setting parameters that are common to the logical host where the scheduler service that is specified in the -F option exists

• [{JP1\_DEFAULT|logical-host-name}\JP1AJSMANAGER\scheduler-service-name] and the definition key in the directory

The environment setting parameters for the scheduler service that is specified in the -F option

For details about environment setting parameter of the scheduler service, see 2. Environment Setting Parameters in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

# jajs\_stop (UNIX only)

## Format

jajs\_stop

# Description

The jajs\_stop command stops JP1/AJS3 on the physical host.

This command is executed when the system stops.

The following explains the command's flow of processing.

- 1. The jajs spmd stop command is executed to stop JP1/AJS3.
- 2. The JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service are stopped.
- 3. The ps command is executed to monitor the jajs\_spmd process, and the jajs\_stop command waits until JP1/ AJS3 stops.
- 4. The queueless agent service is stopped.
- 5. The queueless file transfer service is stopped.

In the initial status when JP1/AJS3 is installed, the definition for stop processing is commented out. That is, stop processing is disabled. If necessary, customize the definition so that stop processing is enabled. For details about customization, see 15.7.1 Setting automatic startup and termination of the JP1/AJS3 service in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

## **Execution privileges**

Superuser privilege

## **Storage directory**

/etc/opt/jp1ajs2/

## Notes

- This command cannot be executed in Windows.
- JP1/AJS3 might not stop correctly if you execute this command together with any of the following commands:
  - ajsprofalter command
  - ajsembdbstart command
  - ajsembdbstop command
  - <code>ajsstart</code> command
  - ajsstop command
  - jajs\_hstd command
  - jajs\_hstd\_stop command
  - jajs\_spmd command
  - jajs\_spmd\_status command
  - jajs\_spmd\_stop command
  - jajs\_start command (UNIX only)

jajs\_stop command (UNIX only)

• Execute this command in an environment in which the JP1\_HOSTNAME environment variable has not been set. If you execute this command in an environment in which the JP1\_HOSTNAME environment variable has been set, the command attempts to stop JP1/AJS3 on the logical host set in the variable, not JP1/AJS3 on the physical host. If you want to stop JP1/AJS3 on the physical host, delete the JP1\_HOSTNAME environment variable. This command does not support a logical host.

# **Return values**

0	Normal end
Values other than 0	Abnormal end

# jajs\_stop.cluster (UNIX only)

## Format

```
jajs_stop.cluster
    [logical-host-name]
    [jajs_spmd_stop-command-option]
```

# Description

Stops JP1/AJS3 in the logical host environment.

This command is used to control the stop of JP1/AJS3 in a cluster system. Before using this command, you must register it in the cluster system.

The following explains the command's flow of processing.

- 1. Stops the JP1/AJS3 processes.
- 2. Stops the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service.
- 3. Executes the ps command to monitor the jajs\_spmd process, and then waits for a maximum of 60 seconds until JP1/AJS3 stops.
- 4. Detaches the logical host from the queueless agent service if the logical host has been attached to the queueless agent service.
- 5. Stops the queueless agent service.
- 6. Stops the queueless file transfer service.

In the initial status when JP1/AJS3 is installed, the definitions for stopping services except the JP1/AJS3 processes are commented out. If necessary, customize the definitions so that stop processing is enabled. For details about customization, see 17.2.8 Specifying the settings that control startup and termination of JP1/AJS3 in a logical host environment in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1.

# **Execution privileges**

Superuser privilege

# Storage directory

/etc/opt/jp1ajs2/

# Arguments

### logical-host-name

Specify the name of the logical host in the logical host environment that will stop JP1/AJS3.

You can specify a character string of 1 to 63 bytes.

By default, the system assumes the host name specified in the JP1\_HOSTNAME environment variable. With this option omitted, the command terminate abnormally if the JP1 HOSTNAME environment variable contains nothing.

## jajs\_spmd\_stop-command-option

Specify the option of the jajs\_spmd\_stop command. Note that you cannot specify the -h option, which is used to specify the logical host name, of the jajs\_spmd command. For details about the option, see the description of the *jajs\_spmd\_stop* in *2. Commands* command.

## Notes

- This command cannot be executed in Windows.
- If you specify options for this command, be sure to specify a logical host name for the first option of the argument.
- JP1/AJS3 might not stop correctly if you execute this command together with any of the following commands on the same logical host:
  - ajsprofalter command ajsembdbstart command
  - ajsembdbstop command
  - ajsstart command
  - ajsstop command
  - jajs\_hstd command
  - jajs\_hstd\_stop command
  - jajs\_spmd command
  - jajs\_spmd\_status command
  - $\verb"jajs\_spmd\_stop" command"$
  - jajs\_start.cluster command (UNIX only)
  - $\verb"jajs_stop.cluster command" (UNIX only)$
- You must specify the logical host name if you specify the jajs\_spmd\_stop command options.

# **Return values**

0	Normal end
Values other than 0	Abnormal end

# jp1exec (Windows only)

## Format

```
jplexec command-line
```

## Description

The jplexec command executes the program (command) specified on the command line, and saves the return code of the executed program in a temporary file. For details about this temporary file, see *Additional information* below.

This command is used in a batch file (.bat or .cmd) executed as a job on the target host. Normally, when a job is forcibly terminated, the batch file executed as the job is forcibly terminated but the programs executed from the batch file are not forcibly terminated. However, if a program is executed via the jplexec command in a batch file, the program is forcibly terminated when the batch file is forcibly terminated. If you specify the jplexit command at the end of a batch file, the return code of the program executed by the jplexec command can be used as the return code of the batch file.

## **Execution privileges**

None

# Arguments

### command-line

Specify the full path name of an executable file that you want to execute as a job on the target host. You can also specify arguments (parameters) for the executable file. As an executable file, you can only specify a file whose extension is exe. If you specify a file whose extension is not exe, the corresponding job might end abnormally.

You can specify a character string of 1 to 259 bytes.

The system behavior differs depending on whether the number of characters in the first argument exceeds the maximum or the total number of characters on the command line exceeds the maximum.

- If the number of characters in the first argument exceeds the maximum The command results in an error.
- If the total number of characters on the command line exceeds the maximum

The system assumes that only the space-separated elements existing within the maximum length are specified on the command line.

Example:

jplexec C:\test.exe aaa...a

If the number of characters in C:\test.exe *aaa...a* exceeds the maximum, the system discards *aaa...a* and executes the command using C:\test.exe.

## Notes

- 1. This command cannot be used in UNIX.
- 2. It can be used only in JP1/AJS3. During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

- 3. If multiple jplexec commands are specified in one batch file, the return code of the program executed by the last jplexec command is saved in a temporary file as the return code of the batch file.
- 4. Only a file having the EXE extension can be specified in this command. If a file whose extension is not EXE is specified, the job might terminate abnormally. Code the following command to call from one batch file to another.

```
jplexec CMD.EXE /C file-name
```

Note, however, that if a batch file that contains the above coding is terminated forcibly (CMD.EXE is terminated forcibly), the programs started from the batch file are not terminated forcibly. To terminate these programs forcibly, make sure that the programs are executed by the jplexec command.

The result of the EXE file or batch file called from the jplexec command cannot be redirected to the standard output file or the standard error output file.

- 5. If the jplexec command is executed in a batch file called from another batch file being executed as a job, forcibly terminating the batch file being executed as a job also forcibly terminates the processes executed by the command.
- 6. The return code of the jplexec command is different from the return code of the program executed by the jplexec command. To acquire the return code of the program executed by the jplexec command, you must also specify the jplexit command. If you do not specify the jplexit command, the return code of the jplexec command itself becomes the return code of the batch file. For details on the jplexit command, see *jplexit* (*Windows only*) in 2. Commands.
- 7. Of the environment variables in a batch file, you must not change those environment variables starting with TMP, TEMP, or JP1 or those environment variables starting with AJS.
- 8. If you use a path name that includes a space character for the file specified by the jplexec command, you must enclose the path name by double quotation marks (") and (\"). If you do not enclose the path with these symbols, the command may fail.

The following is an example in which the execution file name is C:\Program Files\test.exe.

```
jplexec "\"C:\Program Files\test.exe\""
```

9. To execute the command, set write privileges and read privileges for the OS user who executes the job on the following folders:

For Windows Server 2012 or Windows Server 2008

When the JP1/AJS3 installation folder is the default folder or a folder located under a folder protected by the system:

```
- %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\log\jpqagent
```

-%ALLUSERSPROFILE%\Hitachi\JP1\JP1\_DEFAULT\JP1AJS2\log\jpqclient

The default of the <code>%ALLUSERSPROFILE%</code> value is *system-drive*\ProgramData.

When the JP1/AJS3 installation folder is any other kind of folder:

- JP1/AJS3-installation-folder \log \jpqagent

- JP1/AJS3-installation-folder \log \jpqclient

For Windows Server 2003

- JP1/AJS3-installation-folder \log \jpqagent
- JP1/AJS3-installation-folder \log \jpqclient

When using the system in a cluster configuration, set the privileges on the following folders:

- shared-folder\jp1ajs2\log\jpqagent
- shared-folder\jp1ajs2\log\jpqclient

# Additional information

If you use the jplexec command, make sure that you also specify the jplexit command. If you do not specify the jplexit command, a file whose name begins with AJSJP1EXEC remains on the host on which the job is executed. If this file, which is no longer necessary, remains, delete it manually.

This file is created at the first path found in the environment variables searched in the order shown below. If no path is set in any of the environment variables, the file is created in the Windows installation folder.

- 1. Environment variable tmp of the user# that starts the JP1/AJS3 service
- 2. System environment variable tmp
- 3. Environment variable temp of the user<sup>#</sup> that starts the JP1/AJS3 service
- 4. System environment variable temp

For the paths set for the above environment variables, set write and read permissions so that they can be accessed by the OS user who executes the job.

#

For a queueless job, the user who starts a queueless agent service.

# jp1exit (Windows only)

## Format

```
jplexit
    [-ec abnormal-return-code]
```

## Description

After the return code of the program (command) executed by the jplexec command has been saved, the jplexit command is used to acquire the return code.

## **Execution privileges**

None

## Arguments

### -ec abnormal-return-code

Specify the return code to be returned if an internal error of the jplexit command occurs.

You can specify 0 to 9,999.

If this option is omitted, 172 is set as the return code returned by the jplexit command when an error occurs.

If an invalid value is specified, 172 is used as the return code of the jplexit command. The details of the error are output to the standard error output.

## Notes

- 1. This command cannot be used in UNIX.
- 2. During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this command for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.
- 3. The jplexec command returns its own return code, which is different from the return code of the program executed by the jplexec command.

If it is necessary to evaluate the return code of the jplexec command itself, use %ERRORLEVEL% or another means to perform error judgment before the jplexit command is executed.

4. The return code of the program executed by the jplexec command can be executed only when the jplexit command is used.

If you want processing to branch according to the return code of the program executed by the jplexec command, specify the jplexec and jplexit commands in pairs (see *Example* below).

If the jplexit command is not executed after the jplexec command is executed, or if the jplexit command is executed more than once in succession without executing the jplexec command, the jplexit command results in an error. In this case, it is not guaranteed that the return code is correct.

If you want to use the return code of the program execute by the jplexec command as the return code of the batch file, make sure that the jplexit command is executed at the end of the processing executed by the batch file. If execution of the jplexit command is followed by some processing (such as another command), the return code of the batch file might be replaced.

- 5. If the file specified as an argument in the jplexec command does not exist, the command sends error details to the standard error output, and terminates. In this case, the jplexit command returns 0 as the return code.
- 6. To execute the command, set write privileges and read privileges for the OS user who executes the job on the following folders:

For Windows Server 2012 or Windows Server 2008

When the JP1/AJS3 installation folder is the default folder or a folder located under a folder protected by the system:

- %ALLUSERSPROFILE%\Hitachi\JP1\JP1\_DEFAULT\JP1AJS2\log\jpqagent

-%ALLUSERSPROFILE%\Hitachi\JP1\JP1\_DEFAULT\JP1AJS2\log\jpqclient

The default of the %ALLUSERSPROFILE% value is *system-drive*\ProgramData.

When the JP1/AJS3 installation folder is any other kind of folder:

- JP1/AJS3-installation-folder \log \jpqagent
- JP1/AJS3-installation-folder \log \jpqclient

For Windows Server 2003

- JP1/AJS3-installation-folder \log \jpqagent

- JP1/AJS3-installation-folder \log \jpqclient

When using the system in a cluster configuration, set the privileges on the following folders:

- shared-folder\jp1ajs2\log\jpqagent
- *shared-folder*\jp1ajs2\log\jpqclient

## Example

The following example checks the return code of the executed program to branch subsequent processing:

```
jp1exec
         UAP1.exe
jplexit
if %ERRORLEVEL% =0 GOTO :next1
Error handling
GOTO :end
:next1
jplexec UAP2.exe
jp1exit
if %ERRORLEVEL% =0 GOTO :next2
Error handling
GOTO :end
:next2
jplexec UAP3.exe
jplexit
if %ERRORLEVEL% =0 GOTO :next3
Error handling
GOTO :end
```

### Explanation:

When the last jplexit command is executed, the return code of the program executed by the paired jplexec command becomes the return code of the batch file.

If an error occurs and processing branches to :end, the return code of the last program executed after the corresponding error handling becomes the return code of the batch file.

# jpoagoec

## Format

```
jpoagoec
{-a manager-host-name|-d manager-host-name|-r|-p}
[-h host-name]
```

# Description

Changes the requesting manager host name stored by the event action agent process according to the change in the manager host name if event jobs are used.

In operating event jobs, the agent stores the requesting manager host name to coordinate the event jobs through communication between the agent and manager. Therefore, a change in the manager host name requires you to change the requesting manager host name engaged in monitoring JP1/AJS3 event reception that is stored by the agent host or manager host having executed the command. (Using the jpoagoec command, display and check the manager host names that have been stored. Delete any unnecessary host names and add any necessary ones.)

## **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

## Arguments

### -a manager-host-name

Specify the manager host name to be added.

You can specify a character string of 1 to 255 bytes.

#### -d manager-host-name

Specify the manager host name to be deleted.

You can specify a character string of 1 to 255 bytes.

-r

Deletes all manager host names.

## -p

Outputs the list of the stored manager host names to the standard output file.

## -h *host-name*

Specify the logical host name for JP1/AJS3 - Manager or JP1/AJS3 - Agent which is responsible for maintenance (adding, deleting, and displaying manager host names).

You can specify a character string of 1 to 196 bytes.

By default, the system assumes operation using the physical host.

<sup>2.</sup> Commands

# Notes

- Before executing this command, be sure to stop JP1/AJS3.
- Execute this command after terminating all the event jobs that are running on the agent host. To check whether event jobs are running on the agent host, use the ajsshow command. For details about the ajsshow command, see *ajsshow* in 2. *Commands*.
- This command always needs one of the following options: -a, -d, -r, or -p.

# **Return values**

0	Normal end
Values other than 0	Abnormal end

# Example

This example changes the manager host name from ManagerHostB to ManagerHostC. The following flow shows how the change is made.

1. Confirming the manager host name

Confirm the manager host name that the event action agent feature has stored.

Command to be executed:

jpoagoec -p

Display example: ManagerHostA ManagerHostB

2. Deleting the manager host name

Delete the manager host name to be changed.

Command to be executed:

```
jpoagoec -d ManagerHostB
```

3. Adding the changed manager host name

Command to be executed:

jpoagoec -a ManagerHostC

4. Confirming that the manager host name has been added

Command to be executed:

jpoagoec -p

Display example:

ManagerHostA ManagerHostC

5. Cold-starting the agent host

For Windows

## From Control Panel, in Administrative Tools, select Service.

From the Service window displayed, select the JP1/AJS3 service name to be started and execute the following: **Operation - Properties**.

From the **General** page in the *service-name* Property dialog box displayed, specify -cold as the start mode in **Start Parameters**.

After this, click Start.

## For UNIX

Execute the jajs\_spmd -cold command.

# jpoagtjobshow

## Format

```
jpoagtjobshow
  [-h host-name]
  [-m manager-host-name...|-all]
```

# Description

Outputs the list of event jobs currently being executed by the agent to the standard output file.

This command is executed by the agent execution host. Execution is possible irrespective of the situation of the job execution requesting manager, because only the information held by the agent is displayed. The list is displayed even if there is no match between the agent and the job execution requesting manager.

# **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

## Arguments

### -h host-name

Specifies the local host name or logical host name for the agent for which job information is to be displayed. You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If the JP1\_HOSTNAME environment variable is not specified, the system assumes the local host name.

This command will result in an error if the host executing the command does not have any definition for the agent host name.

### -m manager-host-name...|-all

Specifies the manager host name for which you want to display job information among the managers that are sending a request for job execution to the agent specified in the -h option. Specify the name that is output by the hostname command if you are not operating DNS. Use the FQDN format if you are using DNS.

You can specify a character string of 1 to 255 bytes.

You can specify more than one manager host name. In that case, you must separate the manager host names by at least one space character.

Specify -all if you want to cover all manager hosts.

By default, the system assumes the manager host name which is the same as the agent host name. If the local manager does not exit, only the item names are displayed.

No command error occurs if the specified manager host does not have any job information. No command error occurs even if the specified manager host does not have any definition about the manager host name.

# Notes

- An error will occur if you execute this command when JP1/AJS3 is not running.
- An error may occur if you execute this command when JP1/AJS3 is not completely started. Wait for a while and then retry.
- Always separate the option and its value by at least one space character.
- For an option requiring a value, the character string you specify next to the option is assumed as the value (Example: if you specify -h -m, the system assumes -m as the host name).
- You cannot execute more than one of these commands at the same time. After the first command has been executed, execute the second command.
- If you stop the JP1/AJS3 service during command execution, you might not receive any response from the command. In that case, you can cancel the command manually.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

# Additional information

The job information is output for each manager. The order in which the agent has received requests for job execution determines the order of managers. For example, suppose that agent A has received requests for job execution from three managers: ManagerA, ManagerB, and ManagerC in that order. The job information is output in the order of ManagerA, ManagerB, and ManagerC.

# Output example

Here is an example of file output, together with what the output means.



The following shows the meaning of the output.

### COMMAND START TIME

Indicate the date and time at which the command starts its execution in the format of YYYY/MM/DD HH:MM:SS.

#### AGENT

Shows the agent host name (either the local host name or the logical host name).

#### MANAGER

Shows the manager host name requesting job execution.

#### Execution ID

Shows the execution ID.

### Unit ID

Shows the unit ID.

Scheduler service name

Shows the scheduler service name.

### Kind

Shows the type of job.

This command does not distinguish between an ordinary job and a recovery job. This means that even a recovery job is output in the form of an ordinary job.

• evwjb:

JP1 event reception monitoring job or JP1 event reception monitoring job for recovery

• flwjb:

File monitoring job or file for monitoring job for recovery

• mlwjb:

Email reception monitoring job or email reception monitoring job for recovery

• mqwjb:

Message queue reception monitoring job or message queue reception monitoring job for recovery

• mswjb:

MSMQ reception monitoring job or MSMQ reception monitoring job for recovery

• lfwjb:

Log file monitoring job or log file monitoring job for recovery

• ntwjb:

Windows event-log monitoring job or Windows event-log monitoring job for recovery

• tmwjb:

Execution interval control job or execution interval control job for recovery

#### Status

Shows the job status.

• ready:

Monitoring is in progress (The request from the agent has been sent to each monitoring process.)

• not ready:

Monitoring is not in progress.

### Request time

Shows the time at which the agent received a request for job execution from the manager.

Watch kind

Shows the type of monitoring.

• E:

Event which has started monitoring through registration (event icon)

• 0:

Event which has started monitoring through registration (start condition icon)

• A:

Event which has started monitoring through JP1/AJS3 restart or the like (event icon)

• H:

Event which has started monitoring through JP1/AJS3 restart or the like (start condition icon)

### COMMAND END TIME

Indicates the date and time at which the command ends its execution in the format of YYYY/MM/DD HH:MM:SS.

Note that *YYYY/MM/DD HH:MM:SS* part means *calendar-year/month/day hours:minutes:seconds*.

# jpomailprof (Windows only)

## Format

```
jpomailprof
    {-add|-alt|-show|-del}
    [-e|-k|-v]
    [-h logical-host-name]
    [-n profile-name]
    [-m sender-email-address]
    [-x reply-email-address]
    [-s SMTP-server-name]
    [-p SMTP-server-communication-port]
    [-i account-name-for-authentication]
    [-j password-for-authentication]
    [-r POP3-server-name]
    [-t POP3-server-communication-port]
    [-f|-q]
    [-o IP-address-to-be-bound]
```

### Format 1 (for creating a profile of an email account that does not require authentication)

```
jpomailprof
    -add
    [-e]
    [-h logical-host-name]
    -n profile-name
    -m sender-email-address
    [-x reply-email-address]
    -s SMTP-server-name
    [-p SMTP-server-communication-port]
    [-o IP-address-to-be-bound]
```

### Format 2 (for creating a profile of an email account that uses POP before SMTP authentication)

```
jpomailprof
    -add
    -k
    [-h logical-host-name]
    -n profile-name
    -m sender-email-address
    [-x reply-email-address]
    -s SMTP-server-name
    [-p SMTP-server-name
    [-p SMTP-server-communication-port]
    -i account-name-for-authentication
    -j password-for-authentication
    -j password-for-authentication
    -r POP3-server-name
    [-t POP3-server-communication-port]
    [-o IP-address-to-be-bound]
```

### Format 3 (for creating a profile of an email account that uses SMTP-AUTH authentication)

```
jpomailprof
-add
-v
```

```
[-h logical-host-name]
-n profile-name
-m sender-email-address
[-x reply-email-address]
-s SMTP-server-name
[-p SMTP-server-communication-port]
-i account-name-for-authentication
-j password-for-authentication
[-f|-q]
[-o IP-address-to-be-bound]
```

### Format 4 (for changing the profile contents)

```
jpomailprof
    -alt
    [-e|-k|-v]
    [-h logical-host-name]
    -n profile-name
    [-m sender-email-address]
    [-x reply-email-address]
    [-x reply-email-address]
    [-x reply-email-address]
    [-x sMTP-server-name]
    [-p SMTP-server-name]
    [-p SMTP-server-communication-port]
    [-i account-name-for-authentication]
    [-j password-for-authentication]
    [-j password-for-authentication]
    [-r POP3-server-name]
    [-t POP3-server-communication-port]
    [-f|-q]
    [-0 IP-address-to-be-bound]
```

### Format 5 (for listing registered profiles)

```
jpomailprof
-show
[-h logical-host-name]
```

## Format 6 (for displaying the specified profile)

```
jpomailprof
    -show
    [-h logical-host-name]
    -n profile-name
```

## Format 7 (for deleting the specified profile)

```
jpomailprof
-del
[-h logical-host-name]
-n profile-name
```

# Description

The jpomailprof command can create, change, reference, and delete a profile necessary for sending email messages without using Outlook.

