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Job Management Partner 1 Version 10

Job Management Partner 1/Automatic Job Management System 3 Command Reference 2

3021-3-327-20(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 (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 - 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# (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# version 10-50 (For Windows Server 2012 and Windows Server 2008)

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

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

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

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

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

P-812C-6LAL Job Management Partner 1/Base# 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)

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■ 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

■ Issued

Dec. 2014: 3021-3-327-20(E)

■ Copyright

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 - Manager was added.	System Design (Configuration) Guide: *4.5.4* Configuration Guide 1: *C.1* Administration Guide: *2.2.2*, *2.2.4*, *2.3.5*, *13.1*, *13.1.8* Troubleshooting: *A.1*, *A.3* Operator's Guide: *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 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.	System Design (Configuration) Guide: *5.1.1*, *9.4* Configuration Guide 1: *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*, *2.3.6* Troubleshooting: *1.4.1*, *1.4.2*, *2.7.2* 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: *6.3.19*, *15.3.19* Configuration Guide 2: *2.4.1*, *2.4.2* Administration Guide: *8.9.2* Messages 1: *1.3.4*, *KAVT0198-E*, *KAVT0199-E*, *KAVT0528-E*, *KAVT0658-E* to *KAVT0661-E*, *KAVT0664-E*
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 that are used to setup Job Management Partner 1/Automatic Job Management System 3 (abbreviated hereafter to *JP1/AJS3*), the commands that are used for special JP1/AJS3 operation, and how to create information definition files for 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 Used during Setup

Chapter 2 describes the commands that are used to setup JP1/AJS3.

3. Commands Used for Special Operation

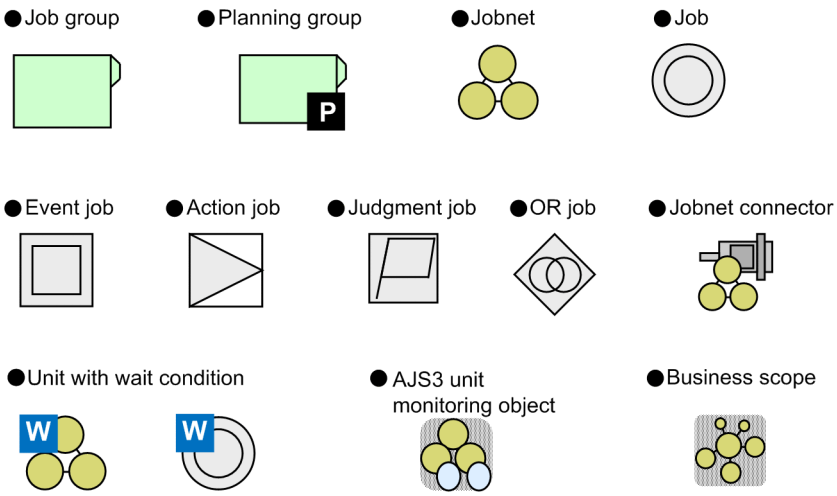
Chapter 3 describes the commands that are used for special JP1/AJS3 operation.

4. Creating Information Definition Files

Chapter 4 describes how to create information definition files for JP1/AJS3.

■ 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	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: • From the **File** menu, choose **Open**. • Click the **Cancel** button. • In the **Enter name** entry box, type your name.
Italic	Italic characters indicate a placeholder for some actual text to be provided by the user or system. For example: • Write the command as follows: `copy` *source-file target-file* • The following message appears: `A file was not found. (file =` *file-name*`)` Italic characters are also used for emphasis. For example: • Do *not* delete the configuration file.
`Monospace`	Monospace characters indicate text that the user enters without change, or text (such as messages) output by the system. For example: • At the prompt, enter `dir`. • Use the `send` command to send mail. • The following message is displayed: `The password is incorrect.`

The following table explains the symbols used in this manual:

Symbol	Convention
`|`	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:

Symbol	Convention
{ }	{A|B|C} means only one of A, or B, or C.
[ ]	In syntax explanations, square brackets indicate that the enclosed item or items are optional. For example: [A] means that you can specify A or nothing. [B|C] means that you can specify B, or C, or nothing.
. . .	In coding, an ellipsis (...) indicates that one or more lines of coding have been omitted. In syntax explanations, an ellipsis indicates that the immediately preceding item can be repeated as many times as necessary. For example: A, B, B, . . . means that, after you specify A, B, you can specify B as many times as necessary.
x	Multiplication sign
/	Division sign
↑ ↑	The calculation result is rounded up to the next whole number. Example: The result of ↑ 34 / 3 ↑ 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).
< > (angle brackets)	Indicates the characters and lexical elements that can be specified. <characters> One or more Kanji characters, katakana characters, upper-case alphabetic characters, lower-case alphabetic characters, or numeric characters <numeric> 0, 1, 2, 3, 4, 5, 6, 7, 8, or 9 <alphabetic character> 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> Alphabetic or numeric character <symbolic name> No more than eight alphanumeric characters beginning with an alphabetic character <unsigned integer> One or more numeric characters <hexadecimal character> 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, or F <file name> A system-determined name assigned to a file <path> The directories contained in the path, with each name separated by a forward slash (/) or backslash (\ ). The path notation is OS-dependent.
(( )) (double parentheses)	Indicates the range of specifiable values.
<< >> (double angle brackets)	Indicates the default assumed by the system when a value is unspecified. Example: If you do not specify *days-to-keep-form* ~<numeric> ((0 to 365)) <<365>>, 365 is assumed as the number of days to keep the form.

Symbol	Convention
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.

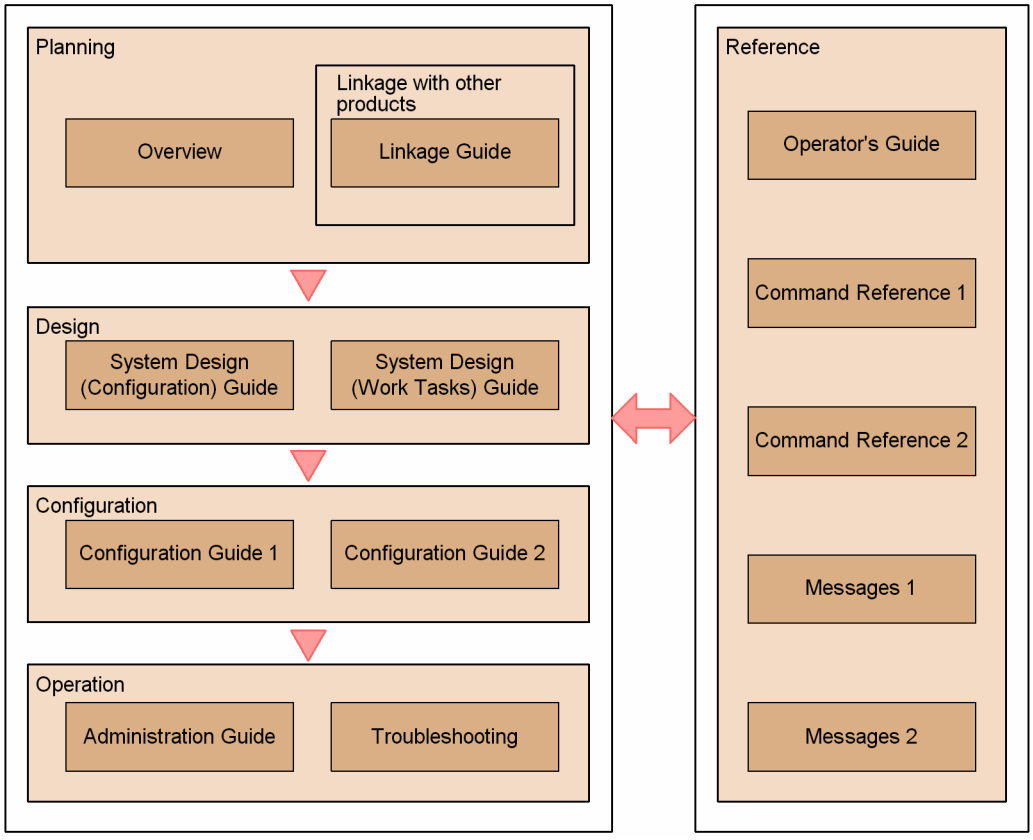
Note that *Job Management Partner 1/Automatic Job Management System 3* has been omitted from the manual titles in the table.

No.	Manual	Contents
1	*Overview* (3021-3-318(E))	• JP1/AJS3 features • Description of functions
2	*System Design (Configuration) Guide* (3021-3-319(E))	• Information that must be considered when designing a system • Cautionary notes on designing a system
3	*System Design (Work Tasks) Guide* (3021-3-320(E))	• Information that must be considered when constructing jobs and jobnets • Cautionary notes on designing jobs and jobnets
4	*Configuration Guide 1* (3021-3-321(E))	• Installation and setup procedures • Environment setup procedure by operation type
5	*Configuration Guide 2* (3021-3-322(E))	• Description of environment setting parameters • Description of operation profiles

No.	Manual	Contents
6	*Administration Guide* (3021-3-323(E))	• Information required to operate a system • Know-how useful for JP1/AJS3 operation
7	*Troubleshooting* (3021-3-324(E))	• How to troubleshoot errors • Data required when an error occurs
8	*Operator's Guide* (3021-3-325(E))	• How to operate JP1/AJS3 - View • How to operate JP1/AJS3 Console View • Description of windows and dialog boxes
9	*Command Reference 1* (3021-3-326(E))	• Command syntax
10	*Command Reference 2* (3021-3-327(E))	• Syntax of commands used for setup and special operations • Syntax and coding examples of information definition files
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	• *System Design (Configuration) Guide* (3021-3-319(E)) • *Configuration Guide 1* (3021-3-321(E))	• *Configuration Guide 2* (3021-3-322(E)) • *Linkage Guide* (3021-3-328(E))
To design work tasks that will be automated (including job definitions and schedule definitions)	• *System Design (Work Tasks) Guide* (3021-3-320(E))	• *Operator's Guide* (3021-3-325(E))
To learn about monitoring and maintaining a running system	• *Administration Guide* (3021-3-323(E))	• *Troubleshooting* (3021-3-324(E)) • *Messages 1* (3021-3-329(E)) • *Messages 2* (3021-3-330(E))
To learn about what action you need to take for problems that occur during operation	• *Troubleshooting* (3021-3-324(E))	• *Messages 1* (3021-3-329(E)) • *Messages 2* (3021-3-330(E))
To learn about operating JP1/AJS3	• *Operator's Guide* (3021-3-325(E))	• *Command Reference 1* (3021-3-326(E)) • *Command Reference 2* (3021-3-327(E))

Contents

Appendixes 446

Index 488

1 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)*.

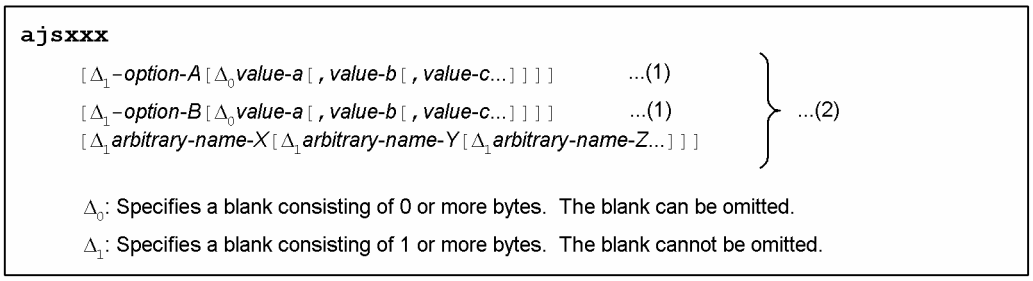
Under UNIX, execute the commands from the control terminal.

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:



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 `--` Δ1 *arbitrary-name-X*. (The system handles the string following `--` Δ1 as an arbitrary name.) The specification of the second and subsequent arbitrary names does not require `--` Δ1 .
  Example:
  To specify two arbitrary names (`-jobA` and `-jobB`) in series, enter `-- -jobA -jobB`.

- 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 /.

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.

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:

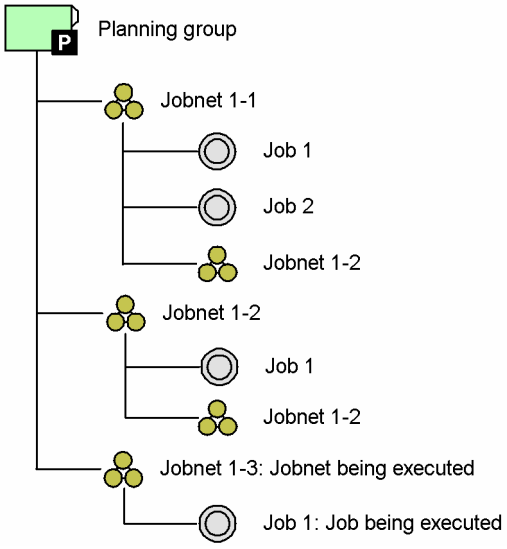
Automatic selection is effective. You can specify a unit name without the root jobnet under the planning group. The running units are selected automatically and execution takes place on the corresponding units. If the unit name specified without a jobnet name cannot be found, the unit is considered as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



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

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:db80:0000:0000:0000:0000:0000:9abc
  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.

Table 1-1: Symbols used in command usage description

Symbol	Meaning
|	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: [A|B] A is assumed if you do not specify either item.

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.

Table 1-2: 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

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#
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.

1.2 Notes on using 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-

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`

- 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. If the UAC function is disabled, you do not need to open 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.

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

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	Character string of up to 15 bytes. (If more than 15 bytes are specified, excess bytes are deleted.) Japanese characters cannot be specified. If the specified job name starts with a number, the system automatically prefixes the name with `R`. By default, the system assumes the file name in the execution file name.
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	`1`, `3` or `5`. If you specify 2 for the execution priority, the system assumes 1. If you specify 4 for the execution priority, the system assumes 5. If you specify an execution priority for a job, the `nice` value when the job is executed is applied in JP1/NQSEXEC. 1: `nice` value `+10` 3: `nice` value 5: `nice` value `-10`
Execution file name	Character string of up to 511 bytes. Specify in the `/home/jp1user/job` format. Japanese characters cannot be specified.
Parameter	Character string of up to 255 bytes. Japanese characters cannot be specified.
Transfer destination file name	Character string of up to 511 bytes. 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). Japanese characters cannot be specified in the transfer destination file name or in the file.

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 *VOS3 Job Management Partner 1/Open Job Entry Description, User's Guide and Reference*). 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 transfer destination file name or 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*.

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 1-5: Limit values when linking with AS/400 (JP1/OJE for Midrange Computer)

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 *library-name*/*file-name* or *library-name*/*file-name*.*member-name* format. For each part of the name, you can specify a character string of up to 10 bytes.
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 *library-name*/*file-name*.*member-name* format. You must specify a file which already exists on the AS/400 system. If you specify the file in *file-name.member-name* 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*.

1.4 Environment variables

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 execution

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[#1] that operates units or the ajsstatus 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)[#2]
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[#1] 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[#1] 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[#1] 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	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
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[#5]
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 JP1_HOSTNAME when referencing a physical host. Setting JP1_HOSTNAME 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:

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* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

#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.

`yes` 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 job execution

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).

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.[#1]
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 jpqjobsub 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 **Command statement** 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 **Command statement** is specified for a job that will be executed in a jobnet[#2] 1. The shell specified on the first line of **Command statement** 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.#4 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/*execution-user-name*, where *execution-user-name* 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.#3, #4
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.

#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 JP1/AJS3 Queueless Agent is specified as the execution target service, the environment variable value that is used when the queueless agent service starts is 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**#1.
  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**#1.
  5. Environment variables specified for **Environment file**#2.
  6. Environment variables used 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

Applies only when JP1/AJS3 Queueless Agent is specified as the execution target service.

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# 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.

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:

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

Function	Command name	Windows	UNIX	Required privileges	Supported products
Sets up the operating environment that corresponds to the logical host for JP1/AJS3 - Manager and JP1/AJS3 - Agent.	jp1ajs2_setup_cluster[#1]	--	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	M
Sets the mail distribution functions.	jpomailrecv	--	Y	None	M and A
Registers the VOS3 user information.	jpqreguser[#1]	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[#1]	Y	Y	Windows: Administrators UNIX: Superuser	M
Prevents increase of the number of shared memory segments.	jpqshmake[#2]	--	Y	UNIX: Superuser	M and A

Function	Command name	Windows	UNIX	Required privileges	Supported products
Creates or deletes an adapter command setting file used to link JP1/IM.	ajs_adapter_setup	Y	Y	Windows: Administrators UNIX: Superuser	M
Sets up an embedded database environment.	ajsembdbsetup	Y	Y	Windows: Administrators UNIX: Superuser	M
Builds an embedded database environment.	ajsembdbbuild	Y	Y	Windows: Administrators UNIX: Superuser	M
Removes setup of an embedded database.	ajsembdbunset	Y	Y	Windows: Administrators UNIX: Superuser	M
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	M
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	M
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	M
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	M
Imports database backup data to a scheduler database.	ajscnvdbimport	Y	Y	Windows: Administrators UNIX: Superuser	M
Installs the JP1/AJS3 standard database (embedded database).	ajsembdbinstl	Y	Y	Windows: Administrators UNIX: Superuser	M
Uninstalls the JP1/AJS3 standard database (embedded database).	ajsembdbuninstl	Y	Y	Windows: Administrators UNIX: Superuser	M

Function	Command name	Windows	UNIX	Required privileges	Supported products
Exports settings information for JP1/AJS3 - Manager disaster recovery.	jajs_rpenvexport	Y	Y	Windows: Administrators UNIX: Superuser	M
Imports settings information for disaster recovery.	jajs_rpenvimport	Y	Y	Windows: Administrators UNIX: Superuser	M
Sets the disaster recovery environment.	jajs_rpsite	Y	Y	Windows: Administrators UNIX: Superuser	M

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

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:

For details about the customize environments, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Table 1-9: Commands used to customize environments

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

Function	Command name	Windows	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	M
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	M
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	M

Legend:

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:

For details about the control Commands, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

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

Function	Command name	Windows	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

Function	Command name	Windows	UNIX	Required privileges	Supported products
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: 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	M
Terminates a specific detailed process of the host service management function (jajs_hstd).	jajs_hstd_stop	Y	Y	Windows: Administrators UNIX: Superuser	M
Starts the scheduler service.	ajsstart	Y	Y	Windows: Administrators UNIX: Superuser	M
Terminates the scheduler service.	ajsstop	Y	Y	Windows: Administrators UNIX: Superuser	M
Changes the operating environment of the scheduler service temporarily.	ajsalter	Y	Y	Windows: Administrators UNIX: Superuser	M
Outputs the operating environment of the scheduler service to the standard output file.	ajsstatus	Y	Y	None	M
Extracts log records that match the specified conditions from the scheduler log, and outputs the extracted log records.	ajslogprint	Y	Y	None	M
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	M
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

Function	Command name	Windows	UNIX	Required privileges	Supported products
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 UNIX: Superuser	M
Checks the settings in an operation profile.	ajsprofstatus	Y	Y	None	M
Creates, changes, or deletes an email sending profile necessary for sending emails without using Outlook.	jpomailprof	Y	--	Windows: Administrators	M and A
Enables the connection permission configuration file and outputs a list of available hosts whose connection is permitted.	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

Legend:

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.

For details about the manipulate units, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Table 1-11: Commands used to manipulate units

Function	Command name	Windows	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	M
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	M
Modifies the definition of a jobnet.	`ajschgnet`	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	M
Modifies the definition of a job.	`ajschgjob`	Y	Y	Destination of change JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	M
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_Editor JP1_AJS_Operator JP1_AJS_Guest Move-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	M
Deletes a unit.	`ajsdelete`	Y	Y	Delete-target and subsequent units JP1_AJS_Admin	M

Function	Command name	Windows	UNIX	Required privileges	Supported products
Deletes a unit.	ajsdelete	Y	Y	JP1_AJS_Manager JP1_AJS_Editor	M
Outputs the name of a unit to the standard output file.	ajsname	Y	Y	Output target unit JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	M
Outputs operating environment information of the scheduler service to the standard output file.	ajsgtroot	Y	Y	None	M
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	M
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	M
Deletes a backup box or backup file.	ajsbkudel	Y	Y	None	M
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	M
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	M
Imports the registered execution-schedule information of a root jobnet.	ajsrgimport	Y	Y	JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	M
Defines calendar information for a job group.	ajscalendar	Y	Y	Destination of change JP1_AJS_Admin	M

Function	Command name	Windows	UNIX	Required privileges	Supported products
Defines calendar information for a job group.	ajscalendar	Y	Y	JP1_AJS_Manager JP1_AJS_Editor	M
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	M
Registers a defined jobnet for execution.	ajsentry	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	M
Cancels the registration of a jobnet.	ajsleave	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	M
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	M
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	M
Outputs the list of event jobs being currently executed in the manager to the standard output file.	jpomanjobshow	Y	Y	UNIX: Superuser Windows: Administrators	M
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	M
Outputs a list of temporary changes to a root jobnet and its lower units to the standard output file.	ajsplanout	Y	Y	Root jobnets JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	M
Modifies the status of a job.	ajschgstat	Y	Y	Manipulation-target unit JP1_AJS_Admin	M

Function	Command name	Windows	UNIX	Required privileges	Supported products
Modifies the status of a job.	ajschgstat	Y	Y	JP1_AJS_Manager JP1_AJS_Operator	M
Stops the execution of a jobnet.	ajsintrpt	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	M
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	M
Re-executes a job or a jobnet.	ajsrerun	Y	Y	Manipulation-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Operator	M
Exports a unit.	ajsexport#	Y	Y	Export-target and subsequent units JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor JP1_AJS_Operator JP1_AJS_Guest	M
Imports a unit.	ajsimport#	Y	Y	Destination of import JP1_AJS_Admin JP1_AJS_Manager JP1_AJS_Editor	M
Starts execution of the definition pre-check and displays the state of execution.	ajschkdef	Y	Y	Windows: Administrators UNIX: Superuser	M
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	M

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.

#

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.

For details about the following table lists the commands used to operate execution agents, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Table 1-12: Commands used to operate execution agents

Function	Command name	Windows	UNIX	Required privileges	Supported products
Adds an execution agent.	`ajsagtadd`	Y	Y	JP1_JPQ_Admin	M
Deletes an execution agent.	`ajsagtdel`	Y	Y	JP1_JPQ_Admin	M
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	M
Changes the execution agent settings or the job transfer restriction status.	`ajsagtalt`	Y	Y	JP1_JPQ_Admin JP1_JPQ_Operator	M
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	M
Outputs a list of event jobs being executed by an execution agent to the standard output file.	`jpoagtjobshow`	Y	Y	Windows: Administrators UNIX: Superuser	M, A

Legend:

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.

1.5.6 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.

For details about the execute jobs, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Table 1-13: Commands used to execute jobs

Function	Command name	Windows	UNIX	Required privileges	Supported products
Executes the program specified as an argument, and saves the return code of the program in a temporary file.	`jp1exec`	Y	--	None	M and A
Returns the return code that was saved by the `jp1exec` command.	`jp1exit`	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:

For details about the manipulate the embedded database, see *2. Commands* in the manual *Job Management Partner 1/ Automatic Job Management System 3 Command Reference 1*.

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

Function	Command name	Windows	UNIX	Required privileges	Supported products
Obtains the backup of the embedded database.	`ajsembdbbackup`	Y	Y	Windows: Administrators UNIX: Superuser	M
Monitors the embedded database.	`ajsembdbstatus`	Y	Y	Windows: Administrators UNIX: Superuser	M
Manipulates the system log of the embedded database.	`ajsembdboplog`	Y	Y	Windows: Administrators UNIX: Superuser	M
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	M
Unloads and reloads the data in the embedded database.	`ajsembdbrorg`	Y	Y	Windows: Administrators UNIX: Superuser	M
Maintains the embedded database.	`ajsembdbreclaim`	Y	Y	Windows: Administrators UNIX: Superuser	M
Expands the database areas in the embedded database.	`ajsembdbaddarea`	Y	Y	Windows: Administrators UNIX: Superuser	M
Expands the system files for the embedded database.	`ajsembdbaddlog`	Y	Y	Windows: Administrators UNIX: Superuser	M
Stops the embedded database.	`ajsembdbstop`	Y	Y	Windows: Administrators UNIX: Superuser	M
Starts the embedded database.	`ajsembdbstart`	Y	Y	Windows: Administrators UNIX: Superuser	M
Cancels the execution of an embedded-database command.	`ajsembdbcancel`	Y	Y	Windows: Administrators UNIX: Superuser	M

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.

For details about the following table lists the commands used when an error occurs, see *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Table 1-15: Commands used when an error occurs

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

Legend:

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.

(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 special operation (commands available when the JP1/AJS3 Console function is used)

Function	Command name	Windows	UNIX	Required privileges	Supported products
Sets up JP1/AJS3 Console Manager.	`jp1ajs2cmsetup`#	--	Y	UNIX: Superuser	M
Sets up JP1/AJS3 Console Agent.	`ajscasetup`	Y	--	Windows: Administrators	M
Sets up JP1/AJS3 Console View.	`ajscvsetup`	Y	--	Windows: Administrators	V
Sets up JP1/AJS3 Console Agent.	`jp1ajs2casetup`#	--	Y	UNIX: Superuser	M
Sets up JP1/AJS3 Console Manager.	`ajscmsetup`	Y	--	Windows: Administrators	M
Changes the size of the trace log file of JP1/AJS3 Console Manager.	`ajscmtrsetsz`	Y	Y	Windows: Administrators UNIX: Superuser	M

Function	Command name	Windows	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	M
Automatically starts JP1/AJS3 Console Manager at a system start.	jajscm_start	--	Y	UNIX: Superuser	M
Automatically stops JP1/AJS3 Console Manager at a system stop.	jajscm_stop	--	Y	UNIX: Superuser	M
Automatically starts JP1/AJS3 Console Agent at a system start.	jajsca_start	--	Y	UNIX: Superuser	M
Automatically stops JP1/AJS3 Console Agent at a system stop.	jajsca_stop	--	Y	UNIX: Superuser	M
Starts or stops the JP1/AJS3 Console Manager service.	ajscminetd_startstop	--	Y	UNIX: Superuser	M
Starts or stops the JP1/AJS3 Console Agent service.	ajscainetd_startstop	--	Y	UNIX: Superuser	M
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	M

Legend:

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*.

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

Function	Command name	Windows	UNIX	Required privileges	Supported products
Outputs the current job execution environment to a file.	jpqexport	Y	Y	Windows: Administrators UNIX: Superuser	M
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	M
Performs maintenance on JP1/AJS3.	jajs_maintain	Y	Y	Windows: Administrators UNIX: Superuser	M
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[#1] However, if the -em option is specified, the following privileges are required (and the above privileges are not required). Windows: Administrators[#2] 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[#1]	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[#1]	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[#1]	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	Windows	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[#1]	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[#1]	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[#2] 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[#2] 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[#2] UNIX: Superuser	M and A
Adds a queue.	jpqqueadd	Y	Y	Destination of a request to add a queue JP1_JPQ_Admin	M

Function	Command name	Windows	UNIX	Required privileges	Supported products
Deletes a queue.	jpqquedel	Y	Y	Destination of a request to delete a queue JP1_JPQ_Admin	M
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[#2] UNIX: Superuser	M
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[#2] UNIX: Superuser	M
Releases the connection between a queue and an agent.	jpqagtunlink	Y	Y	Destination of a request to cancel an agent connection JP1_JPQ_Admin	M
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[#2] 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	M
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	M
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	M and A

Function	Command name	Windows	UNIX	Required privileges	Supported products
Modifies the number of concurrently-executable jobs.	jpqagtalt	Y	Y	required (and the above privilege is not required). Windows: Administrators[#2] 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	M
Adds exclusive execution resources.	jpqresadd	Y	Y	Destination of a request to add exclusive execution resources JP1_JPQ_Admin	M
Deletes exclusive execution resources.	jpqresdel	Y	Y	Destination of a request to delete exclusive execution resources JP1_JPQ_Admin	M

Legend:

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	Windows	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:	M and A

Function	Command name	Windows	UNIX	Required privileges	Supported products
Adds hosts to be processed by the queueless agent service.	ajsqlattach	Y	Y	Administrators UNIX: Superuser	M and A
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	M
Stops the queueless file transfer service.	ajsqlftpstop	Y	Y	Windows: Administrators UNIX: Superuser	M
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

Legend:

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	Windows	UNIX	Required privileges	Supported products
Changes and references the local time and date of the scheduler service.	ajslocaldate	Y	Y	Windows: Administrators UNIX: Superuser	M

Legend:

Y: Supported

M: JP1/AJS3 - Manager

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[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
ajs[#3]	--	--	--	--	--	--	--	--
ajs2collectcore[#3] (UNIX only)	--	--	--	--	--	--	--	--
ajsagtadd[#3]	Y	--	--	--	--	--	--	--
ajsagtalt[#3]	Y	--	--	--	--	--	--	--
ajsagtdel[#3]	Y	--	--	--	--	--	--	--
ajsagtprint[#3]	Y	--	--	--	--	--	--	--
ajsagtshow[#3]	Y	--	--	--	--	--	--	--
ajs_adapter_setup	--	--	--	--	--	--	--	--
ajsalter[#3]	Y	Y[#7]	--	--	--	--	--	--
ajsbackup[#3]	--	--	--	--	--	--	--	--
ajsbkudel[#3]	--	--	--	--	--	--	--	--
ajscainetd_startstop (UNIX only)	--	--	--	--	--	--	--	--
ajscalendar[#3]	Y	--	--	--	--	--	--	--
ajscasetup (Windows only)	--	--	--	--	--	--	--	--
ajscatrsetsz	--	--	--	--	--	--	--	--
ajschange[#3]	Y	--	--	--	--	--	--	--
ajschgjob[#3]	Y	--	--	--	--	--	--	--
ajschgnet[#3]	Y	--	--	--	--	--	--	--
ajschgstat[#3]	Y	Y	--	--	--	--	--	--
ajschkdef[#3]	Y	--	--	--	--	--	Y	Y
ajschksetup	--	--	--	--	--	--	--	--
ajschkstart[#3] (UNIX only)	--	--	--	--	--	--	--	--
ajschkstop[#3] (UNIX only)	--	--	--	--	--	--	Y	Y
ajschktrsetsz[#3]	--	--	--	--	--	--	--	--
ajscminetd_startstop	--	--	--	--	--	--	--	--

Command name	JP1/AJS3[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
(UNIX only)	--	--	--	--	--	--	--	--
ajscmprint	--	--	--	--	--	--	--	--
ajscmsetup (Windows only)	--	--	--	--	--	--	--	--
ajscmtrsetsz	--	--	--	--	--	--	--	--
ajscnvdbexport	--	--	--	--	--	--	--	--
ajscnvdbimport	--	--	--	--	--	--	--	--
ajscon	--	--	--	Y[#4]	--	--	--	--
ajscopy[#3]	Y	--	--	--	--	--	--	--
ajscvsetup	--	--	--	--	--	--	--	--
ajsdbcond[#3]	--	--	--	--	--	--	--	--
ajsdefine[#3]	Y	--	--	--	--	--	--	--
ajsdelete[#3]	Y	--	--	--	--	--	--	--
ajsembdbaddarea[#3]	--	--	--	--	--	--	--	--
ajsembdbaddlog[#3]	--	--	--	--	--	--	--	--
ajsembdbbackup[#3, #5]	--	--	--	--	--	--	--	--
ajsembdbbuild	--	--	--	--	--	--	--	--
ajsembdbcancel[#3]	--	--	--	--	--	--	--	--
ajsembdbidlist	--	--	--	--	--	--	--	--
ajsembdbinstl	--	--	--	--	--	--	--	--
ajsembdboplog[#3]	--	--	--	--	--	--	--	--
ajsembdbreclaim[#3]	--	--	--	--	--	--	--	--
ajsembdbrorg[#3]	--	--	--	--	--	--	--	--
ajsembdbrstr[#3, #5]	--	--	--	--	--	--	--	--
ajsembdbsetup	--	--	--	--	--	--	--	--
ajsembdbstart[#3]	--	--	--	--	--	--	--	--
ajsembdbstatus[#3]	--	--	--	--	--	--	--	--
ajsembdbstop[#3]	--	--	--	--	--	--	--	--
ajsembdbuninstl	--	--	--	--	--	--	--	--
ajsembdbunset	--	--	--	--	--	--	--	--
ajsentry[#3]	Y	Y	--	--	--	--	--	--
ajsexport[#3]	Y	--	--	--	--	--	--	--
ajsgtroot[#3]	--	--	--	--	--	--	--	--

Command name	JP1/AJS3[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
ajsimport[#3]	Y	--	--	--	--	--	--	--
ajsintrpt[#3]	Y	Y	--	--	--	--	--	--
ajskill[#3]	Y	Y	--	--	--	--	--	--
ajsleave[#3]	Y	Y	--	--	--	--	--	--
ajslocaldate	Y	--	--	--	--	--	--	--
ajslogprint[#3]	--	--	--	--	--	--	--	--
ajsname[#3]	Y	--	--	--	--	--	--	--
ajsplan[#3]	Y	Y	--	--	--	--	--	--
ajsplanout[#3]	Y	--	--	--	--	--	--	--
ajsprint[#3]	Y	--	--	--	--	--	--	--
ajsprofalter[#3]	Y	--	--	--	--	--	--	--
ajsprofstatus[#3]	Y	--	--	--	--	--	--	--
ajsqlalter	--	--	--	--	Y	--	--	--
ajsqlattach	--	--	--	--	Y	--	--	--
ajsqldetach	--	--	--	--	Y	--	--	--
ajsqlexecsetsz	--	--	--	--	--	--	--	--
ajsqlftpstart (UNIX only)	--	--	--	--	--	--	--	--
ajsqlftpstop	--	--	--	--	--	Y	--	--
ajsqlsetup	--	--	--	--	--	--	--	--
ajsqlstart (UNIX only)	--	--	--	--	--	--	--	--
ajsqlstatus	--	--	--	--	--	--	--	--
ajsqlstop	--	--	--	--	Y	--	--	--
ajsqltrsetsz	--	--	--	--	--	--	--	--
ajsrelease[#3]	Y	Y[#6]	--	--	--	--	--	--
ajsrerun[#3]	Y	Y	--	--	--	--	--	--
ajsrestore[#3]	Y	--	--	--	--	--	--	--
ajsrgexport[#3]	Y	--	--	--	--	--	--	--
ajsrgimport[#3]	Y	Y	--	--	--	--	--	--
ajsschedule[#3]	Y	--	--	--	--	--	--	--
ajssetup	--	--	--	--	--	--	--	--
ajsshow[#3]	Y	--	--	--	--	--	--	--

Command name	JP1/AJS3[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
ajsstart[#3]	Y	--	--	--	--	--	--	--
ajsstatus[#3]	Y	--	--	--	--	--	--	--
ajsstop[#3]	Y	Y	--	--	--	--	--	--
ajssuspend[#3]	Y	Y	--	--	--	--	--	--
ajstrsetsz[#3]	--	--	--	--	--	--	--	--
jajs_config	--	--	--	--	--	--	--	--
jajs_hstd	Y	--	--	--	--	--	--	--
jajs_hstd_stop	Y	--	--	--	--	--	--	--
jajs_killall.cluster[#3] (UNIX only)	--	--	--	--	--	--	--	--
jajs_log or _04 (UNIX only)	--	--	--	--	--	--	--	--
jajs_log.bat or _04.bat (Windows only)	--	--	--	--	--	--	--	--
jajs_maintain	--	--	--	--	--	--	--	--
jajs_migrate	--	--	--	--	--	--	--	--
jajs_pmtcon[#8]	Y	--	--	--	Y	--	--	--
jajs_rpenvexport	--	--	--	--	--	--	--	--
jajs_rpenvimport	--	--	--	--	--	--	--	--
jajs_rpsite	--	--	--	--	--	--	--	--
jajs_setup	--	--	--	--	--	--	--	--
jajs_setup_cluster	--	--	--	--	--	--	--	--
jajs_spmd[#3]	Y[#9]	--	--	--	--	--	--	--
jajs_spmd_status[#3]	--	--	--	--	--	--	--	--
jajs_spmd_stop[#3]	Y	--	--	--	--	--	--	--
jajs_start[#3] (UNIX only)	--	--	--	--	--	--	--	--
jajs_start.cluster[#3] (UNIX only)	--	--	--	--	--	--	--	--
jajs_status[#3]	Y	--	--	--	--	--	--	--
jajs_stop[#3] (UNIX only)	Y	--	--	--	--	--	--	--
jajs_stop.cluster[#3] (UNIX only)	Y	--	--	--	--	--	--	--
jajsacfg	--	--	--	--	--	--	--	--

Command name	JP1/AJS3[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
jajsca_start (UNIX only)	--	--	--	--	--	--	--	--
jajsca_stop (UNIX only)	--	--	--	--	--	--	--	--
jajscm_start (UNIX only)	--	--	--	--	--	--	--	--
jajscm_stop (UNIX only)	--	--	--	--	--	--	--	--
jajsmcfg	--	--	--	--	--	--	--	--
jp1ajs2_setup_cluster (UNIX only)	--	--	--	--	--	--	--	--
jp1ajs2casetup (UNIX only)	--	--	--	--	--	--	--	--
jp1ajs2cmsetup (UNIX only)	--	--	--	--	--	--	--	--
jp1exec[#3] (Windows only)	--	--	--	--	--	--	--	--
jp1exit[#3] (Windows only)	--	--	--	--	--	--	--	--
jpoagoec[#3]	--	--	--	--	--	--	--	--
jpoagtjobshow[#3]	Y	--	--	--	--	--	--	--
jpomailprof (Windows only)	--	--	--	--	--	--	--	--
jpomailrecv (UNIX only)	Y	--	--	--	--	--	--	--
jpomanevreset[#3, #10]	Y	--	--	--	--	--	--	--
jpomanevshow[#3]	Y	--	--	--	--	--	--	--
jpomanjobshow[#3]	Y	--	--	--	--	--	--	--
jpqagtadd	Y	--	--	--	--	--	--	--
jpqagtalt	Y	--	--	--	--	--	--	--
jpqagtdel	Y	--	--	--	--	--	--	--
jpqagtlink	Y	--	--	--	--	--	--	--
jpqagtshow	Y	--	--	--	--	--	--	--
jpqagtunlink	Y	--	--	--	--	--	--	--
jpqdbcond[#3]	--	--	--	--	--	--	--	--
jpqendjobshow	Y	--	--	--	--	--	--	--
jpqexport	--	--	--	--	--	--	--	--

Command name	JP1/AJS3[#1]	Scheduler service	HP NNM[#2]	Cm	Qa	Qf	CHm	CHa
jpqimport	--	--	--	--	--	--	--	--
jpqjobalt	Y	--	--	--	--	--	--	--
jpqjobcan	Y	--	--	--	--	--	--	--
jpqjobdel	Y	--	--	--	--	--	--	--
jpqjobget	Y	--	--	--	--	--	--	--
jpqjobmove	Y	--	--	--	--	--	--	--
jpqjobshow	Y	--	--	--	--	--	--	--
jpqjobsub	Y	--	--	--	--	--	--	--
jpqqueadd	Y	--	--	--	--	--	--	--
jpqquealt	Y	--	--	--	--	--	--	--
jpqqueclose	Y	--	--	--	--	--	--	--
jpqquedel	Y	--	--	--	--	--	--	--
jpqqueopen	Y	--	--	--	--	--	--	--
jpqregguestuser	Y	--	--	--	--	--	--	--
jpqqueshow	Y	--	--	--	--	--	--	--
jpqreguser	--	--	--	--	--	--	--	--
jpqresadd	Y	--	--	--	--	--	--	--
jpqresdel	Y	--	--	--	--	--	--	--
jpqresshow	Y	--	--	--	--	--	--	--
jpqshmake (UNIX only)	--	--	--	--	--	--	--	--

Legend:

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* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

#4

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

#5

You must have the embedded database service started.

#6

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

#7

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.

#8

The JP1/AJS3 service or queueless agent service must be running.

#9

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

#10

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 at command execution if all JP1/AJS3 services are stopped or if the scheduler service is active.

2 Commands Used during Setup

This chapter describes the commands that are used to set up JP1/AJS3.

ajs_adapter_setup

Format

```
ajs_adapter_setup
     {-i|-u}
```

Description

Creates an adapter command setting file (`Adapter_HITACHI_JP1_AJS2.conf`) or deletes the existing adapter command setting file that is used for linkage with JP1/IM.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-i`

Creates an adapter command setting file at the destination where the adapter command setting file will be stored. Setting this option enables JP1/IM to collect JP1/AJS3 definition information.

`-u`

Deletes the adapter command setting file from the destination where the adapter command setting file is stored.

Destination where the adapter command setting file is stored

In Windows:

JP1/Base-installation-folder`\plugin\conf\`

In UNIX:

`/opt/jp1base/plugin/conf/`

Notes

- If JP1/Base is not installed (if the path to the destination for creating an adapter command setting file does not exist), the system does not create an adapter command setting file even if you specify the `-i` option.
- If you omit all the options for this command, the system assumes `-i`.
- To link with JP1/IM in a cluster system to collect JP1/AJS3 definition information, execute the `ajs_adapter_setup` command on both the primary node and the secondary node.

Return values

0	Normal end
Values other than 0	Abnormal end

ajschksetup

Format

For JP1/AJS3 - Manager:

```
ajschksetup
     [{[-m][-a]|[-u]}]
```

For JP1/AJS3 - Agent:

```
ajschksetup
     [{[-a]|[-u]}]
```

Description

Sets the environment for running the definition pre-check function. The following is the information to be set by this command.

Registering services

The following services are registered for running the definition pre-check function:

Service name to be registered	JP1/AJS3 - Manager	JP1/AJS3 - Agent
JP1/AJS3 Check Manager service	Y	--
JP1/AJS3 Check Agent service	Y	Y

Setting the communication port

The following communication ports are registered in the services file for running the definition pre-check function:

Communication port (service name: port number)	JP1/AJS3 - Manager	JP1/AJS3 - Agent
Executing the definition pre-check function (JP1/AJS3 Check Manager: 23138)	Y	--
Executing the definition pre-check function (JP1/AJS3 Check Agent: 23139)	Y	Y

Setting the common definition information

The common definition information are set for running the definition pre-check function:

Setting information		JP1/AJS3 - Manager	JP1/AJS3 - Agent
Definition key	Environment setting parameter		
[JP1_DEFAULT \JP1AJS2\CHECK]	"AJSCHK_CHECKFILE"=#	Y	--
	"AJSCHK_LOGDIR"=#	Y	Y
	"AJSCHK_LOGSIZE"=dword:00001000	Y	Y
	"AJSCHK_TRACELOGFILE"=#	Y	Y
	"AJSCHK_CHARCODE"="none"	Y	Y

Legend:

Y: Can be set.

--: Cannot be set.

#

The value varies depending on the environment. For details about environment setting parameter, see *2.5 Setting for the JP1/AJS3 definition pre-check function* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

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

-m

Sets up the definition pre-check function (JP1/AJS3 Check Manager service).

This argument can be set only with JP1/AJS3 - Manager. It cannot be specified with JP1/AJS3 - Agent.

It cannot be specified together with the -u option.

-a

Sets up the definition pre-check function (JP1/AJS3 Check Agent service).

This argument cannot be specified with the -u option simultaneously.

-u

Deletes the settings for the definition pre-check function.

In Windows, this argument deletes the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service from the service list in the Administrative Tools.

This option cannot be specified together with the -m or -a option.

Notes

- Before you delete a service after specifying the -u option in the Windows environment, make sure that the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service have been stopped.
- When you omit the -m, -a, or -u option for setting types, the following option is assumed:
  - For JP1/AJS3 - Manager: -m, -a
  - For JP1/AJS3 - Agent: -a

- 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.

Return values

0	Normal end
A value other than 0	Abnormal end

Example

With JP1/AJS3 - Manager, set up the JP1/AJS3 Check Manager service and the JP1/AJS3 Check Agent service.

```
ajschksetup -m -a
```

ajscnvdbexport

Format

```
ajscnvdbexport
     [-mh logical-host-name]
     -F scheduler-service-name
     -b database-backup-file-storage-directory
```

Description

The `ajscnvdbexport` command exports the data of the specified scheduler service from the scheduler database of JP1/AJS2 whose version is 8 or earlier to a file in binary format.

You can execute this command only when you can access the database for the scheduler service in JP1/AJS2 whose version is 8 or earlier.

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*

Specify the name of a logical host. You can specify a character string of 1 to 255 bytes.

If environment variable JP1_HOSTNAME is set when this option is omitted, the system assumes the logical host name specified in the environment variable. If the `JP1_HOSTNAME` environment variable is not specified, `JP1_DEFAULT` is assumed.

`-F` *scheduler-service-name*

Specify the name of the target scheduler service. You can specify a character string of 1 to 30 bytes.

`-b` *database-backup-file-storage-directory*

Specify the absolute path name of the directory that will store database backup files. You can specify a character string of 1 to 244 bytes.

Do not specify a non-existent directory.

When this command is executed, a backup file named *table-ID*`.bk` is created for each table in the following directory:

*database-backup-file-storage-directory**logical-host-name**scheduler-service-name*

Notes

- This command is used for migration from JP1/AJS2 V8 or earlier. An attempt to import the backup data to the scheduler service set up in JP1/AJS3 V9 results in an error.
- This command performs operations on the embedded database existing before migration. Therefore, if the embedded database is used as the scheduler database before migration, add the following path to the appropriate environment variable, and then execute the command.

  In HP-UX:

  `SHLIB_PATH=`*installation-directory-for-the-embedded-database-before-migration*`/client/lib`

  In Solaris or Linux:

  `LD_LIBRARY_PATH=`*installation-directory-for-the-embedded-database-before-migration*`/client/lib`

  In AIX:

  `LIBPATH=`*installation-directory-for-the-embedded-database-before-migration*`/client/lib`

  If you execute the command without adding the above path, the command outputs the KAVS0990-E message, and terminates abnormally.
- If the embedded database or HiRDB is used as the scheduler service database in JP1/AJS2 whose version is 8 or earlier, make sure that the embedded database or HiRDB is started before executing the command.

  For details about how to start the embedded database or HiRDB, see the applicable JP1/AJS2 or HiRDB manual.

Return values

0	Normal end
Multiple of 4 from 4 to 124	Abnormal end

ajscnvdbimport

Format

```
ajscnvdbimport
     [-mh logical-host-name]
     -F scheduler-service-name
     -b database-backup-file-storage-directory
```

Description

The ajscnvdbimport command imports the database backup data created by the ajscnvdbexport command to the specified scheduler database.

If the specified scheduler service already has data, the command deletes the existing data, and then imports the backup data.

You can execute this command only when you can access the scheduler service database.

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*

Specify a logical host name. You can specify a character string of 1 to 255 bytes.

If this option is omitted, the value of the JP1_HOSTNAME environment variable is assumed. If the environment variable is not set, JP1_DEFAULT is assumed.

-F *scheduler-service-name*

Specify the name of the scheduler service for which you want to import the backup data to the database. You can specify a character string of 1 to 30 bytes.

-b *database-backup-file-storage-directory*

Specify the absolute path name of the directory that contains the database backup file. You can specify a character string of 1 to 234 bytes.

The value you specify in this option is the value that was specified in the -b option when the ajscnvdbexport command was executed.

Note

This command is used for migration from JP1/AJS2 V8 or earlier. An attempt to import the backup data to the scheduler service set up in JP1/AJS3 V9 results in an error.

Return values

0	Normal end
Multiple of 4 from 4 to 124	Abnormal end

ajsembdbbuild

Format

```
ajsembdbbuild
     [-l|-m|-s]
     {
      {-d data-area-directory
        [,system-area-directory-1
         [,system-area-directory-2]] |
       -a ajssys01=data-area-partition
        ,ajssys11=system-area-partition-1
         [,ajssys17=system-area-partition-2]
          -d work-area-directory
      } [-lh logical-host-name] |
      {{-r|-f}
       {-d data-area-directory
         [,system-area-directory-1
          [,system-area-directory-2]] |
        -a ajssys01=data-area-partition
         ,ajssys11=system-area-partition-1
          [,ajssys17=system-area-partition-2]
       }
       -ld work-area-directory
       -mh logical-host-name
       -eh primary-node-physical-host-name
      }
     }
     [-p port-number]
     [-i embedded-database-practical-directory]
     [-bs -bl unload-log-file-creation-directory |
      -br -bl unload-log-file-creation-directory ]
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-ext_db]
     [-ext_log]
     [-conf embedded-database-settings-file-name]
```

Format 1 (standard setup on a physical host)

```
ajsembdbbuild
     [-l|-m|-s]
     -d data-area-directory
       [,system-area-directory-1]
     [-lh logical-host-name] |
     [-p port-number]
     [-i embedded-database-practical-directory]
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-ext_db]
     [-ext_log]
     [-conf embedded-database-settings-file-name]
```

Format 2 (setup for creating a backup and obtaining an unload log file periodically on a physical host)

```
ajsembdbbuild
     [-l|-m|-s]
     -d data-area-directory
       ,system-area-directory-1
         [,system-area-directory-2]
     [-lh logical-host-name] |
     [-p port-number]
     [-i embedded-database-practical-directory]
     {-bs -bl unload-log-file-creation-directory|
      -br -bl unload-log-file-creation-directory}
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-ext_db]
     [-ext_log]
     [-conf embedded-database-settings-file-name]
```

Format 3 (setup on a physical host using RAW files)

```
ajsembdbbuild
     [-l|-m|-s]
     -a ajssys01=data-area-partition
       ,ajssys11=system-area-partition-1
     -d work-area-directory
     [-lh logical-host-name] |
     [-p port-number]
     [-i embedded-database-practical-directory]
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-conf embedded-database-settings-file-name]
```

Format 4 (setup for creating a backup and obtaining an unload log file periodically after using RAW files to configure the embedded database server area on a physical host)

```
ajsembdbbuild
     [-l|-m|-s]
     -a ajssys01=data-area-partition
       ,ajssys11=system-area-partition-1
         [,ajssys17=system-area-partition-2]
     -d work-area-directory
     [-lh logical-host-name] |
     [-p port-number]
     [-i embedded-database-practical-directory]
     {-bs -bl unload-log-file-creation-directory |
      -br -bl unload-log-file-creation-directory}
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-conf embedded-database-settings-file-name]
```

Format 5 (standard setup on a logical host)

```
ajsembdbbuild
     [-l|-m|-s]
     {-r|-f}
     -d data-area-directory
       [,system-area-directory-1]
     -ld work-area-directory
     -mh logical-host-name
     -eh primary-node-physical-host-name
     [-p port-number]
     -i embedded-database-practical-directory
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-ext_db]
     [-ext_log]
     [-conf embedded-database-settings-file-name]
```

Format 6 (setup for creating a backup and obtaining an unload log file periodically on a logical host)

```
ajsembdbbuild
     [-l|-m|-s]
     {-r|-f}
     -d data-area-directory
       ,system-area-directory-1
         [,system-area-directory-2]
     -ld work-area-directory
     -mh logical-host-name
     -eh primary-node-physical-host-name
     [-p port-number]
     -i embedded-database-practical-directory
     {-bs -bl unload-log-file-creation-directory |
      -br -bl unload-log-file-creation-directory}
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-ext_db]
     [-ext_log]
     [-conf embedded-database-settings-file-name]
```

Format 7 (setup on a logical host using RAW files)

```
ajsembdbbuild
     [-l|-m|-s]
     {-r|-f}
     -a ajssys01=data-area-partition
       ,ajssys11=system-area-partition-1
     -ld work-area-directory
     -mh logical-host-name
     -eh primary-node-physical-host-name
     [-p port-number]
     -i embedded-database-practical-directory
     [-rs]
     [-c]
```

```
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-conf embedded-database-settings-file-name]
```

Format 8 (setup for creating a backup and obtaining an unload log file periodically after using RAW files to configure the embedded database server area on a logical host)

```
ajsembdbbuild
     [-l|-m|-s]
     {-r|-f}
     -a ajssys01=data-area-partition
       ,ajssys11=system-area-partition-1
         [,ajssys17=system-area-partition-2]
     -ld work-area-directory
     -mh logical-host-name
     -eh primary-node-physical-host-name
     [-p port-number]
     -i embedded-database-practical-directory
     {-bs -bl unload-log-file-creation-directory|
      -br -bl unload-log-file-creation-directory}
     [-rs]
     [-c]
     [-lc character-code-set-type]
     [-id setup-identifier]
     [-conf embedded-database-settings-file-name]
```

Format 9 (setup for configuring an embedded database on a secondary node by using the embedded database settings file created on the primary node)

```
ajsembdbbuild
     -conf embedded-database-settings-file-name
```

Description

The `ajsembdbbuild` command creates the embedded database environment for JP1/AJS3, and starts the embedded database in the environment.

When you create the environment for cluster operation, execute this command on both the executing host and the standby host.

You must enable the IP address to which the name of the disk to be used and the applicable host name resolve. Note that when you execute the command on the standby host, you do not need to enable this IP address.

In Windows, the JP1/AJS3 Database_JF*n* (*n* indicates a character from 0 to 9 or from A to Z) service of the embedded database to be configured must be in running status.

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

-l|-m|-s

Selects one of the following three database models.

- -l

  Selects the large-scale system model, as shown below.

  When the value of the DEFLENTYPE environment settings parameter is byte:

  - Total number of units: About 48,000 to 240,000
  - Number of jobs executed per day and total number of jobnets: 30,000 to 120,000
  - Approximate disk capacity: 20,700 MB

  When the value of the DEFLENTYPE environment settings parameter is sjis:

  - Total number of units: About 38,400 to 192,000
  - Number of jobs executed per day and total number of jobnets: 24,000 to 96,000
  - Approximate disk capacity: 20,700 MB

- -m

  Selects the medium-scale system model, as shown below.

  When the value of the DEFLENTYPE environment settings parameter is byte:

  - Total number of units: About 5,000 to 48,000
  - Number of jobs executed per day and total number of jobnets: 5,000 to 30,000
  - Approximate disk capacity: 4,200 MB

  When the value of the DEFLENTYPE environment settings parameter is sjis:

  - Total number of units: About 4,000 to 38,400
  - Number of jobs executed per day and total number of jobnets: 4,000 to 24,000
  - Approximate disk capacity: 4,200 MB

- -s

  Selects the small-scale system model, as shown below.

  When the value of the DEFLENTYPE environment settings parameter is byte:

  - Total number of units: Up to about 5,000
  - Number of jobs executed per day and total number of jobnets: Up to 5,000
  - Approximate disk capacity: 520 MB

  When the value of the DEFLENTYPE environment settings parameter is sjis:

  - Total number of units: Up to about 4,000
  - Number of jobs executed per day and total number of jobnets: Up to 4,000

- Approximate disk capacity: 520 MB

The default is `-l` (large-scale system).

`-d` *data-area-directory* `[,`*system-area-directory-1*`[,`*system-area-directory-2*`]]`

Specify this option to use normal files for the data area and the system area in the embedded database.

- *data-area-directory*

  Specifies the directory containing the data area of the embedded database. The data area of the embedded database is allocated in this directory and holds the body of the JP1/AJS3 scheduler database.

  If you do not specify *system-area-directory-1* described later, the directory specified here also contains the system area of the embedded database for storing system files.

- *system-area-directory-1*

  If you want to use the system log (specify the `-bs` option), you must also specify *system-area-directory-1*. The system area of the embedded database is allocated in this directory for the storage of system files.

- *system-area-directory-2*

  If you want to use the system log and duplex the system files (specify the `-br` option), you must also specify *system-area-directory-2*. Specifying the `-br` option creates duplicate system files.

Hitachi recommends that you place each of the above directories on a different volume to improve reliability.

When you create an environment for cluster operation (`-r` or `-f` option), specify the directories on the shared disk.

The name of each directory must be an absolute path of 50 bytes or less. If a name contains space characters, enclose the entire path in double quotation marks (" ").

When you specify multiple directories, enclose the entire value of the `-d` option in double quotation marks (" "). Do not enclose each separate directory name in double quotation marks (" ").

`-a ajssys01=`*data-area-partition* `,ajssys11=`*system-area-partition-1* `[,ajssys17=`*system-area-partition-2*`]`

Specify these options to use RAW files for the data area and the system area in the embedded database.

- `ajssys01=`*data-area-partition*

  Specify the partition for the data area in the embedded database. The body of the JP1/AJS3 scheduler database is stored in this partition.