# **Execution privileges**

Administrators privilege

# Arguments

### -add

Specify this argument to create a profile.

A maximum of 16 profiles can be created.

If this option is specified, the -n, -m, and -s options must also be specified.

### -alt

Specify this argument to change contents of a profile. Specify the name of the profile whose contents you want to change in the -n option, and use other options to specify information you want to change.

Only the specified options can be changed.

When an option (-e, -k, or -v) used to specify the authentication method is specified, other options must also be specified. For the combinations of options that need to be specified together, see the description of the [-e|-k|-v] option.

When this option is specified, the -n option cannot be omitted.

### -show

Specify this argument to display a profile.

The profile specified by the -n option is displayed. If the -n option is omitted, all registered profile names are listed.

### -del

Specify this argument to delete a profile. Specify the name of the profile you want to delete in the -n option.

When this option is specified, the -n option cannot be omitted.

## [-e|-k|-v]

Specify the authentication method to be used when an email message is sent.

Option	Authentication method	Required options				Description	
		-i	-j	-r	-t	$\{-f   -q\}$	
-e	N/A	N	N	Ν	N	N	No authentication processing is used.
-k	POP before SMTP	Y	Y	Y	C	N	POP before SMTP authentication is used.
-v	SMTP-AUTH	Y	Y	N	N	С	SMTP-AUTH authentication is used.

## Legend

Y: Must be specified.

C: Can be specified if needed. If omitted, the following values are assumed:

• -t:110

• {-f|-q}:-f

N: Do not specify. If the option is specified, an error occurs.

If the -add option is specified, but this option is omitted, -e is assumed.

This option can be specified only when the -add or -alt option is specified.

### -h logical-host-name

Specify the logical host name of the local host. On the host specified in this option, a profile can be created, changed, referenced, or deleted.

You can specify a character string of 1 to 255 bytes.

When executing the command on a physical host, do not specify this option and the JP1\_HOSTNAME environment variable.

If the option is omitted, the logical host name specified for the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable is not specified, the physical host name is assumed.

### -n profile-name

Specify the profile name to be created, changed, referenced, or deleted.

You can specify a character string of 1 to 64 bytes. Japanese characters are also specifiable.

The specification of alphabetic characters is case insensitive.

If a profile name contains a space, enclose the profile name with double quotation marks ("). If quotation marks are not used, the command ends abnormally.

In addition, the following profile names cannot be specified:

- Names beginning with a space character
- Names consisting of a single period (.)
- Names containing any of the following characters:
   \, /, :, \*, ?, ", <, >, or |
- Any of the following:

CON, PRN, AUX, CLOCK\$, NUL, COM0, COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT0, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9

For a physical host, depending on the installation location of JP1/AJS3, only a value 64 bytes or less can be specified as a profile name.

You must specify this option if you specify the -add, -alt, or -del option.

### -m sender-email-address

Specify the sender email address.

The following characters can be used:

```
Alphanumeric characters, spaces, !, #, $, 8, &, ', *, +, -, /, =, ?, ^, _, `, {, |, }, ~, ., (, ), <, >, [, ], :, ;, @, and ,
```

The number of characters that can be specified for an email address is 1 to 255 (bytes).

<sup>2.</sup> Commands

Validity of the specified address is not checked.

You must specify this option if you specify the -add option.

### -x reply-email-address

Specify this option if you want to use a reply email address that is different from the sender email address.

The following characters can be used:

Alphanumeric characters, spaces,  $!, #, \$, \$, \&, ', *, +, -, /, =, ?, ^, _, `, {, |, }, ~, ., (, ), <, >, [, ], :, ;, @, and ,$ 

The number of characters that can be specified for an email address is 1 to 255 (bytes).

Validity of the specified address is not checked.

If you specify the -add option but omit this option, the sender email address specified by using the -m option is assumed.

### -s SMTP-server-name

Specify the name of the SMTP server to which you want email sent.

The following characters can be used:

Alphanumeric characters, ., -, \_, and :

You can specify a character string of 1 to 255 bytes. More than one SMTP server name cannot be specified.

You must specify this option if you specify the -add option.

### -p SMTP-server-port-number

Specify the port number of the communication port on the SMTP server.

You can specify a port number from 1 to 65535.

If you specify the -add option but omit this option, TCP number 25 is used.

### -i account-for-authentication

Specify the account name for POP before SMTP authentication or SMTP-AUTH authentication.

You can specify a character string of 1 to 255 bytes.

You must specify this option if you specify the -k or -v option.

### -j password-for-authentication

Specify the password of the authentication account for POP before SMTP authentication or SMTP-AUTH authentication.

The password specified for this option is scrambled, and then stored in the profile.

You can specify a character string of 1 to 127 bytes.

You must specify this option if you specify the -k or -v option.

### -r POP3-server-name

Specify the name of the POP3 server to be used for POP before SMTP authentication.

The following characters can be used:

Alphanumeric characters, ., -, \_, and :

You can specify a character string of 1 to 255 bytes.

More than one POP3 server name cannot be specified.

This option can be specified only when the -k option is specified.

### -t POP3-server-port-number

Specify the port number of the communication port for the POP3 server used for POP before SMTP authentication.

You can specify a value from 1 to 65535 as the port number.

This option can be specified only when the -k option is specified.

If you specify the -k option but omit this option, TCP number 110 is used.

### [-f|-q]

Specify the authentication method for SMTP-AUTH authentication.

Option	Authentication method	Description
-f	LOGIN	SMTP-AUTH LOGIN authentication is used.
-d	PLAIN	SMTP-AUTH PLAIN authentication is used.

Note that SMTP-AUTH CRAM-MD5 authentication and SMTP-AUTH DIGEST-MD5 authentication cannot be used.

This option can be specified only when the -v option is specified.

If you specify the -v option but omit this option, -f is assumed.

### -o IP-address-to-be-bound

Specify the sender IP address for communication.

If you specify 0, or specify the -add option but omit this option, the ANY binding method is used.

Both IP address formats (IPv4 and IPv6) can be specified. Specify the same IP address format as the name resolution result of the SMTP server name and the POP3 server name. Note that the name resolution result for the SMTP server name and the POP3 server name must be the same IP address format.

## Notes

• A profile is stored in the folder shown below. To execute the command, the user must have Administrators privileges and be able to read, write, and delete this folder.

profile-storage-folder\sys\prf

Replace *profile-storage-folder* with the value set for the WaitInfFileOutDir environment setting parameter of the [{JP1\_DEFAULT|*logical-host-name*}\JP1AOMAGENT] definition key. For details about the

WaitInfFileOutDir environment setting parameter, see 2.4.2(14) WaitInfFileOutDir in the Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2.

- If you execute this command multiple times, subsequent commands start execution after the current command finishes execution. If the processing of a command takes too much time, an error occurs, and the KAVT3847-E message is output.
- Note the following if you execute this command in a cluster environment:
  - Execute this command when you can access the shared disk.
  - When you create a profile, do so only in the primary node. It is not necessary to create a file in the secondary node.
- Do not execute this command while executing an email sending job. If you execute this command to add, update, or delete a profile while executing the email sending job, the following problems might occur:
  - It takes time for the command to end.
  - An error occurs during command execution, and the KAVT3847-E message is output.
  - An email sending job is delayed.
  - An email sending job ends abnormally.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

## Example 1

The following example creates the profile1 profile, which does not require authentication:

```
jpomailprof -add -n profile1 -m mail@mail.com -s testsmtp.com
```

## Example 2

The following example creates the profile2 profile, which uses POP before SMTP authentication:

```
jpomailprof -add -k -n profile2 -m mail@mail.com -s testsmtp.com -i id -j
pass -r testpop3.com
```

## **Example 3**

The following example creates the profile3 profile, which uses SMTP-AUTH PLAIN authentication:

```
jpomailprof -add -v -n profile3 -m mail@mail.com -s testsmtp.com -i id -j
pass -q
```

## Example 4

The following example changes the SMTP server of the profile1 profile:

```
jpomailprof -alt -n profile1 -s testsmtp2.com
```

# Example 5

The following example lists the registered profiles:

jpomailprof -show

# Example 6

The following example displays the specified profile1 profile:

```
jpomailprof -show -n profile1
```

# Example 7

The following example deletes the specified profile1 profile:

```
jpomailprof -del -n profile1
```

# Output example 1

The following example displays the specified profile:

```
jpomailprof -show -n profile1
SenderEmailAddress xxx@xxx.xxx
ReplyEmailAddress xxx@xxx.xxx
SMTPServer smtptest.com:25
POP3Server -
Authentication -
USER ID -
Bind_IPaddress 192.168.0.2
```

The meaning of the output information is described below.

SenderEmailAddress

The sender email address is output.

ReplyEmailAddress

The reply email address is output.

SMTPServer

The SMTP server to be used is output in SMTP-server-name : port-number-to-be-used format.

POP3Server

The POP server to be used is output in *POP3-server-name*: port-number-to-be-used format. If the POP3 server is not used, – is output.

#### Authentication

The authentication that is used an email is sent is output in the following format.

Authentication method	Character string to be output
N/A	-
POP before SMTP authentication	POP before SMTP

<sup>2.</sup> Commands

Authentication method	Character string to be output
SMTP-AUTH PLAIN authentication	SMTP-AUTH PLAIN
SMTP-AUTH LOGIN authentication	SMTP-AUTH LOGIN

USER ID

The account name used for authentication when an email is sent is output. If authentication is not performed, – is output.

Bind\_IPaddress

The IP address used by the sender is output. ANY is output for the ANY binding method.

# Output example 2

The following example outputs all registered profile names:

```
jpomailprof -show
PATH = C:\Program Files\HITACHI\JP1AJS2\sys\prf\
[ProfileName]
test1
profile2
test3
```

The meaning of the output information is described below.

### PATH

The path to the directory in which the profile is stored is output.

ProfileName

All registered profile names are output.

# jpomanevreset

## Format

```
jpomanevreset
    [-h logical-host-name]
    [-F service-name]
    [-a execution-host-name|-all]
    [-s]
    [-e]
    [-dh manager-host-name-at-main-site -a execution-host- name]
```

# Description

Deletes the information that is to be held by the event action control manager. The command also deletes information on the execution host after communicating with the execution host specified in the -a option.

When a large number of events related to start conditions occur, event action control is in a state of high load, with the result that a slowdown or similar problem may occur in the entire system. However, you can execute this command to return the system to normal operation from the next JP1/AJS3 startup. If the system has several agents, you should use the jpomanevshow command in advance to identify the agent that has caused a large number of events.

When you use the copy and mirroring functionality of the hardware to run JP1/AJS3 in disaster recovery mode, you can access and delete the information on the execution host specified in the -a option by executing this command with the -dh option, specified after the JP1/AJS3 has started in disaster recovery mode on the remote site.

In the standard configuration, this command can be executed only when the JP1/AJS3 host service is running and the target JP1/AJS3 scheduler service is not running. If you execute the command when the target JP1/AJS3 scheduler service is running or the overall JP1/AJS3 service has stopped, the command results in an error. However, if you specify the-dh option, provided that the JP1/AJS3 service is running, you can execute this command regardless of the status of the JP1/AJS3 scheduler service.

For details about how to stop the scheduler service, see *jajs\_spmd\_stop* in 2. Commands.

In the compatible ISAM configuration, this command can be executed only when the JP1/AJS3 service is not running. An error occurs if it is executed while the JP1/AJS3 service is running.

# **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Arguments

### -h logical-host-name

Specifies the name of the logical host responsible for event reset when you are working with a cluster system.

You can specify a string of 1 to 255 bytes.

If you omit this option, the logical host name specified in environment variable JP1\_HOSTNAME is assumed. If the environment variable JP1 HOSTNAME is not specified, the local host name is assumed.

<sup>2.</sup> Commands

### -F service-name

Specify the name of the scheduler service for which you want to delete information.

You can specify a character string of 1 to 30 bytes.

This option can be used only in the standard configuration. If the database uses the compatible ISAM configuration, the KAVT8304-E message is output and the command terminates abnormally.

If you specify the -a option together with this option, you can limit the jobs for which you want to delete information to the event jobs and jobnets with start conditions executed on the host specified in the -a option. If you do not specify the -a option, the command deletes the information about all jobs executed from the scheduler service specified in the -F option.

If you omit this option, the system assumes the default scheduler service name.

### -a execution-host-name|-all

When you perform an event reset, you can delete only information about a specific target host by specifying the host name in the -a option. The execution host name you specify in this option is the execution host name specified in the -s option of the <code>ajsagtadd</code> command. For example, if an execution host name in FQDN format is specified in the -s option of the <code>ajsagtadd</code> command, you need to specify in the -a option the execution host name in FQDN format.

You can use the ajsagtshow command to check the execution host name for the execution agent name.

Example: ajsagtshow -1

For details about the ajsagtadd command, see *ajsagtadd* in 2. *Commands*. For details about the ajsagtshow command, see *ajsagtshow* in 2. *Commands*.

You can specify a character string of 1 to 255 bytes.

If you do not want to limit the target hosts on which you want to delete information about jobs executed from the scheduler service specified in the -F option, specify -all.

If you omit this option, the system assumes the execution host associated with the default execution agent.

-s

Deletes only the information on the manager without communicating with the execution host specified in the -a option.

Specify this option if any of the following conditions is met. If you omit this option under the following conditions, it may take time before the command is terminated.

- When the JP1/AJS3 service on the execution host is cold-started
- When communication between the manager and the execution host cannot be performed properly because of communication failure

If you omit this option, the information on the execution host is also deleted after communicating with the execution host specified in the -a option.

-е

Deletes only unprocessed data while continuing to execute the event job and start conditions. Because the monitoring state on the execution host is terminated once before re-execution, there is a time difference from when the JP1/AJS3 service is started until actual monitoring starts on the execution host.

If you omit this option, the event job and start conditions being executed are terminated.

When using this option to execute the command, you need to perform the steps shown in the table below:

## Table 2-24: What you need to do before and after starting JP1/AJS3

Timing	Action
Before starting JP1/AJS3	On the execution host, remove the cause of the problem.
After starting JP1/AJS3	On JP1/AJS3 - View, check the state of the job and re-execute the command, as necessary.

### -dh manager-host-name-at-main-site -a execution-host-name

Specify the name of the manager host at the main site if the copy and mirroring functionality of the hardware has been used to switch operation to the remote site. If you do not specify the manager host name, the JP1/AJS3 service might take a long time to start on the agent.

You can specify a character string of 1 to 255 bytes.

Specify this option together with the -a option. If you omit the -a option, the message KAVT8347-E is output and the command terminates abnormally. In the -a option, specify an execution host that the manager can communicate with. If you specify a host that is inaccessible or not running a JP1/AJS3 service, after a long delay the command outputs message KAVT8343-W before ending normally. This message indicates that the command was unable to delete information about the execution host specified in the -a option. In this case, if the service is stopped on the execution host specified in the -a option, start the service and then execute the command again. If the host is inaccessible, execute the command again after ensuring that the host can be communicated with.

You cannot specify this option with the -all option, -s option, or -e option. If you do, the message KAVT8307-E is output and the command terminates abnormally.

This option can be used only in the standard configuration. If the database uses a compatible ISAM configuration, the message KAVT8304-E is output and the command terminates abnormally.

If multiple scheduler services are executing event jobs on the execution host, execute the jpomanevreset command for each scheduler service.

## Notes

- Always separate an option and its value by at least one space character.
- You cannot execute several instances of this command at the same time. Wait for one command to be completed before you move on to another command.
- If the target host specified in the -a option has been defined as the target host for multiple execution agents, information about these execution agents is also deleted.
- The command does not check whether the target host specified in the -a option has been registered as the target host for the execution agent in agent management information. Therefore, if JP1/AJS3 has not been installed on the specified target host, it could take time before the command terminates.
- If you execute the command when the folder to be used for storing information about the event action control manager, which is used by the event action control manager, does not exist, the system operates as if there were no

data. The command is terminated normally. For details about the folder for storing information about the event control action manager, see *A.1 JP1/AJS3* - *Manager files and directories* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

- Note that the command will terminate normally even if you fail to delete the file or send data to the execution host. If the KAVT8342-E A file access error occurred. (*file-name*) (*maintenance-information*) or KAVT8343-W An attempt to communicate with the agent has failed. (*agent-host-name*) (*maintenance-information*) message is output in the standard error output file, you must manually delete the file according to the specified procedure.
- If you fail to delete files, the KAVT8342-E A file access error occurred. (*file-name*) (*maintenance-information*) message for each of the unsuccessful files is output to the standard error output file. If you fail to delete a large number of files, a large number of error messages are output accordingly. This implies that you cannot view all the messages. For this reason, you should redirect the standard error output file when executing this command.

Example:

jpomanevreset 2> file-name

- If the KAVT8343-W An attempt to communicate with the agent has failed. (*agent-host-name*) (*maintenance-information*) message is output, the information about the agent involving the error is not deleted. As necessary, therefore, you should cold-start the JP1/AJS3 service on the execution host.
- If the -all option is specified, the command reports that the specified scheduler service has been cold-started to the target hosts on which the status of event jobs and jobnets with start conditions is *Now running*. In addition, the command also performs the same report to the target hosts for which unreported information exists. If the -a option is specified, the command reports that the specified scheduler service has been cold-started to the specified target host even if the status of event jobs and jobnets with start conditions is not *Nor running*.
- If an error such as a network error occurs while data is being sent to the target host, the behavior of the command is as follows:
  - When the agent host cannot be connected (a connection attempt times out) The command does not retry sending of data.
  - When another network error occurs

The command retries to connect (up to two attempts) at 10-second intervals.

For this reason, if the target host or the JP1/AJS3 service on the target host has stopped, it could take time before the command terminates. If the target host name cannot be resolved into the IP address, the command also retries acquisition of the IP address three times at one-second intervals.

- You execute this command in the same environment as that of JP1/AJS3 operation. For example, suppose that you changed DNSEstablish after a JP1/AJS3 stop. Executing this command changes the host name used when communicating with the execution host, so that you cannot identify which manager information needs to be deleted on the execution host. This may cause a problem; for example, the information on the execution host will not be deleted, as expected.
- If there are many files under the folder used for storing information about the event control action manager, it will take time before the command is completed because of the presence of many files that are to be searched for and deleted.
- If you specify the local host name in the -h option, the system will operate by assuming that a physical host is specified.
- If you execute the command after specifying the -e option, the system continues to monitor event jobs and start conditions but deletes the event information and event start information generated before the event reset. For this reason, you may see *Now running* for the status of a job in which an event occurred before an event reset or *Now queuing* for the state of a job in which monitoring has already started. If this occurs, for *Now running* jobs, you must

re-generate events meeting the conditions. For *Now queuing* jobs, meanwhile, you should either use them as they are or terminate them and then re-register them.

- On the target host side, only the information managed by the target host is deleted. Files remaining as trash are not deleted. If you want to delete files left on the target host as trash, cold-start the JP1/AJS3 service on the target host side.
- If you execute the command without specifying the -e option, monitoring of event jobs and start conditions ends. If monitoring of these is necessary, perform registration again. You can ignore the KAVS1400-E and KAVS0265-E messages output to the integrated trace log because these messages pertain to termination of monitoring of event jobs and start conditions.
- Only use the -dh option in a scenario where the copy and mirroring functionality of the hardware is used to run JP1/AJS3 in disaster recovery mode. If JP1/AJS3 is not running in disaster recovery mode or if you specify a logical host name in the -dh option, the system terminates all event jobs being executed by the execution host specified in the -a option on the logical host specified by the -dh option.

If this occurs, the event jobs terminated on the execution host remain in *Now running* status on the logical host specified by the -dh option. This causes event job statuses to become inconsistent between the logical host and the execution host. If you inadvertently specify a logical host name in the -dh option or JP1/AJS3 is not in disaster recovery mode, kill all the event jobs being executed by the execution host specified in the -a option from the logical host specified in the -dh option, and then register them for execution again.

• If the default scheduler service name assumed when the -F option is omitted is not registered, the command outputs message KAVT8351-E to standard error output and terminates abnormally. Make sure that the default scheduler service name is registered on the command execution host, and then execute the command again.

You can reference the -h option in the command line to identify the host where the command will be executed.

## **Return values**

0	Normal end.
1	There is an argument improperly specified.
2	Initialization failed. There is an error in the definitions or environment settings on the logical host.
3	Privileges not sufficient for task requested.
4	The scheduler service specified in the -F option is running.
5	The same command is being used simultaneously.
100	A file access error occurred.
101	Memory shortage occurred.
255	A system error occurred.

# Additional information

The status of JP1/AJS3 - View displayed when JP1/AJS3 is normally started is different from that displayed when JP1/AJS3 is started after you use the jpomanevreset command to recover the status of the event action control manager. The state of JP1/AJS3 - View is also different depending on whether you specify the -e option in the jpomanevreset command: that is, whether the event jobs and start conditions are to be continued. These different statuses are compared and summarized below:

• When you hot-start JP1/AJS3 (-hot)

Target	Status	Status							
	Status	Normal state		After executing the jpomanevreset command					
	AJS3 is	Being executed on the local host	Being executed on the remote host	Specifying -e		Not specifying -e			
	stopped			Being executed on the local host	Being executed on the remote host	Being executed on the local host	Being executed on the remote host		
Event job (in jobnet)	Now running	Ended abnormally <sup>#1,</sup> #2	Now running #2	Ended abnormally/ Unknown end status	Now running/ Unknown end status	Unknown	end status		
	Wait for prev. to end	Wait for pr	ev. to end #3	Wait for prev. to end <sup>#3</sup>					
	Being held	Being	held #3	Being held <sup>#3</sup>					
	Now queuing	Now running/ Ended abnormally	Now running	Ended abnormally/ Unknown end status	Now running/ Unknown end status	Unknown end status			
	Other statuses	No change			No cl	hange			
Start condition	Now monitoring	Now monitoring		Now monitoring Monitor terminated			erminated		
	Other statuses	No change		No change					
Event job in start condition	Now running	Now running		Now running/Unknown end status		Unknown	Unknown end status		
	Now queuing	Now queuing		Now queuing/Unknown end status					
	Other statuses	No cl	hange	No change					

#1

The Now running status occurs when the system is restarted after a system down.

#2

The Unknown end status may occur depending on the timing of the termination processing.

#3

If the Not executed + Ended status occurs when the preceding unit is handled as an abnormal end.

• When you warm-start JP1/AJS3 (-warm)

Target	Status								
	Status before JP1/ AJS3 is stopped	Normal status		After executing the jpomanevreset command					
		Being executed on the local host	Being executed on the remote host	Specifying -e		Not specifying -e			
				Being executed on the local host	Being executed on the remote host	Being executed on the local host	Being executed on the remote host		
Event job (in jobnet)	Now running	Unknown end status		Unknown end status					
	Wait for prev. to end	Not executed + Ended		Not executed + Ended					

Target	Status							
	Status before JP1/ AJS3 is stopped	Normal status		After executing the jpomanevreset command				
		Being executed on the local host	Being executed on the remote host	Specifying -e		Not specifying -e		
				Being executed on the local host	Being executed on the remote host	Being executed on the local host	Being executed on the remote host	
Event job (in jobnet)	Being held	Not executed + Ended		Not executed + Ended				
	Now queuing	Unknown end status		Unknown end status				
	Other statuses	No change		No change				
Start condition	Now monitoring	Now monitoring		Now monitoring/Monitor terminated		Monitor terminated		
	Other statuses	No change		No change				
Event job in start condition	Now running	Now running		Now running/Unknown end status		Unknown end status		
	Now queuing	Now queuing		Now queuing/Unknown end status				
	Other statuses	No change		No change				

## • When you cold-start JP1/AJS3 (-cold)

Target	Status							
	Status before JP1/ AJS3 is stopped	Normal state		After executing the jpomanevreset command				
		Being executed on the local host	Being executed on the remote host	Specifying -e		Not specifying -e		
				Being executed on the local host	Being executed on the remote host	Being executed on the local host	Being executed on the remote host	
Event job (in jobnet) Start condition	Now running	Not registered		Not registered				
	Wait for prev. to end							
	Being held							
	Now queuing							
	Other statuses							
	Now monitoring							
	Other statuses	-						
Event job in start condition	Now running							
	Now queuing							
	Other statuses							

• If the startup mode is not specified when JP1/AJS3 is started

The status of each item when the startup mode of the scheduler service is used is the same as that of the corresponding item shown above.

# Example 1

For an example of deleting the information held by the event action control manager, see *Example* in *jpomanevshow* in *2*. *Commands*.

# Example 2

The following command deletes information about the manager host *MAINHOST* held by execution agent *AP1* in an environment where operation has been switched to a remote site using the disk copy and mirroring functionality of the hardware.

```
jpomanevreset -h LogicalHost -F AJSROOT2 -dh MAINHOST -a AP1
```
# jpomanevshow

## Format

```
jpomanevshow
    [-h logical-host-name]
    [-F service-name]
```

# Description

Analyzes the internal log of the event action control manager and displays the execution hosts that often send data to the manager and information about start conditional jobnet. You use this command when you want to identify a job that has caused a large number of events related to start conditions, as well as the agent that is to be specified in the arguments of the jpomanevreset command. (See *Example*.)

The targets of analysis are the logs that have been output within the last 24 hours. If there are wrapped logs, then only the remaining logs are to be analyzed. The target of analysis also covers only the logs related to start conditions, not covering the event jobs that is defined in the jobnets.

In the result of analysis, five start conditions are displayed, starting with those with the highest level of data sending. For each of the start conditions, the information that can identify the particular start condition and the number of logs during a certain period of time are displayed.

Before you can execute this command, make sure that the JP1/AJS3 host service is running.

## **Execution privileges**

In Windows: Administrators privileges

In UNIX: Superuser privileges

## Arguments

#### -h logical-host-name

Specifies the name of the logical host that displays information when you are operating with a cluster system.

You can specify a string of 1 to 255 bytes.

If you omit this option, the logical host name specified in the JP1\_HOSTNAME environment variable is assumed. If the JP1\_HOSTNAME environment variable has not been set, the local host name is assumed.

#### -F service-name

Specify the name of the scheduler service for which you want to analyze the internal log.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

## Notes

- Do not execute this command while JP1/AJS3 is starting.
- Always separate an option and its value by at least one space character.

- You cannot execute several instances of this command at the same time. Wait for one command to be completed before you move on to another command.
- If you execute the command when the folder used for storing the internal log of the event action control manager does not exist, the system operates as if there were no data, and the command is terminated normally. For details about the folder used or storing the internal log of the event action control manager, see *1.2.4 List of log files and directories* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.
- If you specify the local host name in the -h option, the system will operate by assuming that a physical host is specified.
- On a Windows Server 2012 or Windows Server 2008 machine, before you execute this command, make sure that you open the Command Prompt window as an administrator. If the UAC function is disabled, you do not need to open the Command Prompt window as an administrator.
- If the default scheduler service name assumed when the -F option is omitted is not registered, the command outputs message KAVT8351-E to standard error output and terminates abnormally. Make sure that the default scheduler service name is registered on the command execution host, and then execute the command again.

You can reference the -h option in the command line to identify the host where the command will be executed.

0	Normal end.
1	There are arguments improperly specified.
2	Initialization failed. The definition of the logical host name is incorrect. Alternatively, there is an error in the environment settings.
3	Privileges not sufficient for task requested
5	The same command is being used simultaneously.
100	A file access error occurred.
101	Memory shortage occurred.
255	A system error occurred.

# Output example

The following is an example of output obtained when you execute the command on the manager host:

```
Time for analysis=20XX/06/01 02:30:00 - 20XX/06/02 02:30:00
Agent=agent1
Scheduler service=AJSROOT1
Unit ID=2133
Execution ID=2000 (ID:@A2000)
Total count=233
Target time
                               Count
20XX/06/01 22:00:00-22:59:59
                                   1
20xx/06/01 23:00:00-23:59:59
                                   1
20xx/06/02 00:00:00-00:59:59
                                   1
20XX/06/02 01:00:00-01:59:59
                                  30
20XX/06/02 02:00:00-02:30:00
                                 200
Agent=agent1
Scheduler service=AJSROOT1
Unit ID=2134
```

The content of each item output can be interpreted as follows:

Time for analysis

Indicates the time required for analysis. The time displayed here shows the time measured on the internal log and it may be different from the system time.

1

Agent

Indicates the name of the execution host sending data.

```
Scheduler service
```

Indicates the scheduler service name in which start conditions are defined.

Unit ID

Indicates the unit ID of the event job defined in the start conditions.

#### Execution ID

Indicates the execution ID for start conditions. The execution ID corresponds to the "Being executed" generation displayed on the Daily Schedule window or the Monthly Schedule window.

What is shown in parentheses corresponds to what is displayed on JP1/AJS3 - View.

```
Total count
```

Indicates the total number of entries that were stored in the internal log and that pertain to start conditions.

#### Target time

Indicates the target duration at which to display the number of logs per unit time. If no logs occur during the target duration, the target duration itself will not be output.

#### Count

Indicates the total number of log entries that were present during the target time and that pertain to start conditions.

## Example

Suppose that there has been a rapid increase in the number of events that monitor start conditions. The entire system operating JP1/AJS3 will suffer from high loads because of frequent communication between the manager and the agent and frequent input/output operations of files for storing data temporarily. This makes the operator's action ineffective, thus leading to a major delay in the processing of other programs. In this case, you use the jpomanevshow command to identify the job and event responsible for the large number of events related to start conditions. You can return to normal operation if you eliminate the cause of the large number of monitoring conditions for the particular job and use the jpomanevreset command to remove the large number of event data items from the particular agent.

# ./jpomanevshow Time for analysis=20XX/06/01 02:30:00 - 20XX/06/02 02:30:00						
Agent=agent1 Scheduler service=AJSROOT1 Unit ID=2133 Execution ID=2000(ID:@A2000) Total count=1123 Target time Count 20XX/06/01 22:00:00-22:59:59 1 20XX/06/01 23:00:00-23:59:59 1 20XX/06/02 00:00:00-00:59:59 1 20XX/06/02 01:00:00-01:59:59 603 20XX/06/02 02:00:00-02:30:00 517	Because more than 1,000 events occurred, the following are identified: Job: 2133 Agent: agent1					
Agent=agent1 Scheduler service=AJSROOT1 Unit ID=2134 Execution ID=2000(ID:@A2000) Total count=1 Target time Count 20XX/06/01 17:00:00-17:59:59 1						
# ./ajsname -I 2133	The ajsname command is used to identify the particular job name.					
# ./jpomanevreset -a agent1	The jpomanevreset command is used to specify the particular agent.					

For details about the above procedures, see 2.6 Troubleshooting problems if processing of a jobnet with a start condition is delayed in the manual Job Management Partner 1/Automatic Job Management System 3 Troubleshooting.

# jpomanjobshow

## Format

```
jpomanjobshow
    [-h host-name]
    [-F service-name]
    [-a execution-agent-name...|-all]
```

# Description

Outputs a list of the event jobs currently being executed in the manager to the standard output file.

This command is executed on a host for executing a manager. Regardless of the situation of the job execution agent, you can execute this command because only the information maintained by the manager is displayed. The list is displayed even if versions of the manager and the job execution agent do not match.

## **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

## Arguments

#### -h host-name

Specify the local host name or logical host name for the manager which is to display job information. You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. Without the JP1\_HOSTNAME environment variable, however, the system assumes the local host name.

This command results in an error if the command executing host does not have any no definition about the specified manager host name.

#### -F service-name

Specify the name of the scheduler service for which you want to display job information.

You can specify a character string of 1 to 30 bytes.

If you omit this option, the system assumes the default scheduler service name.

#### -a execution-agent-name...|-all

Of the execution agents on which the manager specified in the -h option requested to execute jobs, you can display job information for only a specific execution agent. To do this, specify the execution agent name in the -a option.

You can specify a character string of 1 to 255 bytes.

You can specify more than one execution agent name. In that case, the execution agent names must always be separated by at least one space character.

Specify -all if you want to cover all execution agents.

If this option is omitted, the default execution agent is assumed.

If the specified execution agent has no job information or does not even exist, the command does not result in an error.

## Notes

- Before you execute this command, make sure that the JP1/AJS3 service is running.
- Do not execute this command while JP1/AJS3 is starting.
- Always separate an option and its value by at least one space character.
- For options that require a value to be specified, the string specified next to the option is assumed to be a value. For example, if you enter -h a, -a is assumed as the logical host name specified for the -h option.
- You cannot execute more than one these commands at the same time. After the first command has been executed, execute the second command.
- If the default scheduler service name assumed when the -F option is omitted is not registered, the command outputs message KAVT8351-E to standard error output and terminates abnormally. Make sure that the default scheduler service name is registered on the command execution host, and then execute the command again.

You can reference the -h option in the command line to identify the host where the command will be executed.

## **Return values**

0	Normal end
Values other than 0	Abnormal end

# Additional information

No error occurs even if you execute this command when JP1/AJS3 scheduler service is not running. If there is a job scheduled to be executed next, the information about the job is output.

# Output example

Here is an example of file output, together with what the output means.

COMMAND START TIME=20XX/12/14 14:10:04							
MANAGER : mana	ager1						
AJSPATH=/TEST/ JOBNAME=JOB1 AGENT=agent1	JobNet1/						
Execution ID @A188	Unit ID 00000002932	Scheduler service name AJSROOT1	Kind evwjb	Information			
AJSPATH=/TEST/ JOBNAME=JOB2 AGENT=agent1	JobNet1/						
Execution ID @A189	Unit ID 00000002956	Scheduler service name AJSROOT1	Kind flwjb	Information			
AJSPATH=/TEST/ JOBNAME=JOB1 AGENT=agent2	JobNet2/						
Execution ID @A190	Unit ID 00000002982	Scheduler service name AJSROOT1	Kind Ifwjb	Information unreported			
COMMAND END TIME=20XX/12/14 14:10:34							

The following shows the meaning of the output.

#### COMMAND START TIME

Indicate the date and time at which the command starts its execution in the format of *YYYY/MM/DD HH:MM:SS*. MANAGER

Shows the manager host name (either the local host name or the logical host name).

#### AJSPATH

Shows the jobnet name in the /root-jobnet-name/jobnet-name/ format.

#### JOBNAME

Shows the job names in the jobnet.

#### AGENT

Shows the execution agent name.

This item is the name of the execution agent on which job execution is requested.

#### Execution ID

Shows the execution ID.

#### Unit ID

Shows the unit ID.

```
Scheduler service name
```

Shows the scheduler service name.

#### Kind

Shows the types of jobs.

- evwjb: JP1 event reception monitoring job
- revwjb: JP1 event reception monitoring job for recovery
- flwjb: File monitoring job
- rflwjb: File monitoring job for recovery

- mlwjb: Email reception monitoring job
- rmlwjb: Email reception monitoring job for recovery
- mqwjb: Message queue reception monitoring job
- rmqwjb: Message queue reception monitoring job for recovery
- mswjb: MSMQ reception monitoring job
- rmswjb: MSMQ reception monitoring job for recovery
- lfwjb: Log file monitoring job
- rlfwjb: Log file monitoring job for recovery
- ntwjb: Windows event-log monitoring job
- rntwjb: Windows event-log monitoring job for recovery
- tmwjb: Execution interval control job
- rtmwjb: Execution interval control job for recovery

#### Information

Shows job information.

• unreported:

The execution agent has not received the request for starting job execution because, for example, the execution agent is not running (it is registered with the unreported information file).

• (No indication)

There is no information to be reported (nothing is registered in the unreported information file). In this case, any of the following statuses could exist:

- Nothing is contained in the unreported information file because nothing was processed by the manager.
- An error occurred while the unreported information file was being accessed.
- A request has arrived at the execution agent correctly.

You can use the jpoagtjobshow command to see whether the job has been actually executed in the agent.

#### COMMAND END TIME

Indicates the date and time at which the command ends its execution in the format of YYYY/MM/DD HH:MM:SS.

The *YYYY/MM/DD HH:MM:SS* part means *calendar-year/month/day hours:minutes:seconds*.

# jpqdbcond

## Format

```
jpqdbcond
  [-h logical-host-name]
  [[-m] |
    [[-x][-k]
    [-d directory-name][-p {output-destination}]]|
    [[{-l|-L} [-a] [[-i {output-destination}]]|
    [-t {output-destination, unused-area-size-threshold} [-v]]]]
    [[-t {output-destination, unused-area-size-threshold} [-v]]]]
```

## Description

- 1. Compresses unused areas and reorganizes files if the ratio of unused areas is high for the ISAM files that the job execution environment uses.
- 2. Outputs the ratio of unused areas, data file fragmentation ratio, and unused size for the ISAM files used in the job execution environment, to the standard output file.

You can display the ratio of unused areas for the ISAM files even while the job execution environment is using the ISAM files.

- 3. Outputs the following information for the ISAM files that the job execution environment uses, to the specified destination as a message:
  - Information about reorganization (start and end date/time, statistics)
  - Unused area size
  - Whether the unused area size has reached the threshold
  - You can specify one or more of the following message destinations:
  - Standard error output
  - Windows event log or Syslog
  - JP1 event
- 4. Checks whether the size of unused areas for the ISAM files that the job execution environment uses has reached the threshold and sets the result in the return value of the command.
- 5. Converts the format of the ISAM file.

## **Execution privileges**

In Windows: Administrators privilege

In UNIX: Superuser privilege

## Arguments

#### -h logical-host-name

Specify the target logical host name.

You can specify a character string of 1 to 255 bytes.

By default, the system assumes the logical host name specified by the JP1\_HOSTNAME environment variable. If the JP1\_HOSTNAME environment variable is not specified, the system assumes the local host name.

#### -m

Outputs the number of ISAM lock table entries and the ISAM file format (whether the key reuse functionality is enabled) for the job execution environment database.

You cannot specify this option with any option other than -h.

-x

Completely reorganizes the data and key files for the ISAM files used in the job execution environment.

-k

Converts all ISAM files that constitute the job execution environment to the format enabling the key reuse functionality and completely reorganizes the data and key files.

#### -d directory-name

Specify the directory name for the work file used for key sorting, if you reorganize the ISAM files that the job execution environment uses.

For an explanation of the system action when you omit this option, see the description of the Jiscond command in the manual *Job Management Partner 1/Base User's Guide*.

#### -p {output-destination}

Outputs a message when the command starts and ends the reorganization of the ISAM files that the job execution environment uses.

You must specify this option with the -x option.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.

- e: Standard error output
- s: Windows event log or Syslog
- j: JP1 event

The following shows example message output when this option is specified:

Example 1: When reorganization is started

```
KAVU5980-I Database condensing of the job execution environment started. 20XX/10/01 01:05:40
```

Example 2: When reorganization is ended normally

```
KAVU5981-I Database condensing of the job execution environment ended normally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)
```

The start date/time, end date/time, elapsed time, unused area size before reorganization, and unused area size after reorganization are also output.

Example 3: When reorganization is ended abnormally

```
KAVS5982-E Database condensing of the job execution environment ended abnormally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)
```

## $\{-1 | -L\}$

Displays the ratio of unused areas for the ISAM files that the job execution environment uses.

You can obtain more detailed information about the ISAM files by specifying this option with the -a option.

```
• -1
```

Exclusively uses the ISAM files to obtain information.

Because this option exclusively uses the files, it provides more accurate information than the -L option. It, however, causes an error if another process is using the ISAM files.

• -L

Obtains information without exclusively using the ISAM files.

Because this option does not exclusively use the files, it can obtain information even while the job execution environment is using the ISAM files. If another process is simultaneously updating the ISAM files, however, the command fails to obtain accurate information for any updates performed just when it obtains information.

-a

Outputs detailed information about the ISAM files that the job execution environment uses.

If this option is specified with the -1 or -L option, the command outputs the data file fragmentation ratio and unused area size as well as the ratio of unused areas.

#### -i {output-destination}

Outputs a message indicating the unused area size for the ISAM files that the job execution environment uses.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.

- e: Standard error output
- s: Windows event log or Syslog
- j: JP1 event

The following shows example message output when this option is specified:

Example

```
KAVU5983-I The ISAM unused area size on job execution environment is 99 MB.
```

#### -t {output-destination}, unused-area-size-threshold

Outputs a message if the unused area size for the ISAM files that the job execution environment uses has reached the specified threshold.

You can use this option to schedule the execution of the jpqdbcond command as a JP1/AJS3 job when the system is not very busy (e.g., not executing a large number of jobs), so that the command periodically checks the status of the ISAM files and outputs a warning message as required.

• output-destination

Specifies one of the following message output destinations.

You can specify a single destination or a combination of two or more destinations.

- e: Standard error output
- s: Windows event log or Syslog

j: JP1 event

• unused-area-size-threshold

Specifies a threshold for the unused area size for the ISAM files.

You can specify a value within the range from 1 to 1024 (in MB; 1 MB = 1,024 \* 1,024 bytes).

The following shows an example message output when this option is specified:

Example:

KAVU5984-W The ISAM unused area size of the job execution environment is 101 MB, which exceeds the 100 MB threshold value.

-v

Sets the return value (process return code) of the command to indicate whether the ratio of unused areas has reached the specified value.

You must specify this option with the -t option.

The following shows the return values of the jpqdbcond command, which depend on whether this option is specified:

• Return value when the -v option is not specified

0	Normal end
Values other than 0	Abnormal end

• Return value when the -v option is specified

0	The unused area size has not reached the threshold.
1	The unused area size has reached or exceeded the threshold.
100 or greater	Abnormal end

## Notes

- Perform reorganization after you have backed up the relevant files. The jpqdbcond command uses the directory specified in the -d option as a work directory. The drive or partition that contains the directory must have at least twice as much free space as the largest ISAM key file in the job execution environment you want to reorganize. In addition, the drive or partition that contains the job execution environment database directory must have at least as much free space as the largest ISAM key file in the job execution environment you want to reorganize. If you do not specify the -d option, the command uses the OS standard work directory. See the description of the Jiscond command in the *Job Management Partner 1/Base User's Guide*.
- If you specify none of the -x, -t, -1, -k, and -m options, the -x option is assumed.
- If you specify the -x or -k option for this command, you must back up the ISAM files before executing the command (before reorganizing the ISAM files).
- If you specify the -x, -1, or -k option for this command, you must execute the command with the ISAM files closed (to close the ISAM files, stop JP1/AJS3). When the ISAM files are open, executing the command will result in an error.

- If you specify the -L option for this command, you can also obtain information about any ISAM files that other
  processes are using. If another process is simultaneously updating the ISAM files, however, the command fails to
  obtain accurate information for any updates performed just when it obtains information. In order to maintain the
  integrity of the ISAM files, other processes attempting to access the ISAM files have to wait while the command is
  executed. You should not, therefore, use this command when the system is executing a large number of jobs.
- The output information from this command with the -l or -L option specified refers to the ratio of unused areas, not the ratio of fragmentation. If, therefore, the ISAM file contains no records or there are an extremely limited number of records, 100% is output showing the ratio of unused areas to the empty area that has been reserved.
- Reorganizing the ISAM files sometimes fails to completely reorganize the entire files, possibly leaving some small unused areas.
- If you execute this command with the -x or -k option specified, do not execute the jpqautocond command or the jajs\_maintain -m manager command at the same time.
- You cannot specify the -x and -k options of this command together.

## **Return value**

0	Normal end <sup>#</sup>
1	The ISAM files being used contain unused areas exceeding the specified threshold size.
100	Invalid argument specified
132	The configuration definition information file for submit job execution is not validly coded.
135	Insufficient system resource
137	No database storage path
138	You do not have the privilege required to access the database.
140	The user is not logged on as a member of the Administrators group (in Windows systems) or does not have superuser privileges (in UNIX systems).
141	Invalid environment setting or logical host name
145	Insufficient memory
146	Insufficient disk space
147	An error due to an internal cause occurred.
148	An error occurred in ISAM processing for database reorganization.
149	Processing cannot be performed because the database size exceeds 2 GB.
226	Invalid execution environment

#

When the -t and -v options are specified simultaneously, indicates that the ISAM files used by the job execution environment have not reached the unused area size threshold.

# Additional informations

• The following shows the format of output when the -1 or -L option is specified:

Table name	Record count	Data	Key 1	Key 2	
JPQSYSINFO	1	18	0%	•	
JPQQUEINFO	105	10%	3%	0%	
JPQCONINFO	46	18	0%		
JPQAGTINF	10	18	08	08	
JPQSCHINFO	528	1%	0%		
JPQJOBINFO	78256	56%	32%	0%	
JPQENVINFO	1	18	08		
JPQTRANSINFO	78256	56%	0%		
JPQJOBCTRL	78256	56%	32%	0%	
JPQNFYINFO	78256	56%	0%		
JPQRESINFO	2	0%	0%	0%	

The following items are output:

#### Table name

Displays the table name.

#### Record count

Displays the number of records.

#### Data

Displays the ratio of unused areas for the data file.

#### Key 1

Displays the ratio of unused areas for the first key file.

#### Key 2

Displays the ratio of unused areas for the second key file.

This item is blank if there is only a single key file.

There cannot be more than two key files.

• The following shows the format of output when the -a option is specified with the -1 or -L option.