- `ajssys11=`*system-area-partition-1*

  Also specify *system-area-partition-1* regardless of whether you use the system log (specify the `-bs` or `-br` option). The system files of the embedded database are stored in this partition.

- `ajssys17=`*system-area-partition-2*

  If you want to use the system log and duplex the system files (specify the `-br` option), you must also specify *system-area-partition-2*. By specifying the `-br` option creates duplicate system files.

The following are examples of specifying these options.

In Windows:

Assigning drive D as the data area partition and drive E as system area partition 1

```
-a "ajssys01=\\.\D:,ajssys11=\\.\E:"
```

Assigning drive D as the data area partition, drive E as system area partition 1, and drive F as system area partition 2

```
-a "ajssys01=\\.\D:,ajssys11=\\.\E:,ajssys17=\\.\F:"
```

In UNIX:

Assigning /dev/vg00/rdsk0 as the data area partition and /dev/vg00/rdsk1 as system area partition 1

```
-a "ajssys01=/dev/vg00/rdsk0,ajssys11=/dev/vg00/rdsk1"
```

Assigning /dev/vg00/rdsk0 as the data area partition, /dev/vg00/rdsk1 as system area partition 1, and /dev/vg00/rdsk2 as system area partition 2

```
-a "ajssys01=/dev/vg00/rdsk0,ajssys11=/dev/vg00/rdsk1,ajssys17=/dev/vg00/
rdsk2"
```

When you create an environment for cluster operation (specify the -r or -f option), specify the partitions on the shared disk.

The name of each partition must be an absolute path of 50 bytes or less. Enclose the entire value of the -a option in double quotation marks (" ").

-d *work-area-directory*

Specify this option when you create an environment that uses RAW files (-a option) but does not use cluster operation (no -r and -f options). As the work area to be used by the embedded database, specify the name of a directory in the normal file system.

The name of the directory must be an absolute path of 50 bytes or less. If the name contains space characters, enclose the entire path in double quotation marks (" ").

Secure 40 MB of free space on the file system of the directory to be specified.

-lh *logical-host-name*

You do not need to specify this option.

When you operate a logical host in a non-cluster environment, specify the -mh, -eh, -ld, and -r options.

-r

Specify this option when you configure the environment of the executing host in a cluster configuration or of the logical host in a non-cluster configuration. At the same time, you also need to specify a logical host name (-mh option) and the work area directory (-ld option).

The shared disk for storing the data area and the system area of the embedded database must be mounted on the executing host. In addition, the target logical host must be available for access.

-f

Specify this option to create the environment for the standby host in a cluster configuration. You also need to specify a logical host name (-mh option) and the embedded database work area directory (-ld option) at the same time.

When you specify this option, only the embedded database is set. The data area is not created and the embedded database is not started. However, make sure that the specification of the data area and the system area of the embedded database (-a or -d option) is the same as the environment for the executing host.

`-ld` *work-area-directory*

Specify this option when you create an environment for logical host (`-r` or `-f` option). As the work area to be used by the embedded database, specify the name of a directory in the normal file system on the physical host. Do not specify a directory on the shared disk.

The name of the directory must be an absolute path of 50 bytes or less. If the name contains space characters, enclose the entire path in double quotation marks (" ").

Secure 40 MB of free space in the file system of the directory to be specified.

`-mh` *logical-host-name*

Specify this option when you create an environment for logical host (`-r` or `-f` option). Specify a logical host name. You can specify a character string of 1 to 32 bytes.

`-eh` *primary-node-physical-host-name*

Specify this option when you create an environment for logical host (`-r` or `-f` option). Specify the host name (host name output by using the `hostname` command) that is recognized as the TCP/IP host name by the operating system on the executing host.

Note that you must specify the physical host name of the primary node for this option even when you are creating the environment for the standby host (`-f` option). You can specify a character string of 1 to 32 bytes.

`-p` *port-number*

Specify the port number to be used for the embedded database. You can specify a number from `5001` to `65535`.

You must specify a port number that is not being used in the system. If other JP1 products are using the embedded database, make sure that you do not specify a port number that these products use.

Note that in Windows, if you specify a port number that has already been used, the following problems might occur:

- JP1/AJS3 terminates abnormally or cannot operate normally.
- The program that uses the duplicate port number terminates abnormally or cannot operate normally.

If you omit this option, the system assumes `22220`.

`-i` *embedded-database-practical-directory*

Specify the name of the directory to be used as the embedded database practical directory.

If you are not sure about the name of the embedded database installation directory, execute the following command to check the name:

```
ajsembdbidlist -v
```

For details on the `ajsembdbidlist` command, see *ajsembdbidlist* in *2. Commands Used during Setup*.

Use absolute paths to specify the names of directories. If the name of a directory contains space characters, enclose the entire path in double quotation marks (" ").

When you create an environment for cluster operation (`-r` or `-f` option), do not specify a directory on the shared disk.

You can omit this option for UNIX. If you omit the option, the system assumes `/opt/jp1ajs2/embdb/_JF0`.

-bs

Specify this option if you use the system log and do not duplex the system files.

If you specify this option without specifying the -bl option, an error occurs.

-br

Specify this option if you use the system log and duplex the system files.

If you specify this option without specifying the -bl option, an error occurs.

-bl *unload-log-file-creation-directory*

Specify a directory in which the unload log file will be created. If you do not specify the -bs or -br option together with the -bl option, an error occurs.

The directory name you can specify in this option must be an absolute path name that is no more than 50 bytes. If the name contains space characters, enclose the entire path in double quotation marks (" ").

For details on how to acquire the unload log file of the embedded database, see *5.4.1(1) Restoring the scheduler database from unload log files* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

-rs

You do not need to specify this option. If you specify it, processing ends without configuring the embedded database.

-c

Specify this option when you have upgraded JP1/AJS3. This option updates the configuration files used by the embedded database to the latest ones. Do not specify this option for a new installation, or if you do not want to update the configuration files.

Note that if you update configuration files, they are overwritten.

If JP1/AJS3 is upgraded from JP1/AJS2 Version 8 or earlier, you must specify this option when you execute the command for the first time after the upgrading.

-lc *character-code-set-type* (UNIX only)

This option no longer needs to be specified.

The character code set specified for this option is ignored, and JP1/AJS3 - Manager automatically sets the character code set.

-id *setup-identifier*

Use four characters, _JF*n* (*n* is 0 to 9 or A to Z), to specify the setup identifier for identifying the embedded database.

Make sure that you specify the setup identifier specified for the -id option of the ajsembdbidlist command.

If you omit this option, the system assumes _JF0. This option is ignored when you specify the -rs options.

To check the registered setup identifiers and embedded database practical directories, execute the ajsembdbidlist command.

For details on the ajsembdbidlist command, see *ajsembdbidlist* in *2. Commands Used during Setup*.

-ext_db

Specify this option if you want to use the database area auto-increment function.

You can specify this option if you use normal files for the data and system areas of the embedded database. You cannot specify this option with the -a option.

To check whether the auto-increment function is used, execute the following commands:

Data area: pddbst -k phys -f -r AJS2DATA

Index area: pddbst -k phys -f -r AJS2INDX

The Auto Extend Use value indicates whether the function is used:

USE: The auto-increment function is used.

NOUSE: The auto-increment function is not used.

Note that before you execute the pddbst command from a command prompt, you need to set environment variables from the same command prompt. For details about the environment variables you must set, see the table that describes them in *10.2.2(2) Using a script to reorganize a database* in the *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*.

-ext_log

Specify this option if you want to use the system log auto-increment function.

You can specify this option if you use normal files for the data and system areas of the embedded database. You cannot specify this option with the -a option.

To check whether the auto-increment function is enabled, use the following command:

ajsembdbstatus -l -id *embedded-database-setup-ID*

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

-conf *embedded-database-settings-file-name*

Specify the embedded database settings file. An embedded database is configured with the same settings as the embedded database that was configured when the specified embedded database settings file was output.

If this option is specified together with other options, the options specified in the embedded database settings file take precedence.

When this option is specified, the -d, -a, -ld, -mh, -eh, -r, and -f options can be omitted.

If the embedded database settings file that was output when the logical host was built is specified, but the -r or -f option is omitted, the -f option is assumed.

If the contents of the embedded database settings file are invalid, the KAVS2130-E message is output, and the command ends abnormally.

To use an embedded database settings file that was output in an environment using a different character encoding, convert the character codes.

If you specify this option, the directory structure must match the environment of the embedded database that was configured when the embedded database settings file specified as the argument was output. Accordingly, create beforehand the directories and partitions specified for the `-d`, `-a`, `-ld`, and `-bl` options of the `ajsembdbbuild` command by which the environment of the embedded database was configured when the embedded database settings file was output.

The embedded database settings file is output to the following location.

In Windows:

embedded-database-practical-directory`\conf\ajsdbst\`*ajsembdb-setup-identifier*`.conf`

In UNIX:

embedded-database-practical-director`/conf/ajsdbst/`*ajsembdb-setup-identifier*`.conf`

Notes

- When you re-create the embedded database environment, execute the `ajsembdbunset` command to initialize the information about the embedded database environment and then execute the `ajsembdbbuild` command. To delete the embedded database environment, execute the `ajsembdbunset` command as well.

  Note that when you execute the `ajsembdbunset` command, the information about the embedded database environment is forcibly initialized even if the scheduler service is accessing the embedded database. Use caution when you execute the `ajsembdbunset` command.

  For details on the `ajsembdbunset` command, see *ajsembdbunset* in *2. Commands Used during Setup*.

- The `ajsembdbbuild` command is incorporated into a script. For this reason, specifying an excessively long character string or an invalid character string or value may result in an unexpected error. In the options, therefore, specify the character strings and numeric values defined in DBMS and JP1/AJS3.
- When executing the `ajsembdbbuild` command, you must set the maximum file size available in the OS file system at a value greater than 2 gigabytes, or set it at infinity.

  For AIX, in particular, note that the file size limit is set at a default of 1 gigabyte.
- Even if the directory name specified in the `-bl` option is incorrect, the embedded database system may complete the startup process. When you specify the `-bl` option, see the Windows event log or syslog to check if an error message for the embedded database KFPS01150-E has been output.
- Do not use multi-byte characters or special symbols for path names such as the path name of the embedded database practical directory.
- If the `ajsembdbbuild` command outputs either of the following messages and terminates, execute the `ajsembdbunset` command with the `-i` option specified to delete the environment, and then re-execute the `ajsembdbbuild` command:
  - KAVS2124-E Failed in construction of EmbedDB server.
  - KAVS2122-E A temporary file already exists.
- Do not execute `ajsembdbbuild` command repeatedly 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 `ajsembdbbuild` command results in an error.
  - The configuration definition information becomes invalid, disabling further operation of JP1/AJS3.

- Before you execute this command, register in the `hosts` file or DNS the name of the host on which you are creating the embedded database environment. In a cluster system, register both the physical and logical host names of the primary node.
- If you register the name of the host on which the embedded database environment has been set up in the `jp1hosts` or `jp1hosts2` definition file, that name does not become effective as the host name used for the embedded database.
- Do not use aliases as the name of the host on which the embedded database environment has been set up.
- The maximum size of the name of the host on which the embedded database can operate is 32 bytes. Therefore, specify the names of the physical host and logical hosts on which the embedded database environment has been set up in the range from 1 to 32 bytes.

Actions to be taken if an error occurs

If a problem occurs during execution of the `ajsembdbbuild` command, the return code, error message, and termination message are output in this order to the standard output and standard error output. Troubleshoot the problem according to the following table, and then re-execute the command.

Code	Message ID	Cause	Action taken
1	KFPX29601	The `-a` or `-d` option is specified incorrectly.	Revise the arguments specified in `-a` or `-d` option.
3	KFPX29603	The specified directory is not an embedded database practical directory.	Specify an embedded database practical directory in the `-i` option.
4	KFPX29604	No embedded database practical directory is specified.	
5	KFPX29605	A port number is duplicated.	Specify a port number in the `-p` option so that it does not duplicate another port number.
6	KFPX29606	System common definition is incorrect.	This error occurs when you modify setup files such as the system common definition manually. Correct the cause of the error. If the length of the specified absolute path name exceeds 50 bytes, specify an absolute path name that is no more than 50 bytes.
7	KFPX29607	The file does not exist.	Review the `ajsembdbbuild` command execution environment. Revise the arguments specified in `-ld` option.
8	KFPX29608	The file could not be opened.	
9	KFPX29609	The file could not be read.	
10	KFPX29610	A file could not be created.	
11	KFPX29611	A directory could not be created.	Review the arguments specified in `-d`, `-bl`, `-a`, and `-ld` options. If the AJS administrator is executing the command, make sure the AJS administrator has execution privileges.
12	KFPX29612	The table and system area is insufficient.	Review the `ajsembdbbuild` command execution environment. Revise the arguments specified in `-ld` option.
13	KFPX29613		
14	KFPX29614		
15	KFPX29615		
16	KFPX29616	An error occurred during the creation of a table and system area.	Review the `ajsembdbbuild` command execution environment. Revise the arguments specified in `-bl` option. If the maximum file size available for the OS file system has a setting equal to or less than 2 gigabytes, you must change the setting to a value greater than 2 gigabytes, or set it at infinity.

Code	Message ID	Cause	Action taken
17	KFPX29617	An error occurred during system area initialization.	Review the `ajsembdbbuild` command execution environment. Revise the arguments specified in `-ld` option.
18	KFPX29618	An error occurred during embedded database start or table area initialization.	Review the command execution environment. Confirm that communication can be established with the IP address that was resolved from the specified host name. Revise the argument specified in `-bl` option. Required resources for the embedded database are insufficient. For details, see *3.2.5 Estimating the values for kernel parameters* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.
19	KFPX29619	An internal error occurred in the embedded database.	Back up the embedded database practical directory and contact the system administrator.
20	KFPX29620	An error occurred during temporary file creation.	Review the `ajsembdbbuild` command execution environment. Revise the arguments specified in `-bl` option.
21	KFPX29621	The file format is incorrect.	This error occurs if you modify setup files such as the system common definition manually. Correct the cause of the error.
22	KFPX29622	System area specification is incorrect.	
23	KFPX29623	An internal error in the embedded database.	Save the directory specified as the embedded database practical directory, and contact the system administrator.
24	KFPX29624 KFPS00031	The embedded database environment has been created.	Execute the `ajsembdbunset` command to delete the embedded database environment, and then perform setup.
25	KFPX29625	Insufficient memory.	Allocate sufficient memory and then again set up the environment.
26	KFPX29626	An internal error occurred in the embedded database.	Back up the embedded database practical directory, and then contact the system administrator.
27	KFPX29627		
--	KFPS00031	The embedded database environment has been created.	Execute the `ajsembdbunset` command to delete the previous embedded database environment.
--	KFPS05089	The directory specified in the `-i` option does not exist.	Specify the embedded database practical directory.
--	Bad directory specified in -i option	The embedded database practical directory specified in `-i` option is invalid.	Specify the correct embedded database practical directory in `-i` option.
--	There is an error in the specification of the setup identifier.	The specified setup identifier is incorrect. Alternatively, the specified setup identifier is already registered.	Check the specification of the setup identifier and re-execute the script. Use four characters, `_JF`*n* (*n* is from 0 to 9 or from A to Z), to specify the setup identifier. Use the `ajsembdbidlist` command to check the registered setup identifiers.
--	Failed to register the configuration definition.	Registering the configuration definition failed.	Execute the `ajsembdbunset` command to delete the embedded database environment. After deleting the environment, check the execution permission for the `ajsembdbbuild` command and re-execute the `ajsembdbbuild` command.
--	KAVS2130-E	The embedded database settings file is incorrect. Alternatively, there is no permission to access the file specified in the `-conf` option.	Specify the file correctly and re-execute the command. If the AJS administrator is executing the command, make sure the AJS administrator has execution privileges.

Legend:

--: No code number.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsembdbidlist

Format

```
ajsembdbidlist
     [-v | -a | -e]
```

Description

Displays information that is required by commands for operating on the embedded database. The information is registered in the configuration definition.

The information to be displayed is as follows:

- Association between setup identifiers and embedded database practical directories
- Association between scheduler services and embedded database practical directories
- Association between setup identifiers of the embedded database where the agent management database is stored
- The version of the embedded database
- Installation mode of the embedded database

Note that this command can be executed regardless of the operating status of JP1/AJS3 and the embedded database.

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

`-v`

Specify this option to display the version of the embedded database.

`-a`

Specify this option to display the location of the embedded database where the agent management database is stored.

`-e`

Specify this option to check the behavior of the installed embedded database.

Example 1

The command in this example displays the following types of information registered in the configuration definition:

- Association between setup identifiers and embedded database practical directories
- Association between scheduler services and embedded database practical directories

```
ajsembdbidlist
```

Example 2

The command in this example displays the following types of information registered in the configuration definition:

- Association between setup identifiers and embedded database installation directories
- Association between setup identifiers and embedded database versions

```
ajsembdbidlist -v
```

Example 3

The command in this example displays the following types of information registered in the configuration definition:

- Association between setup identifiers and embedded database practical directories
- Association between scheduler services and embedded database practical directories
- Association between setup identifiers of the embedded database where the agent management database is stored

```
ajsembdbidlist -a
```

Example 4

The command in this example displays the following types of information registered in the configuration definition:

- Installation mode of the embedded database

```
ajsembdbidlist -e
```

Output example 1

The following output example shows that the `ajsembdbsetup` command (embedded database setup) has been completed for `_JF0` to `_JF2` on hosts `AJSROOT1`, `AJSROOT2`, and `ROOT3`, respectively. For `_JF3`, the `ajsembdbbuild` command (embedded database environment creation) has been completed.

```
(1) *** Embeddb setup-id list 20XX/04/18 08:15:00
  (2)             (3)
  _JF0 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
  _JF1 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1
  _JF2 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
  _JF3 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF3

(4) Host-Name:JP1_DEFAULT
   (5)     (6)       (7)
  AJSROOT1 _JF0 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0

  Host-Name:LHOST1
  AJSROOT2 _JF1 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1
```

```
  ROOT3 _JF2 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
(8)--
```

Explanation of output items

(1) The title and the time that the command was executed (in *YYYY*/*MM*/*DD hh*:*mm*:*ss* format)

(2) Setup identifiers

(3) Embedded database practical directories

(4) Logical host name. For a physical host, `JP1_DEFAULT` is output.

(5) Scheduler service name

(6) Setup identifiers

(7) Embedded database practical directories

(8) End of output

Output example 2

The following output example shows the `ajsembdbidlist` command executed with the `-v` option specified when `_JF0` and `_JF1` have been installed on a physical host and `_JF2` has been installed on the `LHOST1` logical host.

```
(1) *** Embeddb setup-id list 20XX/04/18 08:15:00

(2) Host-Name:JP1_DEFAULT
   (3)   (4)              (5)
  _JF0 08-05-/N C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
  _JF1 08-05-/N C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1

  Host-Name:LHOST1
  _JF2 08-05-/N C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
(6)--
```

Explanation of output items

(1) The title and the time that the command was executed (in *YYYY*/*MM*/*DD hh*:*mm*:*ss* format)

(2) Logical host name. For a physical host, `JP1_DEFAULT` is output.

(3) Setup identifiers

(4) Versions of embedded databases

(5) Installation directories for embedded databases

(6) End of output

Output example 3

The following output example shows the `ajsembdbidlist` command executed with the `-a` option specified when the agent management database of the physical host is stored in `_JF0`, and the agent management database of the `LHOST1` logical host is stored in `_JF2`.

```
(1) *** Embeddb setup-id list 20XX/04/18 08:15:00
(2)      (3)
_JF0 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
_JF1 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1
_JF2 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
_JF3 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF3
(4) Host-Name:JP1_DEFAULT
(5)        (6)     (7)
AJSROOT1 _JF0 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
Host-Name:LHOST1
AJSROOT2 _JF1 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1
ROOT3 _JF2 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
(8) Agent DB
(9) Host-Name:JP1_DEFAULT
(10)      (11)
_JF0 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
Host-Name:LHOST1
_JF2 C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
(12)--
```

Explanation of output items

(1) The title and the time that the command was executed (in *YYYY/MM/DD hh*:*mm*:*ss* format)

(2) Setup identifiers

(3) Embedded database practical directories

(4) Logical host name. For a physical host, `JP1_DEFAULT` is output.

(5) Scheduler service name

(6) Setup identifiers

(7) Embedded database practical directories

(8) Start of output for the association between agent management databases

(9) Logical host name. For a physical host, `JP1_DEFAULT` is output.

(10) Setup identifier of the embedded database where the agent management database for each logical host is stored

(11) Installation directories for embedded databases

(12) End of output

Output example 4

The following output example shows the `ajsembdbidlist` command executed with the `-e` option specified when `_JF0` and `_JF1` have been installed on a physical host and `_JF2` and `_JF3` have been installed on the `LHOST1` logical host. Note that `_JF0` and `_JF1` were installed by using JP1/AJS3 - Manager version 09-50, and `_JF2` and `_JF3` were installed by using JP1/AJS3 - Manager version 10-00 or later.

```
(1) *** Embeddb setup-id list 20XX/04/01 08:15:00

(2) Host-Name:JP1_DEFAULT
```

```
   (3)      (4)      (5)          (6)
  _JF0 08-05-DA OS_CONTROL  C:\Program Files\HITACHI\JP1AJS2\embdb\_JF0
  _JF1 08-05-DA OS_CONTROL  C:\Program Files\HITACHI\JP1AJS2\embdb\_JF1

  Host-Name:LHOST1
  _JF2 08-05-DA AJS_CONTROL C:\Program Files\HITACHI\JP1AJS2\embdb\_JF2
  _JF3 08-05-DA AJS_CONTROL C:\Program Files\HITACHI\JP1AJS2\embdb\_JF3
(7)--
```

Explanation of output items

(1) The title and the time that the command was executed (in *YYYY/MM/DD hh*:*mm*:*ss* format)

(2) Logical host name. For a physical host, `JP1_DEFAULT` is output.

(3) Setup identifiers

(4) Versions of embedded databases

(5) Behavior of the embedded database

OS_CONTROL

Indicates that the embedded database has been installed under one or the other of the following circumstances:

- The embedded database was installed by using a JP1/AJS3 - Manager version earlier than 10-00.
- When the `ajsembdbinstl` command is executed with the `-v9standard` option specified.

For UNIX, the `pdprcd` process starts from `inittab`.

For Windows, the JP1/AJS3 Database ClusterService service is created. The startup type of the JP1/AJS3 Database service is *automatic*.

AJS_CONTROL

Indicates that the embedded database was installed by using JP1/AJS3 - Manager version 10-00 or later.

For UNIX, the `pdprcd` process starts from `pdmgrd`.

For Windows, the JP1/AJS3 Database ClusterService service is not created. The startup type of the JP1/AJS3 Database service is *manual*.

(6) Installation directories for embedded databases

(7) End of output

Actions to be taken if an error occurs

If a command error occurs, take the action indicated in the following table.

Message ID and message	Cause	Action taken
KAVS2116-E There is an error in the specified option. Illegal option (*option*) exists.	The specified option is incorrect. An invalid option has been specified.	Check the option and re-execute the command.
KAVS0903-E System error occurred. : Get Conf NG	An attempt to read the configuration definition failed.	Check the execution permission for the command, and re-execute the command. If this error occurs again, contact the system administrator.

Return values

0	Normal end	Registered information is displayed (this value is also returned when there is no information to be displayed).
4	Abnormal end	An option is invalid.
8	Abnormal end	An attempt to read the configuration definition failed.

ajsembdbinstl

Format

```
ajsembdbinstl
     -s embedded-database-installation-media-storage-directory
     [-mh logical-host-name]
     [-i embedded-database-installation-previous-directory]
     [-id setup-identifier]
     [-v9standard]
```

Description

The `ajsembdbinstl` command installs the JP1/AJS3 standard database (embedded database).

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Storage directory

In Windows:

JP1/AJS3-installation-folder`\tools\`

In UNIX:

`/opt/jp1ajs2/tools/`

Arguments

`-s` *embedded-database-installation-media-storage-directory*

Specify the absolute path name of the directory that will store the embedded database installation media.

You must specify the following directory:

In Windows:

JP1/AJS3-installation-folder`\tools\AJS3DB`

In UNIX:

`/opt/jp1ajs2/tools/AJS3DB`

If the absolute path name you specify contains a space or parenthesis, enclose the entire path name in double quotation marks (`"`).

`-mh` *logical-host-name*

Specify the name of the logical host on which you want to install the embedded database. You can specify a character string of 1 to 32 bytes.

If you are using the physical host, you do not need to specify this option.

`-i` *embedded-database-installation-previous-directory*

Specify the absolute path name of the directory in which you want to install the embedded database. You can specify a character string of 1 to 118 bytes.

Make sure that you specify a path name that begins with a drive name.

The following shows the characters that can be used to specify the absolute path name.

For Windows

Alphanumeric characters, space characters, path separators (\), periods (.), underscores (_), left parentheses ((), and right parentheses ()))

For UNIX

Alphanumeric characters, underscores (_), and slants (/)

If the absolute path name you specify contains a space or parenthesis, enclose the entire path name in double quotation marks (").

If this option is omitted, the following directory is assumed.

In Windows:

JP1/AJS3-installation-folder\embdb_JF*n*

In UNIX:

JP1/AJS3-installation-directory/embdb/_JF*n*

For *n* above, the *n* value in the setup identifier specified for the -id option is used.

For the -id option, make sure that you specify a directory that exists on a local disk.

When executing this command, you need to secure sufficient free space in the disk for the directory in which the embedded database is to be installed. For details about the required free space, see the *Release Notes*.

`-id` *setup-identifier*

Specify a four-character setup identifier, _JF*n* (*n*: 0 to 9 or A to Z), which identifies the embedded database.

If you omit this option, the system assumes _JF0.

`-v9standard`

This option is provided for compatibility and is specified to configure an embedded database with the method used in a version earlier than 10-00. Normally, it is not necessary to specify this option.

The following are differences between when this option is specified and when it is omitted:

In Windows:

When the -v9standard option is specified

- The JP1/AJS3 Database ClusterService service is created.
- The startup type of the JP1/AJS3 Database service is *automatic*.

When the -v9standard option is omitted

- The JP1/AJS3 Database ClusterService service is not created
- The startup type of the JP1/AJS3 Database service is *manual*.

In UNIX:

When the `-v9standard` option is specified

The `pdprcd` process starts from `inittab`.

When the `-v9standard` option is omitted

The `pdprcd` process starts from the `pdmgrd` process.

If an overwrite installation is performed with the `-v9standard` option specified for an embedded database whose startup type for the JP1/AJS3 Database service is set to *manual*, the startup type does not change to *automatic*.

If an overwrite installation is performed with the `-v9standard` option omitted for an embedded database whose startup type for the JP1/AJS3 Database service is set to *automatic*, the startup type changes to *manual*.

Notes

- If the return value of this command is not 0, the following message is output: `Database install failed (error code=`*yy*`)`. In *yy*, the return value is indicated. If this message is output, take action appropriate for the indicated return value. For details, see *2.8.8(2) Action to be taken if an error occurs during installation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.
- If Windows Firewall is used, you must add the embedded database to the Windows Firewall exceptions list.
  After execution of the `ajsembdbinstl` command has been completed, execute the following command:

  ```
  embedded-database-installation-previous-directory\bin\pdsetfw setup-identifier
  ```

- In UNIX, when you install the embedded database by specifying the `-v9standard` option, the entry of the embedded database is registered in the `/etc/inittab` directory (in Linux, the `/etc/init` directory). When an overwrite installation is performed for the embedded database, the entry of the embedded database in the `/etc/inittab` directory is deleted and then re-registered. Therefore, the order of the entries in the `/etc/inittab` directory might change.
  When you install the embedded database by omitting the `-v9standard` option, if the entry of the embedded database to be installed already exists, it is deleted and not re-registered.
- If `pd_mode_conf=AUTO` is specified in the system common definition file of the embedded database, the embedded database might automatically start after the overwrite installation. When the embedded database starts, stop it before the JP1/AJS3 service starts.
- Do not execute this command repeatedly in quick succession.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsembdbsetup

Format

```
ajsembdbsetup
     [-mh logical-host-name]
     [-F service-name]
     [-p port-number]
     [-m [-s send-buffer-size] [-r receive-buffer-size]]
     [-ct maximum-wait-time]
     [-tp table-name-prefix]
     [-c]
     [-ru { l | m | s }]
     [-id setup-identifier]
     [-convert]
     [-del]
     [-e {byte | sjis}]
```

Description

The ajsembdbsetup command sets up an embedded database environment in which the database for the scheduler service and agent management can operate.

You can execute this command only when the embedded database is operating.

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*

Specify the name of the JP1 logical host to be processed. You can specify a character string of 1 to 32 bytes.

If environment variable JP1_HOSTNAME is set when this option is omitted, the system assumes the logical host name specified in the environment variable. If JP1_HOSTNAME is not specified, the system assumes the physical host.

-F *service-name*

Specify the name of the scheduler service to be processed.

If environment variable AJSCONF is set when this option is omitted, the system assumes the service name specified in the environment variable. If AJSCONF is not specified, the system assumes the default scheduler service.

`-p` *port-number*

Specify a decimal number as the port number used for connection to the embedded database. Make sure that the port number you specify in this option is the port number specified in the `-p` option when the `ajsembdbbuild` command was executed.

If you omit this option, the system assumes `22220`.

This communication port is set in the `RDBPORT` parameter for the configuration definition.

You can specify a value from 5001 to 65535.

`-m [-s` *send-buffer-size*`] [-r` *receive-buffer-size*`]`

Specify the sizes of send and receive buffers that are used for the inter-process memory communication function of the embedded database.

The function specified here is set in the `RDBIPC`, `RDBSENDMEMSIZE`, and `RDBRECVMEMSIZE` parameters of the configuration definition.

- `-s`
  Specifies the send buffer size with a decimal number (unit: kilobytes).
- `-r`
  Specifies the receive buffer size with a decimal number (unit: kilobytes).

For the `-s` and `-r` options, you can specify a value from 4 to 2,097,152.

If you omit the `-s` or `-r` option, the system assumes the standard embedded database values for operations.

The optimal values for JP1/AJS3 are: send buffers size =100 and receive buffer size = 1600.

If you omit the `-m` option, the system uses the inter-process memory communication function, and assumes send buffer size = 100 and receive buffer size = 1600 regardless of the `-s` and `-r` options that you specify.

`-ct` *maximum-wait-time*

This option takes effect if the RDB connection wait function is used. Specify a value from 0 to 60 (in minutes) as the maximum wait time for connection to the RDB.

If you omit this option, the system assumes 1.

Specifying a value of 0 disables the RDB connection wait function.

If you specify a value outside the 0-60 range in this option, the invalid value is set in the configuration definition. As a result, the following error message might be output when JP1/AJS3 starts: KAVS1003-E Invalid specification in configuration definition. (*item-name*). In addition, the KAVA0334-E error message might be output while the `ajsembdbsetup` command is being executed.

`-tp` *table-name-prefix*

Specify the table name prefix of the JP1/AJS3 scheduler database. Use up to 4 bytes.

If you omit this option, the system assumes `AJS1`.

In the configuration definition, the `TABLENAMEPREFIX` parameter settings are modified.

-c

Specify this option if you want to reset the scheduler services after a table creation error occurs, despite schema creation ending successfully.

-ru { l | m | s }

Specify this option to use the free area re-use function. When you specify -ru together with l, m, or s, you can specify the re-use start point.

When you omit this option, the system assumes -ru l.

Specify the re-use start point of the free area re-use function after -ru option. Free area is re-used when the usage rate of the database (table) area reaches the re-use start point specified in this option.

l, m, and s correspond to the large database model, medium database model, and small database model of ajsembdbbuild command, respectively. Specify the option that matches the size of the database model specified in ajsembdbbuild command.

The re-use start point of the free area re-use function for the database area is set as follows, for each table.

Table 2-1: Re-use start point of the free area re-use function for the database area set for each table

Table name	Re-use start point of the free area re-use function for each table
AJSUNIT	6% of the segments of the entire AJS2DATA database area (Specify 18 when specifying s, 183 when specifying m, and 957 when specifying l.)
AJSARROW	
AJSBODY	
AJSSCH	
AJSCAL	
AJSPERF	
AJSENTRY	
AJSGEN	
AJSSTAT	16% of the segments of the entire AJS2DATA database area (Specify 48 when specifying s, 489 when specifying m, and 2553 when specifying l.)
AJSRELS	6% of the segments of the entire AJS2DATA database area (Specify 18 when specifying s, 183 when specifying m, and 957 when specifying l.)
AJSID	
AJSAGTEXECCNT	1% of the segments of the entire AJS2DATA database area (Specify 3 when specifying s, 30 when specifying m, and 159 when specifying l.)
AJSEXECAGT	
AJSEXECAGTGRP	
AJSLINKAGT	

Note

The above table names are used when the standard table prefix (AJS) is used.

The total number of area segments in the large, medium, and small database models of ajsembdbbuild command are as follows.

Table 2-2: Total number of area segments created in the large, medium, and small database models of ajsembdbbuild

Database area name	Small	Medium	Large
Data area AJS2DATA	300	3,060	15,960

-id *setup-identifier*

Use four characters, _JF*n* (*n* is from 0 to 9 or from A to Z), to specify the setup identifier for identifying the embedded database. Specify the value specified in the -id option of the ajsembdbbuild command.

If you omit this option, the system assumes _JF0.

-convert

Specify this option if you want to perform advanced setup after JP1/AJS2 - Manager has been upgraded to JP1/AJS3 - Manager.

-del

This option is specified to restore processing if an error occurs during advance setup performed by specifying the -convert option.

Before you execute the command with the -del option, make sure that the option settings that were specified when the error occurred are also specified. If you specify different option settings, restoration processing might not be performed normally.

This option is also specified when the database is set up to allow the same number of characters to be specified for items such as a unit name in both Shift-JIS and UTF-8 environments. In this case, this option deletes the database that has already been set up.

If you execute the ajsembdbsetup command with the -convert, -p, and -tp options omitted but the -del option specified, the value set when the scheduler service was built is assumed for the -p and -tp options.

-e {byte|sjis}

Specifies for the database of the specified scheduler service whether the same number of characters can be specified for items such as a unit name in both Shift-JIS and UTF-8 environments. If you omit this option, the system assumes byte.

If you omit this option in Linux, byte is specified for the DEFLENTYPE environment setting parameter. If you omit this option in AIX, HP-UX, or Solaris, the value of the DEFLENTYPE environment setting parameter does not change.

You cannot specify this option with the -convert or -del option. If you do so, an error occurs.

In addition, if a value other than UTF-8 is specified for the AJSCHARCODE environment setting parameter for the scheduler service specified in the -F option, an error occurs and the KAVS1516-E message is output.

Note that this option can be specified in UNIX, and cannot be specified in Windows.

- byte

  The database is set up so that the number of characters specifiable in a UTF-8 environment becomes the number of characters specified after conversion in UTF-8. If this option is specified, the number of characters specifiable for items such as a unit name in a Shift-JIS environment and a UTF-8 environment will not be the same.

If you execute the command with this option specified, `byte` is specified for the `DEFLENTYPE` environment setting parameter.

- `sjis`

  The database is set up so that the number of characters specifiable in a UTF-8 environment is converted to the number of characters specifiable in a Shift-JIS environment. If this option is specified, the number of characters that can be used in the following definition items for a unit in a UTF-8 environment is the same as that in a Shift-JIS environment:

  - **Unit name** in the detailed unit definition
  - **Comment** in the detailed unit definition
  - **Exclusive jobnet** in the schedule settings

  Before setting up the database with this option specified, make sure that the database of the specified scheduler service has not been set up yet. If the database has already been set up, executing the command will result in an error.

  If you execute the command with this option specified, `sjis` is specified for the `DEFLENTYPE` environment setting parameter.

Notes

- Before executing `ajsembdbsetup` command, stop all the JP1/AJS3 and JP1/AJS3 Console Agent services, including the logical host in the JP1/AJS3 - Manager host. Note that `ajsembdbsetup` command may terminate normally even if these services are not stopped. Also, the JP1/AJS3 logical host must be reachable using the IP address resolved from the logical host name specified in the `-mh` option.
- The `ajsembdbsetup` command is incorporated in a script. For this reason, specifying a long character string or an invalid character string or value may result in an unexpected error. In the options, specify the character strings and numeric values defined in the DBMS and JP1/AJS3.
- Even if an error that occurred is in a configuration definition not necessary for scheduler database setup, the following error message is output: KAVS1003-E Invalid specification in configuration definition. (*item-name*). Setup is complete upon the normal termination of `ajsembdbsetup` command. You do not have to perform setup again even if this message is output repeatedly. After terminating `ajsembdbsetup` command, correct any configuration definition errors as prompted by the error message KAVS1003-E.
- To create an environment by changing the character encoding in UNIX, set the `LANG` environment variable correctly.
- If an error occurs in embedded database access when the `ajsembdbsetup` command is executed, embedded database connection error information is output to `pderr1.trc` and `pderr2.trc` files in the work directory for the `ajsembdbsetup` command. If you re-execute the command and the command terminates normally, delete these files.
- Do not execute `ajsembdbsetup` command repeatedly in quick succession. If you do so, the following problems might occur:
  - The scheduler database becomes invalid and can no longer be used.
  - The `ajsembdbsetup` command results in an error.
  - The configuration definition information becomes invalid, disabling further operation of JP1/AJS3.
- If an error occurs when the `ajsembdbsetup` command with the `-e sjis` option specified is executed, re-execute the command with the `-c` option specified. If you re-execute the command with the `-c` option specified but without also specifying the `-e sjis` option, an error occurs and the KAVS0980-E message is output.
- If an error occurs when the `ajsembdbsetup` command without the `-e sjis` option specified is executed, re-execute the command with the `-c` option specified. If you re-execute the command by specifying both the`-c` and `-e sjis` options, an error occurs and the KAVS0980-E message is output.

Actions to be taken if an error occurs

An error may occur during `ajsembdbsetup` command execution. If an error occurs, correct the cause of the error according to the table below, and then re-execute this script.

Message ID	Cause	Action taken
Invalid value specified in `-ct` option.	An invalid argument is specified in the argument of the `-ct` option.	Specify an integer, ranging from 0 to 60, in the argument of the `-ct` option.
KAVS0178-E	The table is already created.	Make sure that the value of the `-tp` option is different from a table name prefix that has already been registered. Alternatively, delete the existing tables by executing the command with the same option settings, in addition to the `-del` option, specified, and then re-execute the command.
KAVS0190-E	The specified scheduler service is not defined in the host.	Specify an existing scheduler service name in the `-F` option.
KAVS0980-E	The database table configuration is not compatible.	In an environment in which the command was executed with the `-e sjis` option specified, the command was re-executed by specifying the `-c` option but not specifying the `-e sjis` option. In an environment in which the command was executed without the `-e sjis` option specified, the command was re-executed by specifying both the `-c` and `-e sjis` options. When re-executing the command, specify the `-e` option the same way it was specified in the original command.
KAVS0985-E	The embedded database server cannot be connected to the database.	Possible causes for this error are as follows: The embedded database is not started. The port number specified in the `-p` option does not match the port number of the embedded database. Correct these causes and then re-execute this command.
KAVS0996-E	The specified option and value are invalid.	Correct the specified option and value.
KAVS1003-E	The configuration definition includes an invalid specification.	Correct the value specified in the option and then re-execute this command.
KAVS2116-E	The value specified in the option is invalid, or options that cannot be specified together were specified.	Correct the options and the value specified for the options, and then re-execute this command.
KFPA11723-E	The embedded database is stopped.	Start the embedded database.
KFPA11204-E	There is no table.	Review the value of the `-tp` option, and specify a correct table prefix. Then, re-execute the command.
KFPA11563-E KFPA11732-E	Because another user is accessing the embedded database, a lock wait timeout occurred.	Stop all accesses to the embedded database, and then re-execute the command.
The embedded DB work directory associated with the setup identifier specified by the -id option is invalid.	The embedded database practical directory associated with the setup identifier specified in the `-id` option is invalid.	Specify a correct value for the embedded database practical directory set in the configuration definition and re-execute the script. To check the registered setup identifiers and embedded database practical directories, execute the `ajsembdbidlist` command. For details on the `ajsembdbidlist` command, see *ajsembdbidlist* in *2. Commands Used during Setup*.
The setup identifier specified with the -id option is not registered.	The setup identifier specified in the `-id` option is not registered.	Specify a setup identifier that is already registered and re-execute the script. To check the registered setup identifiers

Message ID	Cause	Action taken
The setup identifier specified with the -id option is not registered.	The setup identifier specified in the `-id` option is not registered.	and embedded database practical directories, execute the `ajsembdbidlist` command. For details on the `ajsembdbidlist` command, see *ajsembdbidlist* in *2. Commands Used during Setup*.
Failed to register the configuration definition.	Registering the configuration definition failed.	If advanced setup has been performed, specify also the `-del` option to delete the existing tables, and then re-execute the command.

For details on the messages beginning with KAVS, see *2.3 Messages beginning with KAVS (Messages about the scheduler and the common processing)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 1*.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsembdbuninstl

Format

```
ajsembdbuninstl
     {-mh logical-host-name |
      -id setup-identifier}
```

Description

The ajsembdbuninstl command uninstalls the JP1/AJS3 standard database (embedded database).

You can execute this command regardless of the operating status of the embedded database. Note, however, that all scheduler services for which the scheduler database is set up in the embedded database environment to be uninstalled must be stopped when the command is executed.

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*

Specify the name of the logical host on which you want to perform uninstallation. All embedded databases installed on the specified logical host will be uninstalled.

You can specify a character string of 1 to 32 bytes.

You cannot specify JP1_DEFAULT in this option.

To uninstall the embedded databases from the physical host, specify the -id option.

-id *setup-identifier*

Specify a four-character setup identifier, _JF*n* (*n*: 0 to 9 or A to Z), which identifies the embedded database to be uninstalled.

You can specify this option for uninstallation on either the physical or logical host.

Do not uninstall the following embedded databases because they contain information required by the system:

- The embedded database whose setup identifier is _JF0

- The first embedded database set up on a host where an embedded database setup identifier is changed to other than `_JF0` by performing data migration during embedded database advance setup, embedded database advance setup, or embedded database re-setup
- The embedded database set up with the setup identifier specified in the `-I` option of the `jajs_setup_cluster` command in an environment in which a logical host is set up

For details on the `jajs_setup_cluster` command, see *jajs_setup_cluster* in *2. Commands Used during Setup*.

Notes

- If the return value of this command is not 0, the following message is output: `Database uninstall failed (error code=`*yy*`)`. In *yy*, the return value is indicated. If this message is output, take action appropriate for the indicated return value. For details, see *2.8.8(3) Action to be taken if an error occurs during uninstallation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

  If information about an uninstalled embedded database remains in the JP1/AJS3 common definition information, the `ajsembdbuninstl` command might fail. If such information remains, delete the common definition information by executing the command shown below. For details on the `jbsunsetcnf` command, see the *Job Management Partner 1/Base User's Guide*.

  ```
  jbsunsetcnf -i -h JP1_DEFAULT-or-logical-host-name -c JP1AJS2 -n
  EMBDBINSTALL
  ```

  If no information has been set when the command is executed, the following message might be output: `KAVA0405-I The specified sub-key does not exist (`*JP1_DEFAULT or logical-host-name*`\JP1AJS2\EMBDBINSTALL). Processing stops.`. However, you can ignore this message.
- This command does not delete the embedded database installation directory or the embedded database data area directory. If these directories are no longer necessary, delete them manually.
- In UNIX, when you uninstall the embedded database, if the entry of the embedded database exists in the `/etc/inittab` directory (in Linux, the `/etc/init` directory), it is deleted.
- Do not execute this command repeatedly in quick succession.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsembdbunset

Format

```
ajsembdbunset
      {-r[-e]|-e[-r]}
      [-id embedded-database-setup-identifier]
      [-i embedded-database-practical-directory-name]
```

Format 1 (for canceling the setup of the embedded database (UNIX only))

```
ajsembdbunset
      -r
      [-id embedded-database-setup-identifier]
      [-i embedded-database-practical-directory-name]
```

Format 2 (for deleting the embedded database environment)

```
ajsembdbunset
      -e
      [-id embedded-database-setup-identifier]
      [-i embedded-database-practical-directory-name]
```

Description

Cancels the setup of the embedded database.

You can execute this command regardless of the operating status of the embedded database. You can execute the command only when all the scheduler services for which the target embedded database has been created as the scheduler database are inactive.

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

You do not need to specify this option. If you specify it, processing ends without removing the embedded database setup.

-e

Specify this option to delete the embedded database environment.

The data in the embedded database will be deleted. If you want to keep the data, save it somewhere else beforehand.

In UNIX, if the `-e` option is specified, the `-r` option is also implicitly specified. That is, the registration of the embedded database running in the specified directory is canceled in the operating system.

`-id` *embedded-database-setup-identifier*

Use four characters, `_JNn` (*N*: the character specified during setup of the embedded database environment, *n*: 0 to 9 or A to Z), to specify the setup identifier of the embedded database.

If you omit this option, the system assumes `_JF0`.

To check the registered setup identifiers and embedded database practical directories, execute the `ajsembdbidlist` command.

For details on the `ajsembdbidlist` command, see *ajsembdbidlist* in *2. Commands Used during Setup*.

`-i` *embedded-database-practical-directory-name*

Specify the name of the embedded database practical directory.

You must specify this option only when cancellation of the setup specified by using the `-id` option fails for example, when the `ajsembdbbuild` command does not end normally.

Notes

- When you execute `ajsembdbunset` command, the following message appears:

  message: *ssss* `Embeddb DELETE?(y/n):`

  ssss: *setup-identifier*

  This is a confirmation message for asking you whether you want to delete the environment. If the deletion will cause no problems, enter `y`.
- When you execute `ajsembdbunset` command, check whether the specified operation directory is correct.
- Before you execute `ajsembdbunset` command, stop all the JP1/AJS3 services, and the JP1/AJS3 Console Agent service on the JP1/AJS3 - Manager host (including logical hosts). The command may end normally even if you execute the command without stopping the services.
- The `ajsembdbunset` command forcibly shuts down the embedded database even if the scheduler service is operating. You need to check whether the scheduler service is operating.
- The `ajsembdbunset` command is implemented by a script. If you specify an illegally long character string or a invalid character string or value for the options, an unexpected error may occur. You must specify a character string or a number within the range specified by the DBMS and JP1/AJS3.
- Do not execute `ajsembdbunset` command repeatedly 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 `ajsembdbunset` command results in an error.
- In a cluster system, execute the `ajsembdbunset` command on both the primary and secondary hosts. On the primary host (the host specified in the `-eh` option of the `ajsembdbbuild` command), make sure that the shared disk is mounted before executing the `ajsembdbunset` command. You must execute the `ajsembdbunset` command on the primary host first. If you attempt to execute the `ajsembdbunset` command on the secondary host with the shared disk mounted before executing the command on the primary host, the following message is

output and an error occurs: KFPS04619-E `Unable to execute aa....aa command due to HiRDB unit not offline or not terminate normally(S+R)`. If this message is output, execute the `ajsembdbunset` command on the primary host with the shared disk mounted, and then re-execute the `ajsembdbunset` command with the `-i` option specified on the secondary host.

- If the embedded database has been stopped forcibly or has terminated abnormally, restart it, normally terminate it, and then execute the command.

Return values

0	Ends normally
Values other than 0	Ends abnormally

Actions to be taken if an error occurs

If an error occurs, take the action indicated in the following table.

Message ID	Phenomenon	Action taken
KAVS0996-E	The specified option is incorrect.	Check the specification of the option.
KAVS2104-E	The embedded database is not set up.	The environment of the embedded database has already been deleted.
KAVS2115-E	The embedded database is not installed. Alternatively, access permission for the path specified in the `-i` option does not exist.	The embedded database to be deleted is not installed. Review the specified path, and then re-execute the command. If the AJS administrator is executing the command, make sure that the AJS administrator has execution privileges.
KAVS2116-E	The specified option is incorrect.	Check the option output in the message and re-execute the command.
KAVS2117-E	An error occurred when you executed the command.	Check the message output in the maintenance information.

ajssetup

Format

```
ajssetup
      [-F service-name]
      [-t|[-m]]
      [-mh logical-host-name]
```

Description

If the database is in the standard configuration:

The `ajssetup` command sets up the suspend function.

If the database is in the compatible ISAM configuration:

The `ajssetup` command does the following:

1. Sets up the ISAM database used by a scheduler service.
2. Set up the suspend function.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

-F *service-name*

Specify the service name of the scheduler service to be processed.

You can specify a name of 1 to 30 characters (bytes).

If you omit this option, the system assumes the default scheduler service name.

-t

Specify this option to set up the ISAM database to be used by the scheduler service in a compatible ISAM configuration.

-m

Enables the suspend function.

Specify this option when you change the definition during the registration of a jobnet for execution. Immediately after installation, the suspend function is disabled.

When the suspend function is set up, the database used by the scheduler service is not set up. For this reason, set up the database used by the scheduler service before setting up the suspend function.

-mh *logical-host-name*

You can specify a logical host name instead of environment variable `JP1_HOSTNAME`. Specifying this option causes the host name specified in this option to precede that specified in environment variable `JP1_HOSTNAME`.

Specifying JP1_DEFAULT in this option also enables you to specify a physical host explicitly. Specifying the machine name of a physical host does not make it possible to set up a the physical host.

Notes

- You must complete the following before attempting to execute this command:
  In Windows, stop the JP1/AJS3 service.
  In UNIX, stop the JP1/AJS3 service and then execute the ajsshmdel command.
- You cannot execute more than one ajssetup command at any one time. To specify several ajssetup commands, set up the specification such that they are executed one by one.
- If an error occurs as a result of executing the ajssetup command with the -t option specified, first correct the cause of the error and then delete all the tables that have been created. Then, re-execute the command to create the tables.
  Likewise, to recreate a table after creating tables with the -t option, also delete all these tables. Then, re-execute the command to create tables.
- If you recreate a scheduler service database in a system that is performing operation with a queueless job (including the case where JP1/AJS3 is uninstalled and then reinstalled), reset the queueless job execution environment.
  - When using a queueless job after recreating a scheduler service database
    ajsqlsetup -F *scheduler-service-name*
  - When not using a queueless job after recreating a scheduler service database
    ajsqlsetup -r -F *scheduler-service-name*

Return values

0	Normal end
Multiple of 4 from 4 to 124	Abnormal end

Example

The following ajssetup command creates the table that is used by the scheduler service (service1).

```
ajssetup -F service1
```

jajs_config

Format

```
jajs_config
     -k definition-key-name
     environment-setting-parameter-name=definition ...
```

Description

The `jajs_config` command changes the JP1/AJS3 environment settings.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-k` *definition-key-name*

Specify the name of the definition key under which you set an environment setting parameter.

Make sure that the definition key name is enclosed in square brackets (`[]`).

You cannot specify multiple definition key names. You can only specify the environment setting parameter or environment setting parameters that correspond to one definition key name at each command execution.

If the specified definition key name is incorrect, this command terminates abnormally. For details, see *2. Environment Setting Parameters* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

environment-setting-parameter-name=definition `...`

Specify one or more pairs of environment setting parameter name and value you want to set.

If the specification contains an error, this command terminates abnormally. For details, see *2. Environment Setting Parameters* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

If you specify a numeric value, use `dword:`*hexadecimal-number* format. If you specify multiple values for an environment setting parameter, separate the values by using a colon (`:`).

If you specify multiple pairs of environment setting parameter name and value, separate the pairs by using a space character.

Notes

- The time when the environment setting parameters set by this command take effect differs depending on the parameter. For details, see the description of the environment setting parameter in *2. Environment Setting Parameters* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.
- If you specify environment setting parameters that are not applicable to the specified definition key, the command terminates abnormally. For definition keys and applicable environment setting parameters, see *2. Environment Setting Parameters* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

- You cannot specify multiple definition keys in this command. If you need to specify multiple definition keys, execute the command for each definition key or use the `jbssetcnf` command. For details on the `jbssetcnf` command, see the *Job Management Partner 1/Base User's Guide*.
- Do not execute this command more than once in quick succession.
- Do not terminate this command forcibly.
- This command checks the values specified in environment setting parameters that can take different values in Windows and UNIX. The command ends normally if each of the defined values falls within the allowed scope given in the following table.

Category	Parameter	Condition
System-managed environment settings	"AJSSYSDIR"	A string of no more than 191 bytes
	"AJSLOGDIR"	A string of no more than 191 bytes
Scheduler service environment settings	"LOGSIZE"	A hexadecimal number from 0 to 1E8480 (units: KB) (equivalent decimal number: from 0 to 2,000,000)
	"AJSTMPDIR"	A string of no more than 191 bytes
	"JOBINFDIR"	A string of no more than 191 bytes
	"AJSBKUROOT"	A string of no more than 191 bytes
	"AJSDBDIRECTORY"	A string of no more than 191 bytes
	"AJSSYSDIR"	A string of no more than 191 bytes
	"AJSLOGDIR"	A string of no more than 191 bytes
JP1/AJS3 Console environment settings	"SESSIONTIMEOUT"	A hexadecimal number from 0 to 0 to 78 (units: minute) (equivalent decimal number: from 0 to 120)

For details about the values that can be specified for the above environment setting parameters in the relevant OS, see *2. Environment Setting Parameters* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

Return values

0 to 9	Normal end
10 to 49	End with warning. The command terminated but requires manual operations.
50 or greater	Abnormal end

Example

In this example, the command changes the settings of scheduler service `AJSROOT1` on physical host `JP1_DEFAULT` as follows:

- Changing the size of the scheduler log file to 10,240 (2800 in hexadecimal) KB
- Enabling outputting of the scheduler service startup and termination messages to the scheduler log file

For Windows

```
jajs_config -k [JP1_DEFAULT\JP1AJSMANAGER\AJSROOT1] "LOGSIZE"=dword:
00002800 "AJSLOG"="all"
```

For UNIX

```
jajs_config -k "[JP1_DEFAULT\JP1AJSMANAGER\AJSROOT1]" "LOGSIZE"=dword:
00002800 "AJSLOG"="all"
```

Note

The value specified for the `-k` option or on the command line might contain a backslash (\) or space character. If a backslash (\) or space character is contained, you must, for example, enclose the option or parameter value in double quotation marks (") or single quotation marks ('), or replace a backslash (\) with two backslashes (\\). For details, see the OS documentation or other applicable reference.

jajs_migrate

Format

```
jajs_migrate
     [-h logical-host-name]
     {-C|-convert
       [-T work-directory-name]
       [-r|-f]
       [-S | [[-s {l|m|s}]
            [-u number-of-scheduler-services-to-be-stored-in-one-
database]]]}
```

Format 1 (standard setup on a physical host)

```
jajs_migrate
     -convert
     [-T work-directory-name]
     [-s {l|m|s}]
     [-u number-of-scheduler-services-to-be-stored-in-one-database]
```

Format 2 (for setting up a logical host)

```
jajs_migrate
     -convert
     [-h logical-host-name]
     [-T work-directory-name]
     {-r|-f}
     -S
```

Format 3 (for manually setting up the embedded database on the physical host)

```
jajs_migrate
     -convert
     [-T work-directory-name]
     -S
```

Format 4 (for outputting the current database configuration)

```
jajs_migrate
     [-h logical-host-name]
     -C
```

Description

The `jajs_migrate` command sets up JP1/AJS3 in the standard configuration.

Perform setup after an upgrade installation from JP1/AJS2 to JP1/AJS3. You can execute this command only when the database for a JP1/AJS2 scheduler service can be accessed.

You can also use this command to output the current database configuration to the standard output 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

-convert

Specify this option to set up JP1/AJS3 in the standard configuration.

-h ***logical-host-name***

Specify this option if you want to specify a logical host name, instead of using the JP1_HOSTNAME environment variable. You can specify a character string of 1 to 32 bytes.

The value of this option overrides the value of the JP1_HOSTNAME environment variable. By specifying JP1_DEFAULT as the value of this option, you can explicitly specify the physical host. You can also specify the computer name of the physical host.

Note, if a logical host is set up with the same name as the physical host name, the logical host is still treated as a logical host rather than the physical host.

-T ***work-directory-name***

Specify the name of the work directory use for migration.

You need to specify this option if free space required for the default work directory cannot be secured. The default work directory is as follows.

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\backup

The default value of %ALLUSERSPROFILE% 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

A *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\backup

In Windows Server 2003:

JP1/AJS3 - Manager-installation-folder\backup

In UNIX:

```
/var/opt/jp1ajs2/backup/
```

If the specified directory does not exist, the command terminates abnormally.

If the command terminates abnormally, files might remain. If files remain, delete them and then re-execute the command.

-S

Specify this option if you want to skip setup of the embedded database during migration. If you execute the command when the embedded database has already been set up, specify this option.

However, if you execute the command with this option specified when the embedded database has not been set up, the KAVS0177-E message (`Database type is invalid`) is output.

-s {l|m|s}

Use this option to specify one of the following database models:

- `l`
  Specifies a large-scale system model such as shown below:
  - Total number of units: About 48,000 to 240,000
  - Total number of jobs and jobnets executed per day: 30,000 to 120,000
  - Required disk space: About 20,700 MB
- `m`
  Specifies a medium-scale system model such as shown below:
  - Total number of units: About 5,000 to 48,000
  - Total number of jobs and jobnets executed per day: 5,000 to 30,000
  - Required disk space: About 4,200 MB
- `s`
  Specifies a small-scale system model such as shown below:
  - Total number of units: A maximum of about 5,000
  - Total number of jobs and jobnets executed per day: A maximum of about 5,000
  - Required disk space: About 520 MB

The default value for this option is `s` (small-scale model).

-u *number-of-scheduler-services-to-be-stored-in-one-database*

If you do not want to inherit the configuration existing before migration, using a decimal number specify the number of scheduler services to be stored in one database.

You can specify a value from 1 to 20. If you omit this option, the system assumes 4.

Note that if the embedded database set up in version 8 was used as the scheduler database before migration, the configuration existing before migration is inherited regardless of the specification of this option.

-r

Specify this option to set up the primary host environment in a cluster configuration. If you specify this option, you must also specify the logical host name (`-h` option).

The shared disk must be mounted on the primary host. In addition, the logical host must be accessible.

-f

Specify this option to set up the secondary host environment in a cluster configuration. If you specify this option, you must also specify the logical host name (-h option).

If this option is specified, the command performs only setup of the embedded database, and does not create data areas or start the embedded database. Note, however, that the specification of the data and system areas for the embedded database (-d option) on the secondary host must be the same as the specification in the primary host environment.

-C

Specify this option to output the current database configuration to the standard output file.

Notes

- If you are using the embedded database or HiRDB as the database for a JP1/AJS2 scheduler service, you must start the embedded database or HiRDB in advance. For details about how to start the embedded database or HiRDB, see the applicable JP1/AJS2 manual or the HiRDB manual.
- Take the following action before you execute this command with the -convert option specified:

  In Windows, stop the JP1/AJS3 service.

  In UNIX, stop the JP1/AJS3 service, and execute the ajsshmdel command. The ajsshmdel command is located in /opt/jp1ajs2/bin/ajsshmdel.

  The following shows an example of executing the ajsshmdel command.

  sh:

  ```
  /opt/jp1ajs2/bin/ajsshmdel >/dev/null 2>&1
  ```

  csh:

  ```
  /opt/jp1ajs2/bin/ajsshmdel >&/dev/null
  ```

  In UNIX, if you attempt to execute the jajs_migrate command without executing the ajsshmdel command after the JP1/AJS3 service has stopped, the KAVS0549-E message is output, and the jajs_migrate command terminates abnormally.
- Do not execute this command with the -convert option more than once in quick succession.
- Do not forcibly terminate this command when specifying the -convert option.
- Before you execute this command with the -convert option, register in the hosts file or DNS both the physical host name and logical host name of the JP1/AJS3 host you are migrating to the standard configuration.

  Even if you specify in the jp1hosts or jp1hosts2 definition file the names of the hosts to be migrated in the standard configuration, they are not used as the host names used for the embedded database.

  Do not use an alias as the name of a host you want to migrate in the standard configuration.

  The maximum length of the name of a host on which JP1/AJS3 can operate in the standard configuration is 32 bytes. Make sure that the names of the physical and logical hosts you want to migrate in the standard configuration are 1 to 32 bytes each.
- When you specify the -convert option, the command execution results are output to a log file. The location of the log file is as follows.

  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 value of %ALLUSERSPROFILE% 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

A *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

In Windows Server 2003:

JP1/AJS3 - Manager-installation-folder\log

In UNIX:

/var/opt/jp1ajs2/log

The file name is jajs_migrate_*logical-host-name*_*N*.log, where *N* is a sequential number starting with 1.

- After you execute the jajs_migrate command with the -convert option, check the return value of the command and the log file to make sure that setup of the standard configuration has completed normally. If the command has terminated abnormally, correct the cause of the error, and then re-execute the command.
- To set up JP1/AJS3 in the standard configuration on a physical host, make sure that the JP1_HOSTNAME environment variable has not been set when you execute the jajs_migrate command specifying the -convert option. If the command is executed in an environment in which the JP1_HOSTNAME environment variable is set, JP1/AJS3 on the logical host specified in the JP1_HOSTNAME environment variable is set up in the standard configuration. If the JP1_HOSTNAME environment variable is set, delete it, and then execute the command.
- When you specify the -convert option, the command is executed on the embedded database existing before JP1/AJS3 migration. Therefore, if the embedded database is being used as the scheduler database prior to migration, add the following path to the appropriate environment variable, and then execute the command with the -convert option:

  In HP-UX:

  SHLIB_PATH=*installation-directory-for-the-embedded-database-before-migration*/client/lib

  In Solaris or Linux:

  LD_LIBRARY_PATH=*installation-directory-for-the-embedded-database-before-migration*/client/lib

  In AIX:

  LIBPATH=*installation-directory-for-the-embedded-database-before-migration*/client/lib

  If you execute the command without adding the above path, the command outputs the KAVS0990-E message, and terminates abnormally.
- Note the following if the jajs_migrate -convert command terminates abnormally and you need to re-execute the command:
  - If the DBBKUP directory has been created in the database directory of each scheduler service, and files have been contained in the DBBKUP directory, move these files to the database directory.
  - Use the ajsembdbstatus command with the -s ust option specified to check the status of the embedded database used in version 8. If the status is STOP, use the ajsembdbstart command to change the status to ONLINE.
- When you execute this command with the -convert option specified, a port number in the range 22220 to 22239 is allocated automatically when the system builds the embedded database. An error occurs if the selected port number is in use. Before you execute the command, make sure that ports 22220 to 22239 are available.
- If ISAM is being used as the scheduler service database in JP1/AJS3 version 8 or earlier, at successful execution of the jajs_migrate -convert command the ISAM files will be backed up to a DBBKUP directory created in

the database directory of the scheduler service. You can delete the directory if deleting the directory causes no problem with operation.

- If the embedded database (HiRDB) is being used as the scheduler service database in JP1/AJS3 version 8 or earlier, use of HiRDB will cease at successful execution of the `jajs_migrate -convert` command. Delete the environment, if necessary.
- If you are using a Windows firewall, a pop-up message might appear during setup processing when you execute this command with the `-convert` option specified. If a pop-up message is displayed, registration in the Windows Firewall exceptions list is required. Take action by referring to the notes on the `ajsembdbinstl` command.
- When you execute this command with the `-convert` option specified, a default execution agent and an execution agent that has the same name as the local host are both defined as execution agents on the local host.#

  #:

  If the execution agent that has the same name as the local host name has not been defined in version 8 or earlier, only the default execution agent is defined. The execution agent that has the same name as the local host name is not defined.

  Note that the execution agent that will be selected depends on how the execution agent is specified in the unit definition:

  - When specification of the execution agent is omitted in the unit definition:
    The default execution agent will execute jobs.
  - When the local host name is explicitly specified as the execution agent in the unit definition:
    The execution agent that has the same name as the local host name will execute jobs.

  Also note that the maximum number of concurrently executable jobs set for an execution agent applies only to that execution agent. If both execution agents have been defined, the maximum number of jobs that will be executed concurrently on the local host is the total of the maximum values for the two agents.

  For example, if the local host name `host1` has already been defined as an agent in version 8 or earlier, executing the command will define two execution agents, `@SYSTEM` and `host1`. If the setting of the maximum number of concurrently executable jobs for `host1` is `00:00-00:00=10` (maximum of 10 jobs at any time), a maximum of 15 jobs might be executed concurrently on the local host. This is because the setting of the maximum number of concurrently executable jobs for the default execution agent is `00:00-00:00=5` (maximum of five jobs at any time).
- You can execute this command specifying the `-C` option whether JP1/AJS3 services are active or not.
- When you execute this command with the `-C` option specified, `JP1_DEFAULT` is set as the logical host in the output items even if you specified the machine name of the physical host in the `-h` option.

Return values

0	Normal end
Values other than 0	Abnormal end

Example 1

In the following example, the command sets up JP1/AJS3 in the standard configuration to create five scheduler services to be stored in one database on the physical host on which JP1/AJS3 is installed as an upgrade installation from JP1/AJS2.

```
jajs_migrate -convert -u 5
```

Example 2

The command in this example outputs the current database configuration on the logical host (`lhost`) to the standard output file.

```
jajs_migrate -h lhost -C
```

Output example

The following gives an example of file output when you specify the `-C` option, and explains what each item means.

```
Logical host  lhost
DB construction  standard
```

The output items are as follows:

`Logical host`

Indicates a logical host name.

If you specified the machine name of a physical host in the `-h` option, `JP1_DEFAULT` is set here.

`DB construction`

Indicates the current JP1/AJS3 database configuration as one of the following:

DB construction	Meaning
`standard`	The database has been migrated to the standard configuration.
`compatible ISAM`	The database has not yet been migrated to the standard configuration. The database is operating in a compatible ISAM configuration.
`invalid` (not yet shifted)	JP1/AJS3 cannot be used at present because the required migration to the standard configuration has not yet completed.

jajs_rpenvexport

Format

```
jajs_rpenvexport
     [-h logical-host-name]
     -d output-directory-name
```

Description

The jajs_rpenvexport command outputs (exports) disaster recovery operation setup information for JP1/AJS3 - Manager to the specified directory.

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

-h *logical-host-name*

Specify the name of the logical host at which to export disaster recovery operation setup information for JP1/AJS3 - Manager. You can specify a character string of 1 to 32 bytes.

The value of this option overrides the value of the JP1_HOSTNAME environment variable. If you omit this option, the value of JP1_HOSTNAME is assumed. If JP1_HOSTNAME has not been set, the command terminates abnormally.

The command terminates abnormally if you specify a physical host name (machine name or JP1_DEFAULT) in this option, or if the specified logical host has not been set up (undefined definition key *logical-host-name* \JP1AJSMANAGER).

-d *output-directory-name*

Specify the full path name of the directory to which the JP1/AJS3 - Manager disaster recovery operation setup information is to be exported. The information will be stored in a directory named jp1ajs3_rp, which the system creates in the directory you specify here. Specify an existing directory. The command terminates abnormally if no such directory exists. Do not specify a disk on the network drive.

You can specify a character string of 1 to 185 bytes.

This option is mandatory.

If disaster recovery operation setup information already resides in the specified directory (if a jp1ajs3_rp directory already exists), the existing information will be deleted. If you need to keep the old information, back it up first.

Notes

- The `jajs_rpenvexport` command is incorporated into a script. For this reason, specifying an excessively long character string or an invalid character string or value in this option sometimes results in an unexpected error. Specify character strings and numeric values that are defined in JP1/AJS3.
- Before you execute this command, execute the command `jajs_rpsite` with the `-v` or `-V` option specified, and make sure that output of the message KAVS3711-E is disabled.
- Do not execute this command repeatedly in quick succession. In addition, do not execute this command at the same time and on the same logical host as the command `jajs_rpenvimport` or `jajs_rpsite`. If you do so, the following problems might occur:
  - The message output is incorrect. For example, an invalid message might be output or a message that would normally be output does not appear.
  - The command results in an error.
  - The configuration definition information becomes invalid, disabling further operation of JP1/AJS3.
  - The output JP1/AJS3 - Manager disaster recovery operation setup information is incorrect.
- Do not forcibly terminate this command during execution.
- The command sometimes ends normally even if the environment is invalid. If this occurs, JP1/AJS3 - Manager will not operate correctly on the host that the acquired disaster recovery operation setup information is imported to.

  Before you export disaster recovery operation setup information, make sure that the environment is operating normally.
- You cannot specify the following characters in the command arguments:

  In Windows:

  ^ & = ! @ ~ % " < > | , ; * ?

  In UNIX:

  ^ & = ! @ ~ % " < > | , ; * ? \ ' $

Actions to be taken if an error occurs

Remove the cause of the error as indicated in the message, and then re-execute the command.

See also the cause and action information in the following table where applicable.

Message	Cause	Action to be taken
KAVS1111-E This function cannot be used with the compatible ISAM configuration.	The JP1/AJS3 database is not the standard configuration. (For example, the database is being migrated, or the embedded database has not been created.)	Check the database configuration of the logical host specified in the `-h` option.
KAVS1113-E The specified logical host does not exist	If using Windows Server 2003, you do not have Administrators privilege.	Check the privileges of the execution user, and re-execute the command under an account that has Administrators privilege.

Return values

0	Normal end
Values other than 0	Abnormal end

Example

The command in this example exports disaster recovery operation setup information to the following directory in logical host (LHOST1).

```
c:\temp\export\ajs3_rpenv_20100801

jajs_rpenvexport -h LHOST1 -d c:\temp\export\ajs3_rpenv_20100801
```

jajs_rpenvimport

Format

```
jajs_rpenvimport
     [-h logical-host-name]
     -e physical-host-name-of-primary-node
     -d input-directory-name
     [-s]
```

Description

The jajs_rpenvimport command reads (imports) the JP1/AJS3 - Manager disaster recovery operation setup information exported by the jajs_rpenvexport command and sets the JP1/AJS3 - Manager environment information.

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

-h *logical-host-name*

Specify the name of the logical host at which to import disaster recovery operation setup information exported by the jajs_rpenvexport command. You can specify a character string of 1 to 32 bytes.

The value of this option overrides the value of the JP1_HOSTNAME environment variable. If you omit this option, the value of JP1_HOSTNAME is assumed. If JP1_HOSTNAME has not been set, the command terminates abnormally.

The command terminates abnormally if you specify a physical host name (machine name or JP1_DEFAULT) in this option.

-e *physical-host-name-of-primary-node*

Specify the host name (output by the hostname command) recognized as the TCP/IP host name by the operating system on the primary node at the remote site. You can specify a character string of 1 to 32 bytes. This option is mandatory.

-d *input-directory-name*

Specify the full path name of the directory containing the disaster recovery operation setup information exported by the jajs_rpenvexport command. Specify the directory in which the jp1ajs3_rp directory containing the exported information resides. The command terminates abnormally if no such directory exists. Do not specify a disk on the network drive.

You can specify a character string of 1 to 185 bytes.

This option is mandatory.

The command terminates abnormally if no disaster recovery operation setup information exists in the specified directory.

`-s`

This option forcibly overwrites the existing JP1/AJS3 - Manager environment information even if the logical host specified in the `-h` option has been set up (that is, the definition key *logical-host-name*`\JP1AJSMANAGER` is defined).

If you omit this option and the logical host has been set up, a response-required message asks for confirmation that you want to overwrite the JP1/AJS3 - Manager environment information.

Notes

- To execute this command, the embedded database used by the logical host specified in the `-h` option must be installed. If the embedded database is not installed, the command terminates abnormally.

  Use the `ajsembdbidlist` command to check whether the embedded database used by the logical host specified in the `-h` option is installed. For details on this command, see *ajsembdbidlist* in *2. Commands Used during Setup*.

- To execute this command, all JP1/AJS3 - Manager services at the logical host specified in the `-h` option must be stopped; otherwise, the command terminates abnormally.

  Use the `jajs_spmd_status` command to check whether all JP1/AJS3 - Manager services at the logical host specified in the `-h` option have stopped. For details on this command, see *jajs_spmd_status* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

  To check whether the embedded database has stopped, use the `ajsembdbstatus` command. For the command syntax, see *ajsembdbstatus* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

- The command terminates abnormally if the system status of the embedded database is *restart suspended*. Make sure that the embedded database used by the logical host specified in the `-h` option has stopped. To release the *restart suspended* status of the embedded database, execute the `ajsembdbstart` command with the `-Rf` option specified. For details on this command, see *ajsembdbstatus* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1* or *ajsembdbstart* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

- The `jajs_rpenvimport` command is incorporated into a script. For this reason, specifying an excessively long character string or an invalid character string or value in this option sometimes results in an unexpected error. Specify character strings and numeric values that are defined in JP1/AJS3.

- Before you execute this command, execute the command `jajs_rpsite` with the `-v` or `-V` option specified, and make sure that output of the message KAVS3711-E is disabled.

- Do not execute this command repeatedly in quick succession. In addition, do not execute this command at the same time and on the same logical host as the command `jajs_rpenvexport` or `jajs_rpsite`. If you do so, the following problems might occur:

  - The message output is incorrect. For example, an invalid message might be output or a message that would normally be output does not appear.
  - The command results in an error.
  - The configuration definition information becomes invalid, disabling further operation of JP1/AJS3.

- Do not forcibly terminate this command during execution.

- You cannot specify the following characters in the command arguments:

In Windows:

^ & = ! @ ~ % " < > | , ; * ?

In UNIX:

^ & = ! @ ~ % " < > | , ; * ? \ ' $

- An error might occur when you execute this command in conjunction with the `jajs_spmd_status` command. If so, re-execute the commands.
- This command converts the environment parameter set in the export source host to the logical host name specified in the `-h` option.

  The definition keys and environment setting parameters in the table below must be unique in the physical host and among all logical hosts. Before you execute this command, make sure that the definition keys and parameters are not duplicated on the logical host of the import destination or on any other logical hosts or physical hosts.

Definition key	Environment setting parameters	Definition
`AJSMANAGER\`*scheduler-service-name*	--	The name of the scheduler service
	`AJSSERVICEID`	The scheduler service identification number
	`JOBSTATUSPORT`	The service name of the port used to acquire the job status
	`RDBPORT`	RDB port number
	`AJSTMPDIR`	The name of the directory for temporary files
	`JOBINFDIR`	The name of the directory for job error information
	`AJSDBDIRECTORY`	The name of the database directory
`JP1AJS2CONSOLEMANAGER`	`DATADIRECTORY`	The name of the data directory for root scope

- If you specified the `-bl` option in the `ajsembdbbuild` command when building the embedded database environment at the main site, the directory you specified in the `-bl` option will be created at the import destination host.
- If the shared disk is unreachable when you execute this command, the following message might be output to the integrated trace log: `KNAD3914-E An attempt to open the lock file under the conf directory has failed.` However, the import processing completes normally.
- In a cluster configuration, execute this command on both the primary and secondary nodes. On both nodes, specify the physical host name of the primary node for the `-e` option.

Actions to be taken if an error occurs

Remove the cause of the error as indicated in the message, and then re-execute the command.

See also the cause and action information in the following table where applicable.

Message	Cause	Action to be taken
KAVS1111-E This function cannot be used with the compatible ISAM configuration.	The JP1/AJS3 database is not the standard configuration. (For example, the database is being migrated, or the embedded database has not been created.)	Check the database configuration of the logical host specified in the `-h` option.
KAVS1112-E The specified directory (*directory-name*) does not exist.	The directory specified in the `-d` option does not contain the `jp1ajs3_rp` directory	Re-execute the command, specifying the correct directory name (including the `jp1ajs3_rp`

Message	Cause	Action to be taken
KAVS1112-E The specified directory (*directory-name*) does not exist.	exported by the `jajs_rpenvexport` command.	directory) exported by the `jajs_rpenvexport` command.
KAVS1113-E The specified logical host does not exist (*host-name*).	If using Windows Server 2003, you do not have Administrators privilege.	Check the privileges of the execution user, and re-execute the command under an account that has Administrators privilege.

Return values

0	Normal end
Values other than 0	Abnormal end

Example

The command in this example imports disaster recovery operation setup information stored in the following directory into the logical host `LHOST1` (primary node physical host: `PHOST`).

```
c:\temp\export\ajs3_rpenv_20100801

jajs_rpenvimport -h LHOST1 -e PHOST -d c:\temp\export\ajs3_rpenv_20100801
```

jajs_rpsite

Format

```
jajs_rpsite
     [-h logical-host-name]
     [-m {SET|SETSAME|CHANGE|UNSET} | -v | -V]
```

Description

The `jajs_rpsite` command sets up JP1/AJS3 for operation in disaster recovery mode using the disk copy and mirroring functionality of the hardware.

The following processing can be performed according to the specified option:

- Set up a new logical host to operate as the main site
- Change the logical host that operates as the main site
- Exit disaster recovery mode
- Display the name of the logical host operating as the main site
- Display whether the site is the main site or remote site

You can execute this command only in the standard configuration.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-h` *logical-host-name*

Specify the target logical host name. You can specify a character string of 1 to 32 bytes.

The value of this option overrides the value of the `JP1_HOSTNAME` environment variable.

The command terminates abnormally if you specify a physical host name (machine name or `JP1_DEFAULT`) in this option.

If you omit this option and the `JP1_HOSTNAME` environment variable has not been set, the physical host name is assumed and the command terminates abnormally.

The command terminates abnormally if the specified logical host does not exist at the site where you executed the command.

`-m {SET|SETSAME|CHANGE|UNSET}`

- `SET`

  Sets up a new logical host to be used as the main site when operation in disaster recovery mode is to be configured by using logical hosts with different names.

  JP1/AJS3 services at the remote site are deactivated when you have set up a logical host as the main site, and have started operation at the main site and copying between the shared disks.

Specify this option to set up a new logical host to operate as the main site. If the logical host to be used as the main site is already set, the command terminates abnormally regardless of whether that logical host was set by using -m SET or -m SETSAME.

The command terminates abnormally if you specify the -m SET option with the -v or -V option.

If processing ends normally, message KAVS3707-I is output.

- SETSAME

  Sets up a new logical host to be used as the main site when operation in disaster recovery mode is to be configured by using logical hosts with the same name.

  JP1/AJS3 services at the remote site are deactivated when you have set up a logical host as the main site, and have started operation at the main site and copying between the shared disks.

  Specify this option to set up a new logical host to operate as the main site. If the logical host to be used as the main site is already set, the command terminates abnormally regardless of whether that logical host was set by using -m SET or -m SETSAME.

  The command terminates abnormally if you specify the -m SETNAME option with the -v or -V option.

  If processing ends normally, message KAVS3710-I is output.

- CHANGE

  Changes the logical host that operates as the main site in disaster recovery mode.

  Specify this option to switch operation to the remote site and resume job processing when a disaster at the main site causes the system to go down.

  When you change the logical host that operates as the main site, JP1/AJS3 services are reactivated at the logical host you have designated, and are suppressed at the logical host which now serves as the remote site.

  The command terminates abnormally if:

  - The logical host to operate as the main site has not been configured.
  - The name of the logical host already operating as the main site is specified during the configuration of operation in disaster recovery mode by using logical hosts with different names.
  - Commands are executed on the logical host already operating as the main site during the configuration of operation in disaster recovery mode by using logical hosts with the same name.
  - You specify this option with the -v or -V option.
  - Switching operation to the remote site fails.

  If processing ends normally, message KAVS3708-I is output.

- UNSET

  Exits disaster recovery mode.

  Take JP1/AJS3 out of disaster recovery mode at both the main site and remote site. JP1/AJS3 services remain deactivated at the remote site until disaster recovery mode is released.

  The command terminates abnormally if you specify the -m UNSET option with the -v or -V option.

  If processing ends normally, message KAVS3709-I is output.

-v

Displays the name of the logical host currently operating as the main site in disaster recovery mode.

The command terminates abnormally if you have not configured a logical host to serve as the main site in disaster recovery mode.

The command terminates abnormally if you specify the -v option with the -m or -V option.

-v

Displays whether the specified logical host is currently serving as the main site (`Main` is displayed) or the remote site (`Remote` is displayed).

The command terminates abnormally if you have not configured a logical host to serve as the main site in disaster recovery mode.

The command terminates abnormally if you specify the `-V` option with the `-m` or `-v` option.

Notes

- Before you start copying between the shared disks by means of the hardware functions, make sure that you specify the `-m SET` or `-m SETNAME` option to configure the logical host that will operate as the main site. If you do not designate the logical host that is to operate as the main site, JP1/AJS3 services will not be deactivated at the remote site.
- Do not execute the `jajs_rpsite` command repeatedly in quick succession. In addition, do not execute this command at the same time and on the same logical host as the command `jajs_rpenvexport`, `jajs_rpenvimport`, or `jajs_spmd`. If you do so, the following problems might occur:
  - The message output is incorrect. For example, an invalid message might be output or a message that would normally be output does not appear.
  - The `jajs_rpsite` command results in an error.
  - The configuration definition information becomes invalid, disabling further operation of JP1/AJS3.
- Before you execute the `-m SET`, `-m SETNAME`, `-m CHANGE`, or `-m UNSET` option, stop disk copying by hardware functions between the shared disks.
- If you execute the `-m SET`, `-m SETNAME`, or `-m CHANGE` option at the main site while information is being copied from the main site to the remote site, the command will end abnormally because the logical host that is to operate as the main site has already been specified.
- Execute the `-m SET`, `-m SETNAME`, and `-m CHANGE` options at the site that is to operate as the main site.
- Execute the `-m UNSET` options at both the main site and remote site.
- After executing the command `jajs_rpsite` with the option `-m SET`, `-m SETSAME`, or `-m UNSET`, check whether the settings for operation in disaster recovery mode were correctly specified or removed. To check this, execute the command `jajs_rpsite` with the `-v` or `-V` option.
- If you execute this command at the remote site while information is being copied from the main site to the remote site, the shared disks cannot be accessed and the command will end abnormally.
- The command terminates abnormally if the shared disks of the logical hosts are not mounted.
- To reconfigure operation in disaster recovery mode, remove the settings for operation in disaster recovery mode by using the option `-m UNSET`, and then respecify the settings by using the option `-m SET` or `-m SETSAME`.

Return values

0	Normal end
Values other than 0	Abnormal end

Example

The following examples show operation in disaster recovery mode, using the disk copy and mirroring functionality of the hardware.

Example 1

In the following example, logical hosts are configured by using different names, and LHOST_M is specified for the main-site logical host.

```
jajs_rpsite -h LHOST_M -m SET
```

Example 2

In the following example, logical hosts are configured by using the same name, and LHOST_M is specified for the main-site logical host.

```
jajs_rpsite -h LHOST_M -m SETSAME
```

Example 3

In the following example, logical hosts are configured by using different names, and the main-site logical host switches to LHOST_R (which is currently operating as the remote site) during failover.

```
jajs_rpsite -h LHOST_R -m CHANGE
```

Example 4

In the following example, logical hosts are configured by using the same name, and the main-site logical host switches to LHOST_M (which is currently operating as the remote site) during failover.

```
jajs_rpsite -h LHOST_M -m CHANGE
```

Example 5

Display the name of the logical host currently operating as the main site in the following configuration:

- Main site: Logical host (LHOST_M)
- Remote site: Logical host (LHOST_R)

```
jajs_rpsite -h LHOST_M -v
```

or

```
jajs_rpsite -h LHOST_R -v
```

Example 6

In the examples below, the command displays whether each specified logical host is currently operating as the main site or as the remote site, where the main site and remote site are as follows:

- Main site: Logical host (LHOST_M)
- Remote site: Logical host (LHOST_R)

```
jajs_rpsite -h LHOST_M -V
```

or

```
jajs_rpsite -h LHOST_R -V
```

Example 7

Exit disaster recovery mode in the following configuration:

- Main site: Logical host (`LHOST_M`)
- Remote site: Logical host (`LHOST_R`)

```
jajs_rpsite -h LHOST_M -m UNSET
```

and

```
jajs_rpsite -h LHOST_R -m UNSET
```

Output example 1

The following shows an output example when you specify the `-v` option to display the name of the logical host currently operating as the main site:

```
> jajs_rpsite -h LHOST_M -v
LHOST_R
```

Output example 2

The following examples show the output when the `-V` option is specified to display whether the specified logical host is currently operating as the main site or the remote site:

```
> jajs_rpsite -h LHOST_M -V
Main

> jajs_rpsite -h LHOST_R -V
Remote
```

jajs_setup

Format

```
jajs_setup
     [-F scheduler-service-name]
     {-a
     [-h logical-host-name]
      -n scheduler-service-ID-number
      -p service-for-the-port-reporting-the-job-status
      -d database-directory-name
      -t temporary-directory-name
      -j job-information-directory-name
      -b backup-information-directory-name
      [-D logical-host-shared-directory-name]
      [[-I setup-identifier
       -P embedded-database-port-number]
       [-M {s|m|l}]
       [-E {byte | sjis}]] |
       [-S] |
       -r -A new-scheduler-service-name |
      -e}
```

Format 1 (for adding a scheduler service)

```
jajs_setup
     -a
     [-h logical-host-name]
     [-F scheduler-service-name]
     -n scheduler-service-ID-number
     -p service-for-the-port-reporting-the-job-status
     -d database-directory-name
     -t temporary-directory-name
     -j job-information-directory-name
     -b backup-information-directory-name
     [-D logical-host-shared-directory-name]
     [[I setup-identifier
       -P embedded-database-port-number]
      [-M {s|m|l}]
      [-E {byte | sjis}] |
      -S]
```

Format 2 (for renaming a scheduler service)

```
jajs_setup
     -r
     [-F scheduler-service-name]
     -A new-scheduler-service-name
```

Format 3 (for deleting a scheduler service)

```
jajs_setup
     -e
     [-F scheduler-service-name]
```

Description

The jajs_setup command performs setup of JP1/AJS3 scheduler services.

The following setup operations can be performed according to the specified option:

- Adding a scheduler service
- Renaming a scheduler service
- Deleting a scheduler service

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privilege

Arguments

-a

Specify this option to add a new scheduler service.

When this command is used to add a new scheduler service, the command also installs and sets up the database for the new scheduler service. You can use this command to create a new scheduler service easily.

After a scheduler service has been added normally, if you want to change an environment setting parameter for the scheduler service, execute the jajs_config command by specifying the following value for the -k option (definition key):

[{JP1_DEFAULT|*logical-host*}[#1]\JP1AJSMANAGER*scheduler-service*[#2]]

#1

The specification of the {JP1_DEFAULT|*logical-host*} part depends on whether the host is a physical host or a logical host. For a physical host, specify JP1_DEFAULT. For a logical host, specify the logical host name.

#2

Specify the name of the new scheduler service you created.

You must specify this option with the -h, -F, -n,-p,-d,-t,-j,-b,-I,-P,-M, and -S options. If you add a scheduler service to a logical host, you must also specify the -D option.

If you specify the -a option, you cannot omit the -n, -p, -d, -t, -j, or -b options.

If you add a scheduler service to a logical host, you cannot omit the -D, -I, and -P options.

If a new embedded database needs to be created, the command execution requires several tens of minutes. For a physical host, if the -I and -P options are omitted, the maximum number of scheduler services that can be created in an embedded database is four. If you create more than four scheduler services, another embedded database will need to be created and the command might take a long time to execute. When the -I option is specified, a scheduler service is created for the specified embedded database. Unless the setup identifier for a pre-configured embedded database is specified in the -I option, a new embedded database will need to be created and the command might take a long time to execute.

Note that a maximum of four scheduler services are created for one embedded database even if the -u option was specified for the jajs_migrate command. If you want to specify the number of scheduler services created for one

embedded database, use advanced setup of an embedded database. For details about the `jajs_migrate` command, see *jajs_migrate* in *2. Commands Used during Setup* in this chapter. 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*.

`-r`

Specify this option to rename a scheduler service. The command renames a scheduler service on the host on which the command is executed regardless of whether the host is a physical host or a logical host.

You must specify this option with the `-F` and `-A` options. The `-A` option cannot be omitted.

Renaming of a scheduler service affects JP1/AJS3 functions. For example, a unit might terminate abnormally or might not operate correctly if a scheduler service is renamed after operation has started. Therefore, we recommend that you rename a scheduler service before operation starts.

For the procedure for renaming a scheduler service, see the following sections:

In Windows:

- In a non-cluster environment

  6.1.1(4) Renaming a scheduler service in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*
- In a cluster environment

  8.2.7(4) Renaming a scheduler service in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*

In UNIX:

- In a non-cluster environment

  15.1.1(4) Renaming a scheduler service in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*
- In a cluster environment

  17.2.7(4) Renaming a scheduler service in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*

`-e`

Specify this option to delete a scheduler service. The command deletes a scheduler service on the host on which the command is executed regardless of whether the host is a physical host or a logical host.

When a scheduler service is deleted by this command, the scheduler database for the scheduler service is also deleted.

For details about the procedure for deleting a scheduler service in a logical host environment, see *8.2.7(2) Deleting an added scheduler service* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1* (for Windows) or see *17.2.7(2) Deleting an added scheduler service* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1* (for UNIX).

You must specify this option with the `-F` options.

`-h` *logical-host-name*

Specify the name of the logical host on which to set up the scheduler service.

You can specify a character string of 1 to 32 bytes.

The setup will be performed on the logical host specified in this option.

The value of this option overrides the value of the JP1_HOSTNAME environment variable. If you omit this option, the value of JP1_HOSTNAME is assumed as the logical host name.

When setting up a scheduler service for a physical host, you can specify the physical host name in either of the following ways:

- Omit the -h option and do not set the JP1_HOSTNAME environment variable.
- Specify JP1_DEFAULT as the value of the -h option or the value of the JP1_HOSTNAME environment variable.

You cannot set a physical host name by specifying a machine name in the -h option or in the JP1_HOSTNAME environment variable.

If you are setting up the scheduler service on a logical host, you must also specify the -D, -I, and -P options.

If you specify both the -r and -e options and omit the -h option, the physical host is assumed. You cannot specify this option with the -r and -e option.

-F *scheduler-service-name*

Specify the name of the scheduler service for which you want to perform the desired operation (addition, renaming, or deletion).

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

For the characters you can specify in a scheduler service name, see the note about scheduler services under *Table 2-2* in *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

If you omit this option, the system assumes the default scheduler service name.

-A *new-scheduler-service-name*

Specify the new scheduler service name that will be used for the renamed scheduler service.

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

You must specify this option with the -r options.

-n *scheduler-service-ID-number*

Specify a decimal number as the scheduler service ID number.

You can specify a value from 1 to 20.

The command outputs a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When the specified ID number is already used by the physical host or any logical host of the local host

You must specify this option with the -a options.

Make sure that the ID number you specify is not used by the physical host or any logical host of the local host.

The ID number specified in the -n option is used to internally identify a scheduler service as the name of a temporary file or as an inter-process communication key. Therefore, we recommend that you do not change an ID number after you have specified it. If you change an ID number, always cold-start the scheduler service.

-p *service-for-the-port-reporting-the-job-status*

Specify the communication port number to be used for acquiring job status information by the service name. When the jajs_setup command has completed, define the service name specified in this option in the services file.

You can specify a character string of 1 to 31 bytes.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When startup of multiple scheduler services is enabled, the names of the scheduler services are different but port numbers defined in the services file are duplicate

You must specify this option with the -a options.

-d *database-directory-name*

Specify the full path name of the directory that will contain JP1/AJS3 unit information.

You can specify a character string of 1 to 191 bytes.

Make sure that you do not add a path separator (\ in Windows, / in UNIX) at the end of the database directory name you specify.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When the specified directory does not exist
- When the specified directory name is already used as the name of a database directory on the physical host or any logical host of the local host
- When the specified database directory name ends with a path separator
- When the root directory (/) is specified in UNIX
- When characters other than the drive letter (for example, C:) are specified in the first two bytes of the character string in Windows

You must specify this option with the -a options.

-t *temporary-directory-name*

Specify the full path name of the directory in which JP1/AJS3 temporary files will be created.

You can specify a character string of 1 to 191 bytes.

If the specified directory does not exist, a warning message is displayed. Manually create the directory indicated in the warning message or use the jajs_config command to update the value of the AJSTMPDIR environment setting parameter. For the definition key to be specified in the jajs_config command, see the description of the -a option.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range

- When the specified directory name is already used as the name of a temporary directory on the physical host or any logical host of the local host
- When the root directory (/) is specified in UNIX
- When characters other than the drive letter (for example, C:) are specified in the first two bytes of the character string in Windows

You must specify this option with the -a options.

-j *job-information-directory-name*

Specify the full path name of the directory in which the standard error output file will be stored during job execution if the standard error output file is not specified during job definition.

You can specify a character string of 1 to 191 bytes.

If the specified directory does not exist, a warning message is displayed. Manually create the directory indicated in the warning message or use the jajs_config command to update the value of the JOBINFDIR environment setting parameter. For the definition key to be specified in the jajs_config command, see the description of the -a option.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When the specified directory name is already used as the name of a job information directory on the physical host or any logical host of the local host
- When the root directory (/) is specified in UNIX
- When characters other than the drive letter (for example, C:) are specified in the first two bytes of the character string in Windows

You must specify this option with the -a options.

-b *backup-information-directory-name*

Specify the full path name of the directory used for backing up units.

You can specify a character string of 1 to 191 bytes.

If the specified directory does not exist, a warning message is displayed. Manually create the directory indicated in the warning message or use the jajs_config command to update the value of the AJSBKUROOT environment setting parameter. For the definition key to be specified in the jajs_config command, see the description of the -a option.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When the root directory (/) is specified in UNIX
- When characters other than the drive letter (for example, C:) are specified in the first two bytes of the character string in Windows

You must specify this option with the -a options.

When the scheduler service reference restriction function is enabled (the HIDEOTHERSERVICE environment setting parameter is set to yes), specify a separate directory for each scheduler service as the backup information directory for that scheduler service. If the backup information directory is shared by multiple scheduler services, any user with access

privileges to any of the scheduler services can access all of the backup information stored in the common backup information directory.

-D *logical-host-shared-directory-name*

Specify the full path name of the directory shared by logical hosts when you add a scheduler service to a logical host. For the name of the directory shared by logical hosts, specify the same shared directory name that was specified in the -d option of the jajs_setup_cluster command when the target logical hosts were created.

You can specify a character string of 1 to 165 bytes.

The command displays a message and terminates abnormally in the following cases:

- When the specified value is outside the valid range
- When the specified directory does not exist
- When the root directory (/) is specified in UNIX
- When characters other than the drive letter (for example, C:) are specified in the first two bytes of the character string in Windows

You must specify this option with the -a options.

Always specify this option when you add a scheduler service to a logical host. If this option is omitted, the command terminates abnormally.

-I *setup-identifier*

Specify _JF*n* (*n*: 0 to 9 or A to Z) as the four-character setup identifier of the embedded database used on the logical host.

To set up a scheduler database in an embedded database that you have already configured, specify the setup identifier of the pre-configured database in this option. If you do not specify the setup identifier of the pre-configured embedded database, a new embedded database is configured with the setup identifier specified in the -I option.

If you did not specify the setup identifier of the pre-configured embedded database on a logical host, set up the embedded database on a secondary node.

If you did not specify the setup identifier of the pre-configured embedded database, the embedded database data area is created in the following applicable directory.

In Windows:

Physical host:

JP1/AJS3-installation-folder\embdb*setup-identifier*\dbarea

Logical host:

shared-folder\jp1ajs2\embdb*setup-identifier*\dbarea

In UNIX:

Physical host:

/var/opt/jp1ajs2/embdb/*setup-identifier*/dbarea

Logical host:

shared-directory/jp1ajs2/embdb/*setup-identifier*/dbarea

You must specify this option with the -a options.

Always specify this option when you add a scheduler service to a logical host. If this option is omitted, the command terminates abnormally.

`-P` *embedded-database-port-number*

Specify the port number used for the embedded database.

To create a new scheduler database in an embedded database that you have already configured, specify the port number of the embedded database specified by the setup identifier in the `-I` option. If you are creating a new embedded database in which to set up the scheduler database, specify a port number that is not being used in the system.

You can specify a value from 5001 to 65535.

You must specify this option with the `-a` options.

Always specify this option when you add a scheduler service to a logical host. If this option is omitted, the command terminates abnormally.

`-M {s|m|l}`

Specify the database model of the embedded database to be configured.

For details about the database model and disk requirements, see *B.1 Estimating the amount of required database area* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

If you configure the embedded database with `l` specified in this option, the auto-increment function of the embedded database is disabled. If you want to use this function, perform an advanced setup.

When an embedded database configured with the setup identifier specified in the `-I` option exists, only the re-use start point of the free area in the embedded database is set. In this case, if the `-M` option is omitted, the database model of the embedded database in the installation directory is assumed. If the embedded database in the installation directory was configured in JP1/AJS3 version 09-50 or earlier, `s` is assumed.

If the embedded database configured with the setup identifier specified in the `-I` option does not exist, a new embedded database is set up with the specified model. If you omit this option, the system assumes `s`.

You must specify this option with the `-a` option.

You cannot specify this option with the `-S` option.

`-E {byte|sjis}`

Specifies for the database of the specified scheduler service whether the same number of characters can be specified for items such as a unit name in both Shift-JIS and UTF-8 environments. If you omit this option, the system assumes `byte`.

This option can be specified in UNIX, and cannot be specified in Windows.

You must specify this option with the `-a` option.

You cannot specify this option with the `-S` option.

- `byte`

  The database is set up so that the number of characters specifiable in a UTF-8 environment becomes the number of characters specified after conversion in UTF-8. If this option is specified, the number of characters specifiable for items such as a unit name in a Shift-JIS environment and a UTF-8 environment will not be the same.

If you execute the command with this option specified, `byte` is specified for the `DEFLENTYPE` environment setting parameter.

- `sjis`

  The database is set up so that the number of characters specifiable in a UTF-8 environment is converted to the number of characters specifiable in a Shift-JIS environment. If this option is specified, the number of characters that can be used in the definition items for a unit in the UTF-8 environment is the same as that in the Shift-JIS environment.

  This setting applies to the following items:

  - **Unit name** in the detailed unit definition
  - **Comment** in the detailed unit definition
  - **Exclusive jobnet** in the schedule settings

  If you execute the command with this option specified, `sjis` is specified for the `DEFLENTYPE` environment setting parameter and `UTF-8` is specified for the `AJSCHARCODE` environment setting parameter.

`-s`

Specify this option to set up an embedded database separately by performing an advanced setup instead of setting up the embedded database by using the regular method.

For details about setting up the embedded database by performing an advanced setup, see *D. Advanced Setup for the Embedded Database (in a Cluster Configuration)* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

You must specify this option with the `-a` option.

You cannot specify this option with the `-I`, `-P`, and `-M` options.

Notes

- Do not execute this command more than once in quick succession.
- Do not terminate the command forcibly.
- Before you use this command to rename or delete a scheduler service, make sure that the scheduler service has stopped. If the scheduler service is running, the command terminates abnormally.

  You do not need to stop any services other than the target scheduler service.
- Before you use this command to add or delete a scheduler service, you must place all the embedded databases configured in the target host in running status. If you execute the command without checking the status, the command might terminate abnormally. To check the setup identifiers (`_JF`*n*) of the embedded databases configured in the target host, execute the `ajsembdbidlist` command.

  The following describes how to check the status of an embedded database.

  In Windows:

  - Check whether the service of the JP1/AJS3 Database `_JF`*n* (*n*: 0 to 9 or A to Z) has started. Start the service if inactive.

  - Execute the `ajsembdbstatus` command with the `-s ust -id _JF`*n* (*n*: 0-9 or A-Z) options specified to confirm that the embedded database is running (`UNIT-STAT` is `ONLINE`). If the embedded database is not running, execute the `ajsembdbstart` command with the `-id _JF`*n* option specified.

  In UNIX:

  Execute the `ajsembdbstatus` command with the `-s ust -id _JF`*n* (*n*: 0-9 or A-Z) options specified to confirm that the embedded database is running (`UNIT-STAT` is `ONLINE`). If the embedded database is not running, execute the `ajsembdbstart` command with the `-id _JF`*n* option specified.

- Even during JP1/AJS3 service operation, you can add a scheduler service, or if you choose, you can stop a scheduler service and either remove or rename that scheduler service. Note, however, that the changed scheduler service configuration will take effect only when the JP1/AJS3 service is started the next time. For the procedure for changing the scheduler service configuration according to the operating requirements, see the following manual sections:

  In Windows:

  6.1.1 Settings for starting multiple scheduler services in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*

  In UNIX:

  15.1.1 Settings for starting multiple scheduler services in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*

- If Windows Firewall is used, a pop-up message might be displayed during setup processing. If a pop-up message is displayed, registration in the Windows Firewall exceptions list is required. Take action by referring to the notes on the `ajsembdbinstl` command.
- To execute this command, the JP1/AJS3 logical host must be reachable using the IP address resolved from the logical host name.
- The command might terminate abnormally, outputting the following message: `Database maintenance failed (func code=`*xx*`, error code=`*yy*`)`. If this message is output, take appropriate action according to the following table.

Value of xx	Action
1	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbbuild` command. Then re-execute the command.
2	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbsetup` command. Then re-execute the command.
3	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbunset` command. Then re-execute the command.
4	Correct the problem according to the error message output before this message, and then re-execute the command.
5	Check *2.8.8(1) Action to be taken if an error occurs during embedded database maintenance* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.
6	Check *2.8.8(2) Action to be taken if an error occurs during installation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.
7	Check *2.8.8(3) Action to be taken if an error occurs during uninstallation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.

- On the standby host in a cluster configuration, you cannot use the `jajs_setup` command to add or remove a scheduler service.

  If you want to perform these operations on the standby host, use the applicable JP1/Base commands. The procedures are as follows.

  To add a scheduler service:

  1. On the executing host, execute the following command to export the configuration definition of the logical host to a file:

     `jbsgetcnf -h` *logical-host-name* `>` *output-file-name*

  2. On the standby host, execute the following command to import the file you created in step 1:

     `jbssetcnf` *output-file-name*

To remove a scheduler service:

1. On the standby host, execute the following command:
   `jbsunsetcnf -h` *logical-host-name* `-c "JP1AJSMANAGER\`*scheduler-service-name*`"`

- To rename a scheduler service that has an operation profile, change the file name of the operation profile.
  For example, suppose that the AJSROOT2 scheduler service has a unit-attribute profile and you want to change the service name to AJSROOT3. To do so, change the file name of the unit-attribute profile as follows:
  Old name: `ajsprof_AJSROOT2_unit.conf`
  New name: `ajsprof_AJSROOT3_unit.conf`
- When deleting a scheduler service, delete its operation profile as needed.

Return values

0 to 9	Normal end
10 to 49	End with warning. The command terminated but requires manual operations.
50 or greater	Abnormal end

Example 1

The command in this example adds a scheduler service to logical host `lhost` under the following conditions:

- scheduler service name: `AJSROOT2`
- scheduler service ID number: `2`
- name of the service for the port reporting the job status: `jp1ajs2report2`
- database directory name: `/var/opt/jp1ajs2/database/schedule/AJSROOT2`
- temporary directory name: `/var/opt/jp1ajs2/tmp/schedule2`
- job information directory name: `/var/opt/jp1ajs2/jobinf2`
- job information directory name: `/var/opt/jp1ajs2/backup/schedule2`

```
jajs_setup -a -h JP1_DEFAULT -F AJSROOT2 -n 2 -p jp1ajs2report2
   -d "/var/opt/jp1ajs2/database/schedule/AJSROOT2"
   -t "/var/opt/jp1ajs2/tmp/schedule2"
   -j "/var/opt/jp1ajs2/jobinf2"
   -b "/var/opt/jp1ajs2/backup/schedule2"
```

Example 2

The command in this example adds a scheduler service to logical host `lhost` under the following conditions:

- scheduler service name: `AJSROOT3`
- scheduler service ID number: `3`
- name of the service for the port reporting the job status: `jp1ajs2report3`
- database directory name: `H:\JP1LHOST\jp1ajs2\database\schedule\AJSROOT3`
- temporary directory name: `H:\JP1LHOST\jp1ajs2\tmp\schedule3`
- job information directory name: `H:\JP1LHOST\jp1ajs2\jobinf3`
- job information directory name: `H:\JP1LHOST\jp1ajs2\backup\schedule3`

- logical host shared directory name: H:\JP1LHOST
- setup identifier: _JFA
- embedded database port number: 22250

```
jajs_setup -a -h lhost -F AJSROOT3 -n 3 -p jp1ajs2report3
   -d "H:\JP1LHOST\jp1ajs2\database\schedule\AJSROOT3"
   -t "H:\JP1LHOST\jp1ajs2\tmp\schedule3"
   -j "H:\JP1LHOST\jp1ajs2\jobinf3"
   -b "H:\JP1LHOST\jp1ajs2\backup\schedule3"
   -D "H:\JP1LHOST"
   -I _JFA
   -P 22250
```

Example 3

The command in this example changes the scheduler service name from AJSROOT2 to JP1AJS3001.

```
jajs_setup -r -F AJSROOT2 -A JP1AJS3001
```

Example 4

The command in this example deletes scheduler service AJSROOT2.

```
jajs_setup -e -F AJSROOT2
```

jajs_setup_cluster

Format

For JP1/AJS3 - Manager:

```
jajs_setup_cluster
     [-h logical-host-name]
     -F scheduler-service-name
     {-d shared-directory-name
      [-n scheduler-service-ID-number]
      [-m {cold|warm|hot}]
      {-P embedded-database-port-number
       -I embedded-database-setup-ID
      [-M {s|m|l}]
      [-E {byte | sjis}] |
       -S} |
      [-S | -C embedded-database-settings-file-name]}
     [-R]
```

For JP1/AJS3 - Agent:

```
jajs_setup_cluster
     [-h logical-host-name]
     [-d shared-directory-name]
```

Format 1 (for setting up JP1/AJS3 - Manager on the primary node)

```
jajs_setup_cluster
     [-h logical-host-name]
     -F scheduler-service-name
     -d shared-directory-name
     [-n scheduler-service-ID-number]
     [-m {cold|warm|hot}]
     {-P embedded-database-port-number
      -I embedded-database-setup-ID |
      [-M {s|m|l}]
      [-E {byte | sjis}] |
      [-S]}
```

Format 2 (for setting up JP1/AJS3 - Manager on the secondary node)

```
jajs_setup_cluster
     [-h logical-host-name]
     -F scheduler-service-name
     [-S | -C embedded-database-settings-file-name]
```

Format 3 (for setting up JP1/AJS3 - Agent on the primary node)

```
jajs_setup_cluster
     [-h logical-host-name]
     -d shared-directory-name
```

Format 4 (for setting up JP1/AJS3 - Agent on the secondary node)

```
jajs_setup_cluster
     [-h logical-host-name]
```

Format 5 (for setting up JP1/AJS3 - Manager on the primary and secondary nodes at the remote site)

```
jajs_setup_cluster
     [-h logical-host-name]
     -F scheduler-service-name
     -R
```

Description

The `jajs_setup_cluster` command sets up a JP1/AJS3 operating environment appropriate for the logical host. The command must be executed on both the primary and secondary nodes during setup of a cluster system environment.

Before you execute the `jajs_setup_cluster` command, make sure that the JP1/Base physical and logical environments have been set up.

This command creates a logical host environment by copying the environment of the physical hosts. Scheduler services are created by copying the settings of the default scheduler service on the physical hosts. If no scheduler service has been defined as the default, the command creates the scheduler service on the logical host by copying the setup of the scheduler service that has the smallest identifier number (set in the `AJSSERVICEID` environment setting parameter) among all the existing scheduler services on the physical host.

With the `-R` option specified, a scheduler service is added to the JP1/AJS3 logical host when setup of JP1/AJS3 - Manager on the primary and secondary nodes at the remote site has finished.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-h` *logical-host-name*

Specify the name of the logical host to be set up (a logical host name set in JP1/Base).

You can specify a character string of 1 to 32 bytes.

The environment will be created under the logical host name specified in this option.

The value of this option overrides the value of the `JP1_HOSTNAME` environment variable. If you omit this option, the value of `JP1_HOSTNAME` is assumed as the logical host name.

The command terminates abnormally in the following cases:

- When you omit this option and the `JP1_HOSTNAME` environment variable has not been set
- When a physical host name `JP1_DEFAULT` is specified as the logical host name of the logical host you are setting up

- When you are setting up the primary node and the JP1/AJS3 logical host is not reachable using the IP address resolved from the logical host name

`-F` *scheduler-service-name*

When setting up the primary node for JP1/AJS3 - Manager:

Specify the name of the scheduler service you want to create.

If you specify the name of an existing scheduler service or if a scheduler service has already been created on the logical host, the command terminates abnormally.

When setting up the secondary node for JP1/AJS3 - Manager:

Specify the scheduler service name that you specified on the primary node.

If no scheduler service is found on the specified logical host, the command terminates abnormally.

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

For the characters you can specify in a scheduler service name, see the note about scheduler services under *Table 2-2* in *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

You cannot omit this option when you perform setup for JP1/AJS3 - Manager.

`-d` *shared-directory-name*

Specify the full path name of the mount-point directory for the shared disk used to contain information that the secondary node can inherit from the primary node. You must specify an existing directory. If you specify a non-existent directory, the command terminates abnormally. Do not specify a disk on a network drive.

You can specify a character string of 1 to 122 bytes.

The command terminates abnormally if you specify the root directory (`/`) in UNIX or characters other than the drive letter (for example, `C:`) in the first two bytes of the character string in Windows.

You must specify this option when setting up the primary node. If you omit this option, the node is set up as the secondary node.

In the specified directory, the command creates the `JP1AJS2` (in Windows) or `jp1ajs2` (in UNIX) subdirectory, in which the environment definition files and execution environment for the logical host are created. However, if the subdirectory already exists, the command terminates abnormally. Before you use the `jajs_setup_cluster` command to set up the primary node, always mount the shared disk, and confirm that the subdirectory does not exist.

You cannot specify this option with the `-C` and `-R` options.

`-n` *scheduler-service-ID-number*

Use a decimal number to specify the number that identifies the scheduler service.

You can specify a value from 1 to 20.

You can specify this option only when setting up (with the `-d` option specified) the primary node in JP1/AJS3 - Manager.

Make sure that the ID number you specify is not used by the physical host or any logical host of the local host. If you specify an ID number that has already been used, the command terminates abnormally.

If you omit this option, the smallest available ID number is assumed. If the total number of scheduler services has already reached the maximum, assignment of the scheduler service ID number fails and the command terminates abnormally.

-m {cold|warm|hot}

Specify the scheduler service startup mode.

- cold
  The scheduler service is started in cold-start mode.
- warm
  The scheduler service is started in warm-start mode.
- hot
  The scheduler service is started in hot-start mode.

You can specify this option only when setting up (with the -d option specified) the primary node in JP1/AJS3 - Manager.

If this option is omitted, the command assumes the value of the STARTMODE environment setting parameter for the scheduler service specified in the DEFAULTSERVICENAME environment setting parameter on the physical host.

-P *embedded-database-port-number*

Specify the port number of the embedded database used on the logical host if you also want to set up the embedded database during setup of the logical host.

You can specify a value from 5001 to 65535.

You cannot specify a port number that has already been used by another program. Make sure that the port number you specify is not used by another program. If the port number specified in this option is also used by another application, a problem with either the application or the embedded database occurs. If a problem occurs, change the port number of either the application or the embedded database.

You cannot omit this option if you want to set up the embedded database at the same time that setup (with the -d option specified) of the primary node in JP1/AJS3 - Manager is performed.

You cannot specify this option with the -C, -R, and -S options.

-I *embedded-database-setup-ID*

Specify _JF*n* (*n*: 1 to 9 or A to Z) as a four-character setup ID of the embedded database to be used on the logical host if you also set up the embedded database during setup of the logical host. Make sure that the setup ID you specify has not yet been registered in the system. If you specify a setup ID that has already been registered, the command terminates abnormally. You can use the ajsembdbidlist command to check the setup IDs that have already been registered. For details on the ajsembdbidlist command, see *ajsembdbidlist* in *2. Commands Used during Setup*.

You cannot omit this option if you also set up the embedded database during setup of the primary node for JP1/AJS3 - Manager.

You cannot specify this option with the -C, -R, and -S options.

-M {s|m|l}

Specify the database model of the embedded database to be configured.

For details about the database model and disk requirements, see *B.1 Estimating the amount of required database area* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

If you configure the embedded database with l specified in this option, the auto-increment function of the embedded database is disabled. If you want to use this function, perform an advanced setup.

You cannot specify this option with the -C, -R, and -S options.

-E {byte|sjis}

Specifies for the database of the specified scheduler service whether the same number of characters can be specified for items such as a unit name in both Shift-JIS and UTF-8 environments. If you omit this option, the system assumes byte.