Table name	Record co	unt	Data	Fragment ratio	Key 1	Key 2	Unused area size
JPQSYSINFO	1		0%	-	0%		
		ο.	003МВ		0.000MB		0.002MB
JPQQUEINFO	28		0%	-	0%	0%	
		Ο.	007MB		0.000MB	0.000MB	0.000MB
JPQCONINFO	46		79%	-	33%		
		2.	628MB		0.000MB		2.077MB
JPQAGTINF	10		0%	-	0%	08	
		0.	005MB		0.000MB	0.000MB	0.000MB
JPQSCHINFO	528		0%	-	0%		
		0.	000MB		0.000MB		0.000MB
JPQJOBINFO	2800		31%	-	85%	98%	
		24.	000MB		0.000MB	0.000MB	7.600MB
JPQENVINFO	1		99%	50%	0%		
		0.	060MB		0.000MB		0.066MB
JPQTRANSINF	0 2800		31%	-	0%		
		4.	204MB		0.000MB		1.303MB
JPQJOBCTRL	2800		31%	-	85%	94%	
		2.	662MB		0.000MB	0.000MB	0.825MB
JPQNFYINFO	2800		31%	-	85%		
		2.	191MB		0.000MB		0.679MB
JPQRESINFO	3		45%	-	10%	0%	
		0.	010MB		0.000МВ	0.000MB	0.010MB
Total unused are	ea size						12.562MB

Information is output in two rows for each table. The information displayed in the upper row is the same as that displayed with the -1 or -L option. The lower row displays the unused area size for each file (in MB; 1 MB = 1,024 \* 1,024 bytes).

The following describes the displayed items:

Table name

Displays the table name.

Record count

Displays the number of records.

#### Data

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -l or -L option. The lower row displays the unused area size.

## Fragment ratio

For a variable-length record, updating a record may cause the data in ISAM files to be split into multiple blocks. This item displays the ratio of the split records to the total number of records. This item is only displayed for variable-length ISAM files. It displays a hyphen (-) for other tables.

## Key 1

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -l or -L option. The lower row displays the unused area size.

#### Key 2

When the -a option is specified, data is output in two rows for each table. The data displayed in the upper row is the same as that displayed with the -l or -L option. The lower row displays the unused area size.

#### Unused area size

This item displays the total unused area size for the data and key files that comprise each ISAM file.

#### Total unused area size

Displays the total unused area size for the ISAM files that the job execution environment uses.

• The following shows the format of output when the -m option is specified:

Table name JPQSYSINFO JPQQUEINFO	Reuse key Enabled Enabled	Semaphore No. 1 1
	Omitted	
JPQRESINFO	Enabled	1

The following items are output:

Table name

Displays the table name.

Reuse key

Displays Enabled if the key reuse functionality for the ISAM file format is enabled.

Displays Disabled for the conventional ISAM file format.

## Semaphore No.

Displays the semaphore number if the file is split by semaphore.

Otherwise, a hyphen (-) is displayed.

• If you specify j (JP1 event) as the output destination for the -p, -i, or-t option, the following JP1 events are output:

2. Commands

Specified option	Event ID	Event name	Issued when	Message ID
-p	00004160	Job execution environment database reorganization started	Reorganization starts.	KAVU5980-I
-р	00004161	Job execution environment database reorganization ended normally	Reorganization ends normally.	KAVU5981-I
-р	00004162	Job execution environment database reorganization ended abnormally	Reorganization ends abnormally.	KAVU5982-E
-i	00004163	ISAM unused area size information	ISAM unused area size information is obtained.	KAVU5983-I
-t	00004164	ISAM unused area size threshold reached	The ISAM unused area size threshold is reached.	KAVU5984-W

Note

For details about the JP1 events, see *A. JP1 Events Issued by JP1/AJS3* in the Job Management Partner 1/ Automatic Job Management System 3 Administration Guide.

- The following describes a database reorganization log that is output when the database is reorganized: When you execute the jpqdbcond command, it creates the CONDENSE {1|2}.log file in the directory storing the database. This file contains the database reorganization log, which records the following statistics:
  - Start date/time, end date/time, and time required
  - Unused area size and total file size before database reorganization
  - Unused area size and total file size after database reorganization

Data is logged in the HNTR log format. The log consists of two planes, each of which contains 512 KB of log data. Message KAVU5985-I is output with the statistics of database reorganization embedded.

#### Output example

KAVU5980-I Database condensing of the job execution environment started. 20XX/10/01 01:05:40 KAVU5985-I CONDENSE: Before condensing the database. Unused area size: 102.020 MB Total file size:542.245 MB KAVU5985-I CONDENSE: After condensing the database. Unused area size: 0.100 MB Total file size:440.225 MB KAVU5981-I Database condensing of the job execution environment ended normally. 20XX/10/01 01:05:40 - 20XX/10/01 01:20:20 (00:14:40)

# Appendixes

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1

# A. Notes on Defining Environment Variables and an Environment Variable File

# A.1 Notes on defining environment variables

This section describes the notes on defining environment variables for job execution.

For a list of environment variables, see the environment variable list in Chapter 1.4 Environment variables.

• Use the *environment-variable-name=value* format to specify an environment variable. To specify more than one environment variable, use a line-feed character to separate each entry, as shown in the following example.

Example:

*environment-variable-name-1*=ABCD<line-feed character> *environment-variable-name-2*=EFGH<line-feed character>

You can separate each entry only by using a line-feed character. Do not use a delimiter such as a semicolon (;) or a colon (:).

- Make sure that you specify all entries in the *environment-variable-name=value* format. If you specify an entry that is not in this format, the job could terminate abnormally depending on the OS of the host on which the job is executed.
- You cannot use environment variables that start with AJS (for example, AJSxxxx, where xxxx is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- You cannot use environment variables that start with JP1 (for example, JP1*xxxx*, where *xxxx* is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- You cannot set the environment variables (those shown in *Table 1-7* in *1.4 Environment variables*) that are set when a job is executed for environment variables of a job definition or in a file you specify for environment file of a job definition.
- Usually, environment variables are set in JP1/AJS3 and they refer to those listed in *Table 1-7* in *1.4 Environment variables*, as well as those specified for job definition, and those contained in files specified as environment files for job definition. In addition, environment variables may also be set in the command statements, script files, local login scripts, and system login scripts specified for job definition. If the same environment variables are found in these, they will have the following levels of priority (with the value of 1 as the highest level).

#### Windows

- 1. Environment variables specified for Environment variables<sup>#1</sup>
- 2. Environment variables specified for Environment file#2
- 3. System environment variables

#### UNIX

- 1. Definitions in the commands or script files specified for job definition
- 2. Definitions contained in local login scripts
- 3. Definitions contained in system login scripts
- 4. Environment variables specified for Environment variables<sup>#1</sup>
- 5. Environment variables specified for Environment file<sup>#2</sup>
- 6. Environment variables set when the queueless agent service starts<sup>#3.</sup>

#1

Variables specified for **Environment variables** in the JP1/AJS3 - View window or those specified with the env option for the jpqjobsub command.

#2

Variables specified for **Environment file** in the JP1/AJS3 - View window or those specified with the -ev option for the jpgjobsub command.

#3

Applicable only when the service to be executed is for Queueless Agent jobs.

• When defining an environment variable in a dialog box of JP1/AJS3 - View or in the -env option of the jpqjobsub command, you cannot use a reference to an environment variable. In the following example, the xyz variable is assigned the character string %abc%, and not the value of the abc environment variable.

Example:

```
abc=1
xyz=%abc%
```

If you want to use a reference to an environment variable, specify the reference in the batch file or script file for the job to be executed.

## Cautionary note

In Windows, JP1/AJS3 services normally start with the system environment variables as the settings. User environment variables are not read. Job execution is also governed by these system environment variables. However, when the system is configured as a cluster system with logical hosts, the MSCS<sup>#</sup> reads the user environment variables at system startup. The user environment variables take effect in the JP1/AJS3 services started by the MSCS on the logical hosts, and are also used at job execution.

In addition to the system environment variables, the environment variables set at OS startup are also read when JP1/AJS3 services are activated.

#

Windows Server Failover Clustering (WSFC) in Windows Server 2012 or Windows Server 2008. For clustering software other than MSCS and WSFC, see the software specifications.

# A.2 Notes on defining an environment variable file

Before attempting to define an environment variable name in an environment variable file used for job execution, make sure that the name is valid in the operating system running on the target host.

If the target host does not support the environment variable name you define, the specification of the variable in the environment variable file will not take effect. In such a case, the environment variable is not set on the host.

The following gives precautions about syntax you must follow when defining environment variables in an environment variable file used for job execution:

# (1) Notes on defining an environment variable file in a Windows environment

- Code an environment variable name from the beginning of a line.
- When specifying multiple environment variables, insert a line feed character between pairs of *environment-variable-name=value*.

Example:

environment-variable-name-1=ABCD <return>

environment-variable-name-2=EFGH <return>

- Make sure that you specify all entries in the *environment-variable-name=value* format. If you specify an entry that is not in this format, the job could terminate abnormally depending on the OS of the host on which the job is executed.
- A sequence of characters between "=" and the line feed code is assumed to be a single value.
- You cannot use environment variables that start with AJS (for example, AJSxxxx, where xxxx is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- You cannot use environment variables that start with JP1 (for example, JP1*xxxx*, where *xxxx* is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- Avoid using the environment variables (those shown in *Table 1-7* in *1.4 Environment variables*) because their values are set in JP1/AJS3.
- You cannot use a reference to an environment variable as shown in the following example. In the following example, the xyz variable is assigned the character string %abc%, and not the value of the abc environment variable.

Example:

```
abc=1
xyz=%abc%
```

If you want to use a reference to an environment variable, specify the reference in the batch file for the job to be executed.

# (2) Notes on defining an environment variable file in a UNIX environment

- Code an environment variable name from the beginning of a line.
- When specifying multiple environment variables, insert a line feed character between pairs of *environment-variable-name=value*.

Example:

```
environment-variable-name-1=ABCD <return>
environment-variable-name-2=EFGH <return>
```

- Make sure that you specify all entries in the *environment-variable-name=value* format. If you specify an entry that is not in this format, the job could terminate abnormally depending on the OS of the host on which the job is executed.
- A sequence of characters between "=" and the line feed code is assumed to be a single value.
- You cannot use environment variables that start with AJS (for example, AJSxxxx, where xxxx is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- You cannot use environment variables that start with JP1 (for example, JP1*xxxx*, where *xxxx* is any string) regardless of whether you specify them in uppercase or lowercase. These variables are reserved in the system.
- Avoid using the environment variables (those shown in *Table 1-7* in *1.4 Environment variables*) because their values are set in JP1/AJS3.
- You cannot use a reference to an environment variable as shown in the following example. In the following example, the xyz variable is assigned the character string \$abc, and not the value of the abc environment variable.

Example:

abc=1

A. Notes on Defining Environment Variables and an Environment Variable File

```
xyz=$abc
```

If you want to use a reference to an environment variable, specify the reference in the script file for the job to be executed.

# B. Notes on Using the Embedded-Database Commands

When you use the ajsembdbadduser command to add a new user or modify an existing user, the following embedded-database commands allow you to use the authorization identifier (-a) and the password (-ap) of the user who executes those commands:

- ajsembdbstatus
- ajsembdbrorg
- ajsembdbreclaim
- ajsembdbsetup

The following describes the -a and -ap options.

-a command-executer-authorization-identifier

Specify the authorization identifier of the user who executes the applicable command.

You usually do not need to specify this option because, root is assumed as the authorization identifier. Specify it only if you have used the ajsembdbadduser command to add a new administrator for the embedded database, or if you have modified the existing administrator.

The specified value is case sensitive.

-ap command-executer-password

Specify the password corresponding to the authorization identifier specified in the -a option.

You usually do not need to specify this option because root is assumed as the password. Specify it only if you have used the ajsembdbadduser command to add a new administrator for the embedded database, or if you have modified the existing administrator.

The specified value is case sensitive.

An error might occur when you execute a command. If an error occurs, take the action indicated in the following table and re-execute the command.

Message	Cause	Action to be taken
KAVS0983-E	The database cannot be connected because there is an error in the user name or the password.	Specify correct values in the -a and -ap options, and then re-execute the command. If this error occurs while the SHIFT TABLE message is being output, check the configuration definition. The configuration definition must contain pre-migration settings that work correctly.
KAVS1003-E	The value specified for -a option is invalid.	For -a option, specify the authorization identifier of an existing database administrator.
KFPA11564-E	The character string specified for -a option exceeds 8 bytes.	Reduce the argument specified for –a option to 8 or fewer bytes and re-execute the command.
KFPA11107-E	The character string specified for -ap option exceeds 30 bytes.	Reduce the argument specified for -ap option to 30 or fewer bytes, and then re-execute the command.
KFPA11104-E	Characters other than alphanumeric characters are specified in an argument of – a or –ap option.	Use alphanumeric characters for the argument of $-a$ or $-ap$ option, and then re- execute the command.

Message	Cause	Action to be taken
KFPA11204-E	No table exists.	Check the values specified for $-a$ and $-ap$ options, and then specify the authorization identifier of the table owner.
KFPA11561-E	The specified authorization identifier is not valid.	Change the values specified for $-a$ and $-ap$ options to the values of the user with who has the DBA permission, and the re-execute the command.

# B.1 Adding a new administrator for the embedded database or changing an existing administrator

This section describes how to add a new administrator for the embedded database and modify the existing administrator.

For the embedded database, a database administrator is created by default. Both the authorization identifier of the default database administrator and the password are root. When you use the ajsembdbadduser command, you can add a new database administrator or change the existing password.

For details on the ajsembdbadduser command, see B.3 ajsembdbadduser.

To execute the ajsembdbadduser command, you need to set the environment variable PDUSER. Check the following setting examples, and then set the environment variable PDUSER.

• Setting example for a Windows host

```
x:\> set PDUSER="root"/"root"
```

- Setting example for a UNIX host
  - # PDUSER='"root"/"root"'
  - # export PDUSER

Note

When an AJS administrator is set, an administrator user with the authorization identifier and password both being set to *OS-user-name-of-the-AJS-administrator* is created in addition to the default embedded database administrator root.

#### Example

Changing the password of the database administrator with the authorization identifier root to jplajs2

• For a Windows host

(The embedded database installation previous directory is c:\Program Files\HITACHI \JP1AJS2\embdb\ JF0.)

```
ajsembdbadduser -i "c:\Program Files\HITACHI\JP1AJS2\embdb\_JF0" -a root
-ap jp1ajs2
```

• For a UNIX host

(The embedded database installation previous directory is /opt/jp1ajs2/embdb/\_JF0.) ajsembdbadduser -i /opt/jp1ajs2/embdb/\_JF0 -a root -ap jp1ajs2

If you change the database administrator's password, you must also change the value of the -ap option in the ajsembdbrorg or ajsembdbreclaim command.

B. Notes on Using the Embedded-Database Commands

You can create a new database administrator as well.

#### Example

Creating a new administrator for the embedded database with the authorization identifier jplajs2 and the password jplajs2

• For a Windows host

```
(The embedded database installation previous directory is c:\Program Files\HITACHI \JP1AJS2\embdb\_JF0.)
```

```
ajsembdbadduser -i "c:\Program Files\HITACHI\JP1AJS2\embdb\_JF0" -a jp1ajs2 -ap jp1ajs2
```

• For a UNIX host

(The embedded database installation previous directory is /opt/jplajs2/embdb/\_JF0.) ajsembdbadduser -i /opt/jplajs2/embdb/\_JF0 -a jplajs2 -ap jplajs2

Notes on changing database administrator passwords

- If the password for the authorization identifier root is changed from the default value root, the jajs\_setup command cannot be executed. If the password for the root authorization identifier has been changed, set up the scheduler by using advanced setup of an embedded database. For details about advanced setup of an embedded database, see *C. Advanced Setup of an Embedded Database* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 1.*
- If the password for the authorization identifier root has been changed from the default value root and you want to execute the following commands, specify the authorization identifier in the -a option and the password in the -ap option:

```
ajsembdbstatus
```

```
ajsembdbrorg
```

```
ajsembdbreclaim
```

ajsembdbsetup

For details about the -a and -ap options, see B. Notes on Using the Embedded-Database Commands.

- If you use multiple embedded databases on a single host and there are different settings for each root password, the ajsembdbreclaim command executed with manager specified in the -m option results in an error. In this case, for each embedded database that holds a scheduler service, perform maintenance by specifying the a option, the -ap option, scheduler in the -m option, and the scheduler service that corresponds to the embedded database in the -F option. Also, for the embedded database that holds the agent management database, perform maintenance by specifying the authorization identifier in the -a option, the password in the -ap option, and agent in the -m option. You can check the embedded databases that hold scheduler services and the embedded database that holds the agent management database by executing the ajsembdbidlist command with the -a option specified. For details about ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.
- When an AJS administrator is set, an administrator user with the authorization identifier and password both being set to *OS-user-name-of-the-AJS-administrator* is created in addition to the default embedded database administrator root. Consider changing the password for each authorization identifier.

# B.2 Changing the options of the tables in the embedded database

When you specify the embedded database as the database for a scheduler service, the data storage area in the embedded database might become full faster than you expect depending on the JP1/AJS3 operation. This can occur even when the amount of data is not very large, when there is repeated addition and deletion of data, which creates invalid pages and segments reserved for tables.

This section describes the organization of the data area in the embedded database and the command that can be used to suppress the generation of invalid pages and segments.

# (1) Organization of the data area in the embedded database

This subsection describes the organization of the data area in the embedded database.

The data in the embedded database is actually stored as *pages*. A group of pages is called a *segment*, each of which is associated with a table in the database for management purpose.

The following figure shows how the data area in the embedded database is managed.

#### Figure B-1: Managing the data area in the embedded database

Segment		Segme	ent			
Page Page Page	Page Page	Page	Page	Page	Page	Page
Page Page Page	Page Page	Page	Page	Page	Page	Page

When the embedded database is accessed, the data area is used based on the following rules:

- One segment stores the information of only one table.
- When all the pages in one segment are full, a new segment is allocated to the table.
- When you delete records, pages and segments become invalid areas, and they are not usually available for automatic reuse.
- Even if a reusable segment or page exists, priority is given to unused pages and segments.

The scheduler database of JP1/AJS3 has 11 tables. If one table holds many invalid pages and segments, other tables cannot acquire new pages and segments when data needs to be stored. If as a result there are insufficient pages and segments, an error might occur.

## Figure B-2: When the invalid segments of a specific table occupy all the free segments

Segments occupied by 10 tables except for table A



When all the segments are occupied as shown above, tables other than table A cannot acquire the unused segments even though there is new data to be stored. In this case, an error due to insufficient segments occurs, despite the existence of the invalid segments.

# (2) Applying the free space reusage facility

Even when there are reusable segments, by default, the embedded database uses unallocated segments first.

The embedded database has a free space reusage facility that hastens the reuse of segments in the database area for each table. By using this functionality, the embedded database can reuse reserved segments (those that have been used and deleted) for the applicable table on a priority basis when a new segment is required and the preset number of segments is about to be exceeded.

For example, suppose you use this functionality to set a threshold value of about 50% of the number of segments for table A. When about half of the segments in the data area have been used, the embedded database temporarily stops expansion through the new allocation of segments and looks for reusable segments. As a result, the invalid segments of a specific table do not occupy free segments.

To enable the free space reusage facility during setup of the embedded database when you migrate from ISAM to the embedded database, you must specify the -ru option in the ajsembdbsetup command. For details about how to use the ajsembdbsetup command, see the description of *ajsembdbsetup* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

To enable the free space reusage facility when you create an embedded database for a large-scale model, use the embedded database for the default scheduler service (AJSROOT1) on the physical host, and then execute the following command:

```
ajsembdbsetup -F AJSROOT1 -ru l
```

To enable the free space reusage facility in an environment in which setup to the embedded database has been completed, you need to execute ajsembdbreuse. command For details on the ajsembdbreuse command, see *B.4 ajsembdbreuse*.

Example

Changing the definition of a table in an embedded database environment with -1 option specified as the large data model size in ajsembdbbuild command

B. Notes on Using the Embedded-Database Commands

• For a Windows host

(The embedded database installation previous directory is C:\program Files\HITACHI \JP1AJS2\embdb\\_JF0.)

```
ajsembdbreuse -i "C:\program Files\HITACHI\JP1AJS2\embdb\_JF0" -1
```

• For a UNIX host

```
(The embedded database installation previous directory is /opt/jplajs2/embdb/_JF0.) ajsembdbreuse -i /opt/jplajs2/embdb/_JF0 -l
```

Example

When the ajsembdbaddarea command of the embedded database is used to expand the database area (the total number of AJS2DATA segments is changed to 200,000) after the embedded database environment is set up

• For a Windows host

```
(The embedded database installation previous directory is C:\Program Files\HITACHI
\JP1AJS2\embdb\_JF0.)
ajsembdbreuse -i "C:\Program Files\HITACHI\JP1AJS2\embdb\ JF0" -n 200000
```

• For a UNIX host

```
(The embedded database installation previous directory is /opt/jp1ajs2/embdb/_JF0.)
ajsembdbreuse -i /opt/jp1ajs2/embdb/_JF0 -n 200000
```

The free space reusage facility is effective for tables. It cannot be applied to the index area. You need to periodically maintain the index area to reclaim the invalid pages and segments that are generated in the index area. For details about how to maintain the index area, see 10.2.1(1) Executing the ajsembdbreclaim command automatically in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide and 10.2.1(2) Executing the ajsembdbreclaim command manually in the Job Management Partner 1/Automatic Job Management System 3 Administration Guide and 10.2.1(2) Executing the Administration Guide.

Even if you enable the free space reusage facility, the number of occupied segments can still increase due to increased demand for services or unusual operations. For this reason, you still need to periodically monitor the unused segments in the data area.

# B.3 ajsembdbadduser

#### Format

```
ajsembdbadduser

[-i embedded-database-practical-directory-name]

[-mh logical-host-name]

[-p embedded-database-communication-port]

-a embedded-database-administrator-authorization-identifier

-ap embedded-database-administrator-authorization-identifier-password
```

#### Description

Creates a new embedded database administrator by using the specified authorization identifier and password for the authorization identifier.

When you specify the existing authorization identifier of the embedded database administrator, you can change the password.

#### **Execution permissions**

In Windows: Administrators permissions

B. Notes on Using the Embedded-Database Commands

#### In UNIX: Superuser permissions

#### **Storage directory**

## In Windows

JP1/AJS3 - Manager-installation-folder \tools \

## In UNIX

/opt/jp1ajs2/tools/

## Arguments

-i embedded-database-practical-directory-name

Specify the embedded database practical directory by using the full path to specify the directory. For Windows, if the full path contains a space character, enclose it in double quotation marks (").

You can use the ajsembdbidlist command to check the path to the embedded database practical directory. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

When you omit this option, the following value is assumed:

For UNIX: /opt/jp1ajs2/embdb/\_JF0

For Windows: embedded-database-practical-directory-corresponding-to-embedded-database-setup-identifier\_JF0

-mh logical-host-name

Specify the name of the target JP1 logical host. You can specify a character string of 1 to 32 bytes. If you omit this option and the environment variable JP1\_HOSTNAME has been set, the value of the environment variable is assumed. If no value is set for JP1\_HOSTNAME, the physical host is assumed.

-p embedded-database-communication-port

Specify the connection port for the embedded database as a decimal number.

For the embedded database communication port to be specified, see the value specified in the RDBPORT environment setting parameter for the scheduler service.