This option can be specified in UNIX, and cannot be specified in Windows.

You cannot specify this option with the-C, -R, or -S option.

- byte

  The database is set up so that the number of characters specifiable in a UTF-8 environment becomes the number of characters specified after conversion in UTF-8. If this option is specified, the number of characters specifiable for items such as a unit name in a Shift-JIS environment and a UTF-8 environment will not be the same.

  If you execute the command with this option specified, byte is specified for the DEFLENTYPE environment setting parameter.

- sjis

  The database is set up so that the number of characters specifiable in a UTF-8 environment is converted to the number of characters specifiable in a Shift-JIS environment. If this option is specified, the number of characters that can be used in the definition items for a unit in the UTF-8 environment is the same as that in the Shift-JIS environment.

  This setting applies to the following items:

  - **Unit name** in the detailed unit definition
  - **Comment** in the detailed unit definition
  - **Exclusive jobnet** in the schedule settings

  If you execute the command with this option specified, sjis is specified for the DEFLENTYPE environment setting parameter and UTF-8 is specified for the AJSCHARCODE environment setting parameter.

-C *embedded-database-settings-file-name*

Specify the embedded database settings file.

The number of characters you can specify is from 1 to 255 (bytes).

When creating a cluster environment on a secondary node, copy the following embedded database settings file located on the primary node to the secondary node.

In Windows:

embedded-database-practical-directory\conf\ajsdbst*ajsembdb-setup-identifier*.conf

In UNIX:

embedded-database-practical-director/conf/ajsdbst/*ajsembdb-setup-identifier*.conf

If you specify the -M option when creating the primary node you must specify this option. If you specify this option when creating an environment on the primary node, the KAVS0116-E message is output, and the command ends abnormally. If the contents of the embedded database settings file are invalid, the KAVS2130-E message is output, and the command ends abnormally.

You cannot specify this option for embedded databases configured in JP1/AJS3 version 09-50 or earlier.

This option cannot be specified together with options other than the -h and -F options.

Before performing an advanced setup for the embedded database on the executing host, create the following directories on the standby host just as they are specified on the executing host:

- Unload log file creation directory
- Embedded database work area directory
- Embedded database installation directory

Note that during setup of the executing host, if you specify a directory on the local disk as the unload log file creation directory, you must also create an unload log file creation directory on the standby host.

-S

Specify this option to set up an embedded database separately by performing an advanced setup instead of setting up the embedded database by using the regular method. After you execute the `jajs_setup_cluster` command with this option specified, complete configuration of the embedded database.

If you execute the `jajs_config`, `jajs_setup`, or `jajs_setup_cluster` command before completing configuration, the command outputs the KAVS1516-E error message and terminates abnormally.

For details about setting up the embedded database by performing an advanced setup, see *D. Advanced Setup for the Embedded Database (in a Cluster Configuration)* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

You can specify this option only when you perform setup for JP1/AJS3 - Manager.

You cannot specify this option with the `-C`, `-M`, `-R`, `-P` and `-I` options.

-R

Specify this option to set up a logical host at the remote site in a disaster recovery environment.

You cannot specify this option with any other options except `-h` and `-F`.

Notes

- Before you execute this command, stop all JP1/AJS3 services.
- Do not execute this command more than once in quick succession.
- Do not terminate this command forcibly.
- This command copies the `jp1ajs_spmd.conf` file from the physical host to a logical host. For this reason, if you edit the `jp1ajs_spmd.conf` file on the physical host to set the startup of a process or to set the suppression of the startup process, the settings are passed to the logical host. In such cases, a process unnecessary for the logical host might start, or a process required for the logical host might not start. If the file was edited on the physical host, edit the file on the logical host so that only necessary processes are started.

  For details about suppressing the startup process, see *13.1.6 Limiting JP1/AJS3 - Manager resources to those used for job operation* in the *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*.
- If Windows Firewall is used, a pop-up message might be displayed during setup processing. If a pop-up message is displayed, registration in the Windows Firewall exceptions list is required. Take action by referring to the notes on the `ajsembdbinstl` command.
- The command might terminate abnormally, outputting the following message: `Database maintenance failed (func code=`*xx*`, error code=`*yy*`)`. If this message is output, take appropriate action according to the following table.

Value of xx	Action
1	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbbuild` command. Then re-execute the command.
2	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbsetup` command. Then re-execute the command.
3	Correct the error indicated in the message output before this message according to the action to be taken if an error occurs in the `ajsembdbunset` command. Then re-execute the command.
4	Correct the problem according to the error message output before this message, and then re-execute the command.
5	Check *2.8.8(1) Action to be taken if an error occurs during embedded database maintenance* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.
6	Check *2.8.8(2) Action to be taken if an error occurs during installation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.
7	Check *2.8.8(3) Action to be taken if an error occurs during uninstallation of the embedded database* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting* for error code *yy* in the output message, and correct the problem.

- If an error occurs during command execution on the primary node, correct the cause of the error, and then delete the logical host information as described in *Action to be taken if an error occurs on the primary node* below. Then re-execute the command.
- If an error occurs during command execution on the secondary node, correct the cause of the error, and then re-execute the command (without deleting logical host information).
- Do not delete the scheduler service specified in the `-F` option when you set up JP1/AJS3 - Manager on the primary node. If you delete that scheduler service, setup on the secondary node will fail. If you need to delete the scheduler service, delete the information on the primary node as described in *Action to be taken if an error occurs on the primary node* below. Then perform the setup again, starting from the primary node.
- If the scheduler service on the physical host has an operation profile, the operation profile will be copied to the logical host when you execute this command. Delete the copied operation profile as needed.
- This command copies the executable-command settings file from the physical host to the logical host. After the file is copied, the logical host inherits the settings for commands that can be executed from the physical host. If commands can be executed on the physical host from JP1/AJS3 - View, edit the executable-command settings file on the logical host to allow the execution of necessary commands only. For details about how to specify settings in the executable-command settings file, see *11.3.18 Allowing execution of JP1/AJS3 commands* in the *Job Management Partner 1/Automatic Job Management System 3 Operator's Guide*.

Action to be taken if an error occurs on the primary node

If an error occurs during execution of the `jajs_setup_cluster` command on the primary node, remove the cause of the error, and then delete logical host information. Then re-execute the command.

If setup of the logical host fails and the `jajs_setup_cluster` command outputs error message KAVS1126-E, you must delete the embedded database on the logical host. You do not need to do so, however, if you specified the `-S` option to skip setup of the embedded database, and logical host setup fails without error message KAVS1126-E appearing.

If an error occurs or a command is terminated forcibly during setup of the embedded database, the embedded database must be deleted from the logical host. Use the `ajsembdbuninstl` command to delete the embedded database on the logical host. For details on the `ajsembdbuninstl` command, see *ajsembdbuninstl* in *2. Commands Used during Setup*. Note that you must delete the embedded database from the logical host before deleting the logical host.

The procedure for deleting logical host information is described below.

To delete logical host information:

1. Delete the shared files and directories on the shared disk.
   Delete the JP1/AJS3 shared disk information.
   In Windows: *shared-disk*\JP1AJS2
   In UNIX: *shared-disk*/jp1ajs2
2. Delete the JP1/AJS3 common definition information on the logical host.
   To do this, execute the commands shown below. For details on the jbsunsetcnf command, see the *Job Management Partner 1/Base User's Guide*.

   ```
   jbsunsetcnf -i -h logical-host-name -c JP1AJS2
   jbsunsetcnf -i -h logical-host-name -c JP1AJS2COMMON
   jbsunsetcnf -i -h logical-host-name -c JP1NBQAGENT
   jbsunsetcnf -i -h logical-host-name -c JP1NBQMANAGER#
   jbsunsetcnf -i -h logical-host-name -c JP1NBQCLIENT
   jbsunsetcnf -i -h logical-host-name -c JP1NBQNOTIFY
   jbsunsetcnf -i -h logical-host-name -c JP1AOMMANAGER#
   jbsunsetcnf -i -h logical-host-name -c JP1AOMAGENT
   jbsunsetcnf -i -h logical-host-name -c JP1AJSMANAGER#
   jbsunsetcnf -i -h logical-host-name -c JP1QLAGENT
   jbsunsetcnf -i -h logical-host-name -c JP1AJS2CONSOLEMANAGER#
   #
   ```

   Execute this command only when you delete logical host information from JP1/AJS3 - Manager.
   If the data to be deleted does not exist during execution of the command, the following message might be output: KAVA0405-I The specified *character-string-specified-for-the-c-option* does not exist (*logical-host-name*). Processing stops.. If this message is output, ignore it.

Permissions for sub-directories in the shared directory created at setup of the primary node

For Windows

Full Control is set for the **Everyone** group for all folders created in the *shared-folder*\jp1ajs2 path and listed in the table below. For all other folders, the permissions of the upper-level folder apply.

For folders above *shared-folder*\jp1ajs2, set **Full Control** for users who have SYSTEM and Administrators privileges, and set **Read & Execute** or a higher privilege for all other users who perform settings to pass these settings to the files and folders under the folder.

Important note

Do not change the permission for folders for which **Everyone** has **Full Control**. If you do so, the logical host will not start.

Table 2-3: Folders for which Everyone has Full Control

No.	Folder path	JP1/AJS3 - Manager	JP1/AJS3 - Agent
1	*shared-folder*\jp1ajs2\backup	Y	--
2	*shared-folder*\jp1ajs2\database	Y	--
3	*shared-folder*\jp1ajs2\jobinf	Y	--
4	*shared-folder*\jp1ajs2\log	Y	Y
5	*shared-folder*\jp1ajs2\sys	Y	Y
6	*shared-folder*\jp1ajs2\tmp	Y	Y

Legend:

Y: Supported

--: Not supported

For UNIX

Directories are created in the *shared-directory*/jp1ajs2 path and 777 permission is set for all directories listed in the table below. For all sub-directories not listed in the table, 755 permission is set.

Important note

Do not change the permission for directories for which 777 permission is set. If you do so, the logical host will not start.

Table 2-4: Directories for which 777 permission is set

No.	Directory path	JP1/AJS3 - Manager	JP1/AJS3 - Agent
1	*shared-directory*/jp1ajs2/backup/schedule	Y	--
2	*shared-directory*/jp1ajs2/database/schedule/*scheduler-service-name*	Y	--
3	*shared-directory*/jp1ajs2/jobinf	Y	--
4	*shared-directory*/jp1ajs2/jobinf/schedule/*scheduler-service-name*	Y	--
5	*shared-directory*/jp1ajs2/jobinf/delete	Y	--
6	*shared-directory*/jp1ajs2/log	Y	Y
7	*shared-directory*/jp1ajs2/log/JAJS_SETUP	Y	Y
8	*shared-directory*/jp1ajs2/log/jpqagent	Y	Y
9	*shared-directory*/jp1ajs2/log/jpqclient	Y	Y
10	*shared-directory*/jp1ajs2/log/jpqmanager	Y	--
11	*shared-directory*/jp1ajs2/log/jpqnotify	Y	Y
12	*shared-directory*/jp1ajs2/log/schedule	Y	--
13	*shared-directory*/jp1ajs2/log/schedule/*scheduler-service-name*	Y	--
14	*shared-directory*/jp1ajs2/tmp	Y	Y
15	*shared-directory*/jp1ajs2/tmp/console_agent	Y	Y

No.	Directory path	JP1/AJS3 - Manager	JP1/AJS3 - Agent
16	*shared-directory*/jp1ajs2/tmp/schedule	Y	--
17	*shared-directory*/jp1ajs2/tmp/schedule/*scheduler-service-name*	Y	--

Legend:

Y: Supported

--: Not supported

Return values

0 to 9	Normal end
10 to 49	End with warning. The command terminated but requires manual operations.
50 or greater	Abnormal end

Additional information

When setup is performed by specifying the `-P` and `-I` options, the embedded database is set up with the following settings:

- Database mode: small scale
- System log: Not used
- Duplex of system file: Disabled
- Unload log file: Not used
- Data area directory:

  For Windows

  shared-folder\jp1ajs2\\embdb*value-specified-in-the-I-option*\dbarea

  For UNIX

  shared-directory/jp1ajs2/embdb/*value-specified-in-the-I-option*/dbarea
- Work area directory:

  For Windows

  JP1/AJS3-installation-folder\embdb*value-specified-in-the-I-option*\dbarea

  For UNIX

  /opt/jp1ajs2/embdb/*value-specified-in-the-I-option*/dbarea
- Embedded database practical directory:

  For Windows

  JP1/AJS3-installation-folder\embdb*value-specified-in-the-I-option*

  For UNIX

  /opt/jp1ajs2/embdb/*value-specified-in-the-I-option*
- Database area auto-increment function: Enabled
- System log auto-increment function: Enabled

For the settings other than the above, the default settings are used.

Example 1

In this example, the command also sets up the embedded database under the following conditions during setup of the primary host for JP1/AJS3 - Manager:

- logical host: `lhost1`
- scheduler service: `AJS3SCHEDULE001`
- shared directory name: `F:\shdsk\lhost1`
- embedded database port number: `22201`
- embedded database setup ID: `_JF1`

```
jajs_setup_cluster -h lhost1 -F AJS3SCHEDULE001 -d "F:\shdsk\lhost1" -P
22201 -I _JF1
```

Example 2

In this example, the command sets up the primary host for JP1/AJS3 - Manager under the following conditions, but does not set up the embedded database:

- logical host: `lhost2`
- scheduler service: `AJS3SCHEDULE002`
- shared directory name: `F:\shdsk\lhost2`
- scheduler service ID number: `3`
- scheduler service startup mode: hot start

```
jajs_setup_cluster -h lhost2 -F AJS3SCHEDULE002 -d "F:\shdsk\lhost2" -n 3 -
m hot -S
```

Example 3

In this example, the command also sets up the embedded database under the following conditions during setup of the secondary host for JP1/AJS3 - Manager:

- logical host: `lhost1`
- scheduler service: `AJS3SCHEDULE001`

```
jajs_setup_cluster -h lhost1 -F AJS3SCHEDULE001
```

Example 4

In this example, the command sets up the secondary host for JP1/AJS3 - Manager under the following conditions, but does not set up the embedded database:

- logical host: `lhost2`
- scheduler service: `AJS3SCHEDULE002`

```
jajs_setup_cluster -h lhost2 -F AJS3SCHEDULE002 -S
```

Example 5

In this example, the command sets up the primary host for JP1/AJS3 - Agent under the following conditions:

- logical host: `lhosta1`
- shared directory name: `F:\shdsk\lhosta1`

```
jajs_setup_cluster -h lhosta1 -d "F:\shdsk\lhosta1"
```

Example 6

In this example, the command sets up the secondary host for JP1/AJS3 - Agent under the following conditions:

- logical host: `lhosta1`

```
jajs_setup_cluster -h lhosta1
```

jp1ajs2_setup_cluster (UNIX only)

Format

```
jp1ajs2_setup_cluster
     -h logical-host-name
     [-d shared-directory-name]
     [-n value]
     [-m {cold|warm|hot}]
     [-v]
```

Description

The `jp1ajs2_setup_cluster` command sets up the operating environment of the logical host for compatibility with JP1/AJS2 whose version is 8 or earlier.

JP1/AJS3 - Manager

When the JP1/AJS3 database is to be operated in a compatible ISAM configuration, the `jp1ajs2_setup_cluster` command is used to set up the operating environment of the logical host in a compatible ISAM configuration.

JP1/AJS3 - Agent

Use the `jajs_setup_cluster` command to set up the operating environment of the logical host. For details about the `jajs_setup_cluster` command, see *jajs_setup_cluster* in *2. Commands Used during Setup*.

In a cluster environment, set up the operating environment for both the primary node and secondary node.

To use this command to set up a primary node, you must first set up both the JP1/Base physical host environment and logical host environment.

Before executing this command, make sure that you stop all JP1/AJS3 services.

If you use this command to set up the JP1/AJS3 - Manager environment on the primary node, make sure that you execute the command when only one scheduler service is running on the physical host.

This command sets up the following:

- JP1/AJS3 - Manager

  Primary node setup

  Sets up definition information for the logical host as JP1 common definition information.

  Creates a definition file and execution environment for a logical host on a shared disk. The definition file is copied from the physical host environment (actually, not all the files are copied).

  Sets the write mode for the ISAM database to `sync`.

  Set `sync` for the event-start file writing mode.

  Sets JP1/AJS3 startup mode.

  Changes the communication method for the logical and physical hosts to the IP bind method.

  Set `Y` for the event-start option used at the end of the detail process.

  Secondary node setup

  Changes the communication method for the logical and physical hosts to the IP bind method.

- JP1/AJS3 - Agent

Primary node setup

Sets the definition information for the logical host as JP1 common definition information.

Creates a definition file and execution environment for the logical host in the shared disk. The definition file is copied from the physical host environment (actually, not all the files are copied).

Set `sync` for the event-start file writing mode.

Changes the communication method used by the logical and physical hosts to the IP bind method.

Set `Y` for the event-start option used at the end of the detail process.

Secondary node setup

Changes the communication method used by the logical and physical hosts to the IP bind method.

Execution privileges

Superuser privilege

Arguments

`-h` *logical-host-name*

Specify the name of the logical host to be set up (logical host name set up in JP1/Base).

You can specify 1 to 63 characters (bytes).

The system creates an environment under the logical host name specified by this option.

`-d` *shared-directory-name*

Specify the name of the directory on which you have mounted the shared disk used to store the information passed from the primary node to the secondary node.

You can specify 1 to 165 characters (bytes).

Specify this option when setting up the primary node.

If you omit this option, the system sets up the secondary node.

The system creates *specified-shared-directory-name*`/jp1ajs2` as the shared directory and creates the environment definition file and execution environment for the logical host in the shared directory. Mount the shared disk before executing this command.

`-n` *value*

Specify the identification number of the desired scheduler service. A scheduler service named `AJSROOT`*n* will be created.

You can specify a value from 1 to 20.

If you omit this option, the system assumes 2 (creates `AJSROOT2`). `AJSROOT1` is used in the physical host environment.

Specify a scheduler service identification number that is not used by the physical host or any logical host. When setting up a logical host, if you specify a scheduler service identification number that is already used by the physical host or another logical host, the command terminates normally, but the same scheduler service is created on multiple hosts. JP1/AJS3 does not operate correctly in such an environment, so you should delete the unnecessary logical host.

For details about deleting a logical host, see *17.2.6 Deleting logical hosts* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

You can specify this option only when setting up the primary node.

-m {cold|warm|hot}

Specify how the scheduler service is to be started.

- `cold`
  Cold-starts the scheduler service.
- `warm`
  Warm-starts the scheduler service.
- `hot`
  Hot-starts the scheduler service.

You can specify this option only when setting up the primary node.

If this option is omitted, the value specified in the `STARTMODE` environment setting parameter is assumed.

-v

Displays the processing status.

Notes

- This command can be used in a compatible ISAM configuration only. In the standard configuration, use the `jajs_setup_cluster` command.
- You cannot use this command if a system block has been placed on a physical host or logical host on the target machine.
- This command can be executed in UNIX only. It cannot be executed in Windows.
- ISAM sets up the scheduler database for a scheduler service created when this command is executed.
  The embedded database cannot be used as a scheduler database.
- This command copies the `jp1ajs_spmd.conf` file from the physical host to a logical host. Therefore, processes not necessary for the logical host might be started on the logical host. If the file was edited on the physical host, edit the file on the logical host so that only necessary processes are started.

Return values

0	Normal end
1	Abnormal end

Examples

The `jp1ajs2_setup_cluster` commands in the following examples set up the JP1/AJS3 operating environment.

The table below lists the setup conditions.

Logical host name	`lnode0`
Shared directory name	`/shdsk/lnode0`
Scheduler service name	`AJSROOT2`
How to start the scheduler service	Hot start (The states of a jobnet and job are taken over when a failover occurs.)

Example of specifying the `jp1ajs2_setup_cluster` command that sets up a primary node:

```
# jp1ajs2_setup_cluster -h lnode0 -d /shdsk/lnode0 -n 2 -m hot
```

Example of specifying the `jp1ajs2_setup_cluster` command that sets up a secondary node:

```
# jp1ajs2_setup_cluster -h lnode0
```

jpomailrecv (UNIX only)

Format

```
jpomailrecv
     -u monitor-user-name
     [-t retry-timeout-period]
```

Description

Sets the email distribution feature that acquires mail using the alias of the SMTP mail server, creates an email file specific to mail reception monitoring, and then controls exclusive lock.

Execution privileges

None

Arguments

`-u` *monitor-user-name*

Specify the user name specified for the `UserName` environment setting parameter.

You can specify 1 to 256 characters (bytes).

`-t` *retry-timeout-period*

Specify the retry timeout period for editing when the email file that you have attempted to edit is locked.

You can specify 1 to 1,440 (minutes). If you omit this option, the system assumes an unlimited number of retries.

Notes

- To execute the `jpomailrecv` command, you must first start the JP1/AJS3 service.
- For the `UserName` environment setting parameter, specify the same user name as the monitoring user name of the command. In addition, before executing the command, use the `jajs_config` command to apply the contents of the `UserName` environment setting parameter to the system. For details about the `UserName` environment setting parameter and the setting procedure with the `jajs_config` command, see *2.4.2 Setting up the environment for an email reception monitoring job* in the *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*.
- If an error occurs during command execution or if edit retry is timed out, the received email is returned to the sender (except for the case where the locked file cannot be deleted).
- Code this command in the alias file and start it from the SMTP mail server. The system does not guarantee the operation of this command if it is started manually.
- When coding this command in the alias file, enclose it in double quotation marks (").

Example 1

When `mailuser` is specified for the `UserName` environment setting parameter, the retry timeout period is set to 10 minutes.

```
mailuser:"|/opt/jp1ajs2/bin/jpomailrecv -u mailuser -t 10"
```

Example 2

When `user1` is specified for the `UserName` environment setting parameter, the retry period never times out.

```
user1:user1,"|/opt/jp1ajs2/bin/jpomailrecv -u user1"
```

jpqregguestuser

Format

```
jpqregguestuser
     [-lh logical-host-name] [{-lu user-name|-d}]
```

Description

When using the assumed JP1 user function, you can use this command to register only one JP1 assumed user in the specified manager host. You can also use this command to display information for the registered assumed-JP1 user.

To reflect the contents set by this command, you must restart JP1/AJS3 after executing this command.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-lh` *logical-host-name*

Specify the name of the logical host for the manager host on which the assumed-JP1-user information is to be registered.

You can specify 1 to 255 characters (bytes).

If you omit this option, the system assumes the local host name.

`-lu` *user-name*

Specify the name of the assumed JP1 user using lowercase letters.

You can specify 1 to 31 characters (bytes).

If you omit this option, the system does not register the information for the assumed JP1 user. At this time, if a JP1 user has already been assumed, the following message is output to the standard output: KAVU0819-I Assumed JP1 user (*assumed-JP1-user-name*) is registered.

If the name of the JP1 user to be newly assumed is the same as that of the JP1 user that is already assumed, the information for the JP1 user being newly assumed overwrites that of the JP1 user that is already assumed.

`-d`

Deletes the information for the registered assumed JP1 user.

Specifying this option makes it impossible to use the assumed JP1 user function.

Notes

1. Do not execute this command if a JP1 series product that requires JP1/Base is running.
2. Specify a JP1 user name in lowercase letters. Note that uppercase letters are registered as lowercase letters. Registering JP1 user names in lowercase letters causes the information for that JP1 user to be newly assumed, after which the information for the currently assumed JP1 user is overwritten if his or her name is the same as that of the newly assumed JP1 user.

3. To use the assumed JP1 user function, register the assumed JP1 user specified by this command in the user mapping. You must also register this user in the agent host that executes jobs. Set a user privilege level for the operation that you want to perform.
4. For details about the purpose, usage procedure, and other notes for the command, see *7.1.6 Setting the assumed JP1 user function* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

Return values

0	Normal end
1	The specified argument is invalid.
140	You do not have the privilege (are not authorized) to execute this command.
145	There is insufficient memory.
147	An internal factor error occurred.
160	You attempted to delete assumed JP1 user information that is not registered.
172	The status in which the assumed JP1 user is registered is invalid.

Additional information

Only the commands provided by JP1/AJS3 job execution control can assume JP1 users as a result of executing this command.

Registering a user as the assumed JP1 user allows even those even those OS users who are not registered as JP1 users to operate JP1/AJS3 using the assumed JP1 user privilege. If the OS user is registered as a JP1 user, use the JP1 user.

jpqreguser

Format 1

```
jpqreguser
     [-lh logical-host-name]
     [-lu user-name]
     -rh name-of-JP1/OJE-for-VOS3-host-connected
     -ru user-name-on-JP1/OJE-for-VOS3-host-connected
     [-rg group-name-on-JP1/OJE-for-VOS3-host]
```

Description 1

Before starting linkage with JP1/OJE for VOS3, this command registers VOS3 user information in the JP1/AJS3 host from which the job was submitted. It also changes the registered user information.

The users and hosts to be registered vary depending on whether you use JP1/AJS3 - View to execute the QUEUE job or use a command to execute a submit job. For details, see *6.3 Executing QUEUE jobs or submit jobs* in the *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*.

Format 2

```
jpqreguser
     [-lh logical-host-name]
     [-lu user-name]
     -d
     -rh name-of-JP1/OJE-for-VOS3-host-connected
```

Description 2

Deletes the registered user information.

Format 3

```
jpqreguser
     [-lh logical-host-name]
     -a
```

Description 3

Lists registered user information.

Execution privileges

- For executing the command in Format 1 or Format 2 in Windows Server 2012 or Windows Server 2008: Administrators privileges
- For executing the command with the `-lu` option specified:

  In Windows: Administrators privileges

  In UNIX: Superuser privileges
- In other cases: None

Arguments

`-lh` *logical-host-name*

Specify the logical host name of the JP1/AJS3 host in which user information is to be registered.

You can specify 1 to 255 characters (bytes). If you omit this option, the system assumes the local host name.

`-lu` *user-name*

Specify the user name that you use to operate JP1/OJE for VOS3 host jobs.

You can specify 1 to 63 characters (bytes).

Specify a JP1 user or OS user. Which type of user you specify depends on the user who requested the job. The type of the user requesting the job varies according to the following cases:

- When defining and executing a QUEUE job in a jobnet: JP1 user
- When executing a submit job: OS user

If you omit this option, the system assumes the login user name.

Only those users having Administrators privileges (in Windows) or superuser privileges (in UNIX) can specify this option.

`-rh` *name-of-JP1/OJE-for-VOS3-host-connected*

Specify the name of the JP1/OJE for VOS3 host to be connected.

You can specify 1 to 255 characters (bytes).

`-ru` *user-name-on-JP1/OJE-for-VOS3-host-connected*

Specify the user name on the JP1/OJE for VOS3 host used to operate a job for the host specified by the `-rh` option.

You can specify 1 to 32 characters (bytes).

`-rg` *group-name-on-JP1/OJE-for-VOS3-host*

Specify the name of the group on JP1/OJE for VOS3 to which the user specified by the `-ru` option belongs.

You can specify 1 to 32 characters (bytes). If you omit this option, the system assumes that there is no group.

`-d`

Deletes the registered user information.

If you want to delete information about a user who was specified in the `-lu` option during registration, you must also specify that user in the `-lu` option during deletion.

If you want to delete information about the default user (assumed if the `-lu` option was omitted during registration), you must enter the same password that was specified during registration.

`-a`

Lists user information.

Notes

- Do not execute this command if a JP1 series product that requires JP1/Base is running.
- If you want to submit a job to the JP1/OJE for VOS3 host or delete a submitted job, first register the user information. However, you can reference job information for the JP1/OJE for VOS3 host even if you do not register the user information.
- Registering, modifying, and deleting user information requires the entry of a password.
  - To register user information, enter the password corresponding to the user on the JP1/OJE for VOS3 host to be connected.
  - To modify user information, enter the password corresponding to the VOS3 user specified at registration. To change the specified VOS3 user to a new VOS3 user, also enter the password corresponding to the new VOS3 user.
  - To delete user information, enter the password corresponding to the VOS3 user specified at registration.
  - No password is required to change or delete user information that was registered with the `-lu` option specified.
  - You can register only one user name that differs only in whether it uses uppercase or lowercase letters.
- Before you execute this command on a computer running Windows Server 2012 or Windows Server 2008, 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.

Notes on operating a cluster system

To operate a cluster system, you must set user information on both the executing host and standby host. If you add, change, or delete user information on the executing host, you must also add, change, or delete user information on the standby host.

To add, change, or delete user information on the standby host:

1. Execute the following command on the executing host to save the definition information.
   `jbsgetcnf -h` *logical-host-name* `>` *definition-information-file-name*
   For details on the `jbsgetcnf` command, see the *Job Management Partner 1/Base User's Guide*.
2. Execute the following command on the standby host to save the definition information as a backup.
   `jbsgetcnf -h` *logical-host-name* `>` *backup-file-name*
3. Execute the following command on the standby host to delete the registered user information.
   `jbsunsetcnf -h` *logical-host-name* `-c JP1NBQCLIENT -n Profile`
   For details on the `jbsunsetcnf` command, see the *Job Management Partner 1/Base User's Guide*.
4. Using the definition information file you saved in step 1, execute the following command on the standby host.
   `jbssetcnf` *definition-information-file-saved-in-step-1*
   For details on the `jbssetcnf` command, see the *Job Management Partner 1/Base User's Guide*.
5. Restart JP1/AJS3 on the standby host.
   The contents of the definition information file are applied to the system.

Return values

0	Normal end
1	The specified argument is invalid.
160	You attempted to delete unregistered user information.

165	• On a target host that is running Windows Server 2012 or Windows Server 2008, a user without Administrators privileges attempted to execute the command in Format 1 or Format 2. • On a target host that is running an OS earlier than Windows Server 2008, a user who is not an administrator (a member of the Administrators group in Windows or a superuser in UNIX) executed the command with the `-lu` option specified.
166	The system cannot update or delete user information because the entered password does not match the registered password.
170	There is insufficient memory.
171	You do not have the privilege (are not authorized) to execute this command.
172	An internal factor error occurred.

jpqshmake (UNIX only)

Format

```
jpqshmake
     [logical-host-name]
```

Description

Suppresses the increase of the number of segments in the shared memory, in either of the following cases:

- When the `jajs_killall.cluster` command is executed when a JP1/AJS3 service starts
- When the jpqagtdmn process ends abnormally when a JP1/AJS3 service starts

You only need to execute this command once after setup following an upgrade of JP1/AJS2 from version 06-71-/G or earlier. You do not need to execute this command for a new installation. For details, see *12.2.1(2)(c) About the shared memory used by job execution control (for upgrade installation from 06-71-G1 or an earlier version)* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

Execution privileges

Superuser privileges

Arguments

logical-host-name

Specifies the name of a logical host in the logical host environment where JP1/AJS3 is started.

1 to 255 bytes can be specified.

Specify this argument only for the logical hosts in the cluster configuration.

Return values

0	Ends normally
Values other than 0	Ends abnormally

3 Commands Used for Special Operation

This chapter describes commands used for special JP1/AJS3 operation.

ajscainetd_startstop (UNIX only)

Format

```
ajscainetd_startstop
     {start|stop}
```

Description

Starts or stops the JP1/AJS3 Console Agent service.

Execution privileges

Superuser privileges

Storage directory

`/etc/opt/jplajs2`

Arguments

`start`

Starts the JP1/AJS3 Console Agent service if it has not started.

`stop`

Stops the JP1/AJS3 Console Agent service if it has started.

Notes

- This command is available only on UNIX, not on Windows.
- This command ends without waiting for the JP1/AJS3 Console Agent service to complete startup. Use the `ps` command to check the process operating status to determine if the service is running. For details about the JP1/AJS3 Console Agent service process, see *B.3 Processes (for UNIX)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

Return values

0	Normal end
Values other than 0	Abnormal end

ajscasetup (Windows only)

Format

```
ajscasetup
     [-i|-u]
```

Description

Specifies whether JP1/AJS3 Console Agent is to be used. Executing this command either adds or deletes the JP1/AJS3 Console Agent service.

Execution privileges

Administrators privileges

Storage directory

JP1/AJS3 - Manager-installation-folder\bin\

Arguments

-i

Enables JP1/AJS3 Console Agent (adds the JP1/AJS3 Console Agent service).

-u

Disables JP1/AJS3 Console Agent (deletes the JP1/AJS3 Console Agent service).

Notes

- This command can be executed in Windows only. It cannot be executed in UNIX.
- Immediately after JP1/AJS3 - Manager is installed, you cannot use JP1/AJS3 Console Agent. To enable the use of JP1/AJS3 Console Agent, execute this command.

Additional information

The system outputs messages related to this command in English.

Return values

0	Normal end
Values other than 0	Abnormal end

ajscatrsetsz

Format

```
ajscatrsetsz
     [-s size]
```

Description

Modifies the size of the trace log file for the JP1/AJS3 Console Agent service.

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 privileges

In UNIX: Superuser privileges

Storage directory

In Windows:

JP1/AJS3 - Manager-installation-folder\bin\

In UNIX:

/opt/jp1ajs2/bin/

Arguments

-s *size*

Specify the size of a trace log file.

You can specify 64 to 2,097,151.

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
Other than 0	Abnormal end

Example 1

The following command expands the size of the trace log file for the JP1/AJS3 Queueless Agent service to 3 megabytes (3,072 kilobytes).

```
ajscatrsetsz -s 3072
```

Example 2

The following command outputs the size of the current trace log file to the standard output file.

```
ajscatrsetsz
```

Output Example

```
SIZE:64KB
```

ajscminetd_startstop (UNIX only)

Format

```
ajscminetd_startstop
     {start|stop}
```

Description

Starts or stops the JP1/AJS3 Console Agent service.

Execution privileges

Superuser privileges

Storage directory

`/etc/opt/jplajs2cm`

Arguments

`start`

Starts the JP1/AJS3 Console Manager service if it has not started.

`stop`

Stops the JP1/AJS3 Console Manager service if it has started.

Notes

- This command is available only on UNIX, not on Windows.
- This command ends without waiting for the JP1/AJS3 Console Manager service complete startup. Use the `ps` command to check the process operating status to determine if the service is running. For details about the JP1/AJS3 Console Manager service process, see *B.3 Processes (for UNIX)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

Return values

0	Normal end
Values other than 0	Abnormal end

ajscmprint

Format

```
ajscmprint
     -u JP1-user-name
     -f format-indicator
     [-mh logical-host-name]
```

Description

Outputs definitions for specified JP1 users for JP1/AJS3 Console to a standard output file in plain text format.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Storage directory

In Windows:

JP1/AJS3 - Console-installation-folder\bin\

In UNIX:

/opt/jp1ajs2cm/bin/

Arguments

-u *JP1-user-name*

Specify the name of the JP1 user who has the definition information to be output.

1 to 31 bytes of characters can be specified. If you omit this option, an error occurs.

-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 information* later.

-mh *logical-host-name*

You can specify the logical host name instead of the JP1_HOSTNAME environment variable. The specification of the -mh option overrides the value of the JP1_HOSTNAME environment variable.

Also, you can explicitly specify the physical host by specifying JP1_DEFAULT for the option. You cannot set a physical host by specifying the machine name of the physical host for the option.

Notes

- You cannot execute this command if another user is currently defining the target definition information.
- Always separate an option and its value by at least one space character.

Return values

0	Normal end
Other than 0	Abnormal end

Additional information

Table 3-1 lists the format indicators for outputting definitions for specified JP1 users for JP1/AJS3 Console.

Table 3-2 lists the other format indicators.

Table 3-1: Format indicators for outputting definitions for specified JP1 users

Format indicator	Output information	Unit type abbreviations
%ON	Full path object name Character string of up to 124 bytes (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 184 bytes is output.)	bs, ajsu
%on	Object name Character string of up to 30 bytes (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 45 bytes is output.)	bs, ajsu
%TY	Object type bs: Business scope ajsu: AJS3 unit monitored object	bs, ajsu
%cm	Comment Character string of up to 80 bytes. (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 120 bytes is output.) By default, no characters are output	bs, ajsu
%if	Icon file name Character string of up to 255 bytes. (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 380 bytes is output.) By default, no characters are output	bs, ajsu
%mh	Name of the host to be monitored Character string of up to 255 bytes (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 382 bytes is output.)	ajsu
%mu	AJS3 unit name Character string of up to 2,047 bytes (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 3,070 bytes is output.)	ajsu
%eH	Horizontal position at which the object appears on the window 0 to 9,552 pixels	bs, ajsu
%eV	Vertical position at which the object appears on the window 0 to 9,552 pixels	bs, ajsu
%sH	Number of objects subordinate to the object to be displayed horizontally on the window 1 to 100	bs

Format indicator	Output information	Unit type abbreviations
%sV	Number of objects subordinate to the object to be displayed vertically on the window 1 to 100	bs
%mm	Monitoring method t: Prioritize current time a: Prioritize all unit times th: Prioritize current time schedules ah: Prioritize all unit time schedules	bs (root)
%mt	Monitoring interval 30 to 3,600 seconds	bs (root)
%mp	Hold plan no: Do not display yes: Display (if definition or hold attribute changes) yes_attr: Display (only if hold attribute changes)	bs (root)
%by	Background type n: Do not display i: Depends on upper-level unit s: Display	bs
%bf	Background file name Character string of up to 255 bytes. (When the value of the CHARCODE environment setting parameter is UTF-8, a character string of up to 380 bytes is output.) By default, no characters are output	bs
%bz	Standard zoom percent A value of 20 to 200	bs

Legend:

bs: Business scope

bs (root): Root business scope

ajsu: AJS3 unit monitored object

Table 3-2: Other format indicators

Format indicator	Output information
%%	%
%n	Line feed character
%t	Tab character

Example

The following example outputs definitions for the JP1 user (jp1admin) to a standard output file in plain text format:

```
ajscmprint -u jp1admin -f "%ON,%TY,%cm,%mh,%mu"
```

Output example

The definitions are output in the following format: *full-path-object-name*, *object-type*, *comment*, *monitored-host-name*, *AJS3-unit-name*.

```
/, bs, , ,
/Monitored-object1, ajsu, comment1, host1, AJSROOT1:/jobnet1
/Monitored-object2, ajsu, comment2, host2, AJSROOT1:/jobnet1
/Nested-business-scope3, bs, comment3,,
/Nested-business-scope3/Monitored-object31, ajsu, comment31, host1,
AJSROOT1:/jobnet3
```

ajscmsetup (Windows only)

Format

```
ajscmsetup
     [-i|-u]
```

Description

Specifies whether to use JP1/AJS3 Console Manager. Executing this command either adds or deletes the JP1/AJS3 Console Manager service.

Execution privileges

Administrators privileges

Storage directory

JP1/AJS3-Console-installation-folder\bin\

Arguments

-i

Enables JP1/AJS3 Console Manager (adds the JP1/AJS3 Console Manager service).

-u

Disables JP1/AJS3 Console Manager (deletes the JP1/AJS3 Console Manager service).

Notes

- This command can be executed in Windows only. It cannot be executed in UNIX.
- Immediately after JP1/AJS3 - Manager is installed, you cannot use JP1/AJS3 Console Manager. To enable the use JP1/AJS3 Console Manager, execute this command.

Return values

0	Normal end
Values other than 0	Abnormal end

ajscmtrsetsz

Format

```
ajscmtrsetsz
     [-s size]
```

Description

Modifies the size of the trace log file for the JP1/AJS3 Console Manager service.

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 privileges

In UNIX: Superuser privileges

Storage directory

In Windows:

JP1/AJS3 - Console-installation-folder\bin\

In UNIX:

/opt/jp1ajs2cm/bin/

Arguments

-s *size*

Specify the size of a trace log file.

You can specify 64 to 2,097,151.

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 an option and its value by at least one space character.

Return values

0	Normal end
Other than 0	Abnormal end

Example 1

The following command expands the size of the trace log file for the JP1/AJS3 Queueless Agent service to 3 megabytes (3,072 kilobytes).

```
ajscmtrsetsz -s 3072
```

Example 2

The following command outputs the size of the current trace log file to the standard output file.

```
ajscmtrsetsz
```

Output Example

```
SIZE:64KB
```

ajscon

Format

```
ajscon
     [-bmd]
     [-a login-information-file-name]
     [-h login-host-name]
```

Description

Starts the JP1/AJS3 Console View.

Execution privileges

None

Storage directory

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

Arguments

-bmd

Sets the definition mode for the starting mode. If the definition mode cannot be used because another process is currently monitoring, the system displays an error message and enters the monitor mode.

If you do not specify this option, JP1/AJS3 Console View is started in the monitor mode.

-a *login-information-file-name*

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

With this option specified, you can log in automatically without displaying the Login screen.

If automatic login is specified in the Preferences dialog box of JP1/AJS3 Console View, the information defined in the specified login information file takes precedence.

You can specify a character string of 1 to 255 bytes. The login information file name cannot contain the following characters:

- Space character
- 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 JP1/AJS3 Console View terminates with the following error message:

```
KAVC4013-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, JP1/AJS3 Console View terminates with the following error message appears: `KAVC4020-E The login information file (`*file-name*`) is not found.`

Describe 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-destination 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

- Set up JP1/AJS3 Console View before executing this command.
- Do not enclose the login information file name in double quotation marks ("). Otherwise, an error message KAVC4020-E appears.
- Always separate an option and its value by at least one space character.
- For details about setting the access restrictions on the login information file, see *Notes* in the description of the *ajs* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Return values

0	Normal end
Other than 0	Abnormal end

ajscvsetup

Format

```
ajscvsetup
     [-i|-u]
```

Description

Specifies whether JP1/AJS3 Console View is to be used. Executing this command performs the following:

- Creates a new shortcut for JP1/AJS3 Console View in the Windows **Start**, **All Programs** menu.
- If JP1/IM - View is already installed, adds or deletes a JP1/AJS3 Console View node to or from the Tool Launcher screen.

Execution privileges

Administrators privileges

Storage directory

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

Arguments

-i

- Creates a new shortcut for JP1/AJS3 Console View in the Windows **Start**, **All Programs** menu. Executing the `ajscvsetup` command with this argument specified adds a shortcut for **Application Monitor** to **JP1_Automatic Job Management System 3 - View**, which can be selected from **All Programs** in the **Start** menu.
- If JP1/IM - View is already installed, adds a JP1/AJS3 Console View node to the Tool Launcher screen of JP1/IM - View.

  Executing the `ajscvsetup` command with this argument specified adds a node for **Application Monitor** to the tree area of the Tool Launcher screen. **Application Monitor** is selected from **Job System Management** in **Integration Management**.

-u

- Deletes the existing shortcut for JP1/AJS3 Console View from **All Programs** in the Windows **Start** menu.
- If JP1/IM - View is installed, deletes the node for JP1/AJS3 Console View from the Tool Launcher screen of JP1/IM - View.

Notes

- Immediately after JP1/AJS3 - View is installed, you cannot use JP1/AJS3 Console View. To enable the use of JP1/AJS3 Console View, execute this command.

  Executing `ajscon.exe` without first setting up and starting JP1/AJS3 Console View causes the following message to appear:

  `KAVC4016-E JP1/AJS3 Console View cannot be used because it has not been set up.`
- If you change the location and name of a JP1/AJS3 - View menu, the system does not create a shortcut for JP1/AJS3 Console View in the **Start** menu. In this case, start JP1/AJS3 Console View by executing the `ajscon` command.

The JP1/AJS3 - View menu appears when you choose **All Programs** from the **Start** menu after installing JP1/AJS3 - View.

- Before you execute this command on a computer running Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, and Windows Vista, 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.

Return values

0	Normal end
Values other than 0	Abnormal end

ajslocaldate

Format

```
ajslocaldate
     [-F service-name]
     [-y]
     {[-d[[year/]month/]day][-t hours[:minutes]]|[-s seconds]|[-u]}
```

Description

Modifies the local date and time for a JP1/AJS3 scheduler service (date and time managed by JP1/AJS3).

If you execute this command, without specifying any arguments, the system outputs the local date and time for the JP1/AJS3 scheduler service to the standard output file.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

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.

-y

Does not display a message with a confirmation prompt before modifying the scheduler service local date and time.

-d [*year*/]*month*/]*day*

Specify the scheduler service local date.

- *year*
  You can specify a value between 1997 and 2036.
- *month*
  You can specify a value between 1 and 12.
- *day*
  You can specify a value between 1 and 31.

-t *hours*[:*minutes*]

Specify the local time for a scheduler service.

- *hours*
  You can specify a value between 0 and 23.
- *minutes*

You can specify a value between 0 and 59.

`-s` *seconds*

Specify the difference between the local time for the current scheduler service and the time set in the host.

You can specify a value between -2,147,483,647 and 2,147,483,647 (seconds).

`-u`

Reset the local date and time for the scheduler service to the initial value (the date and time set in the host).

Notes

- To change the scheduler service local time, stop the scheduler service before executing this command. The new local time is applied to the system the next time the scheduler service is started. If you execute this command while the scheduler service is being started, schedule calculation results, display times, and other items might become incorrect.
- If you have set the scheduler service local date and time to a value in the past, you must use cold start to start a scheduler service. (If you modify the scheduler service local date and time, you cannot restore the information recorded in the schedule monitor information file, such as the job end time, preventing the jobnet from running as scheduled.)

  You can use the `ajsstart` command (with the `-c` option specified) to perform cold start for a scheduler service.
- The system generates local time based on the system time. If you modify the system time, make sure that the modification is correctly reflected in the local time.
- To use the local time in a cluster system, execute the `ajslocaldate` command so that both the active and standby machines operate at the same local time.
- If you need to change the local time when a jobnet with start condition is registered for execution, specify an option other than `-c` (`-s`, `-n`, `-j`, or `-k`) in the `ajsstop` command, stop the scheduler service, and then execute the `ajslocaldate` command. If you specify `-c` in the `ajsstop` command to stop the scheduler service, monitoring is not canceled at a time specified within the valid range of the start condition.
- If you want to change the scheduler service local time to a time in the past, check beforehand whether there are any jobnets for which a release entry has been made. If there are any such jobs, use the `ajsdelete` command to delete the relevant jobnet before changing the time.

  If you change the time to a time in the past without deleting the jobnet, a problem might occur during operation. If this happens, restore the time that was set before you made the change, delete the relevant jobnet, and then change the time again.

  To restore the jobnet you deleted, you must back up the definition information of the jobnet that will be subject to release by using the `ajsprint` command before registering the release entry of the jobnet. Use the `ajsdefine` command to re-define the definition information of the jobnet you have backed up, and then specify the release source to register the release entry again. In this way, the jobnet subject to release can be restored.

Return values

0	Normal end
Multiple of 4 within the range from 4 to 124	Abnormal end

Additional informations

- The following table shows an example of the display format for the local date and time for a scheduler service:

Table 3-3: Example of the display format for the local date and time for a scheduler service

Language type	Display format
Japanese	20*XX*/12/01 12:00:00
English	Dec 01 20*XX* 12:00:00

- If there is a change in the local date and time for the scheduler service, the KAVS0210-I message is output to Windows event log or syslog.

ajsqlalter

Format

```
ajsqlalter
     [-l Maximum-number-of-executing-jobs]
     [-b Maximum-number-of-waiting-jobs]
     [-r]
     [-c class-name]
     [-h logical-host-name]
```

Description

Temporarily modifies the operating environment for the queueless agent service.

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

-l *Maximum-number-of-executing-jobs*

Specify the maximum number of queueless jobs that can be executed concurrently.

You can specify a value from 0 to 1,024.

If you execute the command without specifying this option, the command terminates normally, but the maximum number of queueless jobs that can be executed concurrently is not changed.

If you specify the option without specifying its value, the command terminates abnormally.

If you attempt to execute queueless jobs when the number of concurrently executing queueless jobs has already reached the maximum, the jobs are stacked to wait on the queueless agent service. Jobs can be stacked until the maximum number of waiting jobs is reached.

To change the maximum number of concurrently executable jobs for a specific class, execute the command with the -c option specified.

To change the maximum number of concurrently executable jobs for the overall queueless agent service (default class), omit the -c option.

To change the maximum number of concurrently executable jobs for a class on a logical host, execute the command with both the `-c` and `-h` options specified.

`-b` *Maximum-number-of-waiting-jobs*

Specify the maximum number of queueless jobs that can be stacked on the queueless agent service.

You can specify a value from 0 to 102,400.

If you execute the command without specifying this option, the command terminates normally, but the maximum number of queueless jobs that can be stacked on the queueless agent service (maximum number of waiting jobs) is not changed.

If you specify the option without specifying its value, the command terminates abnormally.

If an attempt is made to execute a queueless job when the maximum number of waiting jobs has already been reached, the job fails to start.

To change the maximum number of waiting jobs for a specific class, execute the command with the `-c` option specified.

To change the maximum number of waiting jobs for the overall queueless agent service (default class), omit the `-c` option.

To change the maximum number of waiting jobs for a class on a logical host, execute the command with both the `-c` and `-h` options specified.

`-r`

Erases the user mapping cache.

By default, the system does not erase the user mapping cache.

If you specify this option with the `-h` or `-c` option, the system ignores the specifications of the logical host and class.

`-c` *class-name*

Specify the name of the class for which you want to temporarily change the operating environment.

If this option is not specified, the entire queueless agent service (default class) is assumed.

This option does not affect the `-r` option.

`-h` *logical-host-name*

Specify the name of the logical host for which you want to temporarily change the operating environment. You can only specify a logical host on the local host.

If you omit this option, the system assumes the physical host.

This option does not affect the `-r` option.

You must specify this option with the `-c` option.

Notes

1. Before you execute this command, make sure that the queueless agent service is started and the queueless job execution environment for the relevant logical host is set up. If the queueless job execution environment for the relevant logical host has not yet been set up, execute the `ajsqlsetup` command to set up the queueless job

execution environment. For details on the `ajsqlsetup` command, see *ajsqlsetup* in *3. Commands Used for Special Operation*.

2. When you execute the command with the `-r` option specified, make sure that a queueless job is not being executed.
3. After you change the login shell, password, and other information about the OS user who executes queueless jobs, you must clear the user mapping cache. The cache can be cleared by executing the command with the `-r` option specified. If you continue operation without clearing the cache, queueless jobs executed after the OS user information is changed might fail to start or end abnormally.

   Note that the user mapping cache is also erased when the queueless agent service and queueless file transfer service are restarted.

Return values

0	Normal end
Other than 0	Abnormal end

Example

In this example, the command changes the maximum number of concurrently executable jobs for the overall queueless agent service (default class) to 50.

```
ajsqlalter -l 50
```

ajsqlattach

Format

```
ajsqlattach
     [-h logical-host-name]
```

Description

The ajsqlattach command attaches (connects) a logical host to the queueless agent service.

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 you want to attach to the queueless agent service.

If you omit this option, the system assumes the physical host.

If you specify the option without specifying its value, the command terminates abnormally.

Notes

1. Before you execute this command, make sure that the queueless agent service is started and the queueless job execution environment for the relevant logical host is set up. If the queueless job execution environment for the relevant logical host has not yet been set up, execute the ajsqlsetup command to set up the queueless job execution environment. For details on the ajsqlsetup command, see *ajsqlsetup* in *3. Commands Used for Special Operation*.
2. If an attempt is made to execute a queueless job on a logical host that has not been attached, either the queueless job is executed on the physical host according to the value of the AJSQL_NOATTACHREQ environment setting parameter or the queueless job fails to start. For details about how to set the AJSQL_NOATTACHREQ environment setting parameter, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

Return values

0	Normal end
Other than 0	Abnormal end

Example

In this example, the command attaches logical host `newhost` to the queueless agent service.

```
ajsqlattach -h newhost
```

ajsqldetach

Format

```
ajsqldetach
     [-h logical-host-name]
     [-k]
```

Description

The ajsqldetach command detaches (disconnects) a logical host from the queueless agent service.

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 you want to detach from the queueless agent service.

If you omit this option, the system assumes the physical host.

If you specify the option without specifying its value, the command terminates abnormally.

-k

If there are queueless jobs running on the logical host you want to detach from the queueless agent service, these jobs are forcibly terminated, and then the logical host is detached. (This is called a *forced detach*.)

If this option is omitted, the logical host is not detached from the queueless agent service until all queueless jobs running on the logical host terminate. (This is called a *planned detach*.)

Notes

- Before you execute this command, make sure that the queueless agent service is started and the queueless job execution environment for the relevant logical host is set up. If the queueless job execution environment for the relevant logical host has not yet been set up, set it up by executing the ajsqlsetup command. For details on the ajsqlsetup command, see *ajsqlsetup* in *3. Commands Used for Special Operation*.
- If an attempt is made to execute a queueless job on a logical host that has not been attached, either the queueless job is executed on the physical host according to the value of the AJSQL_NOATTACHREQ environment setting parameter or the queueless job fails to start. For details about how to set the AJSQL_NOATTACHREQ environment

setting parameter, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

- If a forced detach is attempted when many queueless jobs are running on the logical host you want to detach from the queueless agent service, forced termination might take a long time before the logical host is detached.

Return values

0	Normal end
Other than 0	Abnormal end

Example

In this example, the command detaches logical host `newhost` from the queueless agent service.

```
ajsqldetach -h newhost
```

ajsqlexecsetsz

Format

For JP1/AJS3 - Manager:

```
ajsqlexecsetsz
     [[-a] [-h logical-host-name]|-f]
     [-s size]
```

For JP1/AJS3 - Agent:

```
ajsqlexecsetsz
     [-a]
     [-h logical-host-name]
     [-s size]
```

Description

The `ajsqlexecsetsz` command changes the size of the internal log file for execution of queueless jobs or outputs the file size that is currently set.

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

`-a`

Specify this option if the internal log file for which you want to change the size or output the current size setting to the standard output is `ajsqlexeclog`, which contains log data output by the queueless agent service.

You cannot specify this option with the `-f` option.

`-h` ***logical-host-name***

Specify the name of the logical host that contains the `ajsqlexeclog` file, which is the target file if the `-a` option is specified. If the `-h` option is omitted, the physical host is assumed.

You cannot specify the `-h` option if you specify the `-f` option.

-f

Specify this option if the internal log file for which you want to change the size or output the current size setting to the standard output is `ajsqlexeclog_ftpd`, which contains log data output by the queueless file transfer service.

You cannot specify this option with the `-a` option.

-s *size*

If you want to use the command to change the size of the internal log file for execution of queueless jobs, specify the new file size in kilobytes.

You can specify a value from 2,048 to 2,097,151. If this option is omitted, the current size setting of the internal log file for execution of queueless jobs is output to the standard output.

Notes

1. If you use this command to decrease the size of the internal log file for execution of queueless jobs, the contents of the file are cleared.
2. The internal log file for execution of queueless jobs is created on the local disk regardless of whether the host is a physical host or logical host. Therefore, you need to execute this command on both the primary and secondary nodes.

Return values

0	Normal end
Other than 0	Abnormal end

Example

In this example, the command increases the size of the `ajsqlexeclog` file on logical host `Lhost` to 32,768 KB (32 MB).

```
ajsqlexecsetsz -a -h Lhost -s 32768
```

ajsqlftpstart (UNIX only)

Format

```
ajsqlftpstart
```

Description

Starts the queueless file transfer service.

Execution privileges

Superuser privileges

Storage directory

/opt/jp1ajs2/bin/

Arguments

None

Notes

- This command is valid only for UNIX. It is not applicable to Windows.
- This command ends without waiting for the service to complete startup. Use the ajsqlstatus command to check whether the service is running.

Return values

0	Normal end
Other than 0	Abnormal end

ajsqlftpstop

Format

```
ajsqlftpstop
     [-j|-c]
```

Description

Stops the queueless file transfer service.

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

-j

The queueless file transfer service is stopped after all transfer processes that are currently running terminate.

You cannot specify this option with the -c option.

-c

The queueless file transfer service is stopped immediately even when there are running transfer processes.

You cannot specify this option with the -j option.

Notes

1. If you specify no option, the system assumes -j.
2. This command terminates when a stop request is sent to the queueless file transfer service. Therefore, you cannot use this command to check whether the queueless file transfer service has stopped. To perform this check, use the ajsqlstatus command. For details on the ajsqlstatus command, see *ajsqlstatus* in *3. Commands Used for Special Operation*.
3. If you stop the queueless file transfer service by executing the command with the -c option specified, the status of queueless jobs running when the command is executed might change to *Failed to start* or *Ended abnormally*. If there are queueless jobs in *Failed to start* or *Ended abnormally* status after the command is executed, restart the queueless file transfer service to start the jobs, if necessary.

Return values

0	Normal end

Other than 0	Abnormal end

ajsqlsetup

Format

For JP1/AJS3 - Manager

```
ajsqlsetup
     [-h logical-host-name]
     [-F scheduler-service-name]
     [-nc]
     [[-m][-a]]|[-r]|[-u]
```

For JP1/AJS3 - Agent

```
ajsqlsetup
     [-h logical-host-name]
     [-a]|[-u]
```

Description

Sets up a queueless job execution environment. The following shows the information set by this command.

Service registration

Register the following services used by queueless job execution:

Service	JP1/AJS3 - Manager	JP1/AJS3 - Agent
JP1/AJS3 Queueless Agent service	Y#1	Y#1
JP1/AJS3 Queueless File Transfer service	Y#2	--

Setting between service dependency

Set the dependency between JP1/AJS3 services and the queueless agent service or the queueless file transfer service.

Services on which JP1/AJS3 service depends	JP1/AJS3 - Manager	JP1/AJS3 - Agent
JP1/AJS3 Queueless Agent service	Y#3	--
JP1/AJS3 Queueless File Transfer service	Y#2	--

Setting communication ports

Registers the following communication ports used for queueless job execution in the services file:

Communication port (*service-name*:*port-number*)	JP1/AJS3 - Manager	JP1/AJS3 - Agent
Queueless job execution (`jp1ajs2qlagt: 20300`)	Y	Y
Queueless file transfer (`jp1ajs2qlftp: 20301`)	Y	Y

Setting environment setting parameters

Set environment setting parameters used for executing queueless jobs.

Settings		JP1/AJS3 - Manager	JP1/AJS3 - Agent
Definition key	Environment setting parameters		
[JP1_DEFAULT\JP1AJSMANAGER][#6]	"QLMANCHARCODE"=UTF-8	Y[#4]	--
[JP1_DEFAULT\JP1AJSMANAGER*scheduler-service-name*] or [*logical-host-name*\JP1AJSMANAGER*scheduler-service-name*][#7]	"QUEUELESSMULTIREQ"=dword:00000001	Y[#2]	--
[JP1_DEFAULT\JP1QLAGENT][#6]	• In Windows: "AJSQL_JOBMAX"=dword:00000005 • In UNIX: "AJSQL_JOBMAX"=dword:00000400	Y[#1]	Y[#1]
	• In Windows: "AJSQL_JOBWAITMAX"=dword:00000800 • In UNIX: "AJSQL_JOBWAITMAX"=dword:00000000	Y[#1]	Y[#1]
	"AJSQL_TRACELOGFILE"=[#5]	Y	Y[#1]
[JP1_DEFAULT\JP1QLAGENT] or [*logical-host-name*\JP1QLAGENT][#6]	"AJSQL_LOGFILE"=[#5]	Y[#1]	Y[#1]
	"AJSQL_LOGSIZE"=dword:00002000	Y[#1]	Y[#1]
	"AJSQL_STATFILE"=[#5]	Y[#1]	Y[#1]
	"AJSQL_STATSIZE"=dword:00000800	Y[#1]	Y[#1]

Creation of job ID management file

Creates a file for managing the job IDs to be added to the queueless jobs to be executed.

File name	JP1/AJS3 - Manager	JP1/AJS3 - Agent
• In Windows: *Database-folder-of-scheduler-service*\AJSQLJID.dat • In UNIX: *Database-directory-of-scheduler-service*/AJSQLJID.dat	Y[#2]	--

Legend:

Y: Supported

--: Not supported

#1

This is set only when the agent function is used with JP1/AJS3 - Manager or JP1/AJS3 - Agent and the `-a` option is specified.

#2

This is set only when the manager function is used with JP1/AJS3 - Manager and the `-m` option is specified.

#3

This is set only when the agent function is used with JP1/AJS3 - Manager and the `-a` option is specified.

#4

This is set only when the manager function is used with the Linux edition of JP1/AJS3 - Manager and the `-m` option is specified.

#5

If you want to change the value of an environment setting parameter that has been set, we recommend that you use the `jajs_config` command. Because this command validates the specified environment parameter name and other values, you can use this command to ensure that correct values are set. For details on the `jajs_config` command, see *jajs_config* in *2. Commands Used during Setup*.

If you want to change multiple environment setting parameter values at the same time, make sure that you use the `jbssetcnf` command. For details on the `jbssetcnf` command, see the *Job Management Partner 1/Base User's Guide*.

#6

To change the value of an environment setting value that has been set, use the `jbssetcnf` command. For details on the `jbssetcnf` command, see the *Job Management Partner 1/Base User's Guide*.

#7

The value varies depending on the environment. For details about environment setting parameter, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

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 logical host name (logical host name set by JP1/Base) to be set up and used in the cluster environment.

If you omit this option, the system assumes the physical host. If, however, environment variable JP1_HOSTNAME is specified, the system assumes the host set in the variable.

To specify a physical host explicitly, specify JP1_DEFAULT in this option.

This option is valid when you specify the -m, -a, or -r option.

-F *scheduler-service-name*

Specify the name of the scheduler service to be set up.

You can specify this option only with JP1/AJS3 - Manager, not with JP1/AJS3 - Agent.

If you omit this option, the system assumes the default scheduler service. If, however, environment variable AJSCONF is specified, the system assumes the scheduler service set in the variable.

This option is valid when you specify the -m or -r option.

-nc

If this option is specified, the command neither creates a job ID management file nor checks whether the file exists on the shared disk. Specify this option only when you set up the secondary node in a cluster environment. This option is valid only when you specify the -m option.

-m

Sets up the queueless job management function.

You can specify this option only with JP1/AJS3 - Manager; not with JP1/AJS3 - Agent.

You cannot specify this option together with the -r or -u option in the same command.

-a

Sets up the queueless job agent function.

You cannot specify this option together with the -r or -u option in the same command.

-r

If this option is specified, the command stops the JP1/AJS3 service, and disables the queueless job manager function for the scheduler service specified in the -F option or the AJSCONF environment variable. A scheduler service for which the manager function is disabled cannot send queueless jobs.

You can specify this option only with JP1/AJS3 - Manager, not JP1/AJS3 - Agent.

You cannot specify this option together with the -m, -a, or -u option in the same command.

-u

If this option is specified, the command stops the JP1/AJS3 service, and deletes the queueless job execution environment settings from the JP1/AJS3 service.

For Windows, from the list of services in Windows **Administrative Tools**, delete the queueless agent service (JP1/AJS3 Queueless Agent) and the queueless file transfer service (JP1/AJS3 Queueless File Transfer).

You cannot specify this option together with the -r, -m, or -a option in the same command.

Notes

- Before you specify the `-m` option to set up the manager function or specify the `-a` option to set up the agent function, make sure that the JP1/AJS3 service has stopped. If the queueless agent service and queueless file transfer service have already been registered by using the `ajsqlsetup` command, you must also make sure that these services have stopped.
- Before you specify the `-r` option to disable the queueless job manager function or specify the `-u` option to delete the queueless job execution environment settings, make sure that JP1/AJS3 operation has stopped. The command does not wait until JP1/AJS3 operation stops before disabling the queueless job manager function or deleting the queueless job execution environment settings. Therefore, if you do not stop JP1/AJS3 operation, it might be affected by the command execution.
- If you omit the option specifying the setting type (`-m`, `-a`, `-r`, or `-u`), the system assumes the following options:
  - For JP1/AJS3 - Manager: `-m`, `-a`
  - For JP1/AJS3 - Agent: `-a`
- To run JP1/AJS3 - Manager or JP1/AJS3 - Agent using the same options as 07-50, perform the following procedure:
  1. Copy `ajs2ql_0750.conf.model` to `ajs2ql_0750.conf`.
  2. Edit `ajs2ql_0750.conf` as necessary.
  3. Execute the `jbssetcnf` command.

     Example:

     ```
     jbssetcnf ajs2_0750.conf
     ```
- Before you execute this command on a computer running Windows Server 2012 or Windows Server 2008, 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.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsqlstart (UNIX only)

Format

```
ajsqlstart
```

Description

Starts the queueless agent service.

Execution privileges

Superuser privileges

Storage directory

/opt/jp1ajs2/bin/

Arguments

None

Notes

- This command is valid only for UNIX. It is not applicable to Windows.
- This command ends without waiting for the service to complete startup. Use the ajsqlstatus command to check whether the service is running.

Return values

0	Normal end
Values other than 0	Abnormal end

ajsqlstatus

Format

```
ajsqlstatus
     [-h logical-host-name]
```

Description

Outputs detailed information about the queueless agent service.

Execution privileges

None

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 to which detailed information needs to be output.

If you omit this option, the physical host is assumed.

If you specify the option without specifying its value, the command terminates abnormally.

Return values

0	Ends normally
Other than 0	Ends abnormally

Example

The detailed information about the queueless agent service is output to the standard output.

```
ajsqlstatus
```

Output example

```
(1)  Queueless agent service                 active
(2)  Queueless file transfer service         inactive
(3)  Host name                               host01
(4)  Queueless job                           can execute
(5)  Execution request to logical host       executes in physical host
(6)  Attach when service starts              attach
(7)  Log file installation directory name    C:\Program Files\HITACHI\JP1AJS2\log
(8)  Log file size                           4096KB
(9)  Status file name                        C:\Program Files\HITACHI\JP1AJS2\log\ajsqlstat.dat
(10) Status file size                        0KB
(11) Trace log file name                     C:\Program Files\HITACHI\JP1AJS2\tracelog.ql
(12) Character code                          C
(13) Using user profile                      use
(14) Directory name for temporary files      C:\Program Files\HITACHI\JP1AJS2\tmp\QLAgent
(15) Class name                              default
(16) Maximum number of executing jobs        1024
(17) Maximum number of waiting jobs          10
```

Explanation of the displayed items

The details about each displayed item are explained here. The parentheses for individual display items refer to the output format applicable when C is used for the value of the `LANG` environment variable for OS users executing the command in UNIX.

When JP1/AJS3 - Agent is installed on a host, the queueless file transfer service is not installed and item 2 is not displayed.

Item 13 is displayed only when the host is running on Windows.

Items 15 to 17 are displayed for each class defined in the target host. For output, a line-feed character is inserted at the beginning of each line.

(1) Queueless agent service

Indicates the startup status of the queueless agent service.

`active`: Operation of the queueless agent service has started.

`inactive`: Operation of the queueless agent service has stopped.

`restricted processing...`: Because the queueless agent service is being stopped, the service cannot accept execution requests for jobs or commands. When the currently executed job ends, the queueless agent service stops.

`forcibly stopping...`: Because the queueless agent service is being stopped, the service cannot accept execution requests for jobs or commands. The queueless agent service stops without waiting for the end of the job being executed. However, if file transfer is being performed, the queueless agent service waits until the file transfer is completed.

(2) Queueless file transfer service

Indicates the startup status of the queueless file transfer service.

`active`: Operation of the queueless file transfer service has started.

`inactive`: Operation of the queueless file transfer service has stopped.

`restricted processing...`: Because the queueless file transfer service is being stopped, the service cannot accept execution requests for commands. When the file transfer processing ends, the queueless file transfer service stops.

If the queueless file transfer service is not set up, `inactive` is displayed.

(3) Host name

Indicates the target host name.

(4) Queueless job

Indicates whether Queueless jobs can be executed on the target host.

`can execute`: Queueless jobs can be executed on the target host.

`cannot execute`: Queueless jobs cannot be executed on the target host.

`detach processing...`: Queueless jobs cannot be executed, because the target host is being detached.

(5) Execution request to logical host

Indicates the processing to be performed when a logical host that is not specified to process Queueless jobs is requested to execute such jobs.

`executes in physical host`: The job is executed on the physical host.

`does not execute`: The job is not executed.

(6) Attach when service starts

Indicates whether the target host is attached when the queueless agent service is started.

`attach`: The target host is attached when the queueless agent service is started.

`do not attach`: The target host is not attached when the queueless agent service is started.

(7) Log file installation directory name

Indicates the name of the log file storage directory for the queueless agent service.

(8) Log file size

Indicates the size of the log file for the queueless agent service (unit: kilobytes).

(9) Status file name

Indicates the name of the status file for the queueless agent service.

(10) Status file size

Indicates the size of the status file for the queueless agent service (unit: kilobytes).

(11) Trace log file name

Indicates the name of the queueless trace log file.

(12) Character code

Indicates the character set specified for the queueless agent service.

`C`: The ASCII character set is specified for the queueless agent service.

`SJIS`: SJIS character set is specified for the queueless agent service.

`EUC`: EUC character set is specified for the queueless agent service.

`UTF-8`: UTF-8 character set is specified for the queueless agent service.

(13) Using user profile

Indicates whether user profiles are used.

`use`: User profiles are used.

`do not use`: User profiles are not used.

(14) Directory name for temporary files

Indicates the name of the directory for temporary files used by the queueless agent service.

(15) Class name

Indicates the class name defined for the target host.

For the entire queueless agent service (default class), `Default` is displayed as the class name.

(16) Maximum number of executing jobs

Indicates the maximum number of jobs that can be executed simultaneously for each class on the target host.

(17) Maximum number of waiting jobs

Indicates the maximum number of jobs that can wait for each class on the target host.

ajsqlstop

Format

```
ajsqlstop
     [-j|-c]
```

Description

Stops the queueless agent service.

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

-j

The queueless agent service is stopped after all queueless jobs that are currently running terminate.

You cannot specify this option with the -c option.

-c

The queueless agent service is stopped immediately even when there are running queueless jobs.

You cannot specify this option with the -j option.

Notes

1. If you specify no option, the system assumes -j.
2. This command terminates when a stop request is sent to the queueless agent service. Therefore, you cannot use this command to check whether the queueless agent service has stopped. To perform this check, use the ajsqlstatus command. For details on the ajsqlstatus command, see *ajsqlstatus* in *3. Commands Used for Special Operation*.
3. If you stop the queueless agent service by executing the command with the -c option specified, the status of queueless jobs running when the command is executed might change to *Failed to start* or *Ended abnormally*. If there are queueless jobs in *Failed to start* or *Ended abnormally* status after the command is executed, restart the queueless agent service to start the jobs, if necessary.

Return values

0	Normal end
Other than 0	Abnormal end

ajsqltrsetsz

Format

```
ajsqltrsetsz
     [-s size]
```

Description

The ajsqltrsetsz command changes the size of the queueless trace log file or outputs the file size that is currently set.

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*

If you want to use the command to change the size of the queueless trace log file, specify the new file size in kilobytes.

You can specify 64 to 2,097,151.

Notes

1. If you use this command to decrease the size of the queueless trace log file, the contents of the file are cleared.
2. Always separate an option and its value by at least one space character.

Return values

0	Normal end
Value other than 0	Abnormal end

Example

The following command expands the size of the queueless trace log file to 16 megabytes (16,384 kilobytes).

```
ajsqltrsetsz -s 16384
```

jajs_maintain

Format

```
jajs_maintain
     [-h logical-host-name]
     [-F scheduler-service-name]
     {-m {manager|scheduler}|-show|-r start}
     [-x degree-of-parallelism]
     [-c disconnection-status-monitoring-time]
```

Description

The jajs_maintain command performs maintenance of the JP1/AJS3 ISAM database.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

-h *logical-host-name*

Specify the target logical host in a cluster operation that will be placed in the maintenance mode.

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.

1 to 255 bytes of characters can be specified.

-F *scheduler-service-name*

Specify the name of the target scheduler service that will be placed in the maintenance mode. In the scheduler service reduction mode, maintenance will apply to only the service specified with this option.

By default, all scheduler services subordinate to the physical host or logical host will be placed in the reduction mode.

If you specify this option with the manager functionality reduction mode, the command will end abnormally.

1 to 30 bytes of characters can be specified.

-m {manager|scheduler}

Specify the maintenance mode.

- manager

  Performs maintenance in the manager functionality reduction mode.

  - For standard configuration:
    The job execution environment is subject to maintenance.
  - For compatible ISAM configuration:
    The job execution environment and scheduler service are subject to maintenance.

  You can specify this option with the -h option.

- `scheduler`

  Performs maintenance in the scheduler service reduction mode.

  - For standard configuration:
    Nothing is subject to maintenance.
  - For compatible ISAM configuration:
    The scheduler service is subject to maintenance.

  You can specify this option with the `-h` and `-F` options.

For notes on each maintenance mode, see *7.1.3(3)(c) Notes on maintenance mode* in the *Job Management Partner 1/ Automatic Job Management System 3 System Design (Configuration) Guide*.

`-show`

Displays the operating status of the job execution environment and the scheduler service. This option cannot be specified together with the `-m`, `-r`, `-x`, or `-c` option. For the output format, see *Output examples* shown below.

`-r start`

If the job execution environment and the scheduler service remain in the maintenance status because the processing of the `jajs_maintain` command is canceled for whatever reason, this option restores them to operating status.

If you simultaneously specify the `-F` option, only the job execution environment and the specified scheduler service are restored to operating status.

If the target job execution environment and scheduler service are being maintained elsewhere, this command ends abnormally. If the target job execution environment and scheduler service are inactive or are being used, no restoration is performed even if you execute this command. In such a case, the command ends normally.

Do not specify this option together with the `-m`, `-show`, `-x`, or `-c` option.

`-x` *degree-of-parallelism*

Specify the number of concurrent scheduler services for which reorganization should be performed. You can specify 1 to 20.

`-c` *disconnection-status-monitoring-time*

Specify how long the system will monitor for disconnection from the scheduler database when the manager functionality enters the reduction mode. The system will monitor for disconnection at intervals of 10 seconds within the specified period of time.

You can set 0 to 86,400 (seconds). The default is 60 seconds.

Notes

1. During maintenance of the job execution environment, you cannot execute job entry and execution commands. Using such commands causes an error message KAVU0950-E to appear in the standard error output file.
2. Maintenance in the manager functionality reduction mode or the scheduler service reduction mode in compatible ISAM configuration stops the scheduler service. This command, therefore, causes an error if it is executed when linkage between scheduler services is enabled (starting jobs or jobnets using remote jobnets, manager jobnets, event linkage and remote commands). You should perform maintenance in hours when those linkage functions are not used.

3. If you attempt to operate a unit from JP1/AJS3 - View during maintenance of scheduler service, a `KAVV461-E The connection is not possible because the specified scheduler service is under maintenance.` message appears in the message box.

   When you execute a command that manipulates a unit, a `KAVS1717-E Maintenance is being performed, so execution is impossible` message is output to the standard error output.

4. When the `jajs_maintain` command is executed, log data about reorganization is output to the maintenance log file.

   If maintenance processing terminates abnormally, check the maintenance log file for the cause of the abnormal termination, correct the cause, and then re-execute the maintenance processing.

   For the location of the maintenance log file, see the description of the maintenance log file in *1.2.4 List of log files and directories* in the manual *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*.

5. If you stop the JP1/AJS3 service when the manager functionality is reduced, information about any jobs for which the status has changed during the reduction period will be lost. Do not stop JP1/AJS3 when the manager functionality is reduced.

6. If you execute the command in the manager functionality reduction mode when JP1/AJS3 is stopped, the command will require long time to terminate.

7. If the processing of the `jajs_maintain` command is canceled for whatever reason when the scheduler service to be maintained is being used, the scheduler service and the event action control manager might remain in maintenance status. To restore them, you must use the `jajs_maintain -r start`, `ajsstart`, or `jajs_spmd` command to start the applicable service.

   In the above situation, the job execution environment might remain in maintenance status as well. To restore it, execute `jajs_maintain -r start`, or restart the JP1/AJS3 service.

8. If you specify any of the following options in the `jajs_maintain` command, do not execute multiple instances of the command:

   - `-m manager`
   - `-m scheduler`
   - `-r start`

9. If you specify the `-m manager` option in the `jajs_maintain` command, do not concurrently execute the command and the following command or script:

   - The `jpqdbcond` command with the `-x` or `-k` option specified
   - The `jpqautocond` script

10. You cannot specify `-m manager` if any command or API for the job execution environment is still running.

11. You cannot specify `-m manager` while job information is being deleted in the job execution environment.

    If maintenance is performed in the manager functionality reduction mode while job information is being deleted, job information deletion processing is interrupted until the maintenance is completed. The processing is resumed when the maintenance is completed.

12. You cannot specify `jajs_maintain -m manager` while JP1/AJS3 is starting or finishing. You cannot start or finish JP1/AJS3 while `jajs_maintain -m manager` is executing.

13. If you specify the `-m manager` option in the `jajs_maintain` command, do not concurrently execute the command and the `jpqexport` command.

14. If you specify either of the following options in this command, do not concurrently execute the command and the `ajsautocond` script:

    - `-m manager`

- `-m scheduler`

15. If the `jajs_maintain -show` or `jajs_maintain -r start` command is executed while starting or finishing JP1/ JP1/AJS3, messages KAVU2227-E, KAVU0215-E, or KAVU0220-E might be output in the integrated log. These messages, which are output when maintenance operation conflicts with start or finish processing of the JP1/AJS3 service, do not pose a problem for actual operation. However, execution of the `jajs_maintain` command might take more time. If the command terminates abnormally, re-execute the command.
16. When maintenance of the scheduler service is attempted, the scheduler service is stopped after all existing job execution requests are completed. Therefore, if the max number of simultaneous jobs is set as 0 and the max number of waiting jobs is set more than 1 in the queueless job execution environment settings, the `jajs_maintain` command cannot terminate because the scheduler service cannot start finish processing when the maintenance mode is entered while the queueless job is starting. The `jajs_maintain` command should be executed in a status that allows jobs to execute. If fall into this status, set the max number of simultaneous jobs more than 1 by the `ajsqlalter` command, and execute the jobs.
17. For notes on maintenance of the scheduler service that is executing event jobs (including jobs specified in start conditions), see *7.6.8 Notes on restarting the JP1/AJS3 service while event jobs are running* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

Return values

0	Normal end
Other than 0	Abnormal end

Example

To perform maintenance periodically, you can define and execute the `jajs_maintain` command as a JP1/AJS3 job.

Suppose you reorganize the database in the manager functionality reduction mode at 23:00 on the last open day in December every year. You can use the following unit definition parameter to define a jobnet and register planned execution. The following shows examples for Windows and UNIX:

- For Windows

```
unit=maintain-net;
{
  ty=n;
  sd=1,12/*b;
  st=1,23:00;
  cy=1,(1,y);
  sh=1,ca;
  unit=maintain-job;
  {
    ty=pj;
    sc="jajs_maintain.exe";
    prm="-m manager";
  }
}
```

- For UNIX

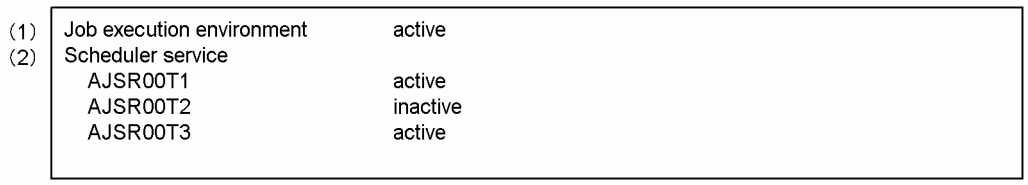
```
unit=maintain-net;
{
  ty=n;
  sd=1,12/*b;
```

```
  st=1,23:00;
  cy=1,(1,y);
  sh=1,ca;
  unit=maintain-job;
  {
    ty=j;
    te="/opt/jp1ajs2/bin/jajs_maintain -m manager";
  }
}
```

Output examples

- When `-show` is specified

  In the following output example, scheduler services (AJSROOT1, AJSROOT2, AJSROOT3) are defined.



  (1) Job execution environment

  `Job execution environment`: Indicates the status of the job execution environment.

  `active`: Operation of JP1/AJS3 has started.

  `inactive`: Operation of JP1/AJS3 has stopped.

  `Now starting`: Operation of JP1/AJS3 is being started.

  `Planned terminating`: Operation of JP1/AJS3 is undergoing a planned stop.

  `Now terminating`: Operation of JP1/AJS3 is being stopped.

  `Maintenance`: Maintenance is being performed on the operation of JP1/AJS3.

  (2) Scheduler service

  `Scheduler service`: Indicates the scheduler service name and the status of the scheduler service.

  `active`: Operation of JP1/AJS3 has started.

  `inactive`: Operation of JP1/AJS3 has stopped.

  `Maintenance`: Maintenance is being performed on the operation of JP1/AJS3.

jajsacfg (Windows only)

Format

```
jajsacfg
```

Description

The `jajsacfg` command opens the Agent Environment Settings dialog box.

The Agent Environment Settings dialog box is provided for compatibility with JP1/AJS2 whose version is 8 or earlier.

If you want to change the environment settings, we recommend that you use the `jajs_config` command. For details on the `jajs_config` command, see *jajs_config* in *2. Commands Used during Setup*.

Execution privileges

Administrators privileges

jajsca_start (UNIX only)

Format

```
jajsca_start
```

Description

Automatically starts JP1/AJS3 Console Agent at a system start. The automatic startup function is invalid immediately after JP1/AJS3 - Manger is installed, because automatic startup definitions have been commented. As necessary, you should customize the automatic startup function so that it will become valid. For details about customization, see *Additional information* below.

Execution privileges

Superuser privileges

Storage directory

```
/etc/opt/jp1ajs2/
```

Note

This command is valid only for UNIX. It is not applicable to Windows.

Return value

0	Normal end
Other than 0	Abnormal end

Additional information

Here is the procedure to enable the automatic startup of JP1/AJS3 Console Agent.

To enable the automatic startup of JP1/AJS3 Console Agent:

1. Use an editor (vi or the like) to open the following file (automatic startup shell script).
   ```
   /etc/opt/jp1ajs2/jajsca_start
   ```
2. Delete the underlined portion in the file description.
   Before deleting, you should confirm the contents.

```
if [ -x /etc/opt/jp1ajs2/ajscainetd_startstop ] ; then
    pids= `ps -ef|awk '/\/opt\/jp1ajs2\/bin\/ajscainetd/ {print $2}' `
    if [ "$pids" = "" ] ; then
      trap "" 1 2 3
      : # /etc/opt/jp1ajs2/ajscainetd_startstop start >/dev/null 2>/dev/null
    fi
fi
```

jajsca_stop (UNIX only)

Format

```
jajsca_stop
```

Description

Automatically stops JP1/AJS3 Console Agent at a system stop. The automatic stop function is invalid immediately after JP1/AJS3 - Manger is installed, because automatic stop definitions have been commented. As necessary, you should customize the automatic stop function so that it will become valid. For details about customization, see *Additional information* below.

Execution privileges

Superuser privileges

Storage directory

```
/etc/opt/jp1ajs2/
```

Note

This command is valid only for UNIX. It is not applicable to Windows.

Return values

0	Normal end
Other than 0	Abnormal end

Additional information

Here is the procedure to enable the automatic stop of JP1/AJS3 Console Agent.

To enable the automatic stop of JP1/AJS3 Console Agent:

1. Use an editor (vi or the like) to open the following file (automatic stop shell script).
   `/etc/opt/jp1ajs2/jajsca_stop`
2. Delete the underlined portion in the file description.
   Before deleting, you should confirm the contents.

```
if [ -x /etc/opt/jp1ajs2/ajscainetd_startstop ] ; then
   : # /etc/opt/jp1ajs2/ajscainetd_startstop stop
fi
```

jajscm_start (UNIX only)

Format

```
jajscm_start
```

Description

Automatically starts JP1/AJS3 Console Manager at a system start. The automatic startup function is invalid immediately after JP1/AJS3 - Manger is installed, because automatic startup definitions have been commented. As necessary, you should customize the automatic startup function so that it will become valid. For details about customization, see *Additional information* below.

Execution privileges

Superuser privileges

Storage directory

/etc/opt/jp1ajs2cm/

Note

This command is valid only for UNIX. It is not applicable to Windows.

Return values

0	Normal end
Other than 0	Abnormal end

Additional information

Here is the procedure to enable the automatic startup of JP1/AJS3 Console Manager.

To enable the automatic startup of JP1/AJS3 Console Manager:

1. Use an editor (vi or the like) to open the following file (automatic startup shell script).
   /etc/opt/jp1ajs2cm/jajscm_start
2. Delete the underlined portion in the file description.
   Before deleting, you should confirm the contents.

```
if [ -x /etc/opt/jp1ajs2cm/ajscminetd_startstop ] ; then
    pids= `ps -ef|awk '/\/opt\/jp1ajs2cm\/bin\/ajscminetd/ {print $2}' `
    if [ "$pids" = "" ] ; then
      trap "" 1 2 3
      : # /etc/opt/jp1ajs2cm/ajscminetd_startstop start >/dev/null 2>/dev/null
    fi
fi
```

jajscm_stop (UNIX only)

Format

```
jajscm_stop
```

Description

Automatically stops JP1/AJS3 Console Manager at a system stop. The automatic stop function is invalid immediately after JP1/AJS3 - Manger is installed, because automatic stop definitions have been commented. As necessary, you should customize the automatic stop function so that it will become valid. For details about customization, see *Additional information* below.

Execution privileges

Superuser privileges

Storage directory

```
/etc/opt/jp1ajs2cm/
```

Note

This command is valid only for UNIX. It is not applicable to Windows.

Return values

0	Normal end
Other than 0	Abnormal end

Additional information

Here is the procedure to enable the automatic stop of JP1/AJS3 Console Manager.

To enable the automatic stop of JP1/AJS3 Console Manager:

1. Use an editor (vi or the like) to open the following file (automatic stop shell script).
   ```
   /etc/opt/jp1ajs2cm/jajscm_stop
   ```
2. Delete the underlined portion in the file description.
   Before deleting, you should confirm the contents.

```
if [ -x /etc/opt/jp1ajs2cm/ajscminetd_startstop ] ; then
   : # /etc/opt/jp1ajs2cm/ajscminetd_startstop stop
fi
```

jajsmcfg (Windows only)

Format

```
jajsmcfg
```

Description

The `jajsmcfg` command opens the Manager Environment Settings dialog box.

Execution privileges

Administrators privileges

Notes

- This command cannot be used if the database is in the standard configuration. This command can only be used if the database is in a compatible ISAM configuration.
- In JP1/AJS3 upgraded from JP1/AJS2, even if the database is set up in the standard configuration, the **Manager Environment Settings** menu remains **All Programs** in the Windows **Start** menu. However, you cannot specify environment settings by choosing this menu item. If you choose the menu item, a message indicating that the menu item is not available in the standard configuration is displayed.
- If the database is in the standard configuration, use the `jbssetcnf` JP1/Base command or the `jajs_config` command to specify environment settings. For details on the `jbssetcnf` command, see the *Job Management Partner 1/Base User's Guide*. For details on the `jajs_config` command, see *jajs_config* in *2. Commands Used during Setup*.
- This command cannot be executed if the JP1/AJS3 system is blocked on the physical host, the logical host, or both of the PCs on which the command is executed.

jp1ajs2casetup (UNIX only)

Format

```
jp1ajs2casetup
```

Description

Installs JP1/AJS3 - Manager and then sets up the JP1/AJS3 Console Agent execution environment. The following lists the information to be set by this command.

- Configuration definition information for JP1/AJS3 Console Agent
- Port number for JP1/AJS3 Console

  The port number for JP1/AJS3 is set in the `/etc/services` file.

  If the port number to be set is already set in the `/etc/services` file, the system outputs the message `Service (`*service-name*`) port` *port-number*`/tcp already used.` The system also outputs this message if the port number to be set is already set in a comment in the `/etc/services` file. Set a port number other than an existing port number and then re-execute this command.

Execution privileges

Superuser privileges

Storage directory

`/opt/jp1ajs2/bin/`

Notes

- This command can be executed in UNIX only. It cannot be executed in Windows.
- Execute this command when using the JP1/AJS3 Console Agent function. This command only has to be executed once after installing JP1/AJS3 - Manager.
- Do not execute this command if a JP1 series product that requires JP1/Base is running.

Return values

0	Normal end
Values other than 0	Abnormal end

jp1ajs2cmsetup (UNIX only)

Format

```
jp1ajs2cmsetup
```

Description

Installs JP1/AJS3 - Manager and then sets up the JP1/AJS3 Console Manager execution environment. The following lists the information to be set by this command.

- Configuration definition information for JP1/AJS3 Console Manager
- Port number for JP1/AJS3 Console

  The port number for JP1/AJS3 is set in the `/etc/services` file.

  If the port number to be set is already set in the `/etc/services` file, the system outputs the message `Service (`*service-name*`) port` *port-number*`/tcp already used.` The system also outputs this message if the port number to be set is already set in a comment in the `/etc/services` file. Set a port number other than the existing port numbers and then re-execute this command.

Execution privileges

Superuser privileges

Storage directory

`/opt/jp1ajs2cm/bin/`

Notes

- This command can be executed in UNIX only. It cannot be executed in Windows.
- When using JP1/AJS3 Console Manager, execute this command after installing JP1/AJS3 - Manager. This command only has to be executed once after you install JP1/AJS3 - Manager.
- Do not execute this command if a JP1 series product that requires JP1/Base is running.

Return values

0	Normal end
Values other than 0	Abnormal end

jpqagtadd

Format

```
jpqagtadd
     [-mh manager-host-name]
     -ah agent-host-name
     [-cp time-time=concurrently-executable-job-limit...]
```

Description

The `jpqagtadd` command adds an agent host to a manager host, and creates the default queue to which the agent host will connect.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you want to add an agent host.

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

By default, the system assumes the local host name.

`-ah` *agent-host-name*

Specify the name of the agent host you want to add.

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

`-cp` *time-time*=*concurrently-executable-job-limit*`...`

Specify the period for concurrently-executable job limits, as well as the concurrently-executable job limit for the period.

Specifying the concurrently-executable job limit allows you to limit the number of jobs that can be concurrently executed by this agent host. The command applies to queue jobs and submit jobs only.

Once the specified concurrently-executable job limit is reached, any extra ones will be queued (for waiting for execution) until the job is completed.

Specify the period by time and time hyphened. Specify the time in units of 30 minutes in the *hh*`:`*mm* format.

hh: You can specify 0, or 00 to 23 hours.

mm: You can specify 0, 00 or 30 minutes.

For the concurrently-executable job limit, you can specify 0 to 4,294,967,295.

By default, the system assumes the value of `00:00-00:00=0` (the 24-hour format with a limit value of 0).

If the maximum number of concurrently executable jobs is 0, you cannot execute the job. To execute the job, you must specify a value of 1 or larger or change the maximum number of concurrently executable jobs.

For an example of how to specify the maximum number of concurrently executable jobs, see also the *Additional information* for the `jpqagtalt` command.

You can specify multiple periods and numbers of concurrently-executable job limit. If you specify multiple periods, however, the values set later are reflected. (For example, if you set `-cp 1:00-2:30=5 2:00-4:00=10`, the number of concurrently-executable job limit for an overlapping period, 2:00 to 2:30 is 10.)

Notes

1. 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.
2. If you omit the number of concurrently-executable jobs for a period, the default is 0. For example, the `-cp 10:00-22:00=10` expression alone means that the limit value is 0 for the 00:00 to 10:00 period, 10 for the 10:00 to 22:00 period, and 0 for the 22:00 to 00:00 period.
3. Executing more than one `jpqagtadd` command in parallel requires a considerably long time for processing. If you want to add multiple agent hosts, add them one after another.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to add an agent host failed due to an internal cause of the host on which the `jpqagtadd` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqagtadd` command was executed.
7	A logical error occurred on the host on which the `jpqagtadd` command was executed.
100	The host on which the `jpqagtadd` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqagtadd` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqagtadd` command was executed.
200	The manager host does not accept addition of an agent host. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	The manager host has returned no response.
203	Addition of an agent host failed due to an internal cause of the manager host.
206	Permission to add an agent host is not granted.
219	The manager host is busy.
220	The manager host memory is insufficient.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.

226	Invalid execution environment
232	An agent host with the same name as the agent host you attempted to add already exists.
235	The maximum number of agent host definitions has been exceeded.
240	The event/action control manager is changing the agent host configuration definition.

Additional informations

- The following table shows the attributes of the default queue created when an agent host is added, the initial values of these attributes, and the commands that can be used to change the attribute values.

Items set for default queues	Attribute	Command used to change attribute
Concurrently-executable job limit	Value specified by the `-cp` option	`Jpqagtalt`
Maximum number of jobs	4,294,967,295	`Jpqquealt`
Warning number of jobs	4,294,967,295	`Jpqquealt`
State of job reception port	close	`Jpqqueopen`
State of job takeout port	open	`Jpqqueclose`
Agent hosts to be connected	Agent host name specified by the `-ah` option	`jpqagtunlink`, `jpqagtlink` `jpqagtlink`
Priority of agent hosts	16	`Jpqagtlink`

- Immediately after you use the `jpqagtadd` command to register agent hosts, you will not be able to register jobs because the queue entrance is closed. Use the `jpqqueopen` command to open the default queue entrance. You should also make sure that any registered agent host name can be resolved to the IP address. If you want to register an agent host whose settings are the same as the default values of the agent host that was registered by using the `jpqimport` command, use the following procedure:

  1. Add an agent host to the manager host, and set the maximum number of concurrently executable jobs (indicated as *concurrently-executable-job-limit* below).

     The default value of `jpqsetup.conf` is 24 hours, with 5 as the *concurrently-executable-job-limit*.

     `jpqagtadd -ah` *agent-host-name* `-cp` *concurrently-executable-job-limit*

  2. Open the default queue entrance.

     `jpqqueopen -ah` *agent-host-name* `-en`

  3. Change the *maximum-number-of-jobs* and the *warning-value-for-job-count* in a default queue.

     By default, `jpqsetup.conf` provides a maximum value of 100 for the number of jobs and a warning value of 80 for the number of jobs.

     `jpqquealt -ah` *agent-host-name* `-mj` *maximum-number-of-jobs* `-wj` *warning-value-for-job-count*

  4. Change the priority of agent hosts to be connected.

     By default, `jpqsetup.conf` provides a value of 1 for priority.

     `jpqagtlink -ah` *agent-host-name* `-lh` *agent-host-name* `-clp` *connection-destination-agent-host-priority*

  Note that agent IDs are automatically assigned when you use the `jpqagtadd` command to register agent hosts. If you want to explicitly specify agent IDs, use the `jpqimport` command to register agent hosts.

jpqagtalt

Format

```
jpqagtalt
     [-mh manager-host-name]
     -ah agent-host-name
     -cp time-time=concurrently-executable-job-limit...
     [-em]
```

Description

The `jpqagtalt` command changes the maximum number of jobs that can concurrently be executed on an agent host registered in the manager host.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

When you want to change the maximum number of concurrently executable jobs on an agent host, specify the name of the manager host on which the agent host has been registered.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-ah` *agent-host-name*

Specify the name of the agent host for which the number of concurrently-executable job limit is to be changed.

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

`-cp` *time-time=number-of-concurrently-executable-job-limit*

Specify the period in which to change the number of concurrently executable job limit and specify the number of concurrently-executable job limit.

Specifying the concurrently-executable job limit allows you to limit the number of jobs that can be concurrently executed by this agent host. The command applies to queue jobs and submit jobs only.

Once the specified concurrently-executable job limit is reached, any extra ones will be queued (for waiting for execution) until the job is completed.

Specify the period by time and time hyphened. Specify the time in units of 30 minutes in the *hh*`:`*mm* format.

hh: You can specify 0, or 00 to 23 hours.

mm: You can specify 0, 00 or 30 minutes.

For the number of concurrently-executable job limit, you can specify 0 to 4,294,967,295.

If the specified period contains the time when you execute the command, the number of concurrently-executable job limit is changed immediately.

You can specify multiple periods and numbers of concurrently-executable job limit. If you specify multiple periods, however, the values set later are reflected. (For example, if you set `-cp 1:00-2:30=5 2:00-4:00=10`, the number of concurrently-executable job limit for an overlapping period, 2:00 to 2:30 is 10.)

See *Additional information* covering examples of specifying the number of concurrently-executable job limit. Reference it as necessary.

`-em`

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. The concurrently-executable job limit specified by this command does not include concurrently-executable event job limit.
3. If you omit the number of concurrently-executable jobs for a period, the default is 0. For example, the `-cp 10:00-22:00=10` expression alone means that the limit value is 0 for the 00:00 to 10:00 period, 10 for the 10:00 to 22:00 period, and 0 for the 22:00 to 00:00 period.
4. You should use the `-em` option for the sole purpose of recovering from an agent host failure. You should avoid specifying the `-em` option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to change the maximum number of concurrently executable jobs failed due to an internal cause of the host on which the `jpqagtalt` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqagtalt` command was executed.

7	A logical error occurred on the host on which the `jpqagtalt` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqagtalt` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqagtalt` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqagtalt` command was executed.
200	The manager host does not accept changes to the number of concurrently-executable job limit. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified agent host. • The specified agent host is not found.
202	The manager host has returned no response.
203	The number of concurrently-executable job limit could not be changed successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to change the number of concurrently-executable job limit.
219	The manager host is busy.
220	The manager host memory is insufficient.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

Additional information

The following gives examples of specifying the number of concurrently-executable job limit.

- The following command changes the number of concurrently-executable job limit of 1:00 to 5:00 to 1.

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

- The following command changes the number of concurrently-executable job limit of 23:00 to 24:00 to 1.

```
-cp 23:00-00:00=1
```

  Specify 24:00 as 00:00 or 0:0.

- The following command changes the number of concurrently-executable job limit of 23:00 to 24:00 and 00:00 to 05:00 on the next day to 1.

```
-cp 23:00-05:00=1
```

  You can give a two-day expression to the number of concurrently-executable job limit.

- The following command changes the number of concurrently-executable job limit of one day to 1.

```
-cp 00:00-00:00=1
```

jpqagtdel

Format

```
jpqagtdel
     [-mh manager-host-name]
     -ah agent-host-name
```

Description

The `jpqagtdel` command deletes an agent host from a manager host, and deletes the default queue to which the agent host is connected.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host from which you want to delete an agent host.

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

By default, the system assumes the local host name.

`-ah` *agent-host-name*

Specify a agent host name you want to delete.

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

Notes

1. 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.
2. Before executing this command, you must make the following preparations:
   - Use `jpqqueclose` or a similar command to close the entrance of the default queue to which the agent host you want to delete is connected. Then make sure that no jobs are running and no jobs are contained in the default queue.

     You cannot delete the agent host if it has a job that is being executed, assuming that the job is a standard job (PC, UNIX, or QUEUE), custom job, action job, or event job.

     When the default queue that contains jobs is deleted, any jobs whose status is *Waiting to execute*, *Being held*, or *Waiting for time* are forcibly terminated.
   - Use `jpqagtunlink` or a similar command to disconnect all queues (other than the default queue) from the agent host you want to delete.

     You cannot delete an agent host if it is connected to any queue other than the default queue.
   - Executing more than one `jpqagtdel` command in parallel requires a considerably long time for processing. When deleting multiple agent hosts, delete them one by one.

3. If an event job or a jobnet with start conditions is executed on an agent host already deleted by the `jpqagtdel` command, the manager host name that was specified in the `-mh` option of the command has been retained on the agent host. On the agent host, delete the manager host specified in the `-mh` option of the command.

   The procedure is as follows.

   1. Check whether the manager host name specified in the `-mh` option of the `jpqagtdel` command has been retained on the agent host.

      Execute the following command:

      `jpoagoec -p`

   2. Delete the manager host name specified in the `-mh` option.

      Execute the following command:

      `jpoagoec -d` *manager-host-name-specified-in-the-mh-option*

   This prevents unnecessary communication (start or stop notification) to the manager host when the agent host is started or stopped. For details on the `jpoagoec` command, see *jpoagoec* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1* earlier in this chapter.

4. If an event job or a jobnet with start conditions is being executed on an agent host, do not stop the OS or turn off the machine before you stop the JP1/AJS3 service on the agent host. If you do so, the `jpqagtdel` command will not be able to delete the agent. If the command has become unable to delete the agent, stop the JP1/AJS3 service on the manager host, cold-start the host, and then re-execute the command. Alternatively, delete the information about an event job or a jobnet with start conditions being executed on the agent host, and then re-execute the command.

   The following describes the procedure for deleting information about an event job or a job with start conditions being executed on an agent host.

   1. Stop the JP1/AJS3 service on the manager host.

   2. On the manager host, make sure that an event job is being executed or a jobnet with start conditions is being monitored on the agent host.

      Execute the following command:

      `jpomanjobshow -h` *manager-host-name* `-a` *name-of-agent-host-to-delete*

   3. On the manager host, delete information about the event job being executed or the jobnet with start conditions being monitored on the agent host.

      Execute the following command:

      `jpomanevreset -h` *manager-host-name* `-a` *agent-host-name* `-s`

   For details on the `jpomanjobshow` command, see *jpomanjobshow* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

   For details on the `jpomanevreset` command, see *jpomanevreset* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to delete an agent host failed due to an internal cause of the host on which the `jpqagtdel` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqagtdel` command was executed.

7	A logical error occurred on the host on which the `jpqagtdel` command was executed.
100	The host on which the `jpqagtdel` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqagtdel` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqagtdel` command was executed.
200	The manager host does not accept the agent host deleting request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	The manager host has returned no response.
203	The agent host could not be deleted successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to delete the agent host.
214	There is no agent host connected to the manager host.
219	The manager host is busy.
220	The manager host memory is insufficient.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
233	There is a job being executed, which is a standard job, custom job, or action job.
234	There is a job being executed, which is an even job.
236	The agent host is connected to a queue.
240	The event/action control manager is changing the agent host configuration definition.

jpqagtlink

Format

```
jpqagtlink
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     -lh name-of-the-agent-host-to-be-connected
     {[-lp connection-priority-for-an-agent-host-that-has-not-been-
connected]|
          -clp connection-priority-for-an-agent-host-that-has-been-
connected}
     [-em]
```

Description

The `jpqagtlink` command is used to connect an agent host to a queue. The command is also used to set the priority of an agent host to be connected to a queue.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

When you want to connect an agent host to a queue, specify the name of the manager host on which the queue has been created. Alternatively, when you want to set the priority of an agent that has been connected to a queue, specify the name of the manager host on which the queue has been created.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-q` *queue-name*

When you want to connect an agent host to a queue other than the default queue, specify the name of the queue. Alternatively, when you want to set the priority of an agent that has been connected to a queue, specify the name of the queue.

You can specify a character string of 1 to 63 bytes.

-ah *agent-host-name*

When you want to connect an agent host to the default queue, specify the agent host name (default queue name) registered on the manager host when the default queue was created. Alternatively, when you want to change the priority of the agent host that has been connected to the default queue, specify the agent host name (default queue name) registered on the manager host when the default queue was created.

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

-lh *name-of-the-agent-host-to-be-connected*

Specify the name of the agent you want to connect to the specified queue or the name of the agent host for which you want to set the priority.

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

-lp *connection-priority-for-an-agent-host-that-has-not-been-connected*

Specify the priority of destination agent hosts.

You can specify a value between 1 and 16. The lowest priority is 1 and the highest is 16. Jobs with higher levels of priority are given execution precedence.

If you omit this option, the system assumes 16.

Use this option to set the queue connection priority for an agent host (specified by the -lh option) that has not been connected to a queue (specified by the -q option) or the default queue (specified by the-ah option).

-clp *connection-priority-for-an-agent-host-that-has-been-connected*

Specify the priority of destination agent hosts.

You can specify a value between 1 and 16. The lowest priority is 1 and the highest is 16. Jobs with higher levels of priority are given execution precedence.

Use this option to change the queue connection priority for an agent host (specified by the -lh option) that has been connected to a queue (specified by the -q option) or the default queue (specified by the-ah option).

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. You should use the -em option for the sole purpose of recovering from an agent host failure. You should avoid specifying the -em option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to connect an agent host or change the connection priority failed due to an internal cause of the host on which the `jpqagtlink` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqagtlink` command was executed.
7	A logical error occurred on the host on which the `jpqagtlink` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqagtlink` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqagtlink` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqagtlink` command was executed.
200	The manager host does not accept connection to the agent host or changes of its priority. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found. • The specified default queue does not exist.
202	The manager host has returned no response.
203	The agent host could not be connected or its priority could not change successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to connect the agent host or change its priority.
214	There is no agent host connected to the manager host.
219	The manager host is busy.
220	The manager host memory is insufficient.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
232	An attempt has been made to connect to connected agent hosts.
239	An attempt has been made to change the priority of non-connected agent hosts by means of the `-clp` option.

jpqagtshow

Format

```
jpqagtshow
     [-mh manager-host-name]
     {-ah agent-host-name|-a|-n}
     [-em]
```

Description

Outputs agent host information (including the agent host name and the schedule of the number of concurrently-executable job limit of a day) to the standard output file.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

However, specifying the -em option requires the following privileges (but does not require JP1_JPQ_Admin privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

-mh *manager-host-name*

When you want to output information about an agent host, specify the name of the manager host on which the agent host has been registered.

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

By default, the system assumes the local host name.

When you specify this option together with the -em option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the -mh option.

-ah *agent-host-name*

Specify the name of the agent host whose agent host information is to be output.

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

-a

Outputs information about all the agent hosts registered to the manager host set by the -mh option.

-n

Outputs the names of all the agent hosts registered to the manager set by the mh option.

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. For the -a option, up to 57 bytes can be output as the agent host name. If the agent host name exceeds 57 bytes, the 56th and subsequent bytes become "..".
3. You should use the -em option for the sole purpose of recovering from an agent host failure. You should avoid specifying the -em option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

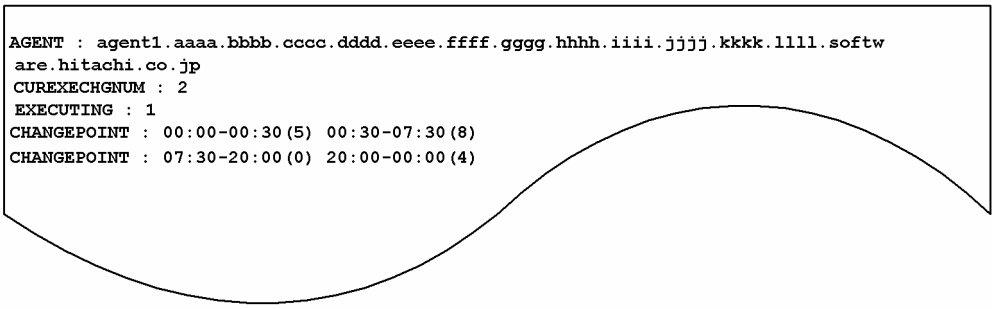
Return values

0	Normal end
1	Invalid parameter value
2	An attempt to output agent host information failed due to an internal cause of the host on which the jpqagtshow command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the jpqagtshow command was executed.
7	A logical error occurred on the host on which the jpqagtshow command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the jpqagtshow command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the jpqagtshow command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the jpqagtshow command was executed.
200	The manager host does not accept output agent host information. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified agent host. • The specified agent host is not found.
202	The manager host has returned no response.
203	Agent host information could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output agent host information. You do not have the privilege required to output the agent host name.
212	The attempt to output information about the agent host has failed because an agent host is currently being added or changed.
214	No agent host is connected to the manager host.
219	The manager host is busy.

220	The manager host memory is insufficient.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

Output example 1

The following gives an example of file output when you specify the `-ah` option, and describes the meanings of output contents.



```
AGENT : agent1.aaaa.bbbb.cccc.dddd.eeee.ffff.gggg.hhhh.iiii.jjjj.kkkk.llll.softw
 are.hitachi.co.jp
 CUREXECHGNUM : 2
 EXECUTING : 1
CHANGEPOINT : 00:00-00:30(5) 00:30-07:30(8)
CHANGEPOINT : 07:30-20:00(0) 20:00-00:00(4)
```

The following shows the meaning of the output.

`AGENT`

Indicates an agent host name.

`CUREXECHGNUM`

Indicates the current number of concurrently-executable job limit.

`EXECUTING`

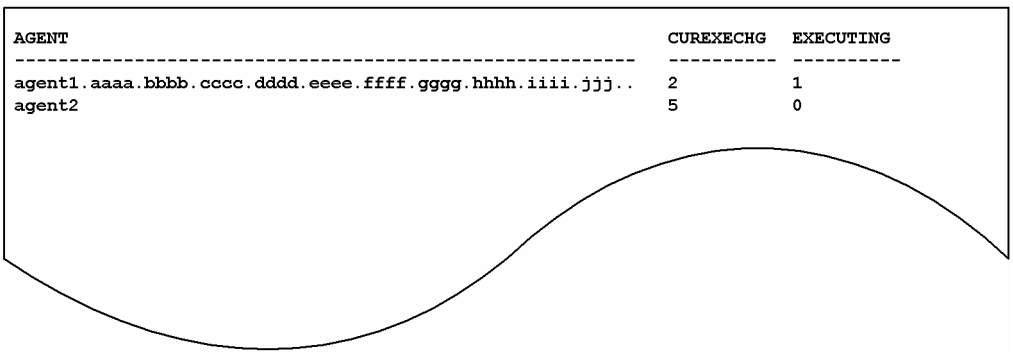
Indicates the number of jobs being executed.

`CHANGEPOINT`

Indicates the schedule of the number of the concurrently-executable job limit on a day in the format of *multiplicity-setup-start-time* − *multiplicity-setup-end-time*（*number-of-concurrently-executable-job-limit*）.

Output example 2

The following gives an example of file output when you specify the `-a` option, and describes the meanings of output contents.



```
AGENT                                                    CUREXECHG   EXECUTING
--------------------------------------------------------  ----------  ----------
agent1.aaaa.bbbb.cccc.dddd.eeee.ffff.gggg.hhhh.iiii.jjj..  2           1
agent2                                                   5           0
```

The following shows the meaning of the output.

AGENT

Indicates an agent host name.

57 bytes of data are output.

CUREXECHG

Indicates the current number of concurrently-executable job limit.

EXECUTING

Indicates the number of jobs being executed.

Output example 3

The following gives an example of file output when you specify the -n option, and describes the meanings of output contents.