You can use the ajsembdbidlist command to check the association between scheduler services and embedded databases. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, 22220 is assumed.

-a embedded-database-administrator-authorization-identifier

Specify the owner of the tables in the new JP1/AJS3 scheduler database to be created. For this authorization identifier, do not specify a database access user (RDBUSER). When you specify the existing authorization identifier of the embedded database administrator, the current password is changed to the password specified in –ap option.

Use eight or fewer single-byte alphanumeric characters (the first character must be an alphabetic character) for this authorization identifier.

-ap embedded-database-administrator-authorization-identifier-password

Specify the password for the authorization identifier of the embedded database administrator.

Use 30 or fewer single-byte alphanumeric characters (the first character must be an alphabetic character) for this password.

## Notes

• You must execute this command while the embedded database is running. If you execute it while the embedded database is not running, an error occurs.

B. Notes on Using the Embedded-Database Commands

- Before you execute the ajsembdbadduser command, set environment variable PDUSER by using the authorization identifier and the authorization identifier password of the existing database administrator. If you execute the command without setting environment variable PDUSER, an error occurs.
- When you execute the ajsembdbadduser command and an error occurs during access to the embedded database server, the error information dated to the connection of the embedded database is created by the name of pderr1.trc and pderr2.trc in the working directory used when the ajsembdbadduser command is executed. When you re-execute the command and the embedded database server ends normally, delete these files.

Option	Allowed	ed Single-byte characters allowed					
name	of bytes	Upper-case characters and numbers	Lower-case characters	Underscores (_)	Space characters	Hyphens (-)	allowed
-a	8 bytes	Yes	Yes	No	No	No	No
-ap	30 bytes	Yes	Yes	No	No	No	No

• The following table lists the characters you can specify for the -a and -ap options.

- Do not execute this command more than once in quick succession. If you do so, the command might result in an error.
- If you specify root in the -a option when attempting to change the embedded database authorization identifier password, the jajs setup command might result in an error.

#### **Return values**

0	Normal end (However, if an error message appears, take the action described in the message.)
Other than 0	Abnormal end

#### Actions to be taken if an error occurs

If an error occurs when you execute ajsembdbadduser command, take the action indicated in the following table.

Table B-1: Actions to be taken if an error occur	rs when ajsembdbadduser is executed
--	-------------------------------------

Message	Cause	Action to be taken
KAVS0996-E	The specified option and value are invalid.	Correct the option and the value for the option, and then re-execute the script.
КҒРА11723-Е	The embedded database is running. Alternatively, the value specified for – p or –mh option is incorrect.	Start the embedded database. If the embedded database is running, check the value specified for -p or -mh option, and then re-execute the script.
KFPA11564-E	The length of the character string specified for $-a$ option exceeds 8 bytes.	Reduce the argument of $-a$ option to 8 or fewer bytes, and re-execute the script.
КҒРА11107-Е	The length of the character string specified for $-ap$ option exceeds 30 bytes.	Reduce the argument of $-ap$ option to 30 or fewer bytes, and then re-execute the script.
KFPA11104-E	Characters other than alphanumeric characters are specified for the argument of $-a$ or $-ap$ option, or the first character is a number.	Use alphanumeric characters (the first character must be an alphabetic character) for the argument of $-a$ or $-ap$ option, and then re-execute the script.
Bad directory specified in -i option	The directory specified for -i option is not the embedded database practical	Specify the correct Embeddb practical directory in -i option. If the correct embedded database practical

B. Notes on Using the Embedded-Database Commands

Message	Cause	Action to be taken
Bad directory specified in -i option	directory or the embedded database is not correctly set up.	directory is specified, and then set up the embedded database again.
AuthID is not Specified	The -a option is not specified.	Specify the -a option.
AuthIDPassword is not Specified	The -ap option is not specified.	Specify the -ap option.
KAVS0101-E	No value is specified for an option that requires a value.	Specify a value for the option and then re-execute the command.
KFPA11724-E	Because the value specified for -p or -mh option is incorrect. The embedded database cannot be connected.	Correct the value specified for -p or -mh option, and then re-execute the script.
KFPA11560-E	The authorization identifier password specified for PDUSER is incorrect.	Specify the password for the authorization identifier specified for PDUSER and then re-execute the script.
KFPA11561-E	The specified authorization identifier is not valid.	Change the user specified for PDUSER to a user with the database administrator permission and then re-execute the script.

# B.4 ajsembdbreuse

#### Format

```
ajsembdbreuse
{{-1 | -m | -s | -n number-of-segments} | -D}
[-mh logical-host-name]
[-p embedded-database-communication-port]
[-tp table-prefix]
[-a embedded-database-administrator-authorization-identifier]
[-ap embedded-database-administrator-authorization-identifier-
password]
[-i embedded-database-practical-directory-name]
```

#### Description

Allows you to apply the free space reusage facility to the JP1/AJS3 tables created in the embedded database that matches the specified prefix.

#### **Execution permissions**

In Windows: Administrators permissions In UNIX: Superuser permissions

#### **Storage directory**

In Windows

JP1/AJS3 - Manager-installation-folder \tools \

In UNIX

/opt/jp1ajs2/tools/

#### Arguments

-l|-m|-s|-n *number-of-segments* 

Specify the point at which you want to start using the free space reusage facility. When the usage rate of the data area reaches the threshold specified here, the free-segment reuse function starts operation.

B. Notes on Using the Embedded-Database Commands

-1, -m, and -s options correspond to each of the database model sizes of ajsembdbbuild command (-1 for large-scale, -m for medium-scale, and -s for small-scale). Specify the option that matches the size of the database model specified in ajsembdbbuild command.

In the -n option, specify the total number of segments in the database area (AJS2DATA) when the total number of segments in the database area is different from the values for the large, medium, and small database models.

For the value of -n option, specify a value for 100 to the number of secured segments. The value must be an integer. If you specify a value outside the range, or a value other than an integer, specify a correct value, and then re-execute the script.

To check the total number of database area (AJS2DATA) segments, execute the ajsembdbstatus command with the -db option specified.

The following table lists the point at which the free space reusage facility is applied to the database area for each table.

Table name	Point at which the free space reusage facility is applied
AJS1UNIT	6% of the total segments in the database area AJS2DATA
AJS1ARROW	(18 when the $-s$ option is specified, 183 when the $-m$ option is specified, and 957 when the $-1$ option is specified.)
AJS1BODY	
AJS1SCH	
AJS1CAL	
AJS1PERF	
AJS1ENTRY	
AJS1GEN	
AJS1STAT	16% of the total segments in the database area AJS2DATA
	(48 when the $-s$ option is specified, 489 when the $-m$ option is specified, and 2553 when the $-1$ option is specified.)
AJS1RELS	6% of the total segments in the database area AJS2DATA
AJS1ID	(18 when the $-s$ option is specified, 183 when the $-m$ option is specified, and 957 when the $-1$ option is specified.)
AJSAGTEXECCNT	1% of the total segments in the database area AJS2DATA
AJSEXECAGT	(3 when the $-s$ option is specified, 30 when the $-m$ option is specified, and 159 when the $-1$ option is specified.)
AJSEXECAGTGRP	
AJSLINKAGT	

## Table B-2: Point at which the free space reusage facility is applied

Note

- The above table names are used when the table prefix is set to the default,  ${\tt AJS1}.$ 

• In the -n option of the ajsembdbreuse command, if the free space reusage start point has changed, specify the value without using a decimal point.

The following table lists the total number of segments in the data area that are created in the large, medium, and small database models of ajsembdbbuild command.

# Table B-3: Total number of segments in the data area created in the large, medium, and small database models of ajsembdbbuild command

Database area name	Small scale	Medium scale	Large scale
Database area AJS2DATA	300	3,060	15,960

#### -mh logical-host-name

Specify the name of the target JP1 logical host. You can specify a character string of 1 to 32 bytes. If you omit this option, and the environment variable JP1\_HOSTNAME has been set, the value of the environment variable is assumed. If no value is specified for JP1\_HOSTNAME, the physical host is assumed.

-p embedded-database-communication-port

Specify the connection port for the embedded database as a decimal number.

For the embedded database communication port to be specified, see the value specified in the RDBPORT environment setting parameter for the scheduler service.

You can use the ajsembdbidlist command to check the association between scheduler services and embedded databases. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2.

If you omit this option, 22220 is assumed.

-tp table-prefix

Specify the prefix of the names of the tables in the JP1/AJS3 scheduler database with four or fewer bytes. If you omit this option, AJS1 is assumed.

For the table prefix to be specified, see the value of the TABLENAMEPREFIX environment setting parameter for the scheduler service for which you want to use the free space reusage facility.

#### -a embedded-database-administrator-authorization-identifier

Specify the owner of the tables in the JP1/AJS3 scheduler database.

Use eight or fewer single-byte alphanumeric characters (the first character must be an alphabetic character). If you omit this option, root is assumed.

-ap embedded-database-administrator-authorization-identifier-password

Specify the password for the authorization identifier of the embedded database administrator.

Use 30 or fewer single-byte alphanumeric characters (the first character must be an alphabetic character). If you omit this option, root is assumed.

-D

Disables the free space reusage facility. If you specify this option while the free space reusage facility is disabled, no error occurs.

-i embedded-database-practical-directory-name

Specify the embedded database practical directory by using the full path. For Windows, if the full path contains a space character, enclose it in double quotation marks (").

You can use the ajsembdbidlist command to check the path to the embedded database practical directory. For details about the ajsembdbidlist command, see *ajsembdbidlist* in 2. Commands Used during Setup in the manual Job Management Partner 1/Automatic Job Management System 3 Command Reference 2. When you omit this option, the following value is assumed:

For UNIX: /opt/HiRDB J/

For Windows: embedded-database-practical-directory-corresponding-to-embedded-database-setup-identifier\_JF0

B. Notes on Using the Embedded-Database Commands

#### Notes

- Before you execute this command, stop all JP1/AJS3 services, the JP1/AJS3 Monitor service, and the JP1/AJS3 Console Agent service on the JP1/AJS3 Manager host (including logical hosts). If you execute this command while JP1/AJS3 is accessing the embedded database, an error occurs.
- You must execute this script while the embedded database is running. If you execute it while the embedded database is not running, an error occurs.
- When you execute the ajsembdbreuse command and an error occurs during access to the embedded database server, the error information dated to the connection of the embedded database is created by the name of pderr1.trc and pderr2.trc in the working directory used when the ajsembdbreuse command is executed. When you re-execute the command, and the embedded database server ends normally, delete these files.
- Do not execute this command more than once in quick succession. If you do so, the command might result in an error.

#### **Return values**

0	Normal end (However, if an error message appears, take the action described in the message.)
Other than 0	Abnormal end

#### Actions to be taken if an error occurs

If an error occurs when you execute ajsembdbreuse, take the action indicated in the following table.

Table B-4: Actions to be taken if an error occurs when alsembdbreuse c	command is	s executed
--	------------	------------

Message	Cause	Action to be taken
KAVS0996-E	The specified option and value are invalid.	Correct the option and the value for the option, and then re-execute the script.
KFPA11723-E	The embedded database is running. Alternatively, the value specified for – p or –mh option is incorrect.	Start the embedded database. If the embedded database is running, check the value specified for -p or -mh option, and then re-execute the script.
KFPA11564-E	The length of the character string specified for $-a$ option exceeds 8 bytes.	Reduce the argument of $-a$ option to 8 or fewer bytes, and then re-execute the script.
KFPA11107-E	The length of the character string specified for -ap option exceeds 30 bytes.	Reduce the argument of $-ap$ option to 30 or fewer bytes, and re-execute the script.
KFPA11104-E	Characters other than alphanumeric characters are specified for the argument of -a or -ap option.	Use alphanumeric characters for the argument of $-a$ or $-ap$ option, and then re-execute the script.
KFPA11204-E	No table exists.	Check the values specified for -a and -ap options, and then specify the authorization identifier of the table owner. Alternatively, check the value of -tp option and then specify a correct table prefix. Then re-execute the script.
KFPA11561-E	The specified authorization identifier is not valid.	Change the values of the $-a$ and $-ap$ options to values for a user with DBA permission, and then re-execute the script.
KFPA11563-E KFPA11732-E	A lock wait timeout error occurred because another user was accessing the embedded database.	Stop all access from JP1/AJS3 to the embedded database and then re-execute the script.

Message	Cause	Action to be taken
Bad directory specified in -i option	The directory specified for $-1$ option is not the embedded database practical directory or the embedded database is not correctly set up.	Specify the correct embedded database practical directory in $-i$ option. If the correct embedded database practical directory is specified, set up the embedded database again.
-D cannot be specified with these options.	An illegal combination of the -D option and the -l, -m, -s, or -n option is specified.	Correct the specified option and then re-execute the script.
KAVS0101-E	No value is specified for an option that requires a value.	Specify a value for the option and then re-execute the command.
КҒРА11560-Е	The authorization identifier password specified for -ap option is incorrect.	Specify the password for the authorization identifier specified for –a option, and then re-execute the script.
KFPA11724-E	The embedded database cannot be connected, because the value specified for -p or -mh option is incorrect.	Correct the value specified for $-p$ or $-mh$ option, and then re-execute the script.
KFPA11105-E KFPA11705-E ERROR Invalid value specified in -n option.	An invalid value is specified for -n option.	Specify a value from 10 to the number of secured segments. The specified value must be an integer.

# C. Privileges Required for Operation as the AJS Administrator

# C.1 Command execution privileges for operation as the AJS administrator

When operating JP1/AJS3, AJS administrators can execute commands that require superuser privileges. Note, however, that restrictions apply to the functionality of the following commands.

No.	Command	Restricted functionality
1	ajs2collectcore(UNIX only)	Acquiring information from a core dump file requires the OS reference privilege for the core dump file. Without this privilege, this command cannot be executed. If the AJS administrator has the OS reference privilege, the administrator can execute the command.
2	ajsbkudel	The deletion of backup files and directories requires the OS execution privilege for the files and directories. Without this privilege, this command cannot be executed. If the AJS administrator has the OS execution privilege, the administrator can execute the command.
3	ajschksetup	Although the AJS administrator can execute this command, the administrator cannot register the port number. After this command is executed, a user with superuser privileges must register the port number.
4	ajsqlsetup	Although the AJS administrator can execute this command, the administrator cannot register the port number. After this command is executed, a user with superuser privileges must register the port number.
5	jajs_killall.cluster(UNIX only)	Terminating a running JP1/AJS3 process requires superuser privileges. The AJS administrator cannot terminate the process.
6	jp1ajs2casetup(UNIX only)	Operations on OS files require superuser privileges. The AJS administrator cannot perform operations on OS files.
7	jp1ajs2cmsetup (UNIX only)	Operations on OS files require superuser privileges. The AJS administrator cannot perform operations on OS files.
8	ajsovsetup	The AJS administrator cannot set up the HP NNM linkage function by executing this command. A user with superuser privileges must execute this command to set up the HP NNM linkage function.
9	ajsovremove	The AJS administrator cannot remove the HP NNM linkage function by executing this command. A user with superuser privileges must execute this command to remove the HP NNM linkage function.

Table C-1: Commands that are restricted when used by an AJS administrator

# C.2 Access permissions for directories or files required for command operations by the AJS administrator

When an AJS administrator operates JP1/AJS3, access permissions are required to use command operations on or specify directories or files. For command operations on directories or files, the applicable access permissions must be set for the AJS administrator beforehand.

In addition, during operation by the AJS administrator, even when executing a command with superuser privileges, the AJS administrator requires access permissions for the directories or files subject to the command operations or specifications. These permissions must be set beforehand.

C. Privileges Required for Operation as the AJS Administrator

The following table describes the directories and files on which AJS administrators can perform command operations, and the required access permissions.

Table C-2:	Access permissions	required by AJS	administrators fo	or command o	perations on
	directories or files				

No.	Command	Option	File or directory requiring access permissions	Required permissions for the AJS administrator
1	ajs2collectcore	f	Output directory	rwx
2		-	Directory containing core dumps or core dump files	Directory containing core dumps: rx Core dump files: r
3	ajschkdef	р	Execution agent profile	r
4		e	Unit-attribute profile	r
5		0	Output file	rw
6	ajscnvdbexport	b	Database backup file storage directory	rwx
7	ajscnvdbimport	b	Database backup file storage directory	rx
8	ajsdbcond	d	Work file directory	rwx
9	ajsembdbaddarea	d	Directory where the database area to be expanded is stored	rwx
10	ajsembdbaddlog	d	Directory where an area to be expanded is stored	rwx
11		du	Directory where an area to be expanded is stored (duplicated)	rwx
12	ajsembdbbackup	i	Embedded database practical directory	rwx
13		d	Data area	rw
14		b	Backup file storage directory	rwx
15	ajsembdbbuild	d	Data area directory	rwx
16		a	Data area partition	rwx
17		d	Work area directory	rwx
18		ld	Work area directory	rwx
19		i	Embedded database practical directory	rwx
20		bl	Unload log file creation directory	rwx
21		conf	Embedded database settings file	r
22	ajsembdbinstl	s	Storage directory for embedded database installation media	ΓX
23		i	Embedded database practical directory	rwx
24	ajsembdboplog	0	Output destination file	rw
25	ajsembdbrorg	d	Unload file storage directory	rwx
26	ajsembdbrstr	i	Embedded database practical directory	rwx
27		d	Data area	rw

C. Privileges Required for Operation as the AJS Administrator

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1
No.	Command	Option	File or directory requiring access permissions	Required permissions for the AJS administrator
28	ajsembdbrstr	bf	Backup file	r
29		1	Unload log file	r
30		ld	Unload log storage directory	rx
31		е	Directory where output results stored	rwx
32	ajsembdbunset	i	Embedded database practical directory	rwx
33	jajs_migrate	Т	Work directory	rwx
34	jajs_rpenvexport	d	Output directory	rwx
35	jajs_rpenvimport	d	Input directory	rx
36	jajs_setup	d	Database directory	rwx
37		t	Temporary directory	rwx
38		j	Job information directory	rwx
39		b	Backup information directory	rwx
40		D	Logical host shared directory	rwx
41	jajs_setup_cluster	d	Shared directory	rwx
42		С	Embedded database settings file	r
43	jp1ajs2_setup_cluster	d	Shared directory	rwx
44	jpqdbcond	d	Work file directory	rwx
45	jpqexport	со	File to which the job execution environment is output	rw
46		dp	Database storage directory	Rx
47	jpqimport	ci	Configuration definition file for the submit job execution environment	R
48		dp	Database storage directory	rwx
49	ajscmprint	#	All items in the data directory	rw

### Legend

-: Not applicable

#

Regardless of whether an option is specified, access permissions are required for the applicable files or directories.

# **D. Version Revisions**

This appendix lists the changes in each version of the JP1/AJS series programs.

# D.1 Revisions in 10-50

The following lists the revisions in 10-50 for each program.

# (1) JP1/AJS3 - Manager

- A virtual machine on which JP1/AJS3 has been installed and configured can now be duplicated.
- Functionality was expanded so that a disaster recovery environment can be set up with the main and remote hosts whose logical host names are the same.
- A setting for shifting the start day by a number of days (counting both open and closed days) was added.
- A function that holds jobnet execution during immediate execution registration was added.
- A function that can execute some commands from JP1/AJS3 View to JP1/AJS3 Manager was added.
- The files jajs\_log.bat and jajs\_log, which have the same functionality as the data collection tool (\_04.bat and \_04), are now available. In addition, an option was added to the Windows version of the data collection tools that allows you to specify the location to which data is output.
- An option was added to the ajsprint command so that relation line information can be output in order of the unit name.
- The procedure for changing the IP address of an agent host was changed.
- UTF-8 was added to the list of character encodings that can be used in AIX, HP-UX, and Solaris 10.
- The number of characters that can be used when specifying a logical host name for the command jajs killall.cluster was increased.

# (2) JP1/AJS3 - Agent

- The files jajs\_log.bat and jajs\_log, which have the same functionality as the data collection tool (\_04.bat and \_04), are now available. In addition, an option was added to the Windows version of the data collection tools that allows you to specify the location to which data is output.
- The procedure for changing the IP address of an agent host was changed.
- UTF-8 was added to the list of character encodings that can be used in AIX, HP-UX, and Solaris 10.
- The number of characters that can be used when specifying a logical host name for the command jajs\_killall.cluster was increased.

# (3) JP1/AJS3 - View

- A setting for shifting the start day by a number of days (counting both open and closed days) was added to the **Schedule by days from start** settings in the **Advanced** tab of the Schedule Rule dialog box.
- A setting for holding jobnet execution if the registration method is **Immediate execution** was added to the Register for Execution dialog box.
- A function that can execute some commands from JP1/AJS3 View to JP1/AJS3 Manager was added.

• The files jajs\_log.bat and jajs\_log, which have the same functionality as the data collection tool (\_04.bat and \_04), are now available. In addition, an option was added to the Windows version of the data collection tools that allows you to specify the location to which data is output.

# D.2 Revisions in 10-10

The following lists the revisions in 10-10 for each program.

# (1) JP1/AJS3 - Manager

- A function was added that uses IP addresses to restrict the hosts that are able to connect to a manager host.
- A function was added for checking the execution schedule of unregistered units in the Monthly Schedule window of JP1/AJS3 View.
- A function was added for preventing scheduler services for which the JP1 user logged in to JP1/AJS3 View has no access privileges from appearing in JP1/AJS3 View.
- A function was added for restricting the maximum number of allowed JP1/AJS3 View concurrent sessions for a scheduler service.
- A function was added for changing the passwords of JP1 users by using JP1/AJS3 View.
- The following OS is supported:
  - Linux 5.1 (x86) or later
  - Linux 5.1 (AMD/Intel 64) or later
- Content related to Solaris 11 (SPARC) was added.

# (2) JP1/AJS3 - Agent

- A function was added that uses IP addresses to restrict the hosts that are able to connect to an agent host.
- Content related to Solaris 11 (SPARC) was added.

# (3) JP1/AJS3 - View

- A function was added for checking the execution schedule of unregistered units in the Monthly Schedule window of JP1/AJS3 View.
- A function was added for preventing scheduler services for which the JP1 user logged in to JP1/AJS3 View has no access privileges from appearing in JP1/AJS3 View.
- A function was added for restricting the maximum number of allowed JP1/AJS3 View concurrent sessions for a scheduler service.
- A function was added for changing the passwords of JP1 users by using JP1/AJS3 View.
- The way in which the Register Custom Job dialog box and the Set Properties of Custom Job dialog box are displayed was changed.
- A change was made so that when **Jobnet Definition** is selected from **Function Menu**, jobnets for which execution has been registered are displayed in the list area of the JP1/AJS3 View window (main window).
- The function for hiding the icons of unused units in the Jobnet Editor window (a setting in the Set Default Values dialog box) was extended.

D. Version Revisions

• A function was added for preventing the history of previously-used login-user names and connection-destination host names from appearing on the Login screen.

# D.3 Revisions in 10-00

The following lists the revisions in 10-00 for each program.