```
AGENT
--------------------------------------------------------------------------------
agent1.aaaa.bbbb.cccc.dddd.eeee.ffff.gggg.hhhh.iiii.jjjj.kkkk.llll.software.hitach
i.co.jp
agent2
```

The following shows the meaning of the output.

AGENT

Indicates an agent host name.

jpqagtunlink

Format

```
jpqagtunlink
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     -lh name-of-the-host-to-be-disconnected
```

Description

Cancels the connection between the queue and its agent hosts.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host that contains the queue whose agent host connection you want to cancel.

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

By default, the system assumes the local host name.

`-q` *queue-name*

When you want to disconnect an agent host from a queue (other than the default queue), specify the name of the queue.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

When you want to disconnect an agent host from the default queue, specify the agent host name (default queue name) registered on the manager host when the default queue was created.

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

`-lh` *name-of-the-host-to-be-disconnected*

Specify the name of the agent host whose connection you want to cancel.

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

Notes

1. 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.
2. An attempt to disconnect any non-connected agent host results in an error.
3. You cannot disconnect the agent host if it has a job that is being executed, assuming that the job is a standard job (PC, UNIX, or QUEUE), custom job, or action job.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to disconnect an agent host failed due to an internal cause of the host on which the `jpqagtunlink` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqagtunlink` command was executed.
7	A logical error occurred on the host on which the `jpqagtunlink` command was executed.
100	The host on which the `jpqagtunlink` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqagtunlink` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqagtunlink` command was executed.
200	The manager host does not accept disconnecting the agent host. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found. • The specified default queue does not exist.
202	The manager host has returned no response.
203	The agent host could not be disconnected successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to disconnect the agent host.
214	There is no agent host connected to the manager host.
219	The manager host is busy.
220	Memory shortage has occurred on the request side of the manager host.
222	A fatal error has occurred. • A system call has encountered an error.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
232	There is no agent host connection.
233	There is a job being executed, which is a standard job, custom job, or action job.

jpqendjobshow

Format

```
jpqendjobshow
     [-mh manager-host-name]
     [-u owner-name]
     [-sa time]
     [-sp time]
     [-rn output-job-information-count]
     [-qn]
```

Description

Outputs a list of ended job information (including the job number and submittal destination queue name) to the standard output.

You can also output ended job information about the JP1/NQSEXEC and JP1/OJE for VOS3 hosts.

You can also output ended job information about the AS/400 system.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

Arguments

-mh *manager-host-name*

Specify the name of the manager host to which you have submitted a job whose job information is to be output.

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

By default, the system assumes the local host name.

-u *owner-name*

Specify the job owner name.

You can specify a character string of 1 to 63 bytes. By default, the system assumes all the users if a user having the JP1_JPQ_Admin privilege or JP1_JPQ_Operator privilege executes the command. If a user having the JP1_JPQ_User privilege executes the command, the system assumes that user.

`-sa` *time*

If you want to output information about jobs whose execution ended after a specific time, specify the time based on the time of the host on which the command is executed. The format of the time you specify is *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*. You can specify a time between 1980/01/01.00:00:00 and 2038/01/18.03:14:07. By default, the system assumes the time for the oldest job information.

- *YYYY*
  Specify a year. You can specify 1980 to 2038.
- *MM*
  Specify a month. You can specify 01 to 12.
- *DD*
  Specify a day. You can specify 01 to 31.
- *hh*
  Specify hours. You can specify 00 to 23.
- *mm*
  Specify minutes. You can specify 00 to 59.
- *ss*
  Specify seconds. You can specify 00 to 59.

`-sp` *time*

If you want to output information about jobs whose execution ended before a specific time, specify the time based on the local time of the host on which the command is executed. The format of the time you specify is *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*. You can specify a time between 1980/01/01.00:00:00 and 2038/01/18.03:14:07. By default, the system assumes the time for the oldest job information.

- *YYYY*
  Specify a year. You can specify 1980 to 2038.
- *MM*
  Specify a month. You can specify 01 to 12.
- *DD*
  Specify a day. You can specify 01 to 31.
- *hh*
  Specify hours. You can specify 00 to 23.
- *mm*
  Specify minutes. You can specify 00 to 59.
- *ss*
  Specify seconds. You can specify 00 to 59.

-rn *output-job-information-count*

Specify the number of pieces of job information to be output. (The system outputs the number of pieces of job information specified with this option, among the end job information in the range specified with the -sa and -sp options, starting from information about the job for which the end time is the latest.)

You can specify a value between 0 and 4,294,967,295. If you omit this option, the system assumes 0.

If you set 0, the system outputs all the job information in the manager host set by the -mh option.

-qn

Outputs the job number, and queue type, and name as job information.

Note

The number of bytes which can be output is fixed for each output item. If the contents of an output item exceed the output limit, they end with "..". (For example, the job name output limit is 26 bytes. If the job name exceeds 26 bytes, the 25th and subsequent bytes become "..".) For the queue name that can be output by the -qn option, all the contents are output.

To output all the contents on each output item, use the jpqjobget command.

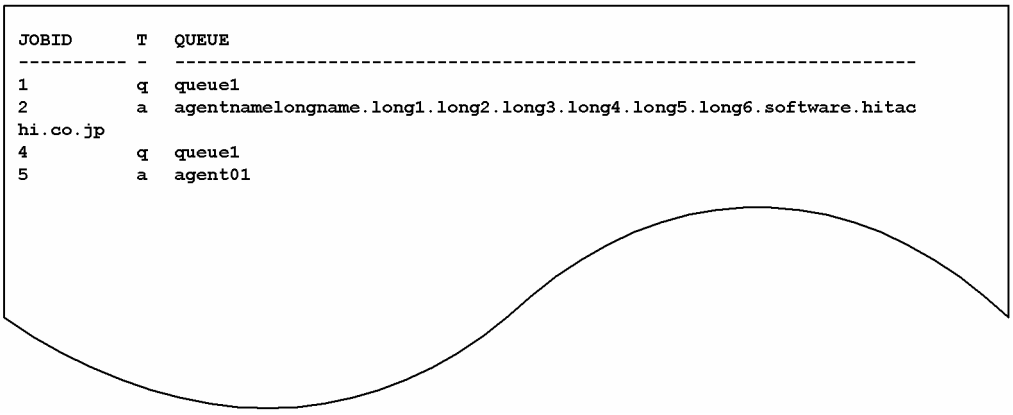
Return values

0	Normal end
1	Invalid parameter value
2	An attempt to output information about ended jobs failed due to an internal cause of the host on which the jpqendjobshow command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the jpqendjobshow command was executed.
7	A logical error occurred on the host on which the jpqendjobshow command was executed.
100	The host on which the jpqendjobshow command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the jpqendjobshow command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the jpqendjobshow command was executed.
200	The manager host does not accept ended job information output. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	The manager host has returned no response.
203	Ended job information could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output ended job information.
207	The specified job is not found. • The specified job is not in the database. • Specified ended job information has been deleted. • Because the specified user's job cannot be accessed, ended job information cannot be output.

219	The manager host is busy.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued an end job information output request to an unsupported host.
226	Invalid execution environment

Output example 1

The following gives an example of file output when you specify the -qn option, and describes the meanings of output contents.



```
JOBID      T  QUEUE
---------- -  ------------------------------------------------------------------
1          q  queue1
2          a  agentnamelongname.long1.long2.long3.long4.long5.long6.software.hitac
hi.co.jp
4          q  queue1
5          a  agent01
```

The following gives the meanings of output contents.

JOBID

Indicates a job number.

T

Indicates a queue type.

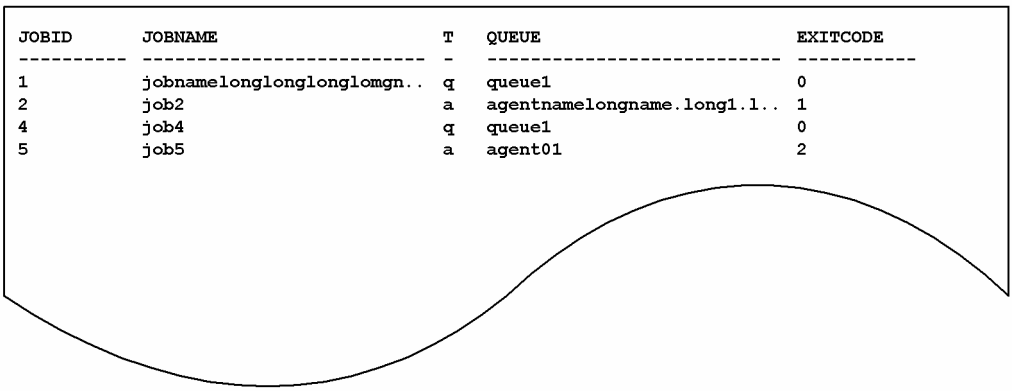
- q: Queue
- a: Agent host

QUEUE

Indicates a queue name (or an agent host name).

Output example 2

The following gives an example of file output when you do not specify the -qn option, and describes the meanings of output contents.



```
JOBID      JOBNAME                    T   QUEUE                        EXITCODE
---------- -------------------------- -   -------------------------- -----------
1          jobnamelonglonglonglomgn.. q   queue1                       0
2          job2                       a   agentnamelongname.long1.l..  1
4          job4                       q   queue1                       0
5          job5                       a   agent01                      2
```

The following shows the meaning of the output.

JOBID

Indicates a job number.

JOBNAME

Indicates a job name.

26 bytes of data are output.

When you use a QUEUE job or the `jpqjobsub` command to specify a job name, that job name is set. If no job name is specified, the execution file name is set.

When you define a PC job in a jobnet, the execution file name is set. When you define a Unix job in a jobnet, the script file name is set. If you do not specify a script file name, and then define a job name in a command statement, `script_job` is set as the job name.

For an action job, the name of the fixed execution file executed by each action job is set as the job name. For an execution file name, the first 63 bytes of the characters from the beginning of the file name, excluding the path information, are set as the job name, and the first 26 bytes are displayed.

T

Indicates a queue type.

- q: Queue
- a: Agent host

QUEUE

Indicates a queue name (or an agent host name).

27 bytes of data are output.

EXITCODE

Indicates a return code (including symbols).

jpqexport

Format

```
jpqexport
     -dt isam
     -co file-name
     [-mh logical-host-name]
     [-dp name-of-database-storage-directory]
```

Description

Outputs the current job execution environment (job execution agent, queues, and execution-locked resources) to a file.

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-dt isam`

Specify the type of the database used in the job execution environment.

- `isam`
  ISAM-based database

`-co` ***file-name***

Specify, using the absolute path name, the file to which the job execution environment is to be output.

You can specify 1 to 511 characters (bytes).

`-mh` ***logical-host-name***

Specify the logical host name.

You can specify 1 to 255 characters (bytes).

If you omit this option, the system assumes the physical host name.

Specify this option first.

`-dp` ***name-of-database-storage-directory***

Specify the name of the directory that contains the ISAM files used as the database in the job execution environment.

You can specify 1 to 511 characters (bytes).

If you omit this option, the system assumes the directory name defined as the database storage directory for the job execution environment during environment setup (configuration).

Notes

1. You cannot overwrite a file to which the job execution environment is to be output. Delete or save files before outputting the job execution environment to the file.
2. Depending on the job execution environment to be used, it may take several minutes or more to output the job execution environment to a file.
3. If you omit the `-mh` option, the system does not reference environment variable `JP1_HOSTNAME`. For operation on the logical host, do not omit the `-mh` option.
4. Do not execute this command and `jajs_maintain -m manager` at the same time.

Return values

0	Normal end
1	The specified argument is invalid.
130	The specified file or its path is not found.
131	The specified file has already been created.
133	You do not have the privilege (are not authorized) to access the specified file.
135	The database is missing or there are insufficient system resources.
137	The database storage directory is missing.
138	You do not have the privilege (are not authorized) to access the database.
140	You do not have Administrator privileges (in Windows) or superuser privileges (in UNIX) to output the job execution environment.
141	Environment settings or the logical host name is inappropriate.
145	There is insufficient memory.
146	Free disk space is insufficient.
147	An internal factor error occurred.
149	The system cannot perform processing because the database size exceeds 2 gigabytes.
150	The database cannot be connected.

jpqimport

Format

```
jpqimport
     -dt isam
     -ci name-of-configuration-definition-file-for-submit-job-execution-
environment
     [-mh logical-host-name]
     [-dp name-of-database-storage-directory]
```

Description

Collectively defines the job execution environment (job execution agent, queues, and execution-locked resources) using the configuration definition file for the submit job execution environment (`jpqsetup.conf`).

If you want to execute a job on another host agent, you must define the job execution agent in the job execution environment.

In addition, you must create queues in the following cases:

- When you want to use purpose-specific queues to accept jobs registered (submitted) from clients
- When you want to distribute execution of jobs
- When you want to accept jobs from JP1/NQSEXEC and JP1/OJE for VOS3

Execution privileges

In Windows: Administrators privileges

In UNIX: Superuser privileges

Arguments

`-dt isam`

Specify the type of the database used in the job execution environment.

- `isam`
  ISAM-based database

`-ci` ***name-of-configuration-definition-file-for-submit-job-execution-environment***

Specify the name of the configuration definition file for submit job execution environment (`jpqsetup.conf`) to be used.

You can specify 1 to 511 characters (bytes).

For details on how to define the configuration definition file for the submit job execution environment, see *Defining the configuration definition file for the submit job execution environment (jpqsetup.conf)*, below.

`-mh` ***logical-host-name***

Specify the logical host name.

You can specify 1 to 255 characters (bytes).

If you omit this option, the system assumes the physical host name.

Specify this option first.

`-dp` *name-of-database-storage-directory*

Specify the name of the directory that will contain the ISAM files used as the database in the job execution environment.

You can specify 1 to 511 characters (bytes).

If you omit this option, the system assumes the directory name defined as the database storage directory for the job execution environment during environment setting (configuration).

Notes

1. Job execution environment defined by this command is used by the following jobs.

   In case of standard configuration

   QUEUE job, submit job

   In case of compatible ISAM configuration

   The agent definition: Unix, PC, action, custom, submit, and event jobs

   The queue definition: queue and submit jobs

   The execution-locked resource definition: submit jobs

   Further, job execution environment settings isn't used by queueless jobs.

2. If this command is used to define all execution environment settings for submit jobs at one time, old information is not overwritten with the new information. Before you re-create the database of the execution environment for submit jobs, always stop JP1/AJS3 and delete or back up the database that has been created. If you choose to delete the database, delete all files contained in the directory to be specified in the `-dp` option (the job execution environment database storage directory specified during environment setup).

   In Windows, delete these files by a program such as **Explorer**.

   In UNIX, delete these files with the `rm` command.

3. Use the character set for JP1/AJS3 operation as the character sets# used in the file specified by the -ci option.

   #

   It refers to the character set specified by the `AJSCHARCODE` environment setting parameter.

4. When you specify a database storage directory name in the `-dp` option, you must also make this specification during environment setup.

   Specify a database storage directory name in the `DatabasePath` environment setting parameter.

5. If you execute this command when JP1/AJS3 is running on the same logical host, an error occurs.

6. Depending on the contents of the configuration definition file for the submit job execution environment, the collective definition processing for the job execution environment might take several tens of minutes.

7. When you re-create the job execution environment, you must delete the standard output file and standard error output file for the remaining job. If you re-create the job execution environment after executing a large number of jobs, it may take a longer time for command execution because of the processing for deleting these files.

8. Be careful if you decrease the maximum number of job execution agents, queues, or execution-locked resources that can be defined in the common definition information before you use this command to add or delete these items. If you do this, you might be unable to collectively import the job execution environment settings by using the `jpqimport` command from the configuration definition file for the submit job execution environment exported by the `jpqexport` command. For example, assume that there is an environment where the maximum number of agents that can be defined is set to 30 in the common definition information. In addition, assume that an agent ID

whose ID is 100 has been specified in the configuration definition file for the submit job execution environment. In this situation, if you execute the `jpqimport` command to import the configuration definition file, the command results in an error.

If this error occurs, correct the configuration definition file for the submit job execution environment so that the defined ID numbers for agents, queues, and execution-locked resources do not exceed their maximum values set during environment setup. Then re-execute the `jpqimport` command.

9. The system handles lines beginning with a # as a comment. Place the # at the very beginning of a comment line. Placing # after a parameter causes an error.
10. If you omit the `-mh` option, the system does not reference environment variable `JP1_HOSTNAME`. To enable operation on the logical host, do not omit this option.

Return values

0	Normal end
1	The specified argument is invalid.
130	The configuration definition information file for submit job execution or its path is not found.
132	The contents of the configuration definition information file for submit job execution are inappropriate.
133	You do not have the privilege (are not authorized) to access the configuration definition information file for submit job execution.
135	The system cannot create a database because there are insufficient system resources.
136	The database is already created.
137	The database storage directory is missing.
138	You do not have the privilege (are not authorized) to access the database.
140	You do not have Administrators privileges (in Windows) or superuser privilege (in UNIX) to collectively define the job execution environment.
141	Environment settings or the logical host name is inappropriate.
142	The manager host is running on the same logical host.
145	There is insufficient memory.
146	Free disk space is insufficient.
147	An internal factor error occurred.
149	The system cannot perform processing because the database size exceeds 2 gigabytes.
150	The database cannot be connected.
151	RDAREA is invalid or RDAREA does not exist.
153	The command cannot be executed.

Additional informations

- When you want to change the configuration definition for the job execution environment by adding or deleting job execution agents, queues, or execution-locked resources, use any of the following methods:
  - Stop the JP1/AJS3 service and then recreate the database for job execution environment with this command. If you are executing a remote job, also stop the JP1/AJS3 service on the remote host.
  - Without stopping the job operation, change the configuration definition for job execution environment with any of the following commands:

    `jpqagtadd`: Adds an agent.

`jpqagtdel`: Deletes an agent.

`jpqagtalt`: Changes the attribute of an agent.

`jpqagtlink`: Links a queue and its agents and then changes the priority of the destination agents.

`jpqagtunlink`: Unlinks a queue and its agents.

`jpqqueadd`: Adds a queue.

`jpqquedel`: Deletes a queue.

`jpqquealt`: Changes the attributes of a queue.

`jpqqueopen`: Opens a queue.

`jpqqueclose`: Closes a queue.

`jpqresadd`: Adds an execution-locked resource.

`jpqresdel`: Deletes an execution-locked resource.

- You can use aliases to create several agents on a single manager host. Before you do this, make sure that the aliases can be resolved into addresses (the `ping` command is terminated normally).

Defining the configuration definition file for the submit job execution environment (jpqsetup.conf)

Define the following three items in the configuration definition file for submit job execution:

- Agent definition
- Queue definition
- Execution-locked resource definition

The following explains the definition of each item.

Agent definition

Format

```
$agent $agent-ID {agent-host-name|$system}
[exec_jobs time-to-start-setting-for-the-number-of-concurrent-jobs time-
to-stop-setting-for-the-number-of-concurrent-jobs number-of-concurrent-
jobs]...
def_queue $default-queue-ID
[max_jobs maximum-number-of-jobs-in-queue]
[warn_jobs warning-value-on-number-of-jobs-in-queue]
[queue_ent {open|close}]
[queue_exit {open|close}]
[connect $agent-ID priority]...
$end
```

Arguments

`$agent $`*agent-ID* `{`*agent-host-name*`|$system}`

Specify the name of the agent host responsible for job execution.

- `$agent`: Fixed
- `$`*agent-ID*: Specify an agent ID in the `$a`*n* format (where *n* is a unique value in the manager host (a value other than 0)). For *n*, specify a value less than or equal to the number of defined agents specified at environment setting. (For example, if 256 agents are defined, specify a value that is less than or equal to 256 for *n*. Specifying a value that is greater than or equal to 257 will result in an error.)

- *agent-host-name*: Character string of up to 255 bytes
- `$system`: Job execution agent on the manager host

`exec_jobs` *time-to-start-setting-for-the-number-of-concurrent-jobs time-to-stop-setting-for-the-number-of-concurrent-jobs number-of-concurrent-jobs*

Specify the number of concurrent jobs. If you omit this option, the system assumes 0 for the number of concurrent jobs for a day.

Specifying the number of concurrent jobs enables you to limit the number of jobs that can be concurrently executed by this agent host. You can apply this limit to standard jobs (UNIX, PC, and QUEUE jobs), action jobs, and custom jobs. If the number of jobs that you attempt to execute concurrently reaches the specified number of concurrent jobs, those jobs that exceed the limit will be queued until another job has finished.

If the number of concurrent jobs is 0, no jobs can be executed. If you want to execute jobs, specify 1 or a greater value.

- *time-to-start-setting-for-the-number-of-concurrent-jobs*: Specify the time to start setting for the number of concurrent jobs in the *hhmm* format. You can specify 00 to 23 (hours) for *hh* and 00 or 30 (minutes) for *mm*.
- *time-to-stop-setting-for-the-number-of-concurrent-jobs*: Specify the time to stop setting for the number of concurrent jobs in the *hhmm* format. You can specify 00 to 23 (hours) for *hh* and 00 or 30 (minutes) for *mm*.
- *number-of-concurrent-jobs*: Specify a value from 0 to 4,294,967,295.

`def_queue $`*default-queue-ID*

Specify the default queue ID.

The default queue is required when you execute a job by specifying an agent host name. Specifying an agent host name as the job submission or execution destination causes the job to be submitted to the default queue of the agent host.

- `$`*default-queue-ID*: Specify the default queue ID in the `$q`*n* format (where *n* is a unique value (a value other than 0) for all the default queue and non-default queue IDs in the manager host). For *n*, specify a value less than or equal to the number of defined queues specified at environment setting. (For example, if 256 queues are defined, specify a value less than or equal to 256 for *n*. Specifying a value greater than or equal to 257 will result in an error.)

`max_jobs` *maximum-number-of-jobs-in-queue*

Specify the maximum number of jobs that can be accumulated in the default queue. If you omit this option, the system assumes 4,294,967,295. Note, however, that despite this setting, if the number of jobs remaining in the queue equals the value for maximum number of jobs in the system, job submission will fail.

This setting also includes the number of jobs that are actually being executed. The number of jobs is the sum of the values of `QUEUING` and `EXECUTING` displayed by the `jpqqueshow` command with the `-q` option specified.

- *maximum-number-of-jobs-in-queue*: Specify a value from 1 to 4,294,967,295.

`warn_jobs` *warning-value-on-number-of-jobs-in-queue*

Specify a warning value indicating that the number of jobs in the default queue is nearing the maximum number of jobs that can be accumulated in the default queue. If you omit this option, the system assumes 4,294,967,295. This setting (including the default value) is for the number of jobs in the default queue, including the jobs that are being executed. When you specify the `-ah` option in the `jpqqueshow` command to check, the number of jobs includes the jobs of both `QUEUING` and `EXECUTING`.

When the number of jobs reaches the warning value, the warning message KAVU4516-W is output to the integrated trace log.

- *warning-value-on-number-of-jobs-in-queue*: This value must be no more than the maximum number of jobs that can be queued and must be in the range from 1 to 4,294,967,295.

`queue_ent {open|close}`

Specify the status of the queue entrance of the default queue for jobs. If the entrance is closed, no jobs can be put into the default queue. If you omit this option, the system assumes `open`.

- `open`: Opens the queue entrance.
- `close`: Closes the queue entrance.

`queue_exit {open|close}`

Specify the status of the exit of the default queue for jobs. If the exit is closed, jobs are accumulated in the queue and are not executed. If you omit this option, the system assumes `open`.

- `open`: Opens the queue exit.
- `close`: Closes the queue exit.

`connect $`*agent-ID priority*

Specify the ID of the agent host to be connected to the default queue. You can specify several agent host IDs. If you omit this option, you cannot execute jobs in which agent host names are specified.

- `$`*agent-ID*: Specifies the ID of the agent host to be connected in the `$a`*n* format.
- *priority*: Specifies a value from 1 to 16 (the lowest priority is 1 and the highest priority is 16). Jobs are executed in descending order of priority.

`$end`

Specifies the end of the agent information.

- `$end`: Fixed

Example of coding:

```
$agent $a1 $system
exec_jobs 0000 0730 10
exec_jobs 0730 2000 1
exec_jobs 2000 0000 5
def_queue $q1
max_jobs 10
warn_jobs 5
queue_ent open
queue_exit open
connect $a1 1
$end

$agent $a2 agent1
exec_jobs 0000 0000 10
def_queue $q2
max_jobs 10
warn_jobs 5
queue_ent open
queue_exit open
connect $a1 1
connect $a2 2
$end
```

Queue definition

Format

```
$queue $queue-ID queue-name
[max_jobs maximum-number-of-jobs-in-queue]
```

```
[warn_jobs warning-value-on-number-of-jobs-in-queue]
[queue_ent {open|close}]
[queue_exit {open|close}]
[connect $agent-ID priority]...
$end
```

Arguments

`$queue $`*queue-ID queue-name*

Specify a queue name. Note that agent names are not case sensitive, but that queue names are.

- `$queue`: Fixed
- `$`*queue-ID*: Specify the queue ID in the `$q`*n* format (where *n* is a unique value (a value other than 0) for all default queue IDs and non-default queue IDs in the manager host). For *n*, specify a value that is less than or equal to the number of defined queues specified at environment setting. (For example, if 256 queues are defined, specify a value less than or equal to 256 for *n*. Specifying a value greater than or equal to 257 will result in an error.)
- *queue-name*: Character string of up to 63 bytes

`max_jobs` *maximum-number-of-jobs-in-queue*

Specify the maximum number of jobs that can be accumulated in the queue. If you omit this option, the system assumes 4,294,967,295. Note, however, that, despite this setting, if the number of jobs remaining in the queue equals the value for maximum number of jobs in the system, job submission will fail.

This setting also includes the number of jobs that are actually being executed. The number of jobs is the sum of the values of `QUEUING` and `EXECUTING` displayed by the `jpqqueshow` command with the `-q` option specified.

- *maximum-number-of-jobs-in-queue*: Specify a value from 1 to 4,294,967,295.

`warn_jobs` *warning-value-on-number-of-jobs-in-queue*

Specify a warning value indicating that the number of jobs in the queue nears the maximum number of jobs that can be accumulated in the queue. If you omit this option, the system assumes 4,294,967,295.

This setting also includes the number of jobs that are actually being executed. The number of jobs is the sum of the values of `QUEUING` and `EXECUTING` displayed by the `jpqqueshow` command with the `-q` option specified.

When the number of jobs reaches the warning value, the warning message KAVU4516-W is output to the integrated trace log.

- *warning-value-on-number-of-jobs-in-queue*: This value must be no more than the maximum number of jobs that can be queued and must be in the range from 1 to 4,294,967,295.

`queue_ent {open|close}`

Specify the status of the queue entrance for jobs. If the entrance is closed, no jobs can be put into the default queue. If you omit this option, the system assumes `open`.

- `open`: Opens the queue entrance.
- `close`: Closes the queue entrance.

`queue_exit {open|close}`

Specify the status of the queue exit for jobs. If the exit is closed, jobs are accumulated in the queue and are not executed. If you omit this option, the system assumes `open`.

- `open`: Opens the queue exit.
- `close`: Closes the queue exit.

`connect $`*agent-ID priority*

Specify the ID of the agent host to be connected to the queue. You can specify several agent host IDs. If you omit this option, you cannot execute those jobs that specify queue names.

- `$`*agent-ID*: Specifies the ID of the agent host to be connected in the `$a`*n* format.
- *priority*: Specifies a value from 1 to 16 (the lowest priority is 1 and the highest priority is 16). Jobs are executed in descending order of priorities.

`$end`

Specifies the end of queue information.

- `$end`: Fixed

Example of coding:

```
$queue $q3 queue1
max_jobs 10
warn_jobs 5
queue_ent open
queue_exit close
connect $a1 1
connect $a2 2
$end
```

Execution-locked resource definition

Format

```
$res $execution-locked-resource-ID execution-locked-resource-name
$end
```

Arguments

`$res $`*execution-locked-resource-ID execution-locked-resource-name*

Specify an execution-locked resource name.

- `$res`: Fixed
- `$`*execution-locked-resource-ID*: Specify the execution-locked resource ID in the `$r`*n* format (where n is a unique value in the manager host (value other than 0)). For *n*, specify a value less than or equal to the number of defined execution-locked resources specified at environment setting. (For example, if 256 execution-locked resources are defined, specify a value less than or equal to 256 for *n*. Specifying a value greater than or equal to 256 will result in an error.)
- *execution-locked-resource-name*: Character string of up to 63 bytes

`$end`

Specifies the end of execution-locked resource information.

- `$end`: Fixed

Example of coding:

```
$res $r1 DAT_System
$end

$res $r2 Temp_File01
$end
```

jpqjobalt

Format

```
jpqjobalt
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     {-h|-hr}
     -j job-number
```

Description

Holds a job or releases a held job.

You can also apply this command to the JP1/NQSEXEC host job. In that case, however, the user can operate only the jobs he or she owns.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

Arguments

`-mh` *manager-host-name*

Specify the host name of the manager to which you have submitted a job to be held or released.

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

By default, the system assumes the local host name.

`-q` *queue-name*

Specify the name of the queue to which you have submitted a job to be held or released.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

Specify the name of the agent host to which you have submitted a job to be held or released.

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

During linkage with JP1/NQSEXEC, you cannot use this command for JP1/NQSEXEC queues.

`-h`

Holds a job.

`-hr`

Releases a held job.

`-j` *job-number*

Specify the job number of a job to be held or released.

You can use the `jpqjobshow` command to check the job number.

Make sure that you specify a job number in the range from 1 to 999999.

Note

During linkage with JP1/OJE for VOS3, you cannot use this command for JP1/OJE for VOS3 queues.

Return values

0	Normal end
1	Invalid parameter value
2	The job could not be held or released successfully owing to an internal cause of the hold or release requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Hold or release requester's insufficient memory
7	The hold or release requester encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • Because TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a job hold or release request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The job could not be held or released successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to hold or release the job.
207	The job to be held or released does not exist. • The specified job is not in the database. • The specified job has already ended.
208	The specified job is running.
219	The manager host is busy.

220	Insufficient manager host memory
222	A fatal error has occurred. • An error has occurred in a system call.
223	The manager host encountered a logic error.
224	You have issued a job hold or hold release request to an unsupported host.
226	Invalid execution environment

Additional information

Even if you set the `-h` option for a held job or the `-hr` option for a job waiting for execution or time, the command ends normally. The job status is not, however, changed.

jpqjobcan

Format

```
jpqjobcan
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     -j job-number
     [-em]
```

Description

Cancels execution of a job waiting for execution, being held, or waiting for time.

A job being executed is killed.

UNIX-based jobs can be forcibly terminated even with a signal-seizing application because SIGKILL is issued.

You can also cancel or kill the JP1/NQSEXEC and JP1/OJE for VOS3. In that case, however, the user can operate only the jobs he or she owns.

You can also cancel or kill jobs for the AS/400 system. You can specify only the `-mh`, `-q`, and `-j` options for the AS/400 system.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

To forcibly terminate a PC job, UNIX job, action job, or custom job, use the `ajskill` command.

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin, JP1_JPQ_Operator, or JP1_JPQ_User privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you have submitted a job to be canceled or killed.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-q` *queue-name*

Specify the name of the queue to which you have submitted a job to be canceled or killed.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

Specify the name of the agent host to which you have submitted a job to be canceled or killed.

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

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

`-j` *job-number*

Specify the job number of a job to be canceled or killed.

You can use the `jpqjobshow` command to check the job number.

Make sure that you specify a job number in the range from 1 to 999999.

`-em`

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Note

You should use the `-em` option for the sole purpose of recovering from an agent failure. You should avoid specifying the `-em` option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	The job could not be canceled or killed successfully owing to an internal cause of the cancel or kill requester.

5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Cancel or kill requester's insufficient memory
7	The cancel or kill requester encountered a logic error.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The manager host cannot be connected for TCP/IP communication. • Because TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a job cancel or kill request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The job could not be canceled or killed successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to cancel or kill the job.
207	The job to be canceled or killed does not exist. • The specified job is not in the database. • The specified job has already ended.
219	The manager host is busy.
220	Insufficient manager host memory
221	Invalid user information about JP1/OJE for VOS3
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a job cancel or kill request to an unsupported host.
226	Invalid execution environment
230	You have attempted to kill a job, but the agent host has failed to kill the job. It cannot be determined whether the job has ended. (The `jpqjobget` command runs to check the job status, however, indicates that the job has ended.)

jpqjobdel

Format

```
jpqjobdel
     [-mh manager-host-name]
     -j job-number
```

Description

Deletes ended job information from the database.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have either of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you have submitted a job whose ended job information is to be deleted.

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

By default, the system assumes the local host name.

`-j` *job-number*

Specify the job number of a job whose ended job information is to be deleted.

You can use the `jpqendjobshow` command to check the job number.

Make sure that you specify a job number in the range from 1 to 999999.

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.

Return values

0	Normal end
1	Invalid parameter value
2	Ended job information could not be deleted successfully owing to an internal cause of the ended job information delete requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Ended job information delete requester's insufficient memory
7	The ended job information delete requester encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • Because TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept an ended job information delete request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	No response from the manager host
203	Ended job information could not be deleted successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to delete ended job information.
207	The job information to be deleted does not exist. • The specified ended job information is not in the database.
208	The specified job has not yet ended.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

jpqjobget

Format

```
jpqjobget
     [-mh manager-host-name]
     [{-q queue-name|-ah agent-host-name}]
     -j job-number
     [-oso standard-output-file-name]
     [-ose standard-error-output-file-name]
     [-di]
     [-cc]
     [-ea]
```

Description

Outputs job information about a certain job to the standard output file.

You can also output job information about the JP1/NQSEXEC and JP1/OJE for VOS3 hosts. In that case, however, the user can operate only the jobs he or she owns.

This command also outputs job information about the AS/400 system to the standard output file. You can specify only the `-mh`, `-q`, and `-j` options for the AS/400 system.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you have submitted a job whose job information is to be output.

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

By default, the system assumes the local host name.

-q *queue-name*

Specify the name of the queue to which you have submitted a job whose job information is to be output.

You can specify a character string of 1 to 63 bytes.

-ah *agent-host-name*

Specify the name of the agent host to which you have submitted a job whose job information is to be output.

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

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-j *job-number*

Specify the job number of a job from which you want to output job information.

Make sure that you specify a job number in the range from 1 to 999999.

-oso *standard-output-file-name*

Specify the name of the file used to acquire the data in the standard output file which is output when the job set by the `-j` option is executed.

You can specify a character string of 1 to 511 bytes.

During linkage with JP1/NQSEXEC 06-00 and earlier versions, you cannot use this option.

-ose *standard-error-output-file-name*

Specify the name of the file used to acquire the data in the standard error output file which is output when the job set by the `-j` option is executed.

You can specify a character string of 1 to 511 bytes.

During linkage with JP1/NQSEXEC 06-00 and earlier versions, you cannot use this option.

-di

Outputs detailed information about the job specified with the `-j` option.

-cc

Outputs the character set used by the agent that has executed the job specified with the `-j` option.

-ea

Outputs the name of the agent host where the job specified with the `-j` option is executed.

Notes

- As a result of job execution, if the standard output file and standard error output file are moved or deleted, you cannot obtain information about these files.
- If a file of several megabytes is transferred either during job registration or as the result of job information collection, the transfer may fail or take time.

Return values

0	Normal end
1	Invalid parameter value
2	Job information could not be output successfully owing to an internal cause of the output requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Job information output requester's insufficient memory
7	The job information output requester encountered a logic error.
13	The file used to acquire data in the standard or standard error output file cannot be created because no file path exists.
14	The file used to acquire data in the standard output file or standard error output file cannot be created because you do not have the privilege required to access it.
15	The data in the standard output file or standard error output file cannot be written to the file owing to the insufficient disk size.
16	The file used to acquire data in the standard output file or standard error output file cannot be opened because it is used by another process.
17	The file used to acquire data in the standard output file or standard error output file cannot be created owing to a cause other than return values 13, 14, 15 and 16.
18	The standard output file or standard error output file could not be written successfully owing to a cause other than return values 13, 14, 15 and 16.
19	The file cannot be created because data in the standard output file or standard error output file could not be acquired from the manager host.
100	The manager host cannot be connected for TCP/IP communication. • Because TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept output job information. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	Job information could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output job information.
207	The specified job is not found. • The specified job is not in the database. • The specified job information is deleted.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	An unsupported host was told to output job information.
226	Invalid execution environment

Output example

The following gives an example of file output.

```
JOBID : 10
OWNER : user1
JOBNAME : joblongname
QUEUE : queue1
STATUS : END
EXITCODE : 0
ENTRYTIME : 20XX/06/01.00:00:00
STARTTIME : 20XX/06/01.00:00:01
ENDTIME : 20XX/06/01.00:10:00
DETAILEDSTATUS : NORMAL END
CHARCODE : ASCII
AGENTNAME : agentname1
```

The following gives the meanings of output contents.

JOBID

Indicates a job number.

OWNER

Indicates the job's owner name.

JOBNAME

Indicates a job name.

When you use a QUEUE job or the jpqjobsub command to specify a job name, that job name is set. If no job name is specified, the execution file name is set.

When you define a PC job in a jobnet, the execution file name is set. When you define a Unix job in a jobnet, the script file name is set. If you do not specify a script file name, and then define a job name in a command statement, script_job is set as the job name.

For an action job, the name of the fixed execution file executed by each action job is set as the job name. For an execution file name, the first 63 bytes of the characters from the beginning in the file name, excluding the path information, are set as the job name.

QUEUE

Indicates a queue name (or an agent host name).

STATUS

Shows the job status.

- ROUTING: Being distributed#
- SCHEDULED: Waiting for a time
- WAITING: Waiting to be executed
- EXECUTING: Being executed
- HOLDING: Placed on hold
- END: End

#

ROUTING is a job status in the JP1/NQSEXEC system.

In a system that consists of only JP1/AJS3, ROUTING is never output.

If you specify a queue name used by only JP1/NQSEXEC in the -q option or if you specify the job number of a job in the JP1/NQSEXEC system in the -j option, ROUTING might be output.

EXITCODE

Indicates a job return code. or details about the job return code, see *7.8.3 Checking the return code of a job* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

ENTRYTIME

Indicates the time of job submittal in the format of *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*.

STARTTIME

Indicates the job execution start time in the format of *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*.

ENDTIME

Indicates the job execution end time in the format of *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*.

DETAILEDSTATUS

Indicates detailed information about the job. This item is output only when you specify the -di option

- END IN ANOTHER SYSTEM: Ended by another system (detail information not acquired)
- WAITING: Waiting to be executed
- HOLDING: Placed on hold
- SCHEDULED: Waiting for a time
- ROUTING: Being routed#1
- EXECUTING: Being executed
- NORMAL END: Ended normally#2
- WARNING END: Ended with warning#2
- ABNORNAL END: Ended abnormally#2
- EXECUTION TIMED OUT: Ended with the abortion of execution
- CANCELED END: Canceled (cancel request given before start of execution)
- FORCIBLY TERMINATED: Killed (cancel request given after start of execution)
- FAILURE WHILE STARTING EXECUTION: Failure during starting execution
- FAILURE WHILE ENDING EXECUTION: Failure during ending execution#3

#1

ROUTING is a job status in the JP1/NQSEXEC system.

In a system that consists of only JP1/AJS3, ROUTING is never output.

If you specify a queue name used by only JP1/NQSEXEC in the -q option or if you specify the job number of a job in the JP1/NQSEXEC system in the -j option, ROUTING might be output.

#2

If you set an end judgment in a job created in a jobnet, the end status is based on the judgment method.

For the jpqjobsub command, you cannot set an end judgment in a job. Therefore, the warning threshold value and the abnormal threshold value are 0. The detailed job information indicates a normal end when the job ends with an return code of 0. However, if the job ends with a value other than 0, then an abnormal end occurred.

#3

This status might occur if an error occurs during the end processing after the execution of a job process or the exchange of end information between the agent host and the manager host, after the job has ended. For details about the error, check the applicable message KAVU*xxxx* output in the integrated trace log.

For the job executed by the agent host, the process itself is ended. To check the end status of the process, check the execution history of job processes or other resources.

CHARCODE

Indicates the character set used by the agent that has executed the job. This item is output only when you specify the -cc option

- ASCII: ASCII
- SJIS: Shift JIS
- JP_EUC: EUC
- UTF-8: UTF-8

If the job execution is not ended or if the job is executed by another system:

- UNKNOWN: Unknown character set

AGENTNAME

Indicates the name of the agent host where the job is executed. This item is output only when you specify the -ea option

If the agent host name cannot be obtained, "AGENTNAME : " is displayed.

Note that the *YYYY/MM/DD.hh:mm:ss* part means *calendar-year/month/day.hours:minutes:seconds*.

jpqjobmove

Format

```
jpqjobmove
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     {-dq destination-queue-name|{-p+|-p-} execution-order}
     -j job-number
```

Description

Moves a job in a queue.

The movement encounters the restrictions below.

- You can move only the jobs other than those running or ended.
- You can specify as the job destination only the queue in the same manager host as the movement sources.
- For jobs in the default queue.
  - You cannot move jobs between queues.
  - You can specify an arbitrary job execution order within the default queue.
- For jobs in queues other than the default queue:
  - You cannot specify the default queue as the movement destination.
  - If you specify the name of the movement destination queue which is the same as the movement source queue, the job is executed last.
  - If you specify the name of the movement destination queue which is the same as the movement source queue, you can specify an arbitrary job execution order.
  - If the movement source queue is different from the destination queue, the job is executed last.
- For QUEUE jobs registered from a jobnet
  - You cannot move jobs between queues.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege

- JP1_JPQ_User privilege (allows you to move jobs between queues only)

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you have submitted a job to be moved.

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

By default, the system assumes the local host name.

`-q` *queue-name*

Specify the name of the queue to which you have submitted a job to be moved. To change the job execution order in a queue other than the default queue, or to move a job between queues, specify this option.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

Specify the name of the agent host to which you have submitted a job to be moved. To change the order in which jobs in the default queue are executed, specify this option.

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

You cannot specify this option with the `-dq` option.

`-dq` *destination-queue-name*

Specify the name of the queue where you want to move a job.

You can specify a character string of 1 to 63 bytes.

You cannot specify this option with the `-ah` option.

You cannot specify this option with the `-p+` or `-p-` option.

`{-p+|-p-}` *execution-order*

Specify the order in which the jobs in the queue are executed.

- `-p+`
  Moves the job so that it will be executed earlier.
- `-p-`
  Moves the job so that it will be executed later.
- *execution-order*
  Specify the order in which jobs are executed in relative order from the current order. (For example, to change current execution order 5 to 3, set `-p+ 2`.)

If the number of jobs in the queue is less than the specified execution order, it is moved to the top of the queue when you set `-p+`, and to the end when you set `-p-`. (For example, if the queue contained fewer than five jobs although you set `-p+ 5`, the system performs processing as if you set execution order 1.)

You cannot specify this option with the `-dq` option.

`-j` *job-number*

Specify the job number of a job to be moved.

You can use the `jpqjobshow` command to check the job number.

Make sure that you specify a job number in the range from 1 to 999999.

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.

Return values

0	Normal end
1	Invalid parameter value
2	The job could not be moved successfully owing to an internal cause of the job movement requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Job movement requester's insufficient memory
7	The job movement requester encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • Because TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a job movement request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The job could not be moved successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to move the job.
207	The job to be moved does not exist. • The specified job is not in the database. • The specified job has ended.
208	The specified job is running.
209	The queue set as the destination is not found.
210	Because the number of submit jobs has reached the limit value in the queue set as the destination, you cannot move the job.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.

224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

jpqjobshow

Format

```
jpqjobshow
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     [-u owner-name]
     -s {e|h|w|s|r}
```

Description

Outputs a list of information on the jobs not ended (including job numbers, job names and job status) to the standard output file.

You can also output job information about the JP1/NQSEXEC and JP1/OJE for VOS3 hosts.

You can also output job information about the AS/400 system. You can, however, specify only the `-mh`, `-q`, `-u`, and `-s` options for the AS/400 system.

This command is applicable for the following jobs:

When the database is in a standard configuration:

Submit jobs and queue jobs

When the database is in a standard configuration without ISAM:

None

When the database is in a compatible ISAM configuration:

PC jobs (other than queueless jobs), UNIX jobs (other than queueless jobs), action jobs, custom jobs, submit jobs, and queue jobs

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you have submitted a job whose job information is to be output.

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

By default, the system assumes the local host name.

`-q` *queue-name*

Specify the name of the queue to which you have submitted a job whose job information is to be output.

You can specify a character string of 1 to 63 bytes.

-ah *agent-host-name*

Specify the name of the agent host to which you have submitted a job whose job information is to be output.

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

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-u *owner-name*

To output information about a job the user has submitted, specify the job owner name.

You can specify a character string of 1 to 63 bytes. By default, the system assumes all the users if a user having the JP1_JPQ_Admin privilege or JP1_JPQ_Operator privilege executes the command. If a user having the JP1_JPQ_User privilege executes the command, the system assumes that user.

-s {e|h|w|s|r}

Outputs information about a job in certain status. You can specify multiple types of status.

- e
  Outputs information about an executing job.
- h
  Outputs information about a held job.
- w
  Outputs information about a job waiting to be executed.
- s
  Outputs information about a job waiting for time.
- r
  Outputs information about a job being distributed.#

  #
  ROUTING is a job status in the JP1/NQSEXEC system.
  In a system that consists of only JP1/AJS3, ROUTING is never output.
  If you specify a queue name used by only JP1/NQSEXEC in the -q option, ROUTING might be output.

Note

The number of bytes which can be output is fixed for each output item. If the contents of an output item exceed the output limit, they end with "..". (For example, the job name output limit is 26 bytes. If the job name exceeds 26 bytes, the 25th and subsequent bytes become "..".)

To output all the contents on each output item, use the jpqjobget command.

Return values

0	Normal end
1	Invalid parameter value
2	Information about a job not ended could not be output successfully owing to an internal cause of the output requester.
5	Initialization has failed.

5	• The definition of the logical host name or the environment setting contains an error.
6	Insufficient memory in the output requester of information about a job not ended
7	The output requester of information about a job not ended encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a request for outputting information about a job not ended. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	Information about a job not ended could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output information about a job not ended.
207	The specified job is not found. • The specified job is not in the database. • As the specified user job not ended cannot be accessed, its information cannot be output.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a non-ended job information output request to an unsupported host.
226	Invalid execution environment

Output example

The following gives an example of file output.

```
JOBID      JOBNAME                    T   QUEUE                      STATUS
---------- -------------------------- -   -------------------------- -----------
1          jobnamelonglonglonglomgn..  q   queue1                     EXECUTING
2          job2                       q   queue1                     WAITING
4          job4                       q   queue1                     SCHEDULED
5          job5                       q   queue1                     HOLDING
```

The following gives the meanings of output contents.

JOBID

Indicates a job number.

JOBNAME

Indicates a job name.

26 bytes of data are output.

When you use a QUEUE job or the jpqjobsub command to specify a job name, that job name is set. If no job name is specified, the execution file name is set.

When you define a PC job in a jobnet, the execution file name is set. When you define a Unix job in a jobnet, the script file name is set. If you do not specify a script file name, and define a job name in a command statement, script_job is set as the job name.

For an action job, the name of the fixed execution file executed by each action job is set as the job name. For an execution file name, the first 63 bytes of the characters from the beginning in the file name, excluding the path information, are set as the job name, and the first 26 bytes are displayed.

T

Indicates a queue type.

- q: Queue
- a: Agent host

QUEUE

Indicates a queue name (or an agent host name).

27 bytes of data are output.

STATUS

Shows the job status.

- EXECUTING: Being executed
- HOLDING: Placed on hold
- WAITING: Waiting to be executed
- SCHEDULED: Waiting for a time
- ROUTING: Being distributed#

#

ROUTING is a job status in the JP1/NQSEXEC system.

In a system that consists of only JP1/AJS3, ROUTING is never output.

If you specify a queue name used by only JP1/NQSEXEC in the -q option, ROUTING might be output.

jpqjobsub

Format

```
jpqjobsub
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     [-eu user-name]
     [-jn job-name]
     [-pr execution-priority]
     -sc target-file-name
     [-arg "arguments..."]
     [-w work-path-name]
     [-shl shell-path-name]
     [-res execution-locked-resource-name]
     [-st execution-start-time]
     [-el time-out-period]
     [-si standard-input-file-name]
     [-rs {q|h|d}]
     [-so|-son standard-output-file-name|-soa standard-output-file-name]
     [-se|-sen standard-error-output-file-name| -sea standard-error-output-
file-name]
     [-ev environment-variable-file-name]
     [[-env environment-variable-name=value]...]
     [-h]
     [-t transfer-source-file-name[=transfer-destination-file-name]]...
     [-td transfer-source-file-name[=transfer-destination-file-name]]...
```

Description

The jpqjobsub command registers a submit job. This command can be used to register a PC job, a Unix job, a queue job (a job to be registered in a queue), or a queueless job. This command can also be used to register a submit job with a JP1/NQSEXEC host, a JP1/OJE for VOS3 host, or a AS/400 system. Note that a job to be registered in another system is a queue job, so a queue must be created in the other system before the job is registered.

Destination of registration	Specifiable options
JP1/NQSEXEC host	-mh,-q,-jn,-pr,-sc,-arg,-so#,-se#,-h,-t
JP1/OJE for VOS3 host	-mh,-q,-jn,-sc,-arg,-t
AS/400 system	-mh,-q,-jn,-pr,-sc,-arg,-t

#

This option only takes effect for linkage with JP1/NQSEXEC 06-00 or a later version.

The other options are ignored even if they are specified.

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege (allows you to manipulate only the jobs you own)

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host to which you want to register a submit job.

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

By default, the system assumes the local host name.

`-q` *queue-name*

If you want to execute a queue job, which is queued and then executed, specify the name of the queue.

You can specify a character string of 1 to 63 bytes. If you want to register a job in another system, specify this option instead of the `-ah` option.

`-ah` *agent-host-name*

If you want to execute a PC or Unix job for which the host where the job will be executed is specified, specify the agent host name.

You can specify a character string of 1 to 255 bytes. You cannot specify this option when you register a job in another system.

`-eu` *user-name*

Specify the OS user name. Make sure that the OS user you specify is mapped to the command-execution JP1 user (JP1 user with the same name as the command-execution OS user) on the agent host on which the command is executed.

You can specify a character string of 1 to 63 bytes.

In Windows, if you want to ensure that a submit job is always executed by the local host user, specify the OS user name in the *host-name**user-name* format.

`-jn` *job-name*

Specify the name of the submit job you want to register.

You can specify a character string of 1 to 63 bytes. By default, the system assumes the first 63 bytes of the file name (excluding the path) of the execution file specified with the `-sc` option.

`-pr` *execution-priority*

Specify the execution priority.

You can specify 1 to 5. By default, the system assumes 1.

The following gives the values you can specify, and their meanings.

Value	Priority for UNIX	Priority for Windows
1	`nice` value + 20	Lower than interactive processing
2	`nice` value +10	
3	`nice` value	Equal to interactive processing
4	`nice` value - 10	Higher than interactive processing

Value	Priority for UNIX	Priority for Windows
5	nice value - 20	Higher than interactive processing

For a UNIX host executing jobs, when users do not have superuser privileges, specifying an execution priority of 4 or 5 results in a privilege error at the time of job execution.

Supplementary note

Windows only supports three levels of priority. Specify one of the following three priority classes to start the job process:

- If the specified value is 1 or 2, the job process is executed when the system is idle (set IDLE_PRIORITY_CLASS as specified in Windows).
- If the specified value is 3, the job process is executed as a general process (set NORMAL_PRIORITY_CLASS as specified in Windows).
- If the specified value is 4 or 5, the job process is executed prior to the threads of processes assigned any of the above priority classes (set HIGH_PRIORITY_CLASS as specified in Windows).

For UNIX, the default nice value is the nice value of the JP1/AJS3 service that executed jajs_spmd. If no specific value is set for the nice value, 20 is assumed for the nice value.

When the specified value is 1 and the nice value is 20, the priority value is determined as follows:

39 ≈ 20 (initial value) + 20 (increment)

If the value exceeds the range of the nice value (0 to 39), the maximum value is 39, and the minimum value is 0.

-sc *target-file-name*

For Windows, specify the name of an executable file on the agent host which will execute the job. For UNIX, specify the name of a script file on the agent host which will execute the job.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution or the path specified by the PATH environment variable. An effective value of the PATH environment variable differs, depending on the operating system of the job-executing host.

For a Windows host

System environment variable

For a UNIX host

PATH environment variable for job-executing OS users

The name of any execution file containing a space character must be enclosed in double quotation marks ("). For example, the aaa bbb name must be specified as follows: "aaa bbb".

In Windows, if you execute a file whose extension is not EXE, COM, CMD, PIF, or BAT, and whose file name contains a space character, you must enclose the file name by double quotation marks (") and (\").

For example

```
jpqjobsub -q q1 -sc "\"C:\PROGRAM FILES\HITACHI\SCRIPT\DATA\EXIT_0.SPT\""
```

-arg "*arguments...*"

Set an argument for the target file.

You can specify a character string of 1 to 1,023 bytes.

You can specify multiple arguments separated by at least one space character.

`-w` *work-path-name*

Specify the name of the work path (current path) for job execution using an absolute path.

You can specify a character string of 1 to 511 bytes. By default, the system assumes the following directory:

Windows
: Work holder for agent process execution that is set in the agent's environmental setting

UNIX
: Home directory of the job-executing user

`-shl` *shell-path-name*

Specify the full path of a job's startup shell.

You can specify a character string of 1 to 511 bytes.

As the startup shell, specify a shell that can be used to execute the script file in UNIX.

The startup shell specified in this option is used if an execution shell is not specified on the first line of the script file. The execution shell is also used to execute the script file in UNIX as if it were a startup shell. However, the shell specified on the first line of the script file is called the execution shell. If the execution shell is specified on the first line of the script file, the startup shell specified in this option is ignored.

If neither a startup shell nor an execution shell is specified, the login shell for the OS user who executes the command (contents of the `/etc/passwd` file on the agent host) is used. If a login shell is not defined either, `/bin/sh` is used.

`-res` *execution-locked-resource-name*

To disable concurrent execution of multiple submit jobs, set the same execution-locked resource name for each submit job.

You can specify a character string of 1 to 63 bytes.

For details about execution-locked resources, see *10.4.1(7) Exclusive control when executing submit jobs (execution-locked resource)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview*.

`-st` *execution-start-time*

Set the local time for the command executing host at which execution of the submit job starts. If you specify a past time, the system assumes that you specify no time at which execution of the submit job starts (the submit job is placed into the waiting or running status immediately after being registered.)

You can specify the date and time in any of the following five formats:

1. *YYYY*/*MM*/*DD*.*hh*:*mm*:*ss*

   If you register a submit job after the specified time, the system immediately places the submit job into the waiting or running status.

2. *day-of-week*.*hh*:*mm*:*ss*

   If you register a submit job after the specified time on the specified day of the week, the system immediately places the submit job into the waiting or running status.

3. *hh*:*mm*:*ss*

If you register a submit job after the specified time, the system immediately places the submit job into the waiting or running status.

4. *YYYY*/*MM*/*DD*

   The system assumes `00:00:00` on the specified day as the time at which execution of the submit job starts. If you submit a job after `00:00:00` on the specified day, the system immediately places the job into the waiting or running status.

5. *n*

   The system places the submit job into the waiting or running status n days after the day on which the submit job is registered.

The following describes the meaning of each value:

- *YYYY*

  Specify a year. You can specify 1980 to 2038.

- *MM*

  Specify a month. You can specify 01 to 12.

- *DD*

  Day. You can specify 01 to 31.

- *hh*

  Specify hours. You can specify 00 to 23.

- *mm*

  Specify minutes. You can specify 00 to 59.

- *ss*

  Seconds. You can specify 00 to 59.

- *day-of-week*

  You can specify `sun`, `mon`, `tue`, `wed`, `thu`, `fri` or `sat`.

- *n*

  Specify the number of days. You can specify 0 to 366 (days).

`-el` *time-out-period*

You can use this option to specify the timeout value used to stop execution of a job if the job is unable to terminate. Specify in minutes a relative time from *execution-start-time*.

You can specify 1 and 1,440 minutes.

`-si` *standard-input-file-name*

Specify the name of the standard input file used for executing the job (the name of the standard input file existing on the agent host on which the job is executed).

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

`-rs {q|h|d}`

Specify how the job is to be handled if the manager host cannot receive a job end notification because a problem has occurred on the agent host on which the job is being executed or because the agent process has terminated abnormally. By default, the system holds the job.

- `q`
  Makes the job wait to be executed.
- `h`
  Holds the job.
- `d`
  Kills the job.

`-so`

Enables you to use the `jpqjobget` command to acquire job execution data in the standard output file after the execution of the job.

`-son` *standard-output-file-name*

To overwrite the standard output file created in the agent host with job information, specify the file name.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For notes for defining the standard output file name, see *7.8.1 Notes on the standard output file and standard error output file* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

`-soa` *standard-output-file-name*

To add job information to the standard output file created in the agent host, specify the file name.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For notes for defining the standard output file name, see *7.8.1 Notes on the standard output file and standard error output file* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

`-se`

Enables you to use the `jpqjobget` command to acquire job execution data in the standard error output file after the execution of the job.

`-sen` *standard-error-output-file-name*

To overwrite the standard error output file created in the agent host with error job information, specify the file name.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For notes for defining the standard error output file name, see *7.8.1 Notes on the standard output file and standard error output file* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

`-sea` *standard-error-output-file-name*

To add error job information to the standard error output file created in the agent host, specify the file name.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For notes for defining the standard error output file name, see *7.8.1 Notes on the standard output file and standard error output file* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

`-ev` *environment-variable-file-name*

When you use an environment variable file, specify one existing on the agent host.

You can specify a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For notes on defining environment variables see *A. Notes on Defining Environment Variables and an Environment Variable File*.

`-env` *environment-variable-name=value*

Set an environment variable.

When specifying environment variables, use the following precautions:

You can specify multiple `-env` options by using one or more space characters to separate each option specification (`-env` *environment-variable-name=value*). Note that the total length of the *environment-variable-name=value* specifications must not exceed 20 KB.

If the same environment variable as set with this option is defined in the environment variable file, the contents set with this option are valid.

- You can specify multiple environment variables.
  The following shows an example specification of the `-env` option and how to calculate the total number of bytes:

  Example for specifying the `-env` option

  -env △ a=1 △ -env △ b=2 △ -env △ C=3

  Legend:

  △ : One-byte space character

  How to calculate the total number of bytes

  In this example, the total number of bytes (13 bytes) is calculated by adding two bytes to the sum of the number of bytes for the underlined sections.

For notes on defining environment variables see *A. Notes on Defining Environment Variables and an Environment Variable File*.

`-h`

Holds a submit job when it is registered.

`-t` *transfer-source-file-name* `[=`*transfer-destination-file-name*`]`

If you reference the file related to job execution, specify the name of the file to be transferred. Specify the file name used in the transfer destination if needed. It is required, however, during linkage with JP1/NQSEXEC and JP1/OJE for VOS3.

For *transfer-source-file-name*, specify a file that exists on the host from which the job is submitted. The transfer source file is transferred to an agent host, JP1/NQSEXEC host, or JP1/OJE for VOS3 host as a file with the name specified for *transfer-destination-file-name*. Note that if you specify *transfer-destination-file-name*, the transfer destination file is deleted after the job execution is completed.

You can specify a character string of 1 to 511 bytes for the transfer destination file. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution. If you omit the name of a transfer destination file, the system assumes the `$JP1AJS2_JPQTEMP`*xx*`$` variable, where the *xx* part shows the transfer file's number, ranging from 01 to 32. If you

specify this variable in the -arg option, there is no need to be concerned about the transfer destination file name when you use the file. After the job is executed, the transfer destination file that has been created temporarily is deleted.

For a UNIX host, you can also specify this variable in the -sc option to execute the job. For a Windows host, you cannot specify this variable in the -sc option. If the variable is specified, it will be impossible to start the job.

You can specify up to 32 options (including the -td option) at the same time.

Also see the explanation for the -td option.

-td *transfer-source-file-name* [=*transfer-destination-file-name*]

If you reference the file related to job execution, specify the name of the file to be transferred. (Specify the file name used in the transfer destination if needed.) Unlike the -t option, this option deletes the transfer destination file in the destination host after the end of job execution.

For *transfer-source-file-name*, specify a file that exists on the host from which the job is submitted. The transfer source file is transferred to an agent host as a file with the name specified for *transfer-destination-file-name*.

You can specify a character string of 1 to 511 bytes for the transfer destination file. You can use either an absolute or relative path to specify the file name. If you specify a relative path, it becomes a path relative to the work path for job execution. If you omit the name of a transfer destination file, the system assumes the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part shows the transfer file's number, ranging from 01 to 32. If you specify this variable in the -arg option, there is no need to be concerned about the file name for the transfer destination when you use the file. After the job is executed, the transfer destination file that has been created temporarily is deleted.

For a UNIX host, you can also specify this variable in the -sc option to execute the job. For a Windows host, you cannot specify this variable in the -sc option. If the variable is specified, it will be impossible to start the job.

You can specify up to 32 options (including the -t option) at the same time.

Notes

1. Do not specify redirection for a command argument. To output the standard output file, specify the -so, -son, or -soa option. To output the standard error output file, specify the -se, -sen, or -sea option. You cannot acquire job information correctly if you specify redirection with the above options.
2. When you execute multiple jobs simultaneously on a single agent host, do not specify the same name for the standard output file, standard error output file, and transfer destination file name. Otherwise, the specified file may get corrupted, preventing the job from being executed.
3. If a file of several megabytes is transferred either during job registration or as the result of job information collection, the transfer may fail or take time.
4. You can specify only text files for the standard input file, the standard output file, the standard error output file, and transfer files.
5. JP1/AJS3 converts character codes when a file is transferred from the manager host to the agent host. It also converts character codes when a result file (standard input file, standard output file, or standard error output file) is transferred from the agent host to the manager host. In both cases, the character codes of the JP1/AJS3 service at the transfer destination are converted, rather than the character codes of the user who executed the command.

   As an example, suppose you start the JP1/AJS3 service on a manager host that uses Shift-JIS and start the JP1/AJS3 service on an agent host that uses EUC, and then create a transfer file in Shift-JIS on the manager host. When you transfer the file to the agent host, the file will be created as a EUC file.

For details about the settings for character encoding in JP1/AJS3, see the description about how to change the character code set in *13.4.1 Setting the language environment* in the manual *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

6. For details about the characters that can be used in the data contained in the standard input file, standard output file, standard error output file, or in a transfer file, see *2.4.3(2) Available characters* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.
7. The following gives the options you can specify for linkage with JP1/NQSEXEC or JP1/OJE for VOS3. The other options are ignored even if they are specified.

   `-mh`

   `-q`

   `-jn`

   `-pr` (Only with JP1/NQSEXEC linked)

   `-sc`

   `-arg`

   `-so` (Only with JP1/NQSEXEC linked)

   `-se` (Only with JP1/NQSEXEC linked)

   `-h` (Only with JP1/NQSEXEC linked)

   `-t`

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to register a submit job failed due to an internal cause of the host on which a submit was requested.
5	Initialization has failed. • The definition of the logical host name or the common definition information contains an error.
6	Memory became insufficient on the host on which a submit was requested.
7	A logical error occurred on the host on which a submit was requested.
8	As the transfer source file or its file path does not exist, you cannot open the file.
9	As you do not have the privilege required to access the transfer source file, you cannot open it.
10	As the transfer source file is used by another process, you cannot open it.
11	You cannot open the transfer source file owing to a cause other than return values 8, 9 and 10.
12	The transfer source file could not be loaded successfully owing to a cause other than return values 8, 9 and 10.
100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept the submit job registered. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host

203	The submit job could not be registered successfully due to an internal cause of the manager host.
204	The specified queue is closed.
205	As the number of submit jobs in the specified queue has reached the limit, no more submit jobs can be registered.
206	You do not have the privilege required to submit a job.
219	The manager host is busy.
220	Insufficient manager host memory
221	Invalid user information about JP1/OJE for VOS3
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
225	An error occurred after the submit job was registered. (Registration of the submit job terminated normally. However, because the destination manager host did not return a job number, the result was that hold, cancellation, or other such operations that use the job number could not be performed for the job.)
226	Invalid execution environment
227	Job information having the same ID already exists in the job execution environment database.
228	The transfer destination file could not be created successfully in the manager host.
229	The transfer destination file could not be written successfully in the manager host.
241	Failed to automatically define the agent.

jpqqueadd

Format

```
jpqqueadd
     [-mh manager-host-name]
     -q queue-name
     [-mj maximum-number-of-jobs-in-queues]
     [-wj warning-value-for-jobs-count-in-queues]
     [-en {open|close}]
     [-ex {open|close}]
```

Description

Adds a queue.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

-mh *manager-host-name*

Specify a manager host name to which a queue is to be added.

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

By default, the system assumes the local host name.

-q *queue-name*

Specify a queue name you want to add.

You can specify a character string of 1 to 63 bytes.

Note that agent names are not case sensitive, but that queue names are.

-mj *maximum-number-of-jobs-in-queues*

Specify the maximum number of jobs which can be accumulated in the queue.

You can specify a value between 1 and 4,294,967,295.

If you omit this option, the system assumes 4,294,967,295.

This setting also includes the number of jobs that are actually being executed.

The number of jobs is the sum of the values of `QUEUING` and `EXECUTING` displayed by the `jpqqueshow` command with the `-q` option specified.

In spite of this setting, however, the submit process will fail if the queue still contains as many jobs as the system's maximum number of jobs.

-wj *warning-value-for-jobs-count-in-queues*

Specify a warning value to inform you that the number of jobs in a particular queue is nearing the maximum number of jobs that can be stored in the queue.

You can specify a value of 1 to 4,294,967,295; however, the value must be equal to, or smaller than, the value specified by the -mj option.

This setting also includes the number of jobs that are actually being executed.

The number of jobs is the sum of the values of QUEUING and EXECUTING displayed by the jpqqueshow command with the-q option specified.

By default, the system assumes the value specified in the -mj option. Without the -mj option specified, the system assumes the value of 4,294,967,295.

-en {open|close}

Specify the status of the job entrance in the queue.

- open
  Opens the reception port.
- close
  Closes the reception port.

By default, the system assumes open.

-ex {open|close}

Specify the status of the job exit in the queue.

- open
  Opens the takeout port.
- close
  Closes the takeout port.

By default, the system assumes open.

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.

Return values

0	Normal end
1	Invalid parameter value
2	The queue could not be added successfully owing to an internal cause of the adding requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Queue adding requester's insufficient memory
7	The queue adding requester encountered a logic error.

100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a queue adding request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	No response from the manager host
203	The queue could not be added successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to add the queue.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
232	The additional queue has the same name as an existing queue.
235	The maximum number of queue definitions has been exceeded.

jpqquealt

Format

```
jpqquealt
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     {[-mj maximum-number-of-jobs-in-queues]|
          [-wj warning-value-for-jobs-count-in-queues]|
          [-nq post-change-queue-name]}
     [-em]
```

Description

Changes queue definitions.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

Specify the name of a manager host that contains the queue whose definition is to be changed.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-q` *queue-name*

Specify the queue name you want to change.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

When you want to change the definition of a default queue, specify the corresponding agent host name that has been registered on the manager host. When an agent host is registered, the default queue is created with the same name as the agent host.

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

You cannot specify this option (you cannot change the name of the default queue) if you specify the -nq option.

-mj ***maximum-number-of-jobs-in-queues***

Specify the maximum number of jobs which can be accumulated in the queue.

You can specify a value between 1 and 4,294,967,295.

This setting also includes the number of jobs that are actually being executed.

The number of jobs is the sum of the values of QUEUING and EXECUTING displayed by the jpqqueshow command with the -q option specified.

By default, the system does not change the maximum value of jobs.

-wj ***warning-value-for-jobs-count-in-queues***

Specify a warning value to inform you that the number of jobs in a queue is nearing the maximum number of jobs that can be stored in the queue.

You can specify a value of 1 to 4,294,967,295; however, the value must be equal to, or smaller than, the value specified by the -mj option.

This setting also includes the number of jobs that are actually being executed.

The number of jobs is the sum of the values of QUEUING and EXECUTING displayed by the jpqqueshow command with the -q option specified.

By default, the system does not change the warning value.

-nq ***post-change-queue-name***

When renaming a queue, specify its new name.

You can specify a character string of 1 to 63 bytes.

By default, the system does not change the queue name.

This option can be specified only when the -q option is specified. You cannot specify it together with the -ah option (you cannot rename the default queue).

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. Be sure to specify at least one of the -mj, -wj, and -nq options.
3. The maximum value for the number of jobs specified in the -mj option is equal to, or larger than, the warning value for the number of jobs specified in the -wj option.

If you change the maximum or warning value regarding the number of jobs, the system compares it with the current setting. Therefore, if you want to change only the maximum value with the `-mj` option, make sure that you choose a value equal to, or greater than, the current warning value regarding the number of jobs. If you want to change only the warning value with the `-wj` option, make sure that you choose a value equal to, or smaller than, the current maximum value regarding the number of jobs.

4. Even if the maximum value for the number of jobs is changed to a value smaller than the current number of jobs being queued, the system executes those jobs being queued. Note, however, that the system will not accept new jobs until the number of jobs being queued falls below the maximum value for the number of jobs after the change.

   For example, suppose that there are 12 jobs being queued. If you change the maximum number of jobs to 10, the system executes up to 12 jobs, but will not accept new jobs until the number of jobs being queued goes down to 9 or fewer.

5. An error occurs if you change the name of a queue while the queue still contains jobs.
6. You cannot rename the default queue.
7. You should use the `-em` option for the sole purpose of recovering from an agent host failure. You should avoid specifying the `-em` option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to change the queue definition failed due to an internal cause of the host on which the `jpqquealt` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqquealt` command was executed.
7	A logical error occurred on the host on which the `jpqquealt` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqquealt` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqquealt` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqquealt` command was executed.
200	The manager host does not accept a queue changing request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The queue could not be changed successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to change the queue.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred.

222	• A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
232	The post-change queue has the same name as an existing queue.
233	The queue contains jobs at the time of a queue name change.
237	The warning value for the number of jobs is greater than its maximum value.
238	The maximum value for the number of jobs is greater than its warning value.

jpqqueclose

Format

```
jpqqueclose
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     [{-en|-ex}]
     [-em]
```

Description

Closes the job inlet or outlet for a queue.

Execution privileges

You must have either of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin or JP1_JPQ_Operator privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host containing a queue to be closed.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-q` *queue-name*

Specify the name of a queue to be closed.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

When you want to close a default queue, specify the corresponding agent host name that has been registered on the manager host. When an agent host is registered, the default queue is created with the same name as the agent host.

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

-en

Closes the queue entrance.

-ex

Closes the queue exit.

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. You should use the `-em` option for the sole purpose of recovering from an agent host failure. You should avoid specifying the `-em` option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to close a queue failed due to an internal cause of the host on which the `jpqqueclose` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqqueclose` command was executed.
7	A logical error occurred on the host on which the `jpqqueclose` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqqueclose` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqqueclose` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqqueclose` command was executed.
200	The manager host does not accept a queue closing request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The queue could not be closed successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to close the queue.
219	The manager host is busy.

220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

Additional information

Even with a queue closed, you can delete, hold and release a job in it.

jpqquedel

Format

```
jpqquedel
     [-mh manager-host-name]
     -q queue-name
```

Description

Deletes queues.

To execute this command, a user must have the JP1_JPQ_Admin privilege.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of a manager host from which you want to delete the queue.

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

By default, the system assumes the local host name.

`-q` *queue-name*

Specify the queue name you want to delete.

You can specify a character string of 1 to 63 bytes.

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.
- Before executing this command, use the `jpqqueclose` command to close the job reception port for the queue you want to delete, so that the system will not accept new jobs. Confirm that the jobs in the queues have been executed.

  You cannot delete the queue if it has a job that is being executed, assuming that the job is a standard job (PC, UNIX, or QUEUE), custom job, or action job.

  If you delete the queue, the jobs to be deleted, those being held, and those waiting within it are cancelled.

Return values

0	Normal end
1	Invalid parameter value
2	The queue could not be deleted successfully owing to an internal cause of the requester.
5	Initialization has failed.

5	• The definition of the logical host name or the environment setting contains an error.
6	Queue deleting requester's insufficient memory
7	The queue deleting requester encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept a queue deleting request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The queue could not be deleted successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to delete the queue.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
233	There are jobs being executed (which are standard jobs, custom jobs, or action jobs).

jpqqueopen

Format

```
jpqqueopen
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name}
     [{-en|-ex}]
     [-em]
```

Description

Opens the job inlet or outlet for a queue.

Execution privileges

You must have either of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege

However, specifying the `-em` option requires the following privileges (but does not require JP1_JPQ_Admin or JP1_JPQ_Operator privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

`-mh` *manager-host-name*

Specify the name of the manager host containing a queue to be opened.

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

By default, the system assumes the local host name.

When you specify this option together with the `-em` option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the `-mh` option.

`-q` *queue-name*

Specify the name of a queue to be opened.

You can specify a character string of 1 to 63 bytes.

`-ah` *agent-host-name*

When you want to open a default queue, specify the corresponding agent host name that has been registered on the manager host. When an agent host is registered, the default queue is created with the same name as the agent host.

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

-en

Opens the queue entrance.

-ex

Opens the queue exit.

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

1. 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.
2. You should use the `-em` option for the sole purpose of recovering from an agent host failure. You should avoid specifying the `-em` option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to open a queue failed due to an internal cause of the host on which the `jpqqueopen` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqqueopen` command was executed.
7	A logical error occurred on the host on which the `jpqqueopen` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqqueopen` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqqueopen` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqqueopen` command was executed.
200	The manager host does not accept a queue opening request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	The queue could not be opened successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to open the queue.
219	The manager host is busy.

220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

jpqqueshow

Format

```
jpqqueshow
     [-mh manager-host-name]
     {-q queue-name|-ah agent-host-name|-a|-ad|-n}
     [-em]
```

Description

Outputs queue information (including queue names, limit and warning values on the maximum number of submit jobs, and the number of submit jobs) to the standard output.

You can also queue information about the JP1/NQSEXEC and JP1/OJE for VOS3 hosts.

You can also output queue information about the AS/400 system. You can specify only the -mh and -n options for the AS/400 system.

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege (-ad option not allowed)
- JP1_JPQ_User privilege (-ad option not allowed)

However, specifying the -em option requires the following privileges (but does not require JP1_JPQ_Admin, JP1_JPQ_Operator, or JP1_JPQ_User privileges).

- Windows: Administrators privileges
- UNIX: Superuser privileges

Arguments

-mh *manager-host-name*

Specify the name of the manager host containing the queue whose queue information is to be output.

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

By default, the system assumes the local host name.

When you specify this option together with the -em option, you can specify only two types of host names: the local host name and the logical host name on the local host. Specifying any other value results in an error (error code: 25). Also note that you cannot specify an alias host name in the -mh option.

-q *queue-name*

Specify the name of the queue whose queue information is to be output.

You can specify a character string of 1 to 63 bytes.

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-ah *agent-host-name*

When you want to output information about a default queue, specify the corresponding agent host name that has been registered on the manager host. When an agent host is registered, the default queue is created with the same name as the agent host.

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

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-a

Outputs all queue information on the manager host set with the -mh option (except for default queue information).

During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-ad

Outputs all queue information on the manager host set with the -mh option (including default queue information).

This option can be specified by only users having the JP1_JPQ_Admin privilege. During linkage with JP1/NQSEXEC and JP1/OJE for VOS3, you cannot use this option for JP1/NQSEXEC queues and JP1/OJE for VOS3 queues.

-n

As queue information, outputs the names of all the queues in the manager host set with the -mh option (excluding information about the default queue).

-em

Specify this option for emergency execution.

Specifying this option enables emergency execution upon failure because a request is sent to a different communication path that is not used under normal conditions.

When you specify this option, note that you cannot assign an IP address to the manager host name.

Notes

- For the -a and -ad options, the queue name output limit is 21 bytes. If the queue name consists of more than 21 bytes, the 20th and subsequent bytes are "..".
- You should use the -em option for the sole purpose of recovering from an agent host failure. You should avoid specifying the -em option under any normal condition, because you may fail to take corrective action when a failure actually occurs.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to open a queue failed due to an internal cause of the host on which the jpqqueshow command was executed.

5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqqueshow` command was executed.
7	A logical error occurred on the host on which the `jpqqueshow` command was executed.
25	The specified manager host name is neither the local host name nor the logical host name.
100	The host on which the `jpqqueshow` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqqueshow` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqqueshow` command was executed.
200	The manager host does not request output queue information. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified queue. • The specified queue is not found.
202	No response from the manager host
203	Queue information could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output queue information.
212	Queue information could not be output successfully because the process of adding or changing agent hosts or queues is under way.
213	The manager host contains no queue.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a queue information output request to an unsupported host.
226	Invalid execution environment

Output example 1

The following gives an example of file output when you specify the `-q` or `-ah` option.

```
QUEUE : a : agent1.software.hitachi.co.jp
MAXQUEUE : 10
WARNQUEUE : 9
ENTRYSTATUS : CLOSE
EXITSTATUS : OPEN
QUEUING : 3
EXECUTING : 1
LINKAGENT : agent3:1 agent4:2
```

The following shows the meaning of the output.

QUEUE

Indicates queue information in the format of *queue-type*：*queue-name* (or *agent-host-name*).

The queue types are:

- q: Queue
- a: Agent host

MAXQUEUE

Indicates the maximum number of jobs submitted.

10 bytes of data are output.

WARNQUEUE

Indicates a warning value on the number of jobs submitted.

10 bytes of data are output.

ENTRYSTATUS

Indicates the status of a queue entrance.

- OPEN: Open
- CLOSE: Closed

EXITSTATUS

Indicates the status of a queue exit.

- OPEN: Open
- CLOSE: Closed

QUEUING

Indicates the number of already submit jobs (excluding the number of jobs currently executed).

EXECUTING

Indicates the number of jobs being executed.

LINKAGENT

Indicates information on a connected agent host in the format of *connected-agent-host-name*:*priority*.

Output example 2

The following gives an example of file output when you set the -a or -ad option.

```
T  QUEUE                 MAXQUEUE   WARNQUEUE  ENT   EXIT  QUEUING    EXECUTING
-  --------------------- ---------- ---------- ----  ----  ---------- ----------
q  batchqueuelongqueue.. 5          3          OPEN  OPEN  2          1
q  batch2                5          5          OPEN  CLOSE 2          1
a  agent1.software.hit.. 10         9          CLOSE OPEN  3          4
a  agent2                10         9          CLOSE CLOSE 3          4
```

The following shows the meaning of the output.

T

Indicates a queue type.

- q: Queue
- a: Agent host

QUEUE

Indicates a queue name (or an agent host name).

21 bytes of data are output.

MAXQUEUE

Indicates the maximum number of jobs submitted.

WARNQUEUE

Indicates a warning value on the number of jobs submitted.

ENT

Indicates the status of a queue entrance.

- OPEN: Open
- CLOSE: Closed

EXIT

Indicates the status of a queue exit.

- OPEN: Open
- CLOSE: Closed

QUEUING

Indicates the number of already submit jobs (excluding the number of jobs currently executed).

EXECUTING

Indicates the number of jobs being executed.

Output example 3

The following gives an example of file output when you set the -n option.

```
QUEUE
--------------------------------------------------------------------------------
batchqueuelongqueuename
batch2
```

The following gives the meanings of output contents.

QUEUE

Indicates a queue name.

jpqresadd

Format

```
jpqresadd
     [-mh manager-host-name]
     -res execution-locked-resource-name
```

Description

Adds execution-locked resources.

To execute this command, a user must have the JP1_JPQ_Admin privilege.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of a manager host to which you want to add execution-locked resources.

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

By default, the system assumes the local host name.

`-res` *execution-locked-resource-name*

Specify the execution-locked resource name you want to add.

You can specify a character string of 1 to 63 bytes.

If the execution-locked resource name you want to specify contains a space character, enclose the name in double quotation marks (").

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.

Return values

0	Normal end
1	Invalid parameter value
2	The execution-locked resource could not be added successfully owing to an internal cause of the requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Execution-locked resource adding requester's insufficient memory
7	The execution-locked resource adding requester encountered a logic error.

100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept an execution-locked resource adding request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
202	No response from the manager host
203	The execution-locked resource could not be added successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to add the execution-locked resource.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
232	The additional execution-locked resource has the same name as an existing execution-locked resource.
235	The maximum number of execution-locked resource definitions has been exceeded.

jpqresdel

Format

```
jpqresdel
     [-mh manager-host-name]
     -res execution-locked-resource-name
```

Description

Deletes execution-locked resources.

To execute this command, a user must have the JP1_JPQ_Admin privilege.

Execution privileges

You must have the following JP1 privilege:

- JP1_JPQ_Admin privilege

Arguments

`-mh` *manager-host-name*

Specify the name of a manager host from which you want to delete execution-locked resources.

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

By default, the system assumes the local host name.

`-res` *execution-locked-resource-name*

Specify the name of execution-locked resource name you want to delete.

You can specify a character string of 1 to 63 bytes.

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 can be executed before the system executes the job using execution-locked resources to be deleted. (Note that exclusive execution lock will be ineffective during job execution.)

  This command results in an error if the job using execution-locked resources to be deleted is being executed.

Return values

0	Normal end
1	Invalid parameter value
2	An attempt to delete an execution-locked resource due to an internal cause of the host on which the `jpqresdel` command was executed.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Memory became insufficient on the host on which the `jpqresdel` command was executed.

7	A logical error occurred on the host on which the `jpqresdel` command was executed.
100	The host on which the `jpqresdel` command was executed cannot connect to the manager host via TCP/IP communication. • The host on which the `jpqresdel` command was executed cannot connect to the manager host because TCP/IP is not set up correctly. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be resolved from the name of the manager host on which the `jpqresdel` command was executed.
200	The manager host does not accept an execution-locked resource deleting request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified execution-locked resource. • The specified execution-locked resource is not found.
202	No response from the manager host
203	The execution-locked resource could not be deleted successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to delete the execution-locked resource.
219	The manager host is busy.
220	Insufficient manager host memory.
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment
233	There are jobs being executed (which are standard jobs, custom jobs, or action jobs).

jpqresshow

Format

```
jpqresshow
     [-mh manager-host-name]
     {-res execution-locked-resource-name|-a|-n}
```

Description

Outputs information about execution-locked resources (the name, the status of the job using the execution-locked resources, and the job ID) to the standard output file.

Execution privileges

You must have any of the following JP1 privileges:

- JP1_JPQ_Admin privilege
- JP1_JPQ_Operator privilege
- JP1_JPQ_User privilege

Arguments

-mh *manager-host-name*

Specify the name of the manager host that contains the execution-locked resources for which information needs to be output.

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

By default, the system assumes the local host name.

-res *execution-locked-resource-name*

Specify the name of an execution-locked resource when you want to display its name, its status of the job using the execution-locked resource, and its job ID.

You can specify a character string of 1 to 63 bytes.

-a

Regarding all the execution-locked resources registered with the manager host specified by the -mh option, the system outputs their names, the status of the job using the execution-locked resources, and their job IDs.

-n

Regarding all the execution-locked resources registered with the manager host specified by the -mh option, the system outputs only their names.

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.

Return values

0	Normal end
1	Invalid parameter value
2	The execution-locked resource could not be output successfully owing to an internal cause of the requester.
5	Initialization has failed. • The definition of the logical host name or the environment setting contains an error.
6	Execution-locked resource outputting requester's insufficient memory
7	The execution-locked resource outputting requester encountered a logic error.
100	The manager host cannot be connected for TCP/IP communication. • As TCP/IP is not validly set, the manager host cannot be connected. • The manager host name is invalid, or the manager host process stopped.
102	The IP address could not be solved successfully by the manager host name.
200	The manager host does not accept an execution-locked resource outputting request. • The manager host is now being started, now being stopped, has stopped, or is running in the reduced-operation mode.
201	You cannot use a specified execution-locked resource. • The specified execution-locked resource is not found.
202	No response from the manager host
203	The execution-locked resource could not be output successfully owing to an internal cause of the manager host.
206	You do not have the privilege required to output the execution-locked resource.
212	The attempt to output an execution-locked resource has failed because the execution-locked resource is being added or changed.
213	The manager host contains no execution-locked resource.
219	The manager host is busy.
220	Insufficient manager host memory
222	A fatal error has occurred. • A system call error has occurred.
223	The manager host encountered a logic error.
224	You have issued a request to a host other than JP1/AJS3.
226	Invalid execution environment

Output example 1

With the `-res` option specified, here is an example of file output, together with what the output means.

```
RESOURCE : Shared_File01234567890123456789012345678901234567890123456789012345678901
STATUS : EXECUTING
JOBID : 129
```

The content of the output is explained below.

RESOURCE

Specifies the execution-locked resource name.

STATUS

Shows the status of the job using execution-locked resources.

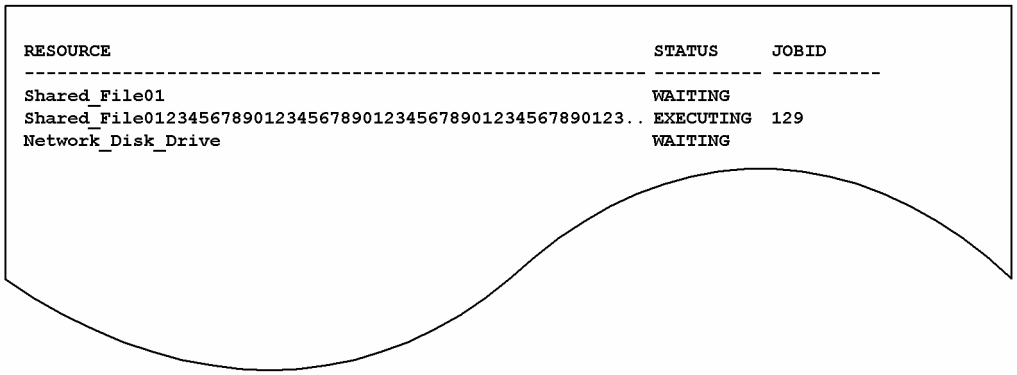
- EXECUTING: The job is currently being executed.
- WAITING: The job is not currently being executed.

JOBID

Shows the job ID of the job using execution-locked resources.

Output example 2

With the -a option specified, here is an example of file output, together with what the output means.



```
RESOURCE                                                  STATUS     JOBID
--------------------------------------------------------- ---------- ----------
Shared_File01                                             WAITING
Shared_File012345678901234567890123456789012345678901234.. EXECUTING  129
Network_Disk_Drive                                        WAITING
```

The content of the output is explained below.

RESOURCE

Specifies the execution-locked resource name. You can output up to 57 bytes. If the execution-locked resource name is 58 bytes or longer, the portion exceeding 55 bytes is indicated by "..".

STATUS

Shows the status of the job using execution-locked resources.

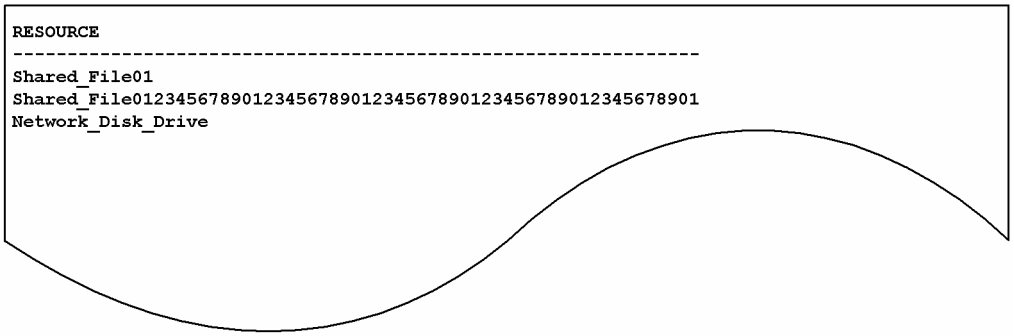
- EXECUTING: The job is currently being executed.
- WAITING: The job is not currently being executed.

JOBID

Shows the job ID of the job using execution-locked resources.

Output example 3

With the -n option specified, here is an example of file output, together with what the output means.



The content of the output is explained below.

RESOURCE

Specifies the execution-locked resource name.

4 Creating Information Definition Files

This chapter describes how to create definition files.

4.1 Creating a unit definition file

A unit definition file is used to define the configuration and details of units. To use the `ajsdefine` command to define units, specify one or more unit definition files.

This section explains how to create a unit definition file.

4.1.1 Format of unit definition files

The following shows how to specify unit definition parameters in a unit definition file.

Figure 4－1: Format of unit definition files

```
/* comment */                                        ..... (A)
unit-attribute-parameter                            ..... (B)
    {                                               ..... (C)
        unit-definition-parameters                  ..... (D)
        lower-level-unit-attribute-parameter        ..... (E)
            {
                lower-level-unit-nesting-definition
                lower-level-unit-nesting-definition
                lower-level-unit-nesting-definition
            }
        lower-level-unit-attribute-parameter
        lower-level-unit-attribute-parameter
        lower-level-unit-attribute-parameter
    }                                               ..... (F)

unit-attribute-parameter
unit-attribute-parameter
unit-attribute-parameter
```

The following explains the items in a unit definition file.

(A) *comment*

To make a comment, enclose it within `/*` and `*/`.

You cannot write a comment in a line where you have defined a unit attribute parameter or a unit definition parameter. You cannot nest a comment as in `/*/*xxxxx*/*/`.

(B) *unit-attribute-parameter*

This item defines a unit attribute.

The following gives the format of this item.

```
unit=unit-name[,[permission-mode][,[JP1-user-name][,[JP1-resource-group-name]]]];
```

The following explains each parameter.

- *unit-name*

Specify a unit name.

You can specify a character string of 1 to 30 bytes. Note that if the character encoding is UTF-8 and `sjis` is specified for the `DEFLENTYPE` environment setting parameter, you can specify from 1 to 30 bytes after conversion to Shift-JIS.

For a unit name, you cannot specify a root job group (/).

- *permission-mode*

  Specify the permission mode for a unit.

  You can specify any four-digit octal values. The following gives the meaning of each digit. If each item of definition information contains an `eu` parameter, the value specified in the parameter is valid.

  First digit

  Specify the user who executes the job.

  0 to 3: The JP1 user who registered the jobnet executes the job.

  4 to 7: The JP1 user who owns the job executes the job.

  Second to fourth digits

  Specify any string.

- *JP1-user-name*

  Specify the name of the JP1 user who owns the unit.

  You can specify a character string of 1 to 30 bytes. The default is the JP1 user name of the user who created the unit.

  An event receiving job is ignored if specified.

- *JP1-resource-group-name*

  Specify a JP1 resource group name.

  You can specify a character string of 1 to 63 bytes. The string can consist of alphanumeric characters and an underscore (_). By default, no characters are assumed.

  An event receiving job is ignored if specified.

(C) `{`

Indicates the start of a unit definition parameter.

The contents enclosed by `{` and `}` provide the unit definition parameters for the unit specified in the unit attribute parameter.

(D) *unit-definition-parameters*

Specify unit definition parameters.

For details, see *4.2 Definition format and parameters*.

(E) *lower-level-unit-attribute-parameter*

Specify a lower-level unit attribute parameter.

Be sure to specify a lower-level unit attribute parameter at the end of the unit definition parameters for the upper-level unit.

For details, see *(B) unit-attribute-parameter*.

(F) `}`

Indicates the end of a unit definition parameter.

4.1.2 Notes on defining unit definition parameters

The information to be defined in the file differs depending on what type of unit you want to define.

This subsection first explains which definitions are required to determine a unit. Then, this subsection explains how to specify each definition.

The unit you want to define is related to the required definition as summarized in *Table 4-1*. Note that definitions 1-8 in *Table 4-1* refer to the following:

Definition 1

Attribute definition

Definition 2

Unit configuration definition

Definition 3

Job group definition

Definition 4

Jobnet definition

Definition 5

Job definition

The following jobs are covered:

- UNIX/PC job
- QUEUE job
- Judgment job
- 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
- JP1 event sending job
- Email sending job
- Message-queue message sending job
- MSMQ message sending job
- OpenView Status Report job
- Local power control job
- Remote power control job
- UNIX/PC custom job
- Passing information setting job

Definition 6

Manager unit definition

The manager unit is a combination of a manager job group and a manager jobnet.

Definition 7

Start condition definition

Definition 8

Jobnet connector definition

Table 4-1: Required definitions

	Definition 1	Definition 2	Definition 3	Definition 4	Definition 5	Definition 6	Definition 7	Definition 8
Job group	Yes	Yes	Yes#3	--	--	--	--	--
Jobnet	Yes	Yes	--	Yes#3	--	--	--	--
Job#1	Yes	--	--	--	Yes	--	--	--
Manager unit#2	Yes	--	--	--	--	Yes	--	--
Start condition	Yes	--	--	--	--	--	Yes	--
Jobnet connector	Yes	--	--	--	--	--	--	Yes

Legend:

Yes: Necessary

--: Unnecessary

#1

For the types of jobs, see the explanation of *Definition 5* above.

#2

For the types of manager units, see the explanation of *Definition 6* above.

#3

To use a jobnet connector to control the execution order of a root jobnet or a root jobnet that is immediately under a planning group, you must specify the execution order control method for jobnet connectors.

For an explanation of how to specify each definition, see *4.2 Definition format and parameters*.

4.2 Definition format and parameters

This section describes the format of definition for defining units.

4.2.1 Attribute definition

This paragraph explains how to specify an attribute definition.

Specify an attribute definition at the beginning of each unit definition parameter.

The following shows the format of, and parameters for an attribute definition.

Format

```
ty={g|mg|n|rn|rm|rr|rc|mn|j|rj|pj|
     rp|qj|rq|jdj|rjdj|orj|rorj|evwj|
     revwj|flwj|rflwj|mlwj|rmlwj|mqwj|
     rmqwj|mswj|rmswj|lfwj|rlfwj|ntwj|
     rntwj|tmwj|rtmwj|evsj|revsj|mlsj|
     rmlsj|mqsj|rmqsj|mssj|rmssj|cmsj|
     rcmsj|pwlj|rpwlj|pwrj|rpwrj|cj|rcj|cpj|rcpj|nc};
[cm="comment";]
```

Parameters

`ty=`

Specify a unit type.

- `g`: Defines a job group or Planning group
- `mg`: Defines a manager job group.
- `n`: Defines a jobnet.
- `rn`: Defines a jobnet for recovery.
- `rm`: Defines a remote jobnet.
- `rr`: Defines a jobnet for recovery.
- `rc`: Defines start conditions for a root jobnet.
- `mn`: Defines a manager jobnet.
- `j`: Defines a Unix job.
- `rj`: Defines a Unix job for recovery.
- `pj`: Defines a PC job.
- `rp`: Defines a PC job for recovery.
- `qj`: Defines a QUEUE job.
- `rq`: Defines a QUEUE job for recovery.
- `jdj`: Defines a judgment job.
- `rjdj`: Defines a judgment job for recovery.
- `orj`: Defines an OR job.

- `rorj`: Defines an OR job for recovery.
- `evwj`: Defines a JP1 event reception monitoring job.
- `revwj`: Defines a JP1 event reception monitoring job for recovery.
- `flwj`: Defines a file monitoring job.
- `rflwj`: Defines a file monitoring job for recovery.
- `mlwj`: Defines an email reception monitoring job.
- `rmlwj`: Defines an email reception monitoring job for recovery.
- `mqwj`: Defines a message queue reception monitoring job.
- `rmqwj`: Defines a message queue reception monitoring job for recovery.
- `mswj`: Defines an MSMQ reception monitoring job.
- `rmswj`: Defines an MSMQ reception monitoring job for recovery.
- `lfwj`: Defines a log file monitoring job.
- `rlfwj`: Defines a log file monitoring job for recovery.
- `ntwj`: Defines a Windows event-log monitoring job.
- `rntwj`: Defines a Windows event-log monitoring job for recovery.
- `tmwj`: Defines an execution-interval control job.
- `rtmwj`: Defines an execution-interval control job for recovery.
- `evsj`: Defines a JP1 event sending job.
- `revsj`: Defines a JP1 event sending job for recovery.
- `mlsj`: Defines an email sending job.
- `rmlsj`: Defines an email sending job for recovery.
- `mqsj`: Defines a message queue sending job.
- `rmqsj`: Defines a message queue sending job for recovery.
- `mssj`: Defines an MSMQ sending job.
- `rmssj`: Defines an MSMQ sending job for recovery.
- `cmsj`: Defines an OpenView Status Report job.
- `rcmsj`: Defines an OpenView Status Report job for recovery.
- `pwlj`: Defines a local power control job.
- `rpwlj`: Defines a local power control job for recovery.
- `pwrj`: Defines a remote power control job.
- `rpwrj`: Defines a remote power control job for recovery.
- `cj`: Defines a custom Unix job.
- `rcj`: Defines a custom Unix job for recovery.
- `cpj`: Defines a custom PC job.
- `rcpj`: Defines a custom PC job for recovery.
- `nc`: Defines a jobnet connector.

cm="*comment*";

Write a comment.

You can use a character string of 1 to 80 bytes. Note that if the character encoding is UTF-8 and sjis is specified for the DEFLENTYPE environment setting parameter, you can specify from 1 to 80 bytes after conversion to Shift-JIS.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

4.2.2 Unit configuration definition

This paragraph explains how to specify a unit configuration definition.

The following gives the format of, and parameters for a unit configuration definition.

Format

```
[el=unit-name, unit-type, +H +V;]
[sz=lateral-icon-count-times-longitudinal-icon-count;]
```

Parameters

el=*unit-name*, *unit-type*, +*H* +*V*;

Specify the information for a unit.

- *unit-name*: Specify a unit name.
  You can specify a character string of 1 to 30 bytes.
- *unit-type*: Specify a unit type.
  For details about the unit type, see the ty parameter in *4.2.1 Attribute definition*.

+*H*

To display the icon of a unit in the JP1/AJS3 - View window, specify in pixels the horizontal location of the unit icon.

You can set 0 to 16,000 (pixels).

Use the formula below to determine the pixel value.

H = 80 + 160*x* (*x*: 0 to lateral icon count - 1)

If you set a value other than that determined from the formula, the system automatically sets a suitable value.

For a job group and a unit covered in the start conditions, *H* defaults to 0.

+*V*

To display a unit in the JP1/AJS3 - View window, specify in pixels the vertical location of the unit icon.

You can set 0 to 10,000 (pixels).

Use the formula below to determine the pixel value.

V = 48 + 96*y* (*y*: 0 to longitudinal icon count - 1)

If you set a value other than that determined from the formula, the system automatically sets a suitable value.

For a job group and a unit covered in the start conditions, *V* defaults to 0.

sz=*lateral-icon-count-times-longitudinal-icon-count*;

Define the maximum number of unit icons displayed in the JP1/AJS3 - View window. This is valid only for a jobnet and a remote jobnet.

- *lateral-icon-count*: You can set 1 to 100. The default is 10.

- *longitudinal-icon-count*: You can set 1 to 100. The default is 8.

4.2.3 Job group definition

This subsection describes how to define a job group (or planning group).

The following gives the format of and parameters for a job group definition.

Format

```
[op={yyyy/mm/dd|{su|mo|tu|we|th|fr|sa}};]
[cl={yyyy/mm/dd|{su|mo|tu|we|th|fr|sa}};]
[sdd={dd|{su|mo|tu|we|th|fr|sa}:n};]
[md={th|ne};]
[stt=hh:mm;]
[gty={p|n};]
[ncl={y|n};]
[ncn=jobnet-connector-name;]
[ncs={y|n};]
[ncex={y|n};]
[nchn="connection-host-name";]
[ncsv=connection-service-name;]
```

Parameters

op={*yyyy*/*mm*/*dd*|{su|mo|tu|we|th|fr|sa}};

Define an open day as calendar information.

- *yyyy*: Specify the calendar year containing an open day. You can set 1994 to 2036.
- *mm*: Specify the month containing an open day. You can set 1 to 12.
- *dd*: Specify an open day. You can set 1 to 31.
- su: Sets Sunday as an open day.
- mo: Sets Monday as an open day.
- tu: Sets Tuesday as an open day.
- we: Sets Wednesday as an open day.
- th: Sets Thursday as an open day.
- fr: Sets Friday as an open day.
- sa: Sets Saturday as an open day.

cl={*yyyy*/*mm*/*dd*|{su|mo|tu|we|th|fr|sa}};

Define a closed day as calendar information.

- *yyyy*: Specify the calendar year containing a closed day. You can set 1994 to 2036.
- *mm*: Specify the month containing a closed day. You can set 1 to 12.
- *dd*: Specify a closed day. You can set 1 to 31.
- su: Sets Sunday as a closed day.
- mo: Sets Monday as a closed day.
- tu: Sets Tuesday as a closed day.

- `we`: Sets Wednesday as a closed day.
- `th`: Sets Thursday as a closed day.
- `fr`: Sets Friday as a closed day.
- `sa`: Sets Saturday as a closed day.

`sdd={`*dd*`|{su|mo|tu|we|th|fr|sa}:`*n*`};`

Define the base date as calendar information.

The default is the base date for an upper-level job group. If no base date is defined for any upper-level job group, 1 is assumed.

- *dd*: Specify the base date as a calendar day. You can set 1 to 31.
- `su`: Sets Sunday as the base date.
- `mo`: Sets Monday as the base date.
- `tu`: Sets Tuesday as the base date.
- `we`: Sets Wednesday as the base date.
- `th`: Sets Thursday as the base date.
- `fr`: Sets Friday as the base date.
- `sa`: Sets Saturday as the base date.
- *n*: Define the week of the month and the day of the week as the base date. You can set 1 to 5 (first week to fifth week).

`md={th|ne};`

Define the base month as calendar information. The default is the base month for an upper-level job group. If no base month is defined for any upper-level job group, `th` is assumed.

- `th`: Considers the days following the base date as belonging to the month containing the base date (current month).
- `ne`: Considers the days following the base date as belonging to the next month.

`stt=`*hh*`:`*mm*`;`

Define the base time as calendar information. The default is the base time for an upper-level job group. If no base time is defined for any upper-level job group, 00:00 is assumed.

- *hh*: Specify hours of the base time. You can set 0 to 23.
- *mm*: Specify minutes of the base time. You can set 0 to 59.

`gty={p|n}`

Specifies the type of the job group. The default is `n`.

- `p`: Planning group
- `n`: Job group

`ncl={y|n};`

If the job group is a planning group, define whether to use a jobnet connector to control the execution order of a root jobnet that is immediately under a planning group. If you omit this option, the system assumes `n`. You can specify this option only when the planning group is specified as the type of job group (`gty=p`).

- `y`: The execution order of a root jobnet that is immediately under a planning group is controlled.
- `n`: The execution order of a root jobnet that is immediately under a planning group is not controlled.

ncn=*jobnet-connector-name*;

If the execution order of a root jobnet that is immediately under a planning group is to be controlled, specify the unit full name of the jobnet connector to be connected. You can specify a character string of 1 to 930 bytes. If you specify any of the following unit names, an error occurs:

- A unit name that does not begin with a slant (/)
- A unit name in which a character string between slants (/) exceeds 30 bytes
- A unit name that ends with a slant (/)

You can specify this option only when the planning group is specified as the type of job group (gty=p). If you specify this option when y has not been specified for the ncl parameter, an error occurs.

ncs={y|n};

If the execution order of a root jobnet that is immediately under a planning group is to be controlled, define the execution order control method. If you omit this option, the system assumes n. You can specify this option only when the planning group is specified as the type of job group (gty=p). If you specify this option when y has not been specified for the ncl parameter, an error occurs.

- y: The root jobnet is executed synchronously with the jobnet connector.
- n: The root jobnet is executed asynchronously with the jobnet connector.

ncex={y|n};

If the execution order of a root jobnet that is under a planning group is to be controlled, define whether to enable linkage between scheduler services. If you omit this option, the system assumes n.

You can specify this option only when the planning group is specified as the type of job group.

If you specify this option when y has not been specified for the ncl parameter, an error occurs.

- y: Linkage between scheduler services is enabled.

  Linkage with jobnet connectors defined on other hosts or in other scheduler services is possible.
- n: Linkage between scheduler services is disabled.

  Linkage with jobnet connectors defined in only the same scheduler service is possible.

nchn="*connection-host-name*";

Specify the name of the host on which the jobnet connector to be connected has been defined. You can specify a character string of 1 to 255 bytes. You cannot specify spaces, tab characters, or linefeed characters.

You can specify this option only when the planning group is specified as the type of job group. If you specify this option when y has not been specified for the ncex parameter, an error occurs.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

ncsv=*connection-service-name*;

Specify the name of the scheduler service in which the jobnet connector to be connected has been defined. You can specify a character string of 1 to 30 bytes.

You can specify this option only when the planning group is specified as the type of job group. If you specify this option when y has not been specified for the ncex parameter, an error occurs.

4.2.4 Jobnet definition

This paragraph explains how to specify a jobnet definition.

To concurrently define multiple unit, specify the upper-level unit definition parameters and then the parameters of a lower-level unit.

The following gives the format of, and parameters for a jobnet definition.

Format

```
[sd=[N,]{[[yyyy/]mm/]{[+|*|@]dd
     |[+|*|@]b[-DD]|[+]{su|mo|tu|we|th|fr|sa}
     [:{n|b}]}|en|ud};]
[st=[N,][+]hh:mm;]
[sy=[N,]hh:mm|{M|U|C}mmmm;]
[ey=[N,]hh:mm|{M|U|C}mmmm;]
[ln=[N,]n;]
[cy=[N,] (n,{y|m|w|d});]
[sh=[N,]{be|af|ca|no};]
[shd=[N,]n;]
[wt=[N,]{no|hh:mm|mmmm|un};]
[wc=[N,]{no|n|un};]
[cftd=[N,]{no|be|af|db|da}[,n[,N]];]
[ed=yyyy/mm/dd;]
[rg=n;]
[pr=n;]
[ni=n;]
[ha={y|w|a|n};]
[ejn=exclusive-jobnet-name;]
[cd={no|un|n};]
[de={y|n};]
[ms={sch|mlt};]
[mp={y|n};]
[jc=full-path-job-group-name;]
[rh="execution-manager-name";]
[ex="execution-agent-name";]
[fd=time-required-for-execution;]
[ar=(f=preceding-unit-name, t=succeeding-unit-name[,relation-type]);]
[ncl={y|n};]
[ncn=jobnet-connector-name;]
[ncs={y|n};]
[ncex={y|n};]
[nchn="connection-host-name";]
[ncsv=connection-service-name;]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`sd=[N,]{[[yyyy/]mm/]{[+|*|@]dd|[+|*|@]b[-DD]|[+]{su|mo|tu|we|th|fr|sa} [:{n|b}]}|en|ud;`

Define the dates when the jobnet is to be executed. You can define up to 144 execution start dates. If you omit this parameter in the root jobnet, the system assumes "`1, en`".

- *N*: When defining multiple jobnet execution start dates, specify a rule number. You can set 0 to 144.

  This number corresponds to the rule numbers for the execution start time, start delay time, end delay time and appropriate upper-level jobnet, and the rule numbers for the processing cycle, shift method and maximum shift days.

If you specify `sd=0,ud`, you can make all the items undefined.

- *yyyy*: Specify the calendar year containing the date when the jobnet is executed. You can set 1994 to 2036. The default is the year containing the date when the jobnet was registered for execution.
- *mm*: Specify the month when the jobnet is executed. You can set 1 to 12. The default is the month containing the day when the jobnet was registered for execution.
- `+`: Sets the date when the jobnet is executed on the basis of a relative day.
- `*`: Sets the date when the jobnet is executed on the basis of an open day.
- `@`:Sets the date when the jobnet is executed on the basis of a closed day.
- *dd*: Define the day when the jobnet is executed.
  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).
- `b`: Sets the date when the jobnet is executed as the end day of the month.
- *−DD*: Specify how many days precede the end of the month or the last open day to set the date when the jobnet is executed. The default is the end of the month or the last open day.
  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).
- `su`: Sets Sunday as the date when the jobnet is executed.
- `mo`: Sets Monday as the date when the jobnet is executed.
- `tu`: Sets Tuesday as the date when the jobnet is executed.
- `we`: Sets Wednesday as the date when the jobnet is executed.
- `th`: Sets Thursday as the date when the jobnet is executed.
- `fr`: Sets Friday as the date when the jobnet is executed.
- `sa`: Sets Saturday as the date when the jobnet is executed.
- *n*: Specify what week from the beginning of the month contains the specified day of the week. You can set 1 to 5 (first week to fifth week). The default is 1 if you have specified a year (*yyyy*) and month (*mm*), and the week containing a specified day of the week nearest the date of registration for execution.
- `en`: Sets the date when the jobnet is registered for execution as the date when it is executed.
- `ud`: Makes all the schedules for the jobnet undefined. Be sure to set *N* to `0`.

`st=[`*N*`,][+]`*hh*`:`*mm*`;`

Define the time when the jobnet is executed. The default is `+00:00` (0 hours 00 minutes as the relative time).

- *N*: Specify the rule number of the execution start time corresponding to the rule number of the jobnet execution start date. You can set 1 to 144. The default is `1`.

- +: Specify that the *hh*:*mm* time when the jobnet is executed is the relative time. The default specifies the absolute time.
- *hh*: Specify the hours of the time when the jobnet is executed. You can set 0 to 47. The default is `0`.
- *mm*: Specify the minutes of the time when the jobnet is executed. You can set 0 to 59 as the minutes value. The default is `0`.

`sy=[`*N*`,]`*hh*`:`*mm*`|{M|U|C}`*mmmm*`;`

Define the delayed start time for a jobnet.

- *N*: Specify the rule number of delayed start time corresponding to the date when the jobnet is executed. You can set 1 to 144. The default is `1`.
- *hh*: Specify the hours of the delayed start time for a jobnet. You can set 0 to 47.
- *mm*: Specify the minutes of the delayed start time for a jobnet. You can set 0 to 59.
- `M`: Sets the minutes specified in *mmmm* as the relative minutes from the time when the root jobnet is executed.
- `U`: Sets the minutes specified in *mmmm* as the relative minutes from the time when the upper-level jobnet is executed.
- `C`: Sets minutes the specified in *mmmm* as the relative minutes from the time when the jobnet is executed.
- *mmmm*: Specify the delayed start time as the relative minutes from the time when the root jobnet, upper-level jobnet or the jobnet itself is executed. You can set 1 to 2,879.

`ey=[`*N*`,]`*hh*`:`*mm*`|{M|U|C}`*mmmm*`;`

Define the delayed end time for a jobnet.

- *N*: Specify the rule number of delayed end time corresponding to the date when the jobnet is executed. You can set 1 to 144. The default is `1`.
- *hh*: Specify the hours of the delayed end time for a jobnet. You can set 0 to 47.
- *mm*: Specify the minutes of the delayed end time for a jobnet. You can set 0 to 59.
- `M`: Sets the minutes specified in *mmmm* as the relative minutes from the time when the root jobnet is executed.
- `U`: Sets the minutes specified in *mmmm* as the relative minutes from the time when the upper-level jobnet is executed.
- `C`: Sets minutes the specified in *mmmm* as the relative minutes from the time when the jobnet is executed.
- *mmmm*: Specify the delayed end time as the relative minutes from the time when the root jobnet, upper-level jobnet or the jobnet itself is executed. You can set 1 to 2,879.

`ln=[`*N*`,]`*n*`;`

Define the rule number of the schedule for the upper-level jobnet. Note that any attempt to specify the root jobnet will be ignored.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is `1`.
- *n*: Specify the rule number of the date when the upper-level jobnet is executed. You can set 1 to 144.

`cy=[`*N*`,](`*n*`,{y|m|w|d});`

Define a processing cycle for a jobnet. By default, no processing cycle is set.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is `1`.
- *n*: Specify the number of processing cycles. The value you can set depends on the parameter (`y`, `m`, `w`, or `d`) you specify.
- `y`: Sets the unit for the processing cycle as a year. For *n*, you can set 1 to 9 (years).

- m: Sets the unit for the processing cycle as a month. For *n*, you can set 1 to 12 (months).
- w: Sets the unit for the processing cycle as a week. For *n*, you can set 1 to 5 (weeks). If you have defined the execution start date by an open or closed day (sd=* or sd=@), you cannot specify this parameter. If you specify this parameter, 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: Sets the unit for the processing cycle as a day. For *n*, you can set 1 to 31 (days).

sh=[*N*,]{be|af|ca|no};

If the jobnet is scheduled to be executed on a closed day on the JP1/AJS3 calendar, define how to substitute the schedule of the closed day job.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is 1.
- be: Applies the previous day of the execution schedule day if it is closed.
- af: Applies the next day of the execution schedule day if it is closed.
- ca: Does not execute the jobnet if the execution schedule day is closed.
- no: Forcibly executes the jobnet on the closed day set as the execution schedule day only if the JP1/AJS3 service is started.

shd=[*N*,]*n*;

Define the maximum number of shift days for jobnet execution.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is 1.
- *n*: Specify the maximum number of shift days for jobnet execution. You can set 1 to 31 (days). The default is 2.

wt=[*N*,]{no|*hh*:*mm*|*mmmm*|un};

Define the time when the status of the jobnet waiting for an event is released. The default is no. Specify this parameter together with the wc parameter.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is 1.
- no: Does not use an event wait.
- *hh*: Specify the hours when the event wait is released. You can set 0 to 47.
- *mm*: Specify the minutes when the event wait is released. You can set 0 to 59.
- *mmmm*: Specify the time when the event wait is released by the relative minutes from the time when the jobnet is executed. You can set 1 to 2,879 (minutes).
- un: Waits without any limit for an event.

wc=[*N*,]{no|*n*|un};

After the end of a jobnet execution triggered by an event activation, define the number of times the system waits for an event. If you specify no in this parameter, Event Waiting will not be performed. If you omit this parameter, no is assumed. Specify this parameter together with the wt parameter.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is 1.
- no: Does not wait for an event.
- *n*: Specify the number of times the system waits for an event. You can set 1 to 999. The default is 1.
- un: Waits without any limit for an event.

`cftd=[N,]{no|be|af|db|da}[,n[,N]];`

Define the schedule of the jobnet according to the days from the start time. The default is `no`.

- *N*: Specify the rule number of the date when the jobnet is executed. You can set 1 to 144. The default is `1`.
- `no`: Does not use a schedule according to the days from the start time.
- `be`: Replaces the date of jobnet execution by an open day preceding the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
- `af`: Replaces the date of jobnet execution by an open day following the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution).
- `db`: Replaces the date of jobnet execution by the day preceding the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution). Because closed days are not skipped, the jobnet might be executed on a closed day. This setting cannot be used if the JP1/AJS3 database is in the compatible ISAM configuration.
- `da`: Replaces the date of jobnet execution by the day following the start date (the execution schedule date fixed by specifying a processing cycle or setting substitution). Because closed days are not skipped, the jobnet might be executed on a closed day. This setting cannot be used if the JP1/AJS3 database is in the compatible ISAM configuration
- *n*: Specify the number of start days. You can set 1 to 31 (days). The default is `1`. If you specify `cftd=no`, this item is invalid.
- *N*: Specify the maximum number of shift days. You can set 1 to 31 (days). The default is `10`. If you specify `cftd=no`, `cftd=db`, or `cftd=da`, this item is invalid.