# (1) JP1/AJS3 - Manager

- IPv6 addresses are now supported for communication.
- Mirroring by copying a disk is now supported to enable disaster recovery operations.
- The AJS administrator, with JP1/AJS3 access permissions that are almost equivalent to superuser permissions, can now be designated when JP1/AJS3 is installed as a new installation.
- Wait conditions can now be used as a means for controlling the execution order of units across jobnets.
- The number of definition items for which macro variables can be specified has been increased, and the passing information setting job, which uses macro variables to pass information, has been added.
- A function that assigns a created or copied unit the attributes inherited from the upper-level unit, and a function that can permanently assign (fix) an execution user to a job have been added.
- A function that prevents jobs from being executed on unauthorized execution agents has been added.
- A function that allows users to save information about temporary change operations and to re-execute temporary change operations has been added.
- A function that automatically retries execution of a job when the executable file defined for the job terminates abnormally has been added.
- The dependent job of a judgment job can now be re-executed when the judgment job terminates normally.
- Mutually exclusive conditions and range conditions can now be specified as judgment conditions for judgment jobs.
- The Monitoring Event Log Job now can monitor the types of log data and events that were added in Windows Server 2008.
- An option that can be used when the Interval Control Job is defined as a start condition has been added to forcibly assume that the start condition is satisfied immediately after the monitoring of the start condition starts.
- The email sending job now supports a function that sends emails without using Outlook.
- SNMP traps can now be issued in Windows Server 2008.
- Processes for managing the embedded database have been improved.
- The startup type of the JP1/AJS3 Database service has been changed to **Manual** so that the JP1/AJS3 Database ClusterService service will not be created.
- An option has been added that checks the permissions of JP1 users mapped to OS users that have administrator permissions based on the JP1 permission level.
- A time period can now be specified when the ajsentry command is used to register a jobnet for fixed execution.
- Options that can be specified when the jajs\_setup or jajs\_setup\_cluster command is used to set up the embedded database have been added.
- The ajsembdbidlist and ajsembdbstatus commands can now be used to display the status of the embedded database.

D. Version Revisions

- The embedded database settings file is now generated when an embedded database is set up. If this file is specified when the ajsembdbuild command is used to build another embedded database, the other embedded database will be set up with the settings in the file.
- *Execution user name* and *Execution time* have been added as extended attributes that can be output for JP1 events (specific information) so that JP1 events indicating job termination can be used as job operating information.
- JP1/AJS3 Manager can now link with JP1/DH AJE, and DHAJEW has been added as a standard custom job.
- The following OS is no longer supported:
  - Solaris 9(SPARC)
  - Linux 5 (x86)
  - Linux 5 (AMD/Intel 64)
  - Linux 5 (IPF)
- The following OS is supported:
  - Windows Server 2012
  - Solaris 11(SPARC)
  - Linux 6 (x86)
  - Linux 6 (x64)

# (2) JP1/AJS3 - Agent

- IPv6 addresses are now supported for communication.
- The AJS administrator, with JP1/AJS3 access permissions that are almost equivalent to superuser permissions, can now be designated when JP1/AJS3 is installed as a new installation.
- An option that can be used when the Interval Control Job is defined as a start condition has been added to forcibly assume that the condition is satisfied when the monitoring of the start condition starts.
- The email sending job now supports a function that sends emails without using Outlook.
- SNMP traps can now be issued in Windows Server 2008.
- The Monitoring Event Log Job now can monitor the types of log data and events that were added in Windows Server 2008.
- The following OS is no longer supported:
  - Solaris 9(SPARC)
  - Linux 5 (x86)
  - Linux 5 (AMD/Intel 64)
  - Linux 5 (IPF)
- The following OS is supported:
  - Windows Server 2012
  - Solaris 11(SPARC)
  - Linux 6 (x86)
  - Linux 6 (x64)

D. Version Revisions

# (3) JP1/AJS3 - View

- The Wait Conditions Settings List window and the Wait Conditions Statuses window have been added as means for managing units with wait conditions and units whose end is being waited for.
- A dialog box which lists temporary change operations that have already been performed and which allows users to re-execute (re-apply) specific temporary change operations has been added.
- Retry information can now be displayed in the following windows:
  - Daily Schedule window
  - Monthly Schedule window
  - Jobnet Monitor window
  - Detailed Schedule dialog box
  - Monitor Details [icon-name] dialog box
- Whether retries are enabled is now displayed in the list area of the Jobnet Editor window.
- The Jobnet Monitor window was provided with a function that grays out all relation lines and units other than the day's units (the units that were executed and are to be executed on the day).
- Specify period, Reference calendar, Waiting-target, and Execution type have been added as search conditions that can be specified in the Search window.
- In the Search window, **Retry Settings** and **Retry execution** can now be specified as search conditions. In addition, the search results displayed in the Search window now include items related to automatic retry.
- The procedure for displaying the units found in the Search window in the Summary Monitor window has been simplified.
- The Display Item Setup dialog box can now be used to set the items to be displayed in the list areas of the Jobnet Editor window and the Jobnet Monitor window.
- A function that allows users to define all-at-one-time schedule rules that start execution at regular intervals, and a function that allows users to delete multiple schedule rules at one time have been added.
- Definition items related to automatic retry have been added to the detailed definitions of Unix jobs, PC jobs, QUEUE jobs, and custom jobs.
- Mutually exclusive conditions and range conditions can now be specified as judgment conditions for judgment jobs.
- The types of log data and events that were added in Windows Server 2008 can now be specified as **Log type** and **Event type** in the detailed definition of the Monitoring Event Log Job.
- The **Expire right after starting** option has been added in the detailed definition of the Interval Control Job. When the job has been defined as a start condition, this option can be used to forcibly assume that the condition is satisfied immediately after the monitoring of the start condition starts.
- An option ensuring that the job groups and planning groups displayed in the list area are initially selected when the JP1/AJS3 View window (Main window) opens has been added. In addition, an option ensuring that the nested jobnets and nested remote jobnets displayed in the map area are initially selected when the Jobnet Editor window or the Jobnet Monitor window opens has been added.
- An option has been added that displays a nested jobnet as being selected at the location at which the jobnet existed before it was moved to the upper layer in the Jobnet Editor window or the Jobnet Monitor window.
- When the **Depends on upper-level jobnet** check box is selected in the schedule settings of a nested jobnet, whether to display a confirmation message before defined schedule rules are deleted can now be selected by using an option.
- The **Start** button, which allows users to launch arbitrary programs, has been added to the Monitor Details [*custom-job-name*] dialog box.

D. Version Revisions

- Because of the user authentication function added in JP1/AJS3 Definition Assistant 09-10, specifying the JP1 user name is now mandatory for starting JP1/AJS3 Definition Assistant from JP1/AJS3 View. With this specification change, **User name** has been added as an item that can be selected from the **Replace** drop-down list in the Tool Entry dialog box.
- The following OS is supported:
  - Windows 8.1
  - Windows 8
  - Windows Server 2012
- An option for preventing the opening of multiple Jobnet Editor windows and Jobnet Monitor windows has been added.

# D.4 Revisions in 09-00

The following lists the revisions in 09-00 for each program.

# (1) JP1/AJS3 - Manager

- The standard database of JP1/AJS3 is now an embedded database.
- Functions related to an embedded database have been changed as follows:
  - The sizes of the large-scale, medium-scale, and small-scale database models have been changed.
  - The database area auto-increment function and the system log auto-increment function have been added.
  - The system log is no longer used.
  - The functions of the commands used to control an embedded database have been enhanced.
- The ISAM database is now used only for QUEUE jobs and submit jobs.
- An agent management function has been added for specifying a logical execution agent name as the destination host for a job or jobnet. Previously, users could only specify execution hosts by their real names.
- Jobs that are in the *Now queuing* status when the service is stopped are now returned to the *Wait for prev. to end* status when the service restarts (in hot-start mode), before being resubmitted.
- A jobnet release function has been added for replacing the definition of a jobnet that is registered for execution with another definition.
- The job execution control manager process (jpqman) and event/action control manager process (jpomanager) can now be started on a scheduler service basis.
- A scheduler log file can now be output for an individual scheduler service or host.
- The following functions have been enhanced:
  - The method by which the number of logs to keep is managed
  - The process by which monitored generations of jobnets with start conditions are established
  - The process by which execution generations when a start condition is established are held
- A format specification has been added to the ajsshow command for outputting the standard output file name.
- The Manager Environment Settings dialog box is no longer provided. Instead, you can use the jajs\_config command to set up the manager environment.
- The following environment setting parameters have been added:

D. Version Revisions

- FixedHostnameForAgent
- NotificationConstantRetry
- NotificationRetryInterval
- NotificationRetryCount
- ClientConnectTimeout
- A function has been added to support end delay monitoring based on how long a job takes to execute.
- The jobnet connector functionality has been enhanced to enable control of the execution order of root jobnets managed by different scheduler services.
- The definition pre-check has been enhanced so that if an invalid execution order is found in the units of the jobnet being checked, the names of the units are output to the check results file.
- The file permission check performed at execution of a Unix job has been enhanced to include checks of the access control list and secondary group settings as well as file permissions.
- A function has been added that enables event jobs to continue executing even if the JP1/AJS3 service stops on the execution host.
- A function has been added for exporting and importing the registration statuses of jobnets as registered execution-schedule information.
- Linkage with message queues on UNIX hosts (TP1/LiNK, TP1/Message Queue, MQSeries) is no longer supported.
- Windows Server 2008 has been added as platforms supported by JP1/AJS3 Manager.
- A unit called a jobnet connector which controls the execution order of root jobnets has been added.
- An option has been added to output a detailed history of user operations, such as changes to jobnet definitions, to the scheduler log.
- The ajslogprint command for extracting log entries from the scheduler log has been added.

# (2) JP1/AJS3 - Agent

- The Agent Environment Settings dialog box is no longer provided. Instead, you can use the jajs\_config command to set up the agent environment.
- Linkage with a message queue system is no longer supported.
- The following environment setting parameters have been added:
  - FixedHostnameForAgent
  - NotificationConstantRetry
  - NotificationRetryInterval
  - NotificationRetryCount
  - ClientConnectTimeout
- The file permission check performed at execution of a Unix job has been enhanced to include checks of the access control list and secondary group settings as well as file permissions.
- Linkage with message queues on UNIX hosts (TP1/LiNK, TP1/Message Queue, MQSeries) is no longer supported.
- Windows Server has been added as platforms supported by JP1/AJS3 Agent.

D. Version Revisions

# (3) JP1/AJS3 - View

- An agent management function has been added for specifying a logical execution agent name as the destination host for a job or jobnet. Previously, users could only specify execution hosts by their real names.
- A jobnet release function has been added for replacing the definition of a jobnet that is registered for execution with another definition.
- Function menus have been added to the JP1/AJS3 View window to facilitate task-oriented operation.
- The JP1/AJS3 View window (Summary Monitor window) has been added. In this window, you can view the progress of jobnets and other information.
- JP1/AJS3 View can now be started in the following modes:
  - Normal mode
    In this mode, the JP1/AJS3 View window is equipped with function menus.
  - Monitoring mode

A mode dedicated to monitoring jobs and jobnets. Only the JP1/AJS3 - View window (Summary Monitor window) is displayed.

- Compatible mode JP1/AJS3 - View operates in the same way as JP1/AJS2 - View version 8 or earlier.
- A Detailed Information area has been added to the JP1/AJS3 View window (Main window), which displays detailed information about a unit.
- The concurrent execution setting of monitored generations and the holding behavior of execution generations (produced when a start condition is satisfied) can now be selected in the detailed definition of a start condition.
- A list filter function has been added for filtering the information in a list.
- A function has been added for saving list information in CSV format.
- You can now click a button in the Daily Schedule window and Monthly Schedule window to move between days and months.
- A list area has been added to the Jobnet Editor window and Jobnet Monitor window. This area displays the jobs defined in the jobnet.
- A Search window has been added, in which you can set detailed search conditions and perform operations on units listed in the search results.
- You can now use a mouse wheel to scroll inside JP1/AJS3 View.
- A function has been added that allows you to select whether **Type** in list areas are grouped by type or displayed in detailed format.
- A function has been added for prohibiting changes to specific definition items in the Define Details dialog box.
- A function has been added for removing icons you no longer use from the icon list area in the Jobnet Editor window.
- Windows 7 has been added as a supported OS (JP1/AJS3 View 09-00-05 or later).
- A function has been added to support end delay monitoring based on how long a job takes to execute.
- The jobnet connector functionality has been enhanced to enable control of the execution order of root jobnets managed by different scheduler services.
- An option has been added to the Filter Settings dialog box so that jobnets with hold plans can be treated as jobnets in *Being held* status for filtering purposes in the Daily Schedule window and Monthly Schedule window.
- The ability to define, operate, and monitor jobnet connectors which control the execution order of root jobnets has been added.
- A function that displays the preceding and succeeding jobs of a given job or jobnet in bold has been added.

D. Version Revisions

• Support for Windows Vista has been added.

# D.5 Revisions in 08-00

The following lists the revisions in 08-00 for each program.

# (1) JP1/AJS2 - Manager

- The recommended values for the environment settings are now set during installation and setup.
- A Monitoring Files job can now monitor files larger than 2 gigabytes (large files).
- The ajsstatus command can now output the connection status of JP1/AJS2 View.
- The following commands used to control an embedded database have been added:
  - ajsembdbaddarea command (expands a database area in an embedded database)
  - ajsembdbaddlog command (expands a log area in an embedded database)
  - ajsembdbcancel command (cancels execution of a command manipulating an embedded database)
  - ajsembdboplog command (manipulates embedded database logs)
  - ajsembdbreclaim command (maintains an embedded database)
  - ajsembdbrorg command (unloads and reloads an embedded database)
  - ajsembdbrstr command (backs up and restores an embedded database)
  - ajsembdbstart command (starts an embedded database)
  - ajsembdbstatus command (monitors an embedded database)
  - ajsembdbstop command (stops an embedded database)
  - ajsembdbunset command (removes the setup of an embedded database)

With support of the ajsembdbreclaim command, the time required to reclaim free pages has been reduced.

- JP1/Performance Management Agent Option for JP1/AJS2 can now be linked with JP1/AJS2 to analyze the operating status.
- The jajs\_start command and the jajs\_start.cluster command can now check whether a process has already been started when JP1/AJS2 is started. (UNIX only)

# (2) JP1/AJS2 - Agent

- The recommended values for the environment settings are now set during installation and setup.
- A Monitoring Files job can now monitor files larger than 2 gigabytes (large files).

# (3) JP1/AJS2 - View

• Icons have been changed.

# D.6 Revisions in 07-50

The following lists the revisions in 07-50 for each program.

D. Version Revisions

Job Management Partner 1/Automatic Job Management System 3 Command Reference 1

# (1) JP1/AJS2 - Manager

- Macro variables can now be used during registration for execution to specify information to be passed.
- Judgment jobs can now perform variable judgment.
- A function has been added that suppresses jobnet executions that follow an abnormally terminated jobnet and that will be started when their start conditions are satisfied.
- A definition pre-check function has been added for conducting a final check before starting production in the production environment after the unit definitions are migrated from the development environment.
- The jpomanevreset command has been added for deleting data accumulated in the event action manager if a large amount of unprocessed data accumulated in the event action manager has caused delay. To identify the start conditions and agents that have caused this problem, the jpomanevshow command has also been added for displaying information about agents that frequently send data to the manager and the start conditions.
- A function that alleviates consumption of the Desktop heap has been added. (Windows only)
- A function has been added for specifying the maximum wait time for the scheduler service to connect to a database.
- Messages that were output to only the integrated trace log can now be output to syslog also. (UNIX only)
- The following functions have been added to the data collection tool:
  - Specifying a logical host name
  - Filtering the data to be collected
  - Adding types of data that can be collected
- Descriptions of messages have been improved.
- An urgent command has been added that can be executed if an error occurs.
- A function has been added that places limits on, for example, the size of files that can be received, to prevent a part of job processing from affecting the entire system operation.
- A function has been added that performs a synchronized write when updating event job information or the wait information file.
- The monitoring interval for linkage with MQ Series can now be specified in seconds.
- If a TCP/IP connection error occurs, the retry interval and count can now be changed.
- The policy to determine the agent hosts to which a job will be dispatched can now be specified.
- All the detailed processes of the event action function can now be stopped to terminate the agent process for the event action function if any of the detailed processes have terminated upon receiving a signal.
- Microsoft(R) Visual C++ .NET Version 2003 is now supported as a compiler for the provided code functions.
- The ajsshow command can now display the hold attribute of a jobnet or job even when the jobnet or job has already terminated.

# (2) JP1/AJS2 - Agent

- A definition pre-check function has been added for conducting a final check before starting production in the production environment after the unit definitions are migrated from the development environment.
- The following functions have been added to the data collection tool:
  - Specifying a logical host name
  - Filtering the data to be collected
  - Adding types of data that can be collected
- D. Version Revisions

- Descriptions of messages have been improved.
- The monitoring interval for linkage with MQ Series can now be specified in seconds.
- All the detailed processes of the event action function can now be stopped to terminate the agent process for the event action function if any of the detailed processes have terminated upon receiving a signal.
- A function has been added that performs a synchronized write when updating event job information or the wait information file.

# (3) JP1/AJS2 - View

- Macro variables can now be used during registration for execution to specify information to be passed.
- Judgment jobs can now perform variable judgment.
- A function has been added that suppresses the jobnet executions that follow an abnormally terminated jobnet and that will be started when their start conditions are satisfied.
- The Add, Change Time, Execute Immediately, and Release Change options have been added to the JP1/AJS2 View window.
- The Paste (Extension) menu command has been added for copying units and relationship lines at the same time.
- Relationship lines can now be drawn from multiple units to a single job network element.
- When opening the Jobnet Monitor window of JP1/AJS2 View from JP1/AJS2 Console View, if there is already an activated JP1/AJS2 View, the window can now be opened in JP1/AJS2 View.
- The following functions have been added to the data collection tool:
  - Specifying a logical host name
  - Filtering the data to be collected
  - Adding types of data that can be collected
- Descriptions of messages have been improved.
- The maximum log file size for JP1/AJS2 View has been increased.
- The maximum log file size for JP1/AJS2 Console View has been increased.
- In JP1/AJS2 View, log information that previously was output many times in small units can now be output at one time.
- In JP1/AJS2 Console View, log information that previously was output many times in small units can now be output at one time.
- In the Windows version of JP1/AJS2 View, Help has been added to the Start menu.

# D.7 Revisions in 07-00

The following lists the revisions in 07-00 for each program.

# (1) About JP1/AJS2 - Manager

- A function was provided to temporarily compress JP1/AJS2 and reconfigure the ISAM database (scheduler database and job execution environment database) without stopping active applications.
- ISAM databases can now be reconfigured in parallel.
- The number of scheduler services that can be added has been changed from 9 to 20.

D. Version Revisions

- An option was added for outputting the execution timings of reference commands, such as ajsshow and the history of service processing requests from operation commands, as the operation log to the scheduler log.
- The number of logs to keep for a jobnet has been changed from 99 to 999.
- For a cold start of JP1/AJS2, the job execution environment database is deleted so that the startup time of JP1/AJS2 becomes shorter.
- A function is now supported for validating the user profile information in the environment setup for job execution control.
- By setting the number of days that job information is held to 0 days, jobs that terminate abnormally can now be handled by changing the save time.
- The JP1/AJS2 job information deletion can now be suppressed.
- Any event job can now be used in a DNS environment (host name in the FQDN format).
- Event job reception information can now be inherited as macro variables as the parameters of standard jobs and action jobs without having to pay attention to double quotation marks in the inherited information.
- The extended regular expression supported by JP1/Base can now be used in Receive event job monitoring jobs, Monitoring log files jobs, and Monitoring event log jobs according to the JP1/Base settings.
- A function to execute queueless jobs is now supported.

# (2) About JP1/AJS2 - Agent

- Event job reception information can now be inherited as macro variables of the parameters of standard jobs and action jobs without being aware of double quotation marks in the inherited information.
- A function for executing queueless jobs was supported.
- When JP1/AJS2 Agent starts, it no longer accesses the authentication server (07-00-/C or later).

# (3) About JP1/AJS2 - View

- A user profile can now be used to set the JP1/AJS2 View environment.
- A line feed character can now be inserted at any point in a unit name displayed in the map area of the Jobnet Editor and Jobnet Monitor windows.
- The default values in the dialog box can now be changed.
- Display items (columns) in the following locations can now be selected.
  - List area in the JP1/AJS2 View window
  - Execution result list in the Daily Schedule window
  - Execution result list in the Monthly Schedule window

This appendix provides reference information, including various conventions, for this manual.

# E.1 Related publications

This manual is part of a related set of manuals. The manuals in the set are listed below (with the manual numbers):

About JP1/AJS:

- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Overview (3021-3-318(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide (3021-3-319(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide (3021-3-320(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1 (3021-3-321(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2 (3021-3-322(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Administration Guide (3021-3-323(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Troubleshooting (3021-3-324(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Operator's Guide (3021-3-325(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Command Reference 2 (3021-3-327(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Linkage Guide (3021-3-328(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Messages 1 (3021-3-329(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Messages 2 (3021-3-330(E))
- Job Management Partner 1/Automatic Job Management System 2 Description (3020-3-K21(E))
- Job Management Partner 1/Automatic Job Management System 2 Planning and Administration Guide (3020-3-K22(E))
- Job Management Partner 1/Automatic Job Management System 2 Setup Guide (3020-3-K23(E))
- Job Management Partner 1/Automatic Job Management System 2 Operator's Guide (3020-3-K24(E))
- Job Management Partner 1/Automatic Job Management System 2 Command Reference (3020-3-K25(E))
- Job Management Partner 1/Automatic Job Management System 2 Linkage Guide (3020-3-K27(E))
- Job Management Partner 1/Automatic Job Management System 2 Messages (3020-3-K28(E))

- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Print Option Description, User's Guide (3021-3-331(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 Definition Assistant Description, Operator's Guide and Reference (3021-3-332(E))
- Job Management Partner 1/Automatic Job Management System 3 Web Operation Assistant Description, Operator's Guide and Reference (3020-3-S18(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 for Enterprise Applications Description, User's Guide and Reference (3021-3-333(E))

### About JP1:

- Job Management Partner 1 Version 10 Job Management Partner 1/Base User's Guide (3021-3-301(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Base Messages (3021-3-302(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Base Function Reference (3021-3-303(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Quick Reference (3021-3-304(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Overview and System Design Guide (3021-3-305(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Configuration Guide (3021-3-306(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Administration Guide (3021-3-307(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager GUI Reference (3021-3-308(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Command and Definition File Reference (3021-3-309(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Integrated Management Manager Messages (3021-3-310(E))
- Job Management Partner 1 Version 10 Job Management Partner 1/Script Description and Reference (3021-3-135(E)), for Windows Systems
- Job Management Partner 1 Version 10 Job Management Partner 1/File Transmission Server/FTP Description, Reference, and Operator's Guide (3021-3-334(E)), for Windows systems
- Job Management Partner 1 Version 10 Job Management Partner 1/File Transmission Server/FTP Description, Reference, and Operator's Guide (3021-3-335(E)), for UNIX systems
- Job Management Partner 1 Version 10 Job Management Partner 1/Data Highway Automatic Job Executor Operation manual (3021-3-336(E))
- Job Management Partner 1/Software Distribution Description and Planning Guide (3020-3-S79(E)), for Windows systems
- Job Management Partner 1/Software Distribution Setup Guide (3020-3-S80(E)), for Windows systems
- Job Management Partner 1/Software Distribution System Administrator's Guide Volume 1 (3020-3-S81(E)), for Windows systems
- Job Management Partner 1/Software Distribution System Administrator's Guide Volume 2 (3020-3-S82(E)), for Windows systems
- Job Management Partner 1/Software Distribution Automatic Installation Tool Description and Reference (3020-3-S83(E)), for Windows systems

E. Reference Material for This Manual

- Job Management Partner 1/Software Distribution Administrator Kit Description and Operator's Guide (3020-3-S84(E))
- Job Management Partner 1/Software Distribution Client Description and User's Guide (3020-3-S85(E)), for UNIX systems
- Job Management Partner 1/Software Distribution SubManager Description and Administrator's Guide (3020-3-L42(E)), for UNIX systems
- Job Management Partner 1/Software Distribution Manager Description and Administrator's Guide (3000-3-841(E))
- Job Management Partner 1/Consolidated Management 2/Extensible SNMP Agent Description, Operator's Guide and Reference (3020-3-L04(E)), for UNIX systems
- Job Management Partner 1/NQSEXEC System Administrator's Guide (3020-3-F30(E))
- Job Management Partner 1/Open Job Entry Description, User's Guide and Reference (6190-3-365(E)), for VOS3 systems
- Job Management Partner 1/Open Job Entry Description, User's Guide and Reference (9000-3-365(E)), for MVS systems
- Job Management Partner 1/Open Job Entry Description, User's Guide and Reference (9000-3-366(E)), for OSIV/ MSP systems
- Job Management Partner 1/Open Job Entry for Midrange Computer Description and User's Guide (9000-3-367(E))

# E.2 Conventions: Abbreviations for product names

This manual uses the following abbreviations for product names:

Abbreviation	Full name or meaning	
JP1/AJS3	JP1/AJS3 - Manager	Job Management Partner 1/Automatic Job Management System 3 - Manager
	JP1/AJS3 - Agent	Job Management Partner 1/Automatic Job Management System 3 - Agent
	JP1/AJS3 - View	Job Management Partner 1/Automatic Job Management System 3 - View
JP1/AJS2	JP1/AJS2 - Manager	Job Management Partner 1/Automatic Job Management System 2 - Manager
	JP1/AJS2 - Agent	Job Management Partner 1/Automatic Job Management System 2 - Agent
	JP1/AJS2 - View	Job Management Partner 1/Automatic Job Management System 2 - View
JP1/AJS2 - Advanced Manager	Job Management Partner 1/Automatic Job Management System 2 - Advanced Manager <sup>#</sup>	
JP1/AJS2 - Client Toolkit	Job Management Partner 1/Automatic Job Management System 2 - Client Toolkit <sup>#</sup>	
JP1/AJS3 - Definition Assistant	Job Management Partner 1/Automatic Job Management System 3 - Definition Assistant	
JP1/AJS3 for Enterprise Applications		Job Management Partner 1/Automatic Job Management System 3 for Enterprise Applications

Abbreviation	Full name or meaning	
JP1/AJS3 - Web Operation Assistant	Job Management Partner 1/Automatic Job Management System 3 - Web Operation Assistant	
JP1/DH - AJE	Job Management Partner 1/Data Highway - Automatic Job Executor	
JP1/DH - Server	Job Management Partner 1/Data Highway - Server	
JP1/FTP		Job Management Partner 1/File Transmission Server/ FTP
JP1/IM	JP1/IM - Manager	Job Management Partner 1/Integrated Management - Manager
	JP1/IM - View	Job Management Partner 1/Integrated Management - View
	JP1/IM - Central Console	Job Management Partner 1/Integrated Manager - Central Console <sup>#</sup>
	JP1/IM - Central Scope	Job Management Partner 1/Integrated Manager - Central Scope <sup>#</sup>
JP1/OJE		Job Management Partner 1/Open Job Entry
JP1/OJE for Midrange Computer	Job Management Partner 1/Open Job Entry for Midrange Computer	
JP1/OJE for VOS3		VOS3 Job Management Partner 1/Open Job Entry
JP1/SES		Job Management Partner 1/System Event Service
NNM	HP NNM	HP Network Node Manager Software version 7.5 or earlier
		HP Network Node Manager Software Starter Edition version 7.5 or earlier
AIX		AIX 5L 5.3
		AIX V6.1
		AIX V7.1
HP-UX	HP-UX (IPF)	HP-UX 11i V2(IPF)
		HP-UX 11i V3(IPF)
Linux	Linux 6.1 (x86)	Red Hat Enterprise Linux(R) Server 6.1 (32-bit x86)
	Linux 6.1 (x64)	Red Hat Enterprise Linux(R) Server 6.1 (64-bit x86_64)
	Linux 5.1 (x86)	Red Hat Enterprise Linux(R) 5.1 (x86)
	Linux 5.1 (AMD/Intel 64)	Red Hat Enterprise Linux(R) 5.1 (AMD/Intel 64)
SAP BW	SAP Business Information Warehouse	
SAP R/3	SAP R/3(R)	
Solaris	Solaris 10(SPARC)	
	Solaris 11(SPARC)	

# Version 7

- In this manual, JP1/AJS is sometimes used generically, referring to JP1/AJS3 and JP1/AJS2.
- UNIX is sometimes used generically, referring to HP-UX, Solaris, AIX and Linux.

# E.3 Conventions: Acronyms

This manual also uses the following acronyms:

Acronym	Full name or meaning
ACL	Access Control List
DB	Database
DBMS	Database Management System
DNS	Domain Name System
EUC	Extended UNIX Code
FQDN	Fully Qualified Domain Name
FTP	File Transfer Protocol
GUI	Graphical User Interface
IME	Input Method Editor
IPF	Itanium(R) Processor Family
ISAM	Indexed Sequential Access Method
LAN	Local Area Network
MAPI	Messaging Application Programming Interface
MIB	Management Information Base
MIME	Multipurpose Internet Mail Extensions
NAT	Network Address Translator
NFS	Network File System
NIC	Network Interface Card
OS	Operating System
PDF	Portable Document Format
RDB	Relational Database
SMTP	Simple Mail Transfer Protocol
SNMP	Simple Network Management Protocol
SUP	Service Using Program
TCP/IP	Transmission Control Protocol/Internet Protocol
UAC	User Account Control
UNC	Universal Naming Convention
WAN	Wide Area Network
WOW64	Windows On Windows 64

Acronym	Full name or meaning
WSDL	Web Services Description Language

# E.4 Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1,024 bytes.
- 1 MB (megabyte) is 1,024<sup>2</sup> bytes.
- 1 GB (gigabyte) is 1,024<sup>3</sup> bytes.
- 1 TB (terabyte) is 1,024<sup>4</sup> bytes.

# E.5 Conventions: Meaning of "directory" and "folder"

As a general rule, Windows folder names are used in this manual if they are identical to UNIX directory names.

# E.6 Conventions: Meaning of "member of the Administrators group"

The term *member of the Administrators group* in this manual refers to a user who is a member of the Administrators group on the local PC only. The privileges of local users, domain users, and Active Directory users are no different as long as these users are members of the Administrators group on the local PC.

# E.7 Default installation folders of JP1/AJS3 for Windows

The default installation folders of JP1/AJS3 for Windows are as follows:

Default installation folders of JP1/AJS3 - Manager:

```
system-drive\Program Files<sup>#</sup>\HITACHI\JP1AJS2
```

and

*system-drive*\Program Files<sup>#</sup>\HITACHI\JP1AJS2CM

Default installation folder of JP1/AJS3 - Agent:

*system-drive*\Program Files<sup>#</sup>\HITACHI\JP1AJS2

Default installation folder of JP1/AJS3 - View:

system-drive\Program Files<sup>#</sup>\HITACHI\JP1AJS2V

#

For 64-bit versions of Windows, replace Program Files with Program Files (x86).

# E.8 About the Start menu in Windows

In Windows Server 2012 or later, instead of using the Start menu, perform the operation as described below.

In Windows 8 or Windows Server 2012 (except Windows Server 2012 R2):

Right-click on the Start screen to display the All Apps screen.

In Windows 8.1 or Windows Server 2012 R2:

Click the down-pointing arrow icon to display the Apps screen.

# E.9 Online manual

JP1/AJS3 - View comes with an online manual that you can read in browsers.

The HTML manual contains the same content as the *Job Management Partner 1/Automatic Job Management System* 3 Operator's Guide.

In JP1/AJS3 - View, you can view the manual by choosing **Help** and then **Contents**. You can also press the **F1** key to view the manual contents. Your Web browser must be associated with a file that has the extension htm; otherwise, the online manual will not be displayed correctly. If this happens, associate the htm file with the Web browser.

Cautionary note

Depending on the OS settings, the online manual might appear in the active window of the browser when you launch the manual from the **Start** menu.

# E.10 Regular expressions available in JP1/AJS3

Regular expressions can be used in some items in dialog boxes and commands. For details about regular expressions in Windows, see the *Job Management Partner 1/Base User's Guide*. For details about regular expressions in UNIX, see your UNIX documentation.

The regular expressions that you can use when executing an event job on a Windows host depend on the JP1/Base settings. For details on setting regular expressions for event job execution, see the explanation about extending the available regular expressions in the *Job Management Partner 1/Base User's Guide*.

Searching may take a long time if you often use the regular expression .\* (which means match any character or characters). In long messages, use .\* only where necessary. In UNIX, you can use  $[^{^{^{^{^{^{^{^{^{^{^{^{*}}}}}}}}}]*$  (repeat characters other than space characters) instead of .\* when you want to find a match other than space characters. Using  $[^{^{^{^{^{^{*}}}}}]*$  reduces the search time.

# E.11 About the 3rd level and 4th level Kanji characters added in JIS 2004 (JIS X 0213:2004)

JP1/AJS3 cannot use the 3rd level and 4th level Kanji characters added in JIS 2004. If these characters are used, operation might not be performed correctly.

E. Reference Material for This Manual

# E.12 About NNM linkage

JP1/AJS3 supports linkage with the following products:

- HP Network Node Manager Software version 6 or earlier
- HP Network Node Manager Starter Edition Software version 7.5 or earlier

In this manual, these products are indicated as HP NNM.

Note that linkage with the following products is not supported:

• HP Network Node Manager i Software v8.10

E. Reference Material for This Manual

# F. Glossary

#### abnormal end

A jobnet ends abnormally if one of the processes defined in the jobnet fails to execute properly. The jobnet is interrupted at that point and subsequent processes are not executed.

A job ends abnormally if it fails to execute properly. The process is interrupted at that point.

The embedded database system ends abnormally when an error causes its status to change from active to stopped or paused, without any intervention by the user. For details, see *D. How the Embedded Database Operates* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

# abnormal threshold

A value that is compared with a job's return code to evaluate whether the job ended normally or abnormally.

# action job

A job that sends email, or sends events reporting the system status to JP1/ IM or the HP NNM.

# agent host

A host that executes jobs on request from a manager host. JP1/AJS3 - Agent must be installed on the agent host, or since JP1/AJS3 - Manager also provides JP1/AJS3 - Agent functionality, JP1/AJS3 - Manager might be installed on the agent host.

The agent host executes the job on receipt of a job request from the manager host. At completion of the job, the agent host receives the execution result (return value) of the executable file and forwards it to the manager host.

# AJS3 unit monitored object

An object for monitoring the status of root jobnets in JP1/AJS3. By defining the monitoring conditions in this object, you can then switch to monitoring mode and monitor the root jobnets.

# AJS administrator

A user that has access permissions almost equivalent to superuser permissions for JP1/AJS3. Only one of the JP1/Base administrators in the JP1 administrators group can be designated as the AJS administrator. An ordinary user designated as the AJS administrator can perform such JP1/AJS3 system management operations as specifying the environment settings and starting and stopping services.

# AJSPATH

An environment variable for defining the paths used by JP1/AJS3. When this environment variable is defined, you do not need to specify the full path when specifying a jobnet name in a command.

# automatic retry

A function that automatically retries execution of a job if the executable file defined for the job terminates abnormally. Because jobs that have terminated abnormally due to a temporary error might be able to run normally when automatically retried, this function can improve the system availability.

# backup box

A directory or a folder for storing backup files.

# backup file

A file containing the units defined in JP1/AJS3.

# base day

A date specified as the starting day of the month in the calendar information.

# base time

The time that marks when a day ends and the next day begins in a JP1/AJS3 system. For example, if 8:00 a.m. is set as the base time, the previous day is regarded as lasting until 7:59 a.m.

# calendar information

Information about open days and closed days for jobnet execution. You can define calendar information separately for each job group. The calendar information specifies the days on which jobnets in the job group can and cannot be executed. (When the processing cycle falls on a closed day, the jobnet can be executed on another day if a substitute schedule is defined.) For open days, you can specify the base day, base month, and base time.

# closed day

A day on which jobnets are not executed. However, if **Execute without shift** is specified, the jobnet will be executed on that closed day.

# cluster system

A system configured as multiple linked server systems, designed to continue operation even if one system fails. If a failure occurs in the server currently executing applications (primary node), the other standby server (secondary node) takes over and continues processing the applications. Therefore, a cluster system is also referred to as a *node switching system*.

The term *cluster system* can also mean load balancing based on parallel processing. In this manual, however, *cluster system* refers only to node-switching functionality for preventing interruption of application processing.

# common user profile

A file containing the environment settings for JP1/AJS3 - View, accessible to all JP1 users. The system administrator saves the common user profile in JP1/AJS3 - Manager. JP1 users can download this file, enabling the same JP1/AJS3 - View environment to be set for all JP1 users.

A common user profile is useful when a large number of JP1 users will be using JP1/AJS3 - View in the same environment.

# compatible ISAM configuration

A system configuration in which JP1/AJS3 information is managed exclusively by the ISAM database.

This configuration is offered to help users migrate from JP1/AJS2 version 8 or earlier. It can restrict to the same degree as in previous versions, the use of resources such as hard disk and memory. However, from version 9 only a subset of the new features offered is provided.

# correlation ID

Information for identifying sent and received messages. The correlation ID is received in the character code set specified by the sender.

# custom job

A predefined job for executing a task with a specific purpose. JP1/AJS3 provides standard custom jobs such as file transfer and job requests to a mainframe. In addition, you can register your own frequently used jobs as custom jobs. When registering a custom job, you can represent it by creating an icon with a special shape and design, and you can create a dialog box for entering job information.

To use a custom job, the requisite program for the job must be installed.

#### Daily Schedule window

A window that displays each day's execution schedules, execution status, and execution results.

#### data collection tool

These tools are provided by JP1 for batch collection of log data and other information required to investigate problems. In addition to problems in JP1/AJS3, problems might occur in the OS or user programs or as the result of operational mistakes. The data collection tools collect JP1/AJS3 log data and other information, such as OS log data, at the same time.

#### default queue

A queue created in an agent host for executing jobs. You must always create a default queue.

When you submit a job for execution, if you specify an agent host name as the destination, the job will be submitted to the default queue of the specified agent host.

#### dependent job

A job executed when the judgment result of a judgment job is true.

#### dependent jobnet

A jobnet executed when the judgment result of a judgment job is true.

#### disaster recovery

Disaster recovery refers to measures that are taken when there are unexpected occurrences such as system shutdown due to a large-scale disaster.

JP1/AJS3 supports a disaster recovery operation that copies JP1/AJS3 data on the shared disk to a shared disk at a remote site. If the JP1/AJS3 system fails because of an event such as a disaster, the JP1/AJS3 system at the remote site can continue operation by using the copied data. The disk copy and mirroring functionality of hardware is used to copy data between shared disks.

#### embedded database

The standard database of JP1/AJS3. An embedded database offers high reliability, and is well suited to large-scale systems that handle large quantities of information.

# embedded database administrator (database administrator)

A user authorized to assign and cancel various permissions for an embedded database (a user with DBA permissions).

Database administrators are managed within an embedded database.

#### embedded database operation commands

A generic term for commands whose name begins with ajsembdb.

# embedded database service

A service that provides the environment for using the embedded database in Windows. This service must be started before you can use the embedded database. The name of the embedded database service is JP1/AJS3 Database *setup-identifier*.

# embedded database system administrator

The owner of an embedded database practical directory and embedded database file system areas (data area and system area). The embedded database system administrator can execute commands for an embedded database.

The OS manages embedded database system administrators.

#### end with warning

A status indicating that a jobnet finished, but some of the processes defined in the jobnet were executed incorrectly. The jobnet continues to the end without interruption.

This ending method is used when an error is not so serious as to terminate the jobnet.

### environment setting parameter

A parameter for defining the information required to operate JP1/AJS3, written in an environment settings file. With these parameters, you can specify the directory in which information about JP1/AJS3 units is stored, whether to output syslog messages, and other such preferences.

#### environment settings file

A file containing the settings required to operate JP1/AJS3, such as the scheduler service environment and job execution environment.

#### event

A specific event, such as email reception or file update, that occurred in the system. Events can be used to start a job or jobnet, and can be monitored using an event job.

#### event job

A job that monitors specific events occurring in the system. When an event job is initiated, it starts monitoring for file updates, incoming messages, or other specified events.

#### execution agent

The logical name of an agent host that executes jobs or jobnets. Based on the agent information defined in the manager host, the manager maps the execution agent specified in the job or jobnet to the physical host name of the agent host, and distributes the job or jobnet accordingly.

#### execution agent group

A group of execution agents configured to realize load distribution. The manager distributes jobs among the execution agents according to their assigned priorities.

#### execution agent restriction

A function that suppresses execution of jobs on an execution agent that the administrator has not permitted to execute the jobs. The execution agents permitted to execute jobs can be set for each unit.

When the execution agent profile is enabled, this function checks for whether the execution agent is permitted to execute jobs at the following times:

- When a unit is defined in JP1/AJS3 View
- When the ajschkdef command is used to conduct a definition pre-check
- When a job is executed

#### execution ID

A number assigned to an execution schedule of the uppermost jobnet.

#### execution-locked resource

A means of preventing multiple jobs from executing at the same time, by specifying the same resource name (execution-locked resource name) for each job.

#### fixed execution registration

A method of registering a jobnet so that it starts and runs at a predetermined date and time calculated by the system from schedule definitions.

#### fixed schedule

A schedule set by absolute times when a jobnet is registered for fixed execution.

# HP NNM

A suite of integrated network management tools from Hewlett-Packard Co. for managing network configuration, performance, and failures.

# immediate execution registration

A method for starting and processing a jobnet immediately after registering it for execution.

### ISAM database

The database that manages the execution environment for QUEUE jobs and submit jobs. Data is indexed using the Indexed Sequential Access Method (ISAM) and is managed in the database. The ISAM database is provided as standard with JP1/Base.

# job

A group of commands, shell scripts, or Windows executable files.

# job execution environment

A job execution environment consists of a JP1/AJS3 manager and agents.

The job execution environment for the manager is used to manage the definition information for execution agents (such as the maximum number of concurrently executable jobs and job transfer restriction status), job distribution method, and job execution results.

The job execution environment for the agent is used mainly to manage how a job is executed.

These job execution environments are managed by using a database and environment setting parameters.

When QUEUE jobs and submit jobs are used, the ISAM database and environment setting parameters are used as the job execution environment for the QUEUE jobs and submit jobs.

Note that queueless jobs are managed in the queueless job execution environment.

### job group

A folder for classifying and managing jobnets.

### job network element

The generic term for these elements is unit.

# jobnet

A set of jobs associated in execution order. When a jobnet is executed, the jobs in the jobnet are automatically executed in their predetermined order.

### jobnet connector

A unit for controlling the execution order of root jobnets. A jobnet connector establishes connections between root jobnets and controls their execution order by having connected generations wait for their counterparts to start or finish.

#### Jobnet Editor window

A window in which you can create new jobnets or edit existing jobnets.

# Jobnet Monitor window

A window that displays the execution status or detailed execution results of jobnets or jobs. You can manipulate jobnets or jobs in this window.

# JP1 event

Event information that is reported to JP1/Base when an event occurs in the system. JP1 events are reported to other systems via JP1/Base.

# JP1 permission level

A name that indicates the operations that a JP1 user is allowed to perform on management targets (resources) defined in JP1/AJS3, including applications and events. Use JP1/Base to define JP1 permission levels.

#### JP1 resource group

A name given to a specific JP1/AJS3 unit for controlling access by JP1 users to that unit.

#### JP1 user

A user designation for using JP1/AJS3 or JP1/IM - Manager. Each JP1 user is registered in the authentication server, which controls the user's access to management targets (resources).

# JP1/AJS3 - Definition Assistant

This program allows you to register a large amount of JP1/AJS3 definition information edited using an Excel template into a manager host, or to retrieve JP1/AJS3 definition information from a manager host to an Excel template. The Excel templates provided by JP1/AJS3 - Definition Assistant are called *definition management templates*. With a definition management template in the spreadsheet format, you can enter or edit definition information efficiently by using automatic filling, automatic filtering, and other Excel functionalities.

# JP1/AJS3 - Print Option

This program allows you to display or print jobnet or schedule information formatted as needed (for example, as jobnet definition information, an execution schedule table, or an execution result confirmation table).

You can also output jobnet or schedule information in CSV format so that you can edit the information.

# JP1/AJS3 Console Agent

A JP1/AJS3 component that regularly monitors the status of objects (root jobnets) on the local host, specified in JP1/AJS3 Console Manager. Any change in status is notified to JP1/AJS3 Console Manager.

# JP1/AJS3 Console Manager

A JP1/AJS3 component that stores definitions about monitored objects defined in JP1/AJS3 Console View, and gets status information about monitored objects by issuing requests to JP1/AJS3 Console Agent.

# JP1/AJS3 Console View

A JP1/AJS3 component that allows you to define objects to be monitored, using a graphical user interface. The definitions are stored in JP1/AJS3 Console Manager. Using JP1/AJS3 Console View, you can view and monitor the status of target objects notified by JP1/AJS3 Console Agent to JP1/AJS3 Console Manager. You need to log in to JP1/AJS3 Console Manager before using JP1/AJS3 Console View.

# JP1/AJS3 for Enterprise Applications

A program that allows you to control jobs in an R/3 system from another system. You can submit, delete, and monitor R/3 jobs.

R/3 jobs can be executed automatically from JP1/AJS3 if you register them as custom jobs for JP1/AJS3 for Enterprise Applications when you define a JP1/AJS3 jobnet.