`ed=`*yyyy*`/`*mm*`/`*dd*`;`

Define the expiration date of a defined schedule. By default, the system does not check the expiration date.

- *yyyy*: Specify the calendar year of the expiration date. You can set 1994 to 2036.
- *mm*: Specify the month of the expiration date. You can set 1 to 12.
- *dd*: Specify the day of the expiration date. You can set 1 to 31.

`rg=`*n*`;`

Define saved generations of the jobnet. You can, however, enable the system setting option to increase the number of generations to up to 999. The default is `1`. You can specify this parameter only for the root jobnet. For a nested jobnet, the system inherits a value defined for the root jobnet.

`pr=`*n*`;`

Define the default for the priority of jobnet job execution. You can set 1 to 5. The lowest priority of execution is 1, while the highest priority is 5. The default value depends on the definition of upper-level jobnets.

The value specified in this parameter is used if the `pr` parameter is not specified for the jobs in the jobnet. The system assumes a value of 1 as the priority in job execution if this parameter is not specified for any of the upper-level jobnets (including the highest level) and if the `ni` parameter is not specified.

If this and the `ni` parameter are specified together, the value of the second parameter will be valid.

`ni=`*n*`;`

Define the default for the priority of jobnet job execution. You can set -39 to 39. The specified value is replaced by the default for the priority of job execution in the `pr` parameter. The relationship is summarized below.

ni parameter settings	Default for the priority of job execution
11 to 39	5
1 to 10	4

ni parameter settings	Default for the priority of job execution
0	3
-10 to -1	2
-39 to -11	1

The default value depends on the definition of upper-level jobnets.

The value specified in this parameter is used if the `pr` parameter is not specified for the jobs in the jobnet. The system assumes a value of 1 as the priority of job execution if this parameter is not specified for any of the upper-level jobnets (including the highest level) and if the `pr` parameter is not specified.

If this parameter is specified together with the `pr` parameter, the value of the parameter specified later will be effective.

`ha={y|w|a|n};`

Define whether to suspend jobnet execution. The default is `n`. If you specify `w` or `a` for a nested jobnet, the system assumes `n`.

- `y`: Suspends jobnet execution.
- `w`: Suspends jobnet execution only if the last jobnet end status is Ended with warning, Ended abnormally, Skipped so not exe., Invalid exe. seq., Interrupted, or Killed. You cannot specify this parameter with `mp=y`.
- `a`: Suspends jobnet execution only if the last jobnet end status is Ended abnormally, Skipped so not exe., Invalid exe. seq., Interrupted, or Killed.
- `n`: Does not suspend jobnet execution.

`ejn=`*exclusive-jobnet-name*`;`

Define the name of a jobnet you do not want to execute while executing this jobnet (a jobnet in the same level).

You can set a character string of 1 to 30 bytes. Note that if the character encoding is UTF-8 and `sjis` is specified for the `DEFLENTYPE` environment setting parameter, you can specify from 1 to 30 bytes after conversion to Shift-JIS.

`cd={no|un|`*n*`};`

Define the number of days after which the waiting is canceled for the jobnet in the Being held, Wait for start cond or Waiting for the start time status.

The default is `no`.

- `no`: The value set in the system option is applied as the timeout of the wait status.
- `un`: Waits without setting a timeout.
- *n*: Specify the number of days the jobnet waits. Specify the relative number of days from the base date for the job group to which the jobnet belongs. You can set 1 to 2 (days).

`de={y|n};`

Define dependence on the schedule for the upper-level jobnet. The default is `y`. You cannot define this parameter for the root jobnet.

- `y`: The jobnet depends on the schedule for the upper-level jobnet. You cannot specify this parameter together with the `sd` parameter.
- `n`: The jobnet does not depend on the schedule for the upper-level jobnet.

`ms={sch|mlt};`

Define a schedule option for jobnet execution. The default is `sch`.

- `sch`: Uses a schedule skip option.

- `mlt`: Uses a multi-schedule option.

`mp={y|n};`

Define whether to enable concurrent jobnet execution. The default is `n`.

- `y`: Enables concurrent execution. You cannot specify this together with `ha=w` or `ha=a`.
- `n`: Disables concurrent execution.

`jc=`*job-group-full-name*`;`

Define the job group name that contains the definition of the calendar information specified on a jobnet basis.

You can set a character string of 1 to 930 bytes.

`rh="`*execution-manager-name*`";`

Define the name of the JP1/AJS3 - Manager host in which a remote jobnet will be executed.

You can set a character string of 1 to 255 bytes. If you omit this option, a message KAVS0289-E is output as the execution result of the remote jobnet, and an error occurs.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

You can specify a macro variable.

If job definition information contains no specified agent name to execute, the system uses the name set here. If this parameter is not specified, the following value is assumed:

- The local host name is assumed for the root jobnet.
- The value of the upper-level jobnet is assumed for a nested jobnet.
- The value specified for the execution manager is assumed for a remote jobnet.

`fd=`*time-required-for-execution*`;`

Define the time required for executing the jobnet or remote jobnet for which the termination delay is monitored.

You can specify a decimal value between 1 and 2,879 (minutes).

`ar=(f=`*preceding-unit-name*`, t=`*succeeding-unit-name*`[,`*relation-type*`]);`

Define the order in which units are executed. (This definition is equivalent to defining execution order by relating icons in the map area in the Jobnet Edit window for JP1/AJS3 - View.)

- `f=`*preceding-unit-name*: Specify the name of a unit or judgment job to be executed earlier. You can set a character string of 1 to 30 bytes.
- `t=`*succeeding-unit-name*: Specify the name of a unit to be executed subsequently or dependent unit. You can set a character string of 1 to 30 bytes.
- *relation-type*: Define the method of establishing a relationship. The default is `seq`.

  `seq`: Sequential relationship

  `con`: Provides a conditional connection with the judgment job as a dependent unit. This can be specified only when the preceding unit name contains a judgment job.

`ncl={y|n};`

For a root jobnet, define whether to use a jobnet connector to control the execution order. If you omit this option, the system assumes `n`.

You can specify this option only for a root jobnet.

- y: The execution order of the root jobnet is controlled.
- n: The execution order of the root jobnet is not controlled.

ncn=*jobnet-connector-name*;

If the execution order of a root jobnet is to be controlled, specify the unit full name of the jobnet connector to be connected. You can specify a character string of 1 to 930 bytes. If you specify any of the following unit names, an error occurs:

- A unit name that does not begin with a slant (/)
- A unit name in which a character string between slants (/) exceeds 30 bytes
- A unit name that ends with a slant (/)

You can specify this option only for a root jobnet. If you specify this option when y has not been specified for the ncl parameter, an error occurs.

ncs={y|n};

If the execution order of a root jobnet is to be controlled, define the execution order control method. If you omit this option, the system assumes n. You can specify this option only for a root jobnet. If you specify this option when y has not been specified for the ncl parameter, an error occurs.

- y: The root jobnet is executed synchronously with the jobnet connector.
- n: The root jobnet is executed asynchronously with the jobnet connector.

ncex={y|n};

If the execution order of a root jobnet is to be controlled, define whether to enable linkage between scheduler services. If you omit this option, the system assumes n.

You can specify this option only for a root jobnet.

If you specify this option when y has not been specified for the ncl parameter, an error occurs.

- y: Linkage between scheduler services is enabled.

  Linkage with jobnet connectors defined on other hosts or in other scheduler services is possible.
- n: Linkage between scheduler services is disabled.

  Linkage with jobnet connectors defined in only the same scheduler service is possible.

nchn="*connection-host-name*";

Specify the name of the host on which the jobnet connector to be connected has been defined. You can specify a character string of 1 to 255 bytes. You cannot specify spaces, tab characters, or linefeed characters.

You can specify this option only for a root jobnet. If you specify this option when y has not been specified for the ncex parameter, an error occurs.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

ncsv=*connection-service-name*;

Specify the name of the scheduler service in which the jobnet connector to be connected has been defined. You can specify a character string of 1 to 30 bytes.

You can specify this option only for a root jobnet. If you specify this option when y has not been specified for the ncex parameter, an error occurs.

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.5 Manager unit definition

This paragraph explains how to specify a manager unit definition.

The following gives the format of, and the parameters for a manager unit definition.

Format

```
[mh="manager-host-name";]
[mu=manager-unit-name;]
```

Parameters

mh="*manager-host-name*";

Define the name of the JP1/AJS3 - Manager host.

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

mu=*manager-unit-name*;

Define the full-path unit name of a manager.

You can set a character string of 1 to 961 bytes.

4.2.6 UNIX/PC job definition

This paragraph explains how to specify a definition for a UNIX/PC job.

The following gives the format of, and the parameters for a UNIX/PC job definition.

Format

```
[te="command-text";]
[sc="script-file-name";]
[prm="parameter";]
[wkp="work-path-name";]
[ev="environmental-variable-file-name";]
[env="environment-variable";]...
[si="standard-input-file-name";]
[so="standard-output-file-name";]
[se="standard-error-output-file-name";]
[soa={new|add};]
[sea={new|add};]
[etm=n;]
[fd=time-required-for-execution;]
[pr=n;]
[ex="execution-agent-name";]
[un="target-user-name";]
[jd={nm|ab|cod|mdf|exf};]
[wth=n;]
[tho=n;]
[jdf="end-judgment-file-name";]
[abr={y|n};]
[rjs=lower-limit-of-return-codes-to-be-retried-automatically;]
[rje=upper-limit-of-return-codes-to-be-retried-automatically;]
[rec=maximum-number-of-retry-executions;]
[rei=retry-interval;]
[ts1="transfer-source-file-name-1";]
[td1="transfer-destination-file-name-1";]
[top1={sav|del};]
[ts2="transfer-source-file-name-2";]
[td2="transfer-destination-file-name-2";]
[top2={sav|del};]
[ts3="transfer-source-file-name-3";]
[td3="transfer-destination-file-name-3";]
[top3={sav|del};]
[ts4="transfer-source-file-name-4";]
[td4="transfer-destination-file-name-4";]
[top4={sav|del};]
```

```
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

te="*command-text*";

Define command text. You can set a character string of 1 to 1,023 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

The command text can contain macro variables. In that case, you can set a character string of 1 to 1,023 bytes using the "*macro-variable-name*:*passing-information-name*" format. Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

sc="*script-file-name*";

For the Unix job, define a script file name on the agent host where the job is executed. For the PC job, define an execution file name on the agent host.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

The file name can contain macro variables. In that case, you can set a character string of 1 to 511 bytes using the "*macro-variable-name*:*passing-information-name*" format. Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

prm="*parameter*";

Define a parameter for the target file.

You can set a character string of 1 to 1,023 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

The parameter can contain macro variables. In that case, you can set a character string of 1 to 1,023 bytes using the "*macro-variable-name*:*passing-information-name*" format. Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

wkp="*work-path-name*";

Define the work path name using a full path name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

ev="*environment-variable-file-name*";

Define the environmental variable file name for the agent host.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

env="*environment-variable*";

Define an environment variable using the "*environment-variable-name*=*value*" format.

You can set a character string of 1 to 20,479 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

The environment variable can contain macro variables. In that case, you can set a character string of 1 to 20,479 bytes using the "*macro-variable-name*:*passing-information-name*" format. Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

The environment variable can contain macro variables. In that case, you can set a character string of 1 to 20,479 bytes using the "?AJS2*xxxxxxxxx*?:*passing-information-name*" format. Note that you can set a character string of 1 to 64 bytes in the ?AJS2*xxxxxxxxx*? part; only uppercase alphabetic characters and periods (.) can be used in the *xxxxxxxxx* part.

si="*standard-input-file-name*";

Define a file name for standard input on the agent host where the job is executed.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

so="*standard-output-file-name*";

Define a file name for standard output on the agent host where the job is executed.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), by specifying $JP1AJS2_JPQSTDOUTTEMP$ you can output the standard output file as a temporary file.

You can also specify a macro variable if the job has the queuing attribute (jty=q).

se="*standard-error-output-file-name*";

Define a file name for standard error output on the agent host where the job is executed.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

soa={new|add};

Define an append option for a standard output file name. The default is new. This parameter is valid only when the standard output file name is specified in the so parameter.

- new: Creates a new file.
- add: Adds information to an existing file.

sea={new|add};

Define an append option for a standard error output file name. The default is new. This parameter is valid only when the name of the standard error output file is specified in the se parameter.

- new: Creates a new file.
- add: Adds information to an existing file.

etm=*n*;

Define the time-out period using the relative minutes from the start time.

You can set 1 to 1,440 minutes.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

pr=*n*;

Define the priority of job execution.

You can set 1 to 5. The lowest priority of execution is 1, while the highest priority is 5. The default value depends on the definition of the upper-level jobnets. If this parameter is not specified, and if the pr parameter and the ni parameter of all upper-level jobnets of the job are not specified, the priority of the job is assumed to be the value specified for the DEFAULTPRIORITY environment setting parameter (If no value is specified for the DEFAULTPRIORITY environment setting parameter, then the priority is assumed to be 1). For details about the DEFAULTPRIORITY environment setting parameter, see *2.2.2(106) DEFAULTPRIORITY* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

ex="*execution-agent-name*";

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

un="*execution-user-name*";

Define the name of the OS user responsible for executing a job in the agent host.

You can set a character string of 1 to 63 bytes. You cannot specify a space character in the user name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

jd={nm|ab|cod|mdf|exf};

Define the type of end judgment. The default is cod.

If you specify a value other than cod, you cannot specify the rjs, rje, rec, and rei parameters. In addition, you cannot specify y for the abr parameter. If you specify y, unit creation fails.

- nm: Always assumes a normal end.

- ab: Always assumes an abnormal end.
- cod: Normal end if the return code is below a set value
- mdf: Normal end if the file is refreshed during the period between the start and the end of job execution
- exf: Normal end if a file is created at the end of job execution

wth=*n*;

Define the warning threshold.

You can set 0 to 2,147,483,647.

tho=*n*;

Define the abnormal threshold.

You can set 0 to 2,147,483,647. The default is 0.

jdf="*end-judgment-file-name*";

Define an end judgment file name on the agent host for job execution.

You can set a character string of 1 to 511 bytes. You can use either an absolute or relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

abr={y|n};

Define whether retrying on an abnormal end is enabled. If you omit this option, the system assumes n.

You can specify y only when you specify cod for the jd parameter.

- y: Automatic retries are performed if an abnormal end occurs.
- n: Automatic retries are not performed if an abnormal end occurs.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rjs= *lower-limit-of-return-codes-to-be-retried-automatically*;

Define the lower limit of the return codes to be retried automatically if an abnormal end occurs.

This option can be specified only if automatic retrying is performed when an abnormal end occurs (y is specified for the abr parameter).

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold (the tho parameter) and a value greater than the upper limit on return codes to be automatically retried (the rie parameter), unit creation fails.

If this option is omitted, a lower limit for the return codes to be retried automatically is not defined, and *abnormal-threshold* + 1 is assumed when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rje=*upper-limit-of-return-codes-to-be-retried-automatically*;

Define the upper limit of the return codes to be retried automatically if an abnormal end occurs.

This option can be specified only if automatic retrying is performed when an abnormal end occurs (y is specified for the abr parameter).

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold (the tho parameter) and a value smaller than the lower limit of the return codes to be retried automatically (the ris parameter), unit creation fails.

If this option is omitted, an upper limit of the return codes to be automatically retried is not defined, and the maximum value (4,294,967,295) is assumed when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`rec=`*maximum-number-of-retry-executions*`;`

Define the maximum number of retry executions only when automatic retry is performed for an abnormal end (`y` is specified for the `abr` parameter).

You can specify a value from 1 to 12 (times). If you omit this option, the system assumes `1`.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`rei=`*retry-interval*`;`

Define the retry interval only when automatic retrying is performed for an abnormal end (`y` is specified for the `abr` parameter).

You can specify a value from 1 to 10 (minutes). If you omit this option, the system assumes `1`.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ts1="`*transfer-source-file-name-1*`";`

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`td1="`*transfer-destination-file-name-1*`";`

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes. The default is the `$JP1AJS2_JPQTEMP`*xx*`$` variable, where the *xx* part refers to the number of the transfer file ranging from 01 to 04. If this variable is assigned to the `sc` and `prm` parameters, you can execute the job without having to be aware of the transfer destination file name. If this variable is assigned to the `sc` and `prm` parameters, you can execute the job without having to be aware of the transfer destination file name.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`top1={sav|del};`

Define the option to automatically delete the transfer destination file.

- `sav`: Saves the file.
- `del`: Deletes the file.

If you specify transfer source and destination file names with this parameter omitted, the system defaults to `sav`.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to `del`.

`ts2="`*transfer-source-file-name-2*`";`

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`td2="`*transfer-destination-file-name-2*`";`

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes. The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part refers to the number of the transfer file ranging from 01 to 04. If this variable is assigned to the sc and prm parameters, you can execute the job without having to be aware of the transfer destination file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

top2={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify transfer source and destination file names with this parameter omitted, the system defaults to sav.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to del.

ts3="*transfer-source-file-name-3*";

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

td3="*transfer-destination-file-name-3*";

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes. The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part refers to the number of the transfer file ranging from 01 to 04. If this variable is assigned to the sc and prm parameters, you can execute the job without having to be aware of the transfer destination file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

top3={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify transfer source and destination file names with this parameter omitted, the system defaults to sav.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to del.

ts4="*transfer-source-file-name-4*";

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

td4="*transfer-destination-file-name-4*";

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes. The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part refers to the number of the transfer file ranging from 01 to 04. If this variable is assigned to the sc and prm parameters, you can execute the job without having to be aware of the transfer destination file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If the job has the queuing attribute (jty=q), you can specify a macro variable.

top4={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify transfer source and destination file names with this parameter omitted, the system defaults to sav.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to del.

ha={y|n};

Define whether to suspend job execution. The default is n.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

jty={q|n};

Define whether the job has the queuing attribute. The default is q.

- q: Has the queuing attribute.
- n: Does not have the queuing attribute.

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

eun=*name-of-the-unit-whose-end-is-being-waited-for*;

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.7 QUEUE job definition

This paragraph explains how to specify a definition for a QUEUE job.

The following gives the format of, and the parameters for a QUEUE job definition.

Format

```
[qu="queue-name";]
[qm="host-name";]
[req="job-name";]
[sc="script-file-name";]
[prm="parameter";]
[fd=time-required-for-execution;]
[pr=n;]
[jd={nm|ab|cod};]
[wth=n;]
[tho=n;]
[abr={y|n};]
[rjs=lower-limit-of-return-codes-to-be-retried-automatically;]
[rje=upper-limit-of-return-codes-to-be-retried-automatically;]
[rec=maximum-number-of-retry-executions;]
[rei=retry-interval;]
[ts1="transfer-source-file-name-1";]
[td1="transfer-destination-file-name-1";]
[ts2="transfer-source-file-name-2";]
[td2="transfer-destination-file-name-2";]
[ts3="transfer-source-file-name-3";]
```

```
[td3="transfer-destination-file-name-3";]
[ts4="transfer-source-file-name-4";]
[td4="transfer-destination-file-name-4";]
[ha={y|n};]
[eu={ent|def};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

qu="*queue-name*";

Define the name of the queue to which a QUEUE job is submitted.

You can set a character string of 1 to 63 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

qm="*host-name*";

Define the JP1/AJS3 - Manager host name, JP1/NQSEXEC host name and the JP1/OJE for VOS3 host name for linkage. The default is the local host name. You can set a character string of 1 to 255 bytes. If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

req="*job-name*";

Define a job name to submit a QUEUE job.

You can set a character string of 1 to 63 bytes. The default is the unit name of a QUEUE job.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

sc="*script-file-name*";

Define an execution file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

prm="*parameter*";

Define a parameter for the execution file.

You can set a character string of 1 to 1,023 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

pr=n;

Define the priority of job execution.

You can set 1 to 5. The lowest priority of execution is 1, while the highest priority is 5. The default depends on the definition of the upper-level jobnet. If this parameter is not specified, and if the pr parameter and the ni parameter of all upper-level jobnets of the job are not specified, the priority of the job is assumed to be the value specified for the DEFAULTPRIORITY environment setting parameter (If no value is specified for the DEFAULTPRIORITY environment setting parameter, then the priority is assumed to be 1). For details about the DEFAULTPRIORITY environment setting parameter, see *2.2.2(106) DEFAULTPRIORITY* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

jd={nm|ab|cod};

Define the type of end judgment. The default is cod.

If you specify a value other than cod, you cannot specify y for the abr parameter. If you specify y, the KAVS0674-E message is output, and the unit cannot be created.

- nm: Always assumes a normal end.
- ab: Always assumes an abnormal end.
- cod: Normal end if the return code is below a set value.

wth=*n*;

Define the threshold for the end with warning.

You can set 0 to 2,147, 483, 647.

tho=*n*;

Define the threshold for the abnormal end.

You can set 0 to 2,147, 483, 647. The default is 0.

abr={y|n};

Define whether retrying on an abnormal end is enabled. If you omit this option, the system assumes n.

You can specify y only when you specify cod for the jd parameter.

- y: Automatic retries are performed if an abnormal end occurs.
- n: Automatic retries are not performed if an abnormal end occurs.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rjs=*lower-limit-of-return-codes-to-be-retried-automatically*;

Define the lower limit of the return codes to be retried automatically when automatic retrying is performed for an abnormal end.

You can define the lower limit only when you specify y for the abr parameter.

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold and a value greater than the upper limit of the return codes to be retried automatically, the KAVS0668-E message is output, and the unit cannot be created.

If you omit this option, the system assumes *abnormal-threshold* + 1 when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rje=*upper-limit-of-return-codes-to-be-retried-automatically*;

Define the upper limit of the return codes to be retried automatically if automatic retrying is performed for an abnormal end.

You can define the upper limit only when you specify y for the abr parameter.

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold and a value smaller than the lower limit of the return codes to be retried automatically, the KAVS0668-E message is output, and unit creation fails.

If you omit this option, the system assumes the maximum value (4,294,967,295) when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`rec=`*maximum-number-of-retry-executions*`;`

Define the maximum number of retry executions when automatic retrying is performed for an abnormal end.

You can specify this parameter only when you specify `y` for the `abr` parameter.

You can specify a value from 1 to 12 (times). If you omit this option, the system assumes `1`.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`rei=`*retry-interval*`;`

Define the retry interval when automatic retrying is performed for an abnormal end.

You can specify this parameter only when you specify `y` for the `abr` parameter.

You can specify a value from 1 to 10 (minutes). If you omit this option, the system assumes `1`.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ts1="`*transfer-source-file-name-1*`";`

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

You can specify a macro variable.

`td1="`*transfer-destination-file-name-1*`";`

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

You can specify a macro variable.

`ts2="`*transfer-source-file-name-2*`";`

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

You can specify a macro variable.

`td2="`*transfer-destination-file-name-2*`";`

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

You can specify a macro variable.

`ts3="`*transfer-source-file-name-3*`";`

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

td3="*transfer-destination-file-name-3*";

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

ts4="*transfer-source-file-name-4*";

Define a full-path transfer source file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

td4="*transfer-destination-file-name-4*";

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

ha={y|n};

Define whether to suspend job execution. The default is n.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.8 Judgment job definition

This paragraph explains how to specify a judgment job definition.

The following gives the format of, and the parameters for a judgment job definition.

Format

```
[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};]
[ejc=judgment-return-code;]
[ejl=lower-limit-of-judgment-return-codes;]
[ejh=upper-limit-of-judgment-return-codes;]
[ejf="end-judgment-file-name";]
[ejv=variable-name;]
[ejt="judgment-value-for-variable (string)";]
[eji=judgment-value-for-variable (numeric);]
[ejs=lower-limit-judgment-value-for-variable_(numeric);]
[ejg=upper-limit-judgment-value-for-variable_(numeric);]
[ejm={gt|ge};]
[eju={lt|le};]
[ha={y|n};]
```

Parameters

`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};`

Define judgment conditions for comparing the return code of the preceding job with the reference value. You can specify only one judgment condition. The default is `gt`.

For this parameter, if the database configuration for JP1/AJS3 is the compatible ISAM configuration, you cannot specify `ri`, `ro`, `vri`, `vro`, and `spn`.

- `gt`: The return code of the preceding job is greater than the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `ge`: The return code of the preceding job is equal to or greater than the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `lt`: The return code of the preceding job is smaller than the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `le`: The return code of the preceding job is equal to or smaller than the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `eq`: The return code of the preceding job is equal to the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `ne`: The return code of the preceding job is not equal to the reference value. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`.
- `ri`: The return code of the preceding job is within the judgment value range. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`. You must also specify the `ejl` and `ejh` options. If necessary, specify `ejm` and `eju`.
- `ro`: The return code of the preceding job is outside the judgment value range. You cannot specify this option together with `ejf="`*end-judgment-file-name*`";`. You must also specify the `ejl` and `ejh` options. If necessary, specify `ejm` and `eju`.
- `ef`: A file is created. You cannot specify this option together with `ejc=`*judgment-return-code*`;`.
- `nf`: No file is created. You cannot specify this option together with `ejc=`*judgment-return-code*`;`.
- `vgt`: The value of the specified variable is greater than the judgment value. `eji` is treated as a numerical value.
- `vge`: The value of the specified variable is equal to or greater than the judgment value. `eji` is treated as a numerical value.
- `vlt`: The value of the specified variable is smaller than the judgment value. `eji` is treated as a numerical value.
- `vle`: The value of the specified variable is equal to or smaller than the judgment value. `eji` is treated as a numerical value.
- `veq`: The value of the specified variable is equal to the judgment value. `eji` is treated as a numerical value.
- `vne`: The value of the specified variable is not equal to the judgment value. `eji` is treated as a numerical value.
- `vri`: The specified variable value is within the judgment value range. `ejs` and `ejg` are treated as numeric values. You must also specify `ejs` and `ejg`. If necessary, specify `ejm` and `eju`.
- `vro`: The specified variable value is outside the judgment value range. `ejs` and `ejg` are treated as numeric values. You must also specify `ejs` and `ejg`. If necessary, specify `ejm` and `eju`.

- `sce`: The value of the specified variable is equal to the judgment value. `ejt` is treated as a character string.
- `spe`: The value of the specified variable contains the judgment value. `ejt` is treated as a character string.
- `sne`: The value of the specified variable is not equal to the judgment value. `ejt` is treated as a character string.
- `spn`: The value of the specified variable does not contain the judgment value. `ejt` is treated as a character string. You must also specify `ejv` and `ejt`.
- `snn`: There is a value for the specified variable. `ejt` is not processed.
- `snl`: There is no value for the specified variable. `ejt` is not processed.

`ejc=`*judgment-return-code*`;`

Define the judgment return code for judgment. The default value is `0`.

You can set 0 to 4,294,967,295.

This parameter takes effect if you specify `gt`, `ge`, `lt`, `le`, `eq`, or `ne` for the `ej` parameter. If you specify another value, this parameter does not take effect.

`ejl=`*lower-limit-judgment-return-code*`;`

Define the lower limit judgment return code used in making a judgment.

You can specify a value from 0 to 4,294,967,295. If there is no integer value in the range used to judge the return code from the lower limit judgment return code (`ejl` parameter) and the boundary condition (`ejm` parameter) to the upper limit judgment return code (`ejh` parameter) and the boundary condition (`eju` parameter), an error occurs.

If you specify `ri` or `ro` for the `ej` parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

If the return code is a negative value, judgment can be performed by specifying a value that converts to an unsigned integer. For example, `-1` is treated as `4,294,967,295` in Windows, and as `255` in UNIX. Note, however, that if a negative number in an return code is converted to an unsigned integer, it falls within the range from 2,147,483,648 to 4,294,967,295. Accordingly, if the lower limit of the return code is a negative value and the upper limit is a positive value, the range cannot be specified.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ejh=`*upper-limit-judgment-return-code*`;`

Define the upper limit judgment return code used in making a judgment.

You can specify a value from 0 to 4,294,967,295. If there is no integer value in the range used to judge the return code from the lower limit judgment return code (`ejl` parameter) and the boundary condition (`ejm` parameter) to the upper limit judgment return code (`ejh` parameter) and the boundary condition (`eju` parameter), an error occurs.

If you specify `ri` or `ro` for the `ej` parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

If the return code is a negative value, judgment can be performed by specifying a value that converts to an unsigned integer. For example, `-1` is treated as `4,294,967,295` in Windows, and as `255` in UNIX. Note, however, that if a negative number in an return code is converted to an unsigned integer, it falls within the range from 2,147,483,648 to 4,294,967,295. Accordingly, if the lower limit of the return code is a negative value and the upper limit is a positive value, the range cannot be specified.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ejf="`*end-judgment-file-name*`";`

Define the file name of a file subject to end judgment.

You can set a character string of 1 to 260 bytes. This parameter takes effect when `ef` or `nf` is specified for the `ej` parameter. If you specify another value, this parameter does not take effect.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

ejv=*variable-name*;

Using the ?AJS2*xxxxx*? format, specify the macro variable name specified in the preceding job. If you specify vgt, vge, vlt, vle, veq, vne, vri, vro, sce, spe, sne, spn, snn, or snl for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

The *xxxxx* string in the variable name can contain only upper-case alphabetic characters, numeric characters, and periods (.).

You can specify a string of 1 to 64 bytes as the macro variable name.

ejt="*judgment-value-for-variable (string)*";

Specify the judgment value to be used as the judgment criterion by using a string of up to 511 bytes.

If you specify sce, spe, sne, or spn for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

eji=*judgment-value-for-variable (numeric)*;

Specify the judgment value to be used as the judgment criterion by using a numerical value ranging from 0 to 2,147,483,647. The default value is 0.

If you specify vgt, vge, vlt, vle, veq, or vne for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

ejs=*lower-limit-judgment-value-for-variable_(numeric)*;

Specify a numeric value from 0 to 2,147,483,647 as the lower limit judgment value used in making a variable (numeric) judgment. If there is no integer value in the range used to judge the variable (numeric) judgment value from the lower limit judgment value (ejs parameter) and the boundary condition (ejm parameter) to the upper limit judgment value (ejg parameter) and the boundary condition (eju parameter), an error occurs.

If you specify vri or vro for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ejg=*upper-limit-judgment-value-for-variable_(numeric)*;

Specify a numeric value from 0 to 2,147,483,647 as the upper limit judgment value used in making a variable (numeric) judgment. If there is no integer value in the range used to judge the variable (numeric) judgment value from the lower limit judgment value (ejs parameter) and the boundary condition (ejm parameter) to the upper limit judgment value (ejg parameter) and the boundary condition (eju parameter), an error occurs.

If you specify vri or vro for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ejm={gt|ge};

Define the boundary conditions used to define the lower limit judgment return code (the ejl parameter) or the lower limit judgment value (the ejs parameter) for variables (numeric). If you omit this option, the system assumes ge.

If you specify ri, ro, vri, or vro for the ej parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

- gt

  Indicates that the return code of the preceding job or the variable judgment numeric value is greater than the judgment value.

- ge

Indicates that the return code of the preceding job or the variable judgment numeric value is equal to or greater than the judgment value.

`eju={lt|le};`

Define the boundary conditions used to define the upper limit judgment return code (the `ejh` parameter) or the upper limit judgment value (the `ejg` parameter) for variables (numeric). If you omit this option, the system assumes `le`.

If you specify `ri`, `ro`, `vri`, or `vro` for the `ej` parameter, this parameter takes effect. If you specify another value, this parameter does not take effect.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

- `lt`

  Indicates that the return code of the preceding job or the variable judgment numeric value is smaller than the judgment value.

- `le`

  Indicates that the return code of the preceding job or the variable judgment numeric value is equal to or smaller than the judgment value.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

4.2.9 Job definition for monitoring JP1 event reception

This paragraph explains how to specify a job definition for monitoring JP1 event reception.

The following gives the format of, and the parameters for a job definition for monitoring JP1 event reception.

Format

```
[evwid=event-ID;]
[evusr="event-issue-source-user-name";]
[evgrp="event-issue-source-group-name";]
[evhst="event-issue-source-host-name";]
[evipa=event-issue-source-IP-address;]
[evwms="message";]
[evdet="detailed-event-information";]
[evwsv=em[:al[:cr[:er[:wr[:no[:in[:db]]]]]]];]
[evwfr=optional-extended-attribute-name:"value";]
[evtmc={n|a|n:"file-name"|a:"file-name"
     |d:"file-name"|b:"file-name"};]
[evuid=event-issue-source-user-ID;]
[evgid=event-issue-source-group-ID;]
[evpid=event-issue-source-process-ID;]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[evesc={no|minutes};]
[ets={kl|nr|wr|an};]
```

```
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`evwid=`*event-ID*`;`

Define the event ID of an event to be received.

You can set hexadecimal values of 00000000:00000000 to FFFFFFFF: FFFFFFFF.

`evusr="`*event-issue-source-user-name*`";`

Define the user name of the event issue source in the basic information on an event to be received.

You can set a character string of 1 to 20 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the user name.

`evgrp="`*event-issue-source-group-name*`";`

Define the group name of the event issue source in the basic information on an event to be received.

You can set a character string of 1 to 20 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the group name.

`evhst="`*event-issue-source-host-name*`";`

Define the host name of the event issue source in the basic information about an event to be received.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the host name.

You can also specify a macro variable.

`evipa=`*event-issue-source-IP-address*`;`

Define the IP address of the event issue source in the basic information about an event to be received.

You can specify 0.0.0.0 to 255.255.255.255 using the *XXX.YYY.xxx.yyy* format. You can specify 0 to 255 in each of the *XXX*, *YYY*, *xxx*, and *yyy* parts.

`evwms="`*message*`";`

Define a character string that is to be compared with the message part of an event received.

You can set a character string of 1 to 1,024 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the message.

`evdet="`*detailed-event-information*`";`

Define a character string that is to be compared with the detailed information part of an event received.

You can set a character string of 1 to 1,024 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the detailed information.

`evwsv=em[:al[:cr[:er[:wr[:no[:in[:db]]]]]]];`

Define the event level of the extended attribute of an event to be received.

- `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.

`evwfr=`*optional-extended-attribute-name*`:"`*value*`";`

If you have set an optional attribute name or value for the extended attribute of an event to be received, define the optional extended attribute name in the format of `evwfr=`*optional extended attribute name*`:"`*value*`"`.

You can set a character string of 1 to 2,048 bytes. You can set multiple values. (You can set up to 2,048 bytes of multiple values in the format of `evwfr=`*optional-extended-attribute-name*`:"`*value*`";`.)

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

Note that you can use regular expressions and macro variables in the optional extended attribute name.

`evtmc={n|a|n:"`*file-name*`"|a:"`*file-name*`"|d:"`*file-name*`"|b:"`*file-name*`"};`

Define conditions on end judgment. The default is `n`.

- `n`: Always assumes a normal end.
- `a`: Always assumes an abnormal end.
- `n:"`*file-name*`"`: Normal end if the message matches the contents of a specified file
- `a:"`*file-name*`"`: Abnormal end if the message matches the contents of a specified file
- `d:"`*file-name*`"`: Normal end if the detailed information matches the contents of a specified file
- `b:"`*file-name*`"`: Abnormal end if the detailed information matches the contents of a specified file

For the file name, You can set a character string of 1 to 256 bytes.

`evuid=`*event-issue-source-user-ID*`;`

Define the user ID of the event issue source in the basic information about an event to be received.

You can set a value of -1 to 9,999,999,999 bytes.

`evgid=`*event-issue-source-group-ID*`;`

Define the group ID of the event issue source in the basic information about an event to be received.

You can set a value of -1 to 9,999,999,999 bytes.

`evpid=`*event-issue-source-process-ID*`;`

Define the process ID of the event issue source in the basic information about an event to be received.

You can set a value of -1 to 9,999,999,999 bytes.

`jpoif=`*macro-variable-name*`:`*passing-information-name*`;`

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format `?AJS2`*xxxxx*`?`. In the *xxxxx* part, you can use uppercase alphabetic characters (`A` to `Z`), numerals (`0` to `9`), and periods (`.`) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;" format.

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

etm=n;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

You can specify a macro variable.

ha={y|n};

Define whether to suspend job execution. The default is n. This parameter is invalid for a job within the start condition.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent. This parameter is ignored in an event job.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

evesc={no|*minutes*};

Define whether, immediately after the JP1 event reception monitoring job is executed (before starting monitoring for a JP1 event) any previous JP1 events still need to be monitored for reception. The default is no.

- no: Does not search for previous JP1 events.
- *minutes*: Searches for JP1 events that occurred from the time point earlier by the specified minutes than the time when the JP1 event reception monitoring job was executed. You can specify a decimal value between 1 and 720 (minutes).

ets={kl|nr|wr|an};

Define the state of the event job after the execution time-out period elapses. The default is kl. This parameter is invalid for a job within the start condition.

- kl: Killed
- nr: Ended normally
- wr: Ended with warning
- an: Ended abnormally

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

Cautionary note

Suppose that you want to pass on the information received in an event job to the parameters of a standard job or action job. If the passing information contains a double quotation mark ("), you must prefix the \ sign to the passing information. If you do not prefix the \ sign, when the received information is inherited, a problem occurs such as the double quotation mark being ignored. You can avoid this problem by setting the option that enables any data containing a double quotation mark to be considered as inheritance information.

For the specific settings, see the following appropriate sections, depending on your OS. On a Windows host, see *6.3.4 Passing event data containing double quotation marks* in the *Job Management Partner 1/Automatic Job*

Management System 3 Configuration Guide 1. On a UNIX host, see *15.3.4 Passing event data containing double quotation marks* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

4.2.10 File monitoring job definition

This paragraph explains how to specify a file monitoring job definition.

The following gives the format of, and the parameters for a file monitoring job definition.

Format

```
[flwf="name-of-file-to-be-monitored";]
[flwc=c[:d[:{s|m}]];]
[flwi=monitoring-interval;]
[flco={y|n};]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`flwf="`*name-of-file-to-be-monitored*`";`

Define the name of a file to be monitored.

You can set a character string of 1 to 255 bytes. You can specify a full-path file name or wildcard characters using the wildcard (*). However, you cannot use the wildcard for wildcard characters when you specify 1 to 9 as the monitor interval in the `flwi` parameter.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`flwc=c[:d[:{s|m}]];`

Define the monitoring conditions. You can specify multiple items. However, you cannot specify s together with `m`. The default is `c`.

- `c`: Monitors file creation.
- `d`: Monitors file deletion.
- `s`: Monitors file resizing.
- `m`: Monitors for a change in the writing time of the last file.

`flwi=`*monitoring-interval;*

Define a time interval to monitor a file.

You can set 1 to 600 (seconds). However you cannot use the wildcard for wildcard characters when you specify a value of 1 to 9 as the monitor interval in the `flwi` parameter. The default is `60`.

flco={y|n};

Defines whether or not to make monitor conditions true if c is specified in the flwc parameter and if the file to be monitored exists when the file monitoring job is executed. You can specify this parameter only when c is specified in the flwc parameter. The default is n.

- y: Makes the monitor conditions true, thus terminating the job normally.
- n: Monitors how a monitor target file is created after the file monitoring job is executed.

jpoif=*macro-variable-name*:*passing-information-name*;

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;" format.

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

You can specify a macro variable.

ha={y|n};

Define whether to suspend job execution. The default is n. This parameter is invalid for a job within the start condition.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent. This parameter is ignored in an event job.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

ets={kl|nr|wr|an};

Define the state of the event job after the execution time-out period elapses. The default is kl. This parameter is invalid for a job within the start condition.

- kl: Killed
- nr: Ended normally
- wr: Ended with warning

- an: Ended abnormally

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={and|or};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

eun=*name-of-the-unit-whose-end-is-being-waited-for*;

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ega={exec|execdeffer|none};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes none.

- exec: Start executing.
- execdeffer: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- none: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

uem={y|n};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.11 Email reception monitoring job definition

This paragraph explains how to specify an email reception monitoring job definition.

The following gives the format of, and the parameters for an email reception monitoring job definition.

Format

```
[pfm={u|p};]
[mlprf="profile-name";]
[mladr="sender";]
[mlsbj="subject";]
[mltx="text";]
[mlsav={y|n};]
[mllst="received-email-list";]
[mlstx="name-of-text-file";]
[mlsfd="name-of-folder-to-save-attached-file";]
[mlafl="name-of-list-file";]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`pfm={u|p};`

Specify email reception definitions for each platform. The default is `p`.

- `p`: Provides definitions for email reception in the Windows environment.
- `u`: Provides definitions for email reception in the UNIX environment.

`mlprf="`*profile-name*`";`

Specify one of the profile names set in the `ProfileName1` to `ProfileName4` environment setting parameters on the agent host on which the email reception monitoring job is executed.

This parameter is valid only if you specify `pfm=p;`. Note also that this is a required parameter if you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

For details about the environment setting parameters, 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*.

`mladr="`*sender*`";`

Define the sender of email.

You can set a character string of 1 to 256 bytes. You can specify up to 20 sender names at the same time in the format of `mladr="`*sender*`";`.

You cannot omit all of `mladr="`*sender*`";`, `mlsbj="`*subject*`";` and `mltxt="`*text*`";`. You must define at least one of the items.

If you want to use a double quotation mark (`"`) or a number sign (`#`) in the sender, prefix the character by `#`. That is, use `#"` instead of " and use `##` instead of `#`.

`mlsbj="`*subject*`";`

Define the subject of received email.

You can set a character string of 1 to 256 bytes. You can specify up to 20 subjects at the same time in the format of `mlsbj="`*subject*`";`.

You cannot specify all of `mladr="`*sender*`";`, `mlsbj="`*subject*`";` and `mltxt="`*text*`";`. You must define at least one of the items.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

`mltxt="`*text*`";`

Define the text of received email.

You can set a character string of 1 to 512 bytes. You can specify up to 20 messages at the same time in the format of `mltxt="`*text*`";`.

You cannot specify all of `mladr="`*sender*`";`, `mlsbj="`*subject*`";` and `mltxt="`*text*`";`. You must define at least one of the items.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

If a UNIX host performs email reception monitoring, do not enter a line feed in the text. The text containing a line feed becomes inconsistent with the email monitoring conditions, causing the system to remain in the email monitoring status.

`mlsav={y|n};`

Define whether to save received emails. The default is `y`. This parameter is valid only when you specify `pfm=u;`.

- `y`: Saves emails.
- `n`: Does not save emails.

`mllst="`*received-email-list*`";`

When creating a list of emails which match monitoring conditions, define a received-email list name. This parameter is valid only when you specify `pfm=u;`.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

`mlstx="`*text-file-name*`";`

When saving received email text in a file, specify a file name. This parameter is valid only when you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

`mlsfd="`*name-of-folder-to-save-attached file*`";`

Define the folder name of a folder to save the attached file of received email. This parameter is valid only when you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes. Specify a full-path folder name.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

`mlafl="`*list-file-name*`";`

Define the file name of a file to list the received attached file names for received email. This parameter is valid only when you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

jpoif=*macro-variable-name*:*passing-information-name*;

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;" format.

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

You can specify a macro variable.

ha={y|n};

Define whether to suspend job execution. The default is n. This parameter is invalid for a job within the start condition.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent. This parameter is ignored in an event job.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

ets={kl|nr|wr|an};

Define the state of the event job after the execution time-out period elapses. The default is kl. This parameter is invalid for a job within the start condition.

- kl: Killed
- nr: Ended normally
- wr: Ended with warning
- an: Ended abnormally

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.12 Job definition for monitoring message-queue message reception

This paragraph explains how to specify a job definition for monitoring reception of messages sent from a message queue.

The following gives the format of, and the parameters for a message-queue message reception monitoring job definition.

Format

```
[mqcor=correlation-ID;]
[mqque=message-input-queue-name;]
[mqdsc=message-ID;]
[mqmdl=model-queue-name;]
[mqsfn="message-storage-file-name";]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

mqcor=*correlation-ID*;

Define the correlation ID of a received message.

You can set a character string of 1 to 24 bytes. You can, however, set only uppercase alphanumeric characters.

mqque=*message-input-queue-name*;

Define the queue name of a queue to monitor message reception.

You can set a character string of 1 to 48 bytes. Specify a queue name using an MQ character string. When linking MQSeries, specify the name of a queue that exists in the default queue manager.

mqdsc=*message-ID*;

Define the message ID of a received message.

You can set a character string of 1 to 24 bytes. You can, however, specify only uppercase alphanumeric characters.

mqmdl=*model-queue-name*;

Define the model queue name of a queue to monitor message reception.

You can set a character string of 1 to 48 bytes. Specify a queue name using an MQ character string. When linking MQSeries, specify the name of a queue that exists in the default queue manager.

mqsfn="*message-storage-file-name*";

Define the name of a file that stores messages matching monitoring conditions.

You can set a character string of 1 to 256 bytes. The file name must be the full path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

jpoif=*macro-variable-name*:*passing-information-name*;

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;".

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

ha={y|n};

Define whether to suspend job execution. The default is n. This parameter is invalid for a job within the start condition.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent. This parameter is ignored in an event job.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

ets={kl|nr|wr|an};

Define the state of the event job after the execution time-out period elapses. The default is kl. This parameter is invalid for a job within the start condition.

- kl: Killed
- nr: Ended normally
- wr: Ended with warning
- an: Ended abnormally

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.13 MSMQ message reception monitoring job definition

This paragraph explains how to specify a job definition for monitoring MSMQ message reception.

The following gives the format of, and the parameters for an MSMQ message reception monitoring job definition.

Format

```
[msqpt="path-name";]
[msrer=correlation-ID;]
[mslbl="message-label";]
[msapl=application-information;]
[mssvf="message-storage-file-name";]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
```

```
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`msqpt="`*path-name*`";`

Define the queue path name of a queue to monitor messages.

You can set a character string of 1 to 259 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

`msrer=`*correlation-ID*`;`

Define the correlation ID of a message to be monitored.

You can set a character string of 1 to 20 bytes. Note that you can specify only uppercase alphabetic and numeric characters.

`mslbl="`*message-label*`";`

Define the message label of a message to be monitored.

You can set a character string of 1 to 249 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

`msapl=`*application-information*`;`

Define application information about a message to be monitored.

You can specify any hexadecimal value ranging from 0 to FFFFFFFF.

`mssvf="`*message-storage-file-name*`";`

Define the name of a file that stores messages matching monitoring conditions.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

`jpoif=`*macro-variable-name*`:`*passing-information-name*`;`

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;".

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

`etm=`*n*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

`ex="`*execution-agent-name*`";`

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`. This parameter is invalid for a job within the start condition.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`. This parameter is ignored in an event job.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`ets={kl|nr|wr|an};`

Define the state of the event job after the execution time-out period elapses. The default is `kl`. This parameter is invalid for a job within the start condition.

- `kl`: Killed
- `nr`: Ended normally
- `wr`: Ended with warning
- `an`: Ended abnormally

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.14 Log-file monitoring job definition

This paragraph explains how to specify a log-file monitoring job definition.

The following gives the format of and the parameters for a log-file monitoring job definition.

Format

```
[lftpd=[!]"trap-data-1"[:[!]"trap-data-2"...];]...
[lffnm="log-file-name";]
[lfdft={s|s2|w1|w2};]
[lfrft={v:'[\]delimiter'|f:record-length};]
[lfhds={l:header-row-count|s:header-size};]
[lfmks=[!]"data-1-other-than-log-information"
     [: [!]"data-2-other-than-log-information"...];]
[lfsiv=file-monitoring-interval;]
[lfmxl=maximum-event-data-length;]
[lfsrc={y|n};]
[lfcre={y|n};]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`lftpd=[!]"`*trap-data-1*`"[: [!]"`*trap-data-2*`"...];`

Define data in a log file to be trapped.

You can set multiple pieces of trap data in a single `lfptd` parameter (based on AND conditions). You can also set more than one `lfptd` parameter (based on OR conditions). You can set up to 2,048 bytes of pieces of data.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

Note that you can use a regular expression to specify trap data.

`lffnm="`*log-file-name*`";`

Specify the file name that is to be monitored.

You can set a character string of 1 to 256 bytes. You can set up to eight log file names at one time in the format of `lffnm="`*log-file-name*`"`.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

You can specify a macro variable.

`lfdft={s|s2|w1|w2};`

Define the output format of a log file to be trapped. The default is `s`.

- `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.)
- `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.)

  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.)

`lfrft={v:'[\]`*delimiter*`'|f:`*record-format*`};`

Define a record format for log data to be trapped. The default is `v:'\n'`.

- `v:'[\]`*delimiter*`'`: Delimits rows by a variable-length record. You can set a character string of 1 byte for a delimiter.
- `f:`*record-length*: Delimits rows by a fixed-length record. You can set a character string of 1 to 9,999,999 bytes for record length.

`lfhds={l:`*header-row-count*`|s:`*header-size*`};`

Define a header.

- `l:`*header-row-count*: If the log file to be trapped begins with a header, specify the number of header rows.

  You can set 0 to 99,999 header rows.
- `s:`*header-size*: Specify a header size if the log file to be trapped beings with a header for which you cannot specify a row count. For example, you cannot specify a row count if the format of binary data or records is different from that of a log record.

  You can set 0 to 9,999,999 bytes for a header size.

`lfmks=[!]"`*data-1-other-than-log-information*`"[:[!]"`*data-2-other-than-log-information*`"...];`

If the log file to be trapped contains data other than log information, define the data.

You can set up to 1,024 bytes of multiple data items.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify data.

OR conditions apply if you specify more than one lfmks parameter, while AND conditions apply if you specify more than one item of data in a single lfmks parameter.

lfsiv=*file-monitoring-interval*;

Define a time interval to search the log file.

You can set 1 to 86,400 seconds. The default is 10.

lfmxl=*maximum-event-log-data-length*;

Define how many top bytes are to be set as event data in one row in a specified log file to be entered.

You can set 2 to 512 bytes. The default is 512.

lfsrc={y|n};

Define whether to enter data from its top. The default is n.

- y: Enters data from its top.
- n: Does not enter data from its top.

lfcre={y|n};

Define whether to cause an error if a specified log file is missing when you have started a log file monitoring job. The default is n.

- y: Error
- n: Opens the file repeatedly until the log file is created.

jpoif=*macro-variable-name*:*passing-information-name*;

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;".

This parameter makes it possible to take over event information of subsequent PC jobs, Unix jobs, and action jobs.

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

You can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`. This parameter is invalid for a job within the start condition.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`. This parameter is ignored in an event job.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`ets={kl|nr|wr|an};`

Define the state of the event job after the execution time-out period elapses. The default is `kl`. This parameter is invalid for a job within the start condition.

- `kl`: Killed
- `nr`: Ended normally
- `wr`: Ended with warning
- `an`: Ended abnormally

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.

- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

Cautionary notes

- The log file name can also contain space characters and symbols. However, if you want to use a special character, such as a double quotation mark (`"`), as a normal character, prefix a backslash (`\`) to the special character.

  For example: `log\#"file`
- Suppose that you want to pass on (inherit) the passing information received in an event job to the parameters of a standard job or action job. If the passing information contains a double quotation mark ("), you must prefix the \ sign to the passing information. If you do not prefix the \ sign, even if the received information is inherited, a problem occurs: for example, the double quotation mark is ignored. You can avoid this problem by setting the option that enables any data containing a double quotation mark to serve as passing information as specified.

  For the specific settings, see the following sections, depending on your OS. On a Windows host, see *6.3.4 Passing event data containing double quotation marks* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*. On a UNIX host, see *15.3.4 Passing event data containing double quotation marks* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

4.2.15 Windows event-log monitoring job definition

This paragraph explains how to specify a definition for a Windows event-log monitoring job.

The following gives the format of, and the parameters for a Windows event-log monitoring job definition.

Format

```
[ntlgt={sys|sec|app|dns|dir|frs|oth};]
[ntolg="any-log-type";]
[ntevt=[v[: i[: w[: e[: s[: c[: f]]]]]]];]
[ntnsr={y|n};]
[ntsrc="source";]
[ntncl={y|n};]
[ntcls="class";]
[ntnei={y|n};]
[nteid=event-ID;]
[ntdis="explanation";]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
```

```
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`ntlgt={sys|sec|app|dns|dir|frs|oth};`

Define a log type. The default is `sys`.

- `sys`: Monitors a system log.
- `sec`: Monitors a security log.
- `app`: Monitors an application log.
- `dns`: Monitors the DNS Server log.#
- `dir`: Monitors the Directory Service log.#
- `frs`: Monitors the file reproduction service log.#
- `oth`: Monitors the log type specified as the any log type. You must specify the `ntolg` parameter together with this parameter.

#

This type can be defined only for Windows 2000.

`ntolg="`*any-log-type*`";`

Define the any log type to be monitored.

The number of characters you can specify is from 1 to 255 (bytes).

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

If you specify `oth` for the `ntlgt` parameter, but do not specify this parameter, an error occurs. If you specify a value other than `oth` for the `ntlgt` parameter, and specify this parameter, an error occurs.

`ntevt=[v[:i[:w[:e[:c[:s[:f]]]]]]];`

Define an event type. By default, all the types are assumed.

- `v`: Monitors a verbose event.
- `i`: Monitors an information event.
- `w`: Monitors a warning event.
- `e`: Monitors an error event.
- `c`: Monitors a critical event.
- `s`: Monitors a success audit event.
- `f`: Monitors a failure audit event.

`ntnsr={y|n};`

Define judgment conditions for a source to be monitored. The default is `y`.

- `y`: Monitors a specified source.
- `n`: Monitored the sources other than a specified one. This is equivalent to `NOT`.

`ntsrc="`*source*`";`

Define a source to be monitored.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

`ntncl={y|n};`

Defines judgment conditions for an event class to be monitored. The default is y.

- y: Monitors a specified class.
- n: Monitors the classes other than a specified one. This is equivalent to NOT.

`ntcls="`*class*`";`

Define an event class to be monitored.

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

If the system cannot identify the class of a Windows event, the Windows event viewer displays Others. If you want to monitor such an unclassified event, specify None instead of Others. Even if you specify a character string of Others, no monitoring conditions are applied.

`ntnei={y|n};`

Define judgment conditions for an event ID to be monitored. The default is y.

- y: Monitors a specified event ID.
- n: Monitors the IDs other than a specified event ID.

`nteid=`*event-ID*`;`

Define the event ID of an event to be monitored.

You can set 0 to 4,294,967,295.

`ntdis="`*explanation*`";`

To monitor the explanation of a specified event, define a character string for comparison.

You can set a character string of 1 to 1,024 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

Note that you can use a regular expression to specify the explanation.

`jpoif=`*macro-variable-name*`:`*passing-information-name*`;`

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format ?AJS2*xxxxx*?. In the *xxxxx* part, you can use uppercase alphabetic characters (A to Z), numerals (0 to 9), and periods (.) .

This parameter can contain up to 2,048 bytes in the "jpoif=*macro-variable-name*:*passing-information-name*;".

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

`etm=`*n*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

ex="*execution-agent-name*";

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

You can specify a macro variable.

ha={y|n};

Define whether to suspend job execution. The default is n. This parameter is invalid for a job within the start condition.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent. This parameter is ignored in an event job.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

ets={kl|nr|wr|an};

Define the state of the event job after the execution time-out period elapses. The default is kl. This parameter is invalid for a job within the start condition.

- kl: Killed
- nr: Ended normally
- wr: Ended with warning
- an: Ended abnormally

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

eun=*name-of-the-unit-whose-end-is-being-waited-for*;

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.16 Execution-interval control job definition

This paragraph explains how to specify for an execution-interval control job definition.

The following gives the format of, and the parameter for an execution-interval control job definition.

Format

```
[tmitv=wait-time;]
[etn={y|n};]
[jpoif=macro-variable-name:passing-information-name;]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[ets={kl|nr|wr|an};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`tmitv=`*wait-time*`;`

Define wait time.

You can set 1 to 1,440 minutes. The default is `10`.

`etn={y|n};`

If you define the execution-interval control job as a start condition, specify whether to complete the job immediately after it is started. If you omit this option, the system assumes `n`.

- `y`: Completes the job immediately after it is started and starts the first execution instantly.
- `n`: The job is not completed immediately after it is started. Instead, the job waits until the time specified as the wait time passes, and then starts its first execution.

You cannot specify `y` for this parameter for the execution-interval control job defined for a normal jobnet instead of as a start condition. If you do so, the KAVS0669-E message is output, and the execution-interval control job cannot be created.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`jpoif=`*macro-variable-name*`:`*passing