JP1/AJS3 for Enterprise Applications is the successor to JP1/Application Manager for R/3.

# JP1/Base

A program that provides the event service function. JP1/Base allows you to control the order in which services start, and it lets you send and receive JP1 events. JP1/Base is a prerequisite program for JP1/IM and JP1/AJS3. When JP1/IM is deployed in a system with JP1/AJS3, JP1/Base provides functionality for restricting operations by JP1 users.

# JP1/DH - AJE

A program that automatically sends data to and receives data from JP1/DH - Server.

# JP1/FTP

A program for performing file transfer tasks efficiently, including file transfer/reception linked to application execution, scheduled file transfer, and automated program execution following file reception. JP1/FTP supports monitoring of transfer status, enhancing file transfer reliability.

# JP1/IM

A program for centrally monitoring a distributed system. Using the windows in JP1/IM - View, the system administrator can monitor JP1 events, which provide information about job execution status or problems in the distributed system.

# JP1/NQSEXEC

A program for executing routine batch processing on a distributed system and for running batch jobs efficiently.

# JP1/OJE for Midrange Computer

A program for submitting batch jobs to AS/400 from a Windows or UNIX host, or for submitting batch jobs from AS/400 to a Windows or UNIX host.

# JP1/OJE for VOS3

A program that links with JP1/AJS3 for executing and monitoring batch jobs between a Windows or UNIX system and a mainframe (VOS3).

# JP1/Script

A program for creating and executing scripts (batch files) that control jobs on Windows. Job operation can be automated by linking JP1/Script with JP1/AJS3.

# JP1/Software Distribution

A general term for a system that distributes software and manages clients using batch operations over a network.

By linking with JP1/AJS3 using the JP1/Software Distribution command interface, the user can automate software distribution and other tasks.

# judgment job

A job that executes a dependent unit if the judgment result of a specified condition is true.

# judgment value

A value for evaluating whether a job ended normally or abnormally.

#### kill

To forcibly terminate a unit being executed.

When the root jobnet is killed, all the jobs being executed are killed and the jobnets are terminated.

# list file

A file containing a list of extracts from sent and received mail.

# logical host

A logical server that provides the JP1 execution environment for running a cluster system. If a failure occurs on the primary node, the logical host is switched to the secondary node.

Each logical host has a unique IP address. At failover, the secondary node inherits the IP address. Thus, if the physical server fails, clients can access the secondary node using the same IP address. To the clients, it appears that one server is operating continuously.

# macro variable

A variable used to pass information from one job to another job during execution.

A macro variable name and passing information (or for an event job, a passing information name) are specified during unit definition. A macro variable can be used during job execution by specifying the name of the macro variable in the succeeding job.

# macro variable name

A character string in ?AJS2*xxxx*? format that indicates the name of a macro variable. If a macro variable name is specified during the definition of a unit, the macro variable set in the preceding job can be used during job execution.

### mail filtering application

A program or a shell script that converts email formats.

A mail filtering application is required to convert the character set when exchanging email in formats other than RFC822.

#### mail receipt parameter file

A file containing the mail receipt monitoring parameters defined by the user. The file extension is .prm. This file is created automatically when the user defines a Receive Email Event job.

#### mail send parameter file

A file containing the mail send parameters defined by the user. The file extension is .prm. This file is created automatically when the user defines a Send Email Action job.

#### manager host

A host that manages jobnet definitions and schedule information in a database, and requests agent hosts to execute jobs. You must install JP1/AJS3 - Manager on the manager host.

The manager host creates jobnet execution schedules from the defined schedule information. At jobnet run time, the manager host starts the executable files defined as jobs, forwards the job definitions to an agent host, and requests the agent host to execute the jobs. When execution completes, the execution result is received by the agent host and the database is updated. Based on the updated information, the manager host executes a succeeding job or schedules the next execution of the jobnet.

#### manager job group

A job group for monitoring JP1/AJS3 - Manager applications from another JP1/AJS3 - Manager.

#### manager jobnet

A jobnet for monitoring JP1/AJS3 - Manager applications from another JP1/AJS3 - Manager.

#### MAPI (Messaging Application Programming Interface)

The standard messaging API for Windows.

#### max. shiftable days

A set number of days within which to shift the next scheduled execution date when the recalculated date falls on a closed day.

# maximum number of concurrently executable jobs

The maximum number of jobs that can be executed concurrently.

#### message ID

One item in an MQSeries message descriptor. Message IDs are stored in the character set specified by the sender. They can be used as storage locations to help identify messages.

# MIME (Multipurpose Internet Mail Extensions)

An extended SMTP function used for sending and receiving non-ASCII data.

MIME specifies various procedures, such as how data is to be transmitted between email systems, and the format of control messages for email transfer.

#### Monthly Schedule window

A window that displays each month's execution schedules and execution results.

#### nested jobnet

A jobnet defined within another jobnet.

#### node switching system

See cluster system.

#### normal end

A normal end of a jobnet occurs when all the processes defined in the jobnet have executed correctly and the jobnet has completed.

A normal end of a job occurs when the job has executed correctly.

#### open day

A day when jobnets run.

#### passing information

Values specified for macro variables during registration for execution, event IDs, event issuance dates, and other information (values) that is dynamically set in macro variables and passed to succeeding jobs.

#### passing information name

A variable name indicating the event information to be received by an event job.

Variable names that can be used for this purpose include EVID (event ID) and EVDATE (event issuance date). These variable names are specified during the definition of an event job.

#### physical host

An environment unique to each of the servers (nodes) in a cluster system. When a secondary node takes over from the primary node, the environment of the physical host remains unchanged and is not inherited by the other server.

# planned execution registration

A method of registering a jobnet so that it starts and executes according to schedule definitions.

# planning group

A unit for switching execution among multiple root jobnets in a planned manner. Directly under a planning group, you can create a number of root jobnets, each defined differently and with differing execution schedules. This enables the root jobnets to be executed automatically in turn, according to the set schedules.

#### preceding job

A job executed immediately before another job or jobnet.

# preceding jobnet

A jobnet executed immediately before another job or jobnet.

### processing cycle

The interval between one execution start date and the next execution start date of a jobnet. By defining a processing cycle, you can execute a jobnet at regular intervals.

#### queue

An area for temporarily keeping jobs registered for execution. Jobs are submitted to the queue in order of registration, and are sequentially transferred for execution to the agent connected to that queue.

The queue controls the number of jobs that the agent executes concurrently, thereby preventing any degradation in performance caused by a large number of jobs being executed at the same time.

#### queueless job

A job transferred directly from the manager to an agent host for execution, without using a queue. Queueless jobs simplify processing because they are not managed in a queue by the job execution control. As a result, they offer better performance than ordinary queued jobs, allowing more jobs to be executed within a given period of time. However, job execution control functions such as execution agent names and execution agent groups are not available with queueless jobs.

You can define PC jobs and Unix jobs in a jobnet as queueless jobs by specifying **Queueless Agent** as the execution service.

Unless otherwise indicated, the descriptions in this manual apply to jobs for which **Standard** is specified as the execution service.

#### queueless job execution environment

A queueless job execution environment consists of execution environments for the JP1/AJS3 manager (scheduler service and queueless file transfer service) and queueless agents (queueless agent services). The execution of queueless jobs is managed by using the environment setting parameters for the job execution environment.

Note that the job execution environment must be set up by using the ajsqlsetup command before environment setting parameters are set.

# queuing job

A job submitted directly to a queue and waiting to be executed.

# recovery job

A job to be executed when a job or jobnet ends abnormally.

# recovery jobnet

A jobnet to be executed when a job or jobnet ends abnormally.

# schedule by days from start

A schedule defined for recalculating the next scheduled execution date, using as the base day the next scheduled execution date determined from the execution start time, processing cycle, and substitute schedule for closed days.

# schedule information file

A text file containing schedule information parameters, entered by command when setting fixed execution registration for a jobnet.

#### schedule rule

Jobnet information such as execution start time and processing cycle. Up to 144 schedule rules can be defined for a single jobnet.

#### scheduler service

A service that manages the schedules for jobnet execution, and executes processes according to those schedules. Each scheduler service manages all the units in the root job group whose name matches the scheduler service name.

Multiple scheduler services can be activated in a single manager. This allows root job groups to be managed individually. For example, if you start a separate scheduler service for each application, each scheduler service can run its specific application (jobnet and jobs) in parallel, independently of the other scheduler services.

#### shift days

A set number of days within which to determine a substitute date when the next execution date falls on a closed day.

#### shutdown status

A situation in which a jobnet fails to start or end due to an error, and the execution status or the next scheduled execution cannot be verified. If this happens, you must cancel and then re-register the jobnet for execution.

# SMTP (Simple Mail Transfer Protocol)

A protocol, generally used in UNIX networks, for transferring ASCII data by TCP/IP between heterogeneous systems.

# standard configuration

A system configuration in which JP1/AJS3 information is managed by the embedded database.

Unless otherwise indicated, the descriptions in this manual relate to a system in a standard configuration.

Note that the ISAM database is still used to store some information related to QUEUE jobs and submit jobs.

#### start condition

A definition of the conditions under which a jobnet starts when the jobnet is driven by a specific event.

#### subject

A character string written in the subject line of an email message. Non-ASCII characters are supported in JP1/AJS3, but might not be supported in connected email systems.

# submit

To request the system to execute a job.

# submit job

A standard job registered using the jpqjobsub command.

#### substitute schedule

A means of executing a jobnet on a different day when the next execution date, determined from the jobnet schedule, falls on a closed day.

# succeeding job

A job executed immediately after another job or jobnet.

# succeeding jobnet

A jobnet executed immediately after another job or jobnet.

# suspend

To suppress the execution of the root jobnet and lower units.

When you change a definition under a root jobnet that has been registered for execution, you should suspend the root jobnet to prevent erroneous operation such as the execution control processing running with the old definition. By suspending the root jobnet, the redefinition processing can be synchronized with the execution control processing.

# threshold

A value for evaluating the termination status of a job. You can define an abnormal threshold and a warning threshold for each job.

#### timeout period

A time interval after which an executed job is forcibly terminated if there was no response from the job or if it failed to complete during the specified period.

# **TP1/Server Base**

Software for distributing transaction processing and server processing in an open system. JP1/AJS2 uses TP1/Server Base transaction processing.

# unit

A generic term for any job network element.

# unit definition parameter file

A text file containing unit definition parameters, entered by command when defining the units.

# unit ID

A unique number allocated to a unit.

# unit whose end is being waited for

A unit specified as a wait condition of another unit. The unit for which the unit whose end is being waited for is specified as a wait condition starts when the unit whose end is being waited for terminates.

# unit with wait condition

A unit for which another unit (unit whose end is being waited for) is specified as a wait condition. The unit with the wait condition starts execution when the associated unit (unit whose end is being waited for) terminates.

# virtual machine

A virtual computer system (host) created on a physical host to run an OS is called a *virtual machine*. Multiple virtual machines can operate on a single physical host to execute multiple processes simultaneously or to run different OSs concurrently.

By replicating a virtual machine that has already been set up, you can easily increase hosts that have the same environment.

# wait condition

A condition set for a unit that allows the execution order of units across jobnets to be controlled. A unit with another unit specified as a wait condition starts execution when the associated unit terminates.

# warning threshold

A value for evaluating whether a job ended with a warning.

# Windows Messaging

A facility that provides an interface for sending and receiving email. Using Windows Messaging, you can manage, access, and share a variety of information such as data received from an online service.

# Index

### Symbols

\_04.bat (Windows only) 505 \_04 (UNIX only) 495

# Α

abbreviations for products 628 abnormal end 634 abnormal threshold 634 About the 3rd level and 4th level Kanji characters added in JIS 2004 (JIS X 0213:2004) 632 About the Start menu in Windows 632 acronyms 630 action job 634 adding new administrator for embedded database or changing existing administrator 599 agent host 634 ajs 72 ajs adapter setup 45 AJS AJSCONF 40 ajs2collectcore (UNIX only) 76 AJS3 unit monitored object 634 AJS administrator 634 ajsagtadd 82 ajsagtalt 90 ajsagtdel 96 ajsagtprint 99 ajsagtshow 103 ajsalter 108 AJSAUTOJUDGE 37 ajsbackup 111 ajsbkudel 115 ajscainetd\_startstop 58 ajscalendar 117 ajscasetup 57 ajscatrsetsz 58 ajschange 124 140 ajschgjob ajschgnet 172 ajschgstat 187 ajschkdef 193 ajschksetup 45 ajschkstart (UNIX only) 204 ajschkstop (UNIX only) 206 ajschktrsetsz 208

ajscminetd startstop 58 ajscmprint 58 ajscmsetup 57 ajscmtrsetsz 57 ajscnvdbexport 45 ajscnvdbimport 45 aiscon 58 AJSCONF 37 AJSCONVERTUTF8 37 aiscopy 209 ajscvsetup 57 ajsdbcond 214 222 aisdefine ajsdelete 226 AJSDISPSUBUNITTYPE 37 ajsembdbaddarea 229 ajsembdbaddlog 233 ajsembdbadduser 603 ajsembdbbackup 237 ajsembdbbuild 45 ajsembdbcancel 243 ajsembdbidlist 45 ajsembdbinstl 45 ajsembdboplog 246 ajsembdbreclaim 252 ajsembdbreuse 606 ajsembdbrorg 257 ajsembdbrstr 261 ajsembdbsetup 45 ajsembdbstart 268 271 ajsembdbstatus 305 ajsembdbstop ajsembdbuninstl 46 ajsembdbunset 45 ajsentry 308 AJSENV 39 AJSEXDATE 40 AJSEXECID 40 AJSEXECPID 40 ajsexport 315 ajsgtroot 317 AJSHOST 40 ajsimport 319 ajsintrpt 321

AJSJOBNAME

39
ajskill 324 ajsleave 328 ajslocaldate 63 ajslogprint 333 AJSMANAGERHOST 37 ajsname 337 AJSNETNAME 39 AJSPATH 37, 634 ajsplan 340 ajsplanout 353 AJSPRE RC 39 AJSPRE ST 39 ajsprint 357 ajsprofalter 393 ajsprofstatus 396 ajsqlalter 62 ajsqlattach 62 ajsqldetach 63 ajsqlexecsetsz 63 ajsqlftpstart 63 ajsqlftpstop 63 AJSQLManagerName (Windows only) 41 ajsqlsetup 62 ajsqlstart 63 ajsqlstatus 63 ajsqlstop 63 ajsqltrsetsz 63 ajsrelease 399 ajsrerun 407 ajsrestore 412 ajsrgexport 416 ajsrgexport 419 ajsschedule 422 ajssetup 44 ajsshow 425 ajsstart 466 ajsstatus 470 ajsstop 478 ajssuspend 484 ajstrsetsz 487 argument 23 AS/400 system 36 automatic retry 634

# В

backup box 634 backup file 635 base day 635 base time 635

# С

calculating estimated required time 449 calendar information 635 cautionary notes when UTF-8 is used as character encoding 32 changing options of tables in embedded database 601 closed day 635 cluster system 635 commands 44 commands used during special operation commands available during operation test 63 commands available in execution environment for queue or submit jobs 59 commands available when JP1/AJS3 Console function is used 57 commands available when queueless jobs are used 62 commands used to control JP1/AJS3 47 commands used to customize environments 46 commands used to execute jobs 55 commands used to manipulate the embedded database 56 commands used to manipulate units 50 commands used to operate execution agents 54 44 commands used to set up JP1/AJS3 57 commands used when error occurs commands you can execute remotely and how to execute them 29 common user profile 635 conventions abbreviations for products 628 acronyms 630 diagrams 12 fonts and symbols 12 KB, MB, GB, and TB 631 meaning of directory and folder 631 meaning of member of Administrators group 631 version numbers 14 correlation ID 635 custom job 636

# D

Daily Schedule window636database administrator636

data collection tool 636 default queue 636 defaults installation folders of JP1/AJS3 for Windows 631 dependent job 636 dependent jobnet 636 diagram conventions 12 directory term defined 631 disaster recovery 636

## Ε

embedded database adding new administrator or changing existing administrator 599 administrator, glossary definition 636 changing options of tables 601 glossary definition 636 operation commands, glossary definition 636 service, glossary definition 637 system administrator, glossary definition 637 embedded-database commands notes on using 598 637 end with warning environment setting parameters glossary definition 637 environment settings file 637 environment variables 37 environment variables for command execution 30 environment variables set for job execution 39 environment variables set when a job is executed from JP1/AJS3 39 environment variables used for command execution 37 environment variables used to execute JP1/AJS3 commands 37 event 637 event job 637 execution agent 637 execution agent group 637 execution agent restriction 637 execution ID 25, 638 execution-locked resource 638

## F

fixed execution registration 638 fixed schedule 638 folder term defined 631 font conventions 12 forced termination (kill) of jobs 481 forced termination (kill) of the scheduler service 481 full name 24

# G

GB meaning 631 Glossary 634

# Η

HOME (UNIX only) 40
how to specify the name of a unit in a planning group 349
HP NNM 638
term defined 633

immediate execution registration 638 installation folders default for JP1/AJS3 for Windows 631 ISAM compatible ISAM configuration, glossary definition 635 database, glossary definition 638

## J

jajs\_config 45 jajs hstd 489 jajs\_hstd\_stop 491 jajs killall.cluster (UNIX only) 493 jajs log.bat (Windows only) 505 jajs\_log (UNIX only) 495 59 jajs maintain 45 jajs\_migrate jajs\_pmtcon 515 jajs rpenvexport 46 jajs\_rpenvimport 46 jajs\_rpsite 46 jajs setup 45 jajs\_setup\_cluster 45 jajs\_spmd 519 jajs\_spmd\_status 524 jajs\_spmd\_stop 528 jajs start.cluster (UNIX only) 533 jajs\_start (UNIX only) 531

jajs\_status 535 jajs stop.cluster (UNIX only) 545 jajs stop (UNIX only) 543 jajsca\_start 58 jajsca stop 58 jajscm\_start 58 jajscm stop 58 jajsshowadminusr (UNIX only) 518 job 638 job execution environment 638 job group 639 jobnet connector 639 Jobnet Editor window 639 Jobnet Monitor window 639 jobnet restriction 480 jobnets glossary definition 639 job network element 639 job restriction 480 JP1 HOSTNAME 37, 40 JP1 USERNAME 37.40 JP1/AJS3 Console Agent 640 JP1/AJS3 Console Manager 640 JP1/AJS3 Console View 640 JP1/AJS3 - Definition Assistant 639 JP1/AJS3 for Enterprise Applications 640 JP1/AJS3 - Print Option 639 JP1/Base 640 JP1/DH - AJE 640 JP1/FTP 640 JP1/IM 640 JP1/NQSEXEC 640 JP1/OJE for Midrange Computer 641 JP1/OJE for VOS3 641 JP1/Script 641 JP1/Software Distribution 641 jp1ajs2 setup cluster 44 jp1ajs2casetup 57 jp1ajs2cmsetup 57 JP1 event 639 jp1exec (Windows only) 547 jp1exit (Windows only) 550 JP1JobID 40 JP1JobName 40 JP1NBQSClientName (Windows only) 40 JP1NBQSQueueName 40 JP1 permission level 639

JP1Priority 40 639 JP1 resource group JP1UNCName 40 JP1 user 639 JP1UserName 40 jpoagoec 553 556 jpoagtjobshow jpomailprof (Windows only) 560 jpomailrecv 44 569 jpomanevreset jpomanevshow 577 jpomanjobshow 581 jpqagtadd 61 jpqagtalt 61 jpgagtdel 61 jpqagtlink 61 jpqagtshow 61 jpgagtunlink 61 jpqdbcond 585 jpqendjobshow 60 jpgexport 59 jpqimport 59 ipgjobalt 59 jpqjobcan 59 jpqjobdel 60 ipgjobget 59 jpqjobmove 59 jpqjobshow 59 jpqjobsub 59 jpqqueadd 60 ipqquealt 61 jpqqueclose 60 jpqquedel 61 jpqqueopen 60 jpqqueshow 60 jpqregguestuser 44 jpqreguser 44 jpgresadd 62 jpgresdel 62 jpqresshow 62 jpqshmake 45 judgment job 641 judgment value 641

# Κ

KB meaning 631 kill 641

# L

### LANG 37

LANG (UNIX only) 41 limit values when linking with AS/400 (JP1/OJE for Midrange Computer) 36 limit values when linking with JP1/NQSEXEC 34 limit values when linking with JP1/OJE for VOS3 35 linkage with AS/400 (JP1/OJE for Midrange Computer) 36 linkage with other programs 34 list file 641 logical host 641 logical host name 24 LONGNAME (UNIX only) 41

### Μ

macro variable 641 macro variable name 642 MAIL (UNIX only) 41 mail filtering application 642 mail receipt parameter file 642 mail send parameter file 642 manager host 642 manager job group 642 manager jobnet 642 MAPI 642 max. shiftable days 642 maximum number of concurrently executable jobs 642 MB meaning 631 member of the Administrators group term defined 631 message ID 642 **MIME 643** Monthly Schedule window 643

## Ν

nested jobnet 643 NNM linkage supported products 633 node switching system 643 normal end 643 notes common to all commands 31 notes on commands related to the scheduler service 31 notes on commands that consume a large amount of system resources 31 notes on commands that perform mutually conflicting processes 31 notes on operation in the console for executing commands 32 notes on using commands 31

## 0

online manual contents 632 open day 643 option 23

## Ρ

passing information 643 passing information name 643 PATH (UNIX only) 41 physical host 643 planned execution registration 643 planning group 643 preceding job 643 preceding jobnet 644 prerequisites to use commands 64 previlege required for operation as AJS administrator 611 processing cycle 644

## Q

queue644queueless job644queueless job execution environment644queuing job644

# R

recovery job 644 recovery jobnet 644 Reference Material for This Manual 626 regular expressions available in JP1/AJS3 632 Related publications 626 remote execution of a command 29 revisions 07-00 624 07-50 622 08-00 622 09-00 619 10-00 616 10-10 615 10-50 614

## S

schedule by days from start 644 schedule information file 645 schedule restriction 478 scheduler service 645 scheduler service name 24 schedule rule 645 SHELL (UNIX only) 40 shift days 645 shutdown status 645 SMTP 645 specifying IPv6 address 28 specifying a command 23 specifying a unit name 24 specifying a unit name in a command when using a planning group 25 Specifying wildcard characters 28 standard configuration 645 start condition 645 subject 645 submit 645 submit job 646 substitute schedule 646 succeeding job 646 succeeding jobnet 646 suspend 646 symbol conventions 12 symbols used in command usage description 28

# Т

TB meaning 631 threshold 646 timeout period 646 TP1/Server Base 646 TZ 37

# U

unit 646 unit definition parameter file 646 unit ID 646 unit name 24 unit whose end is being waited for 646 unit with wait condition 647

# V

version number conventions 14 version revisions 614 virtual machine 647

# W

wait condition 647 warning threshold 647 Windows Messaging 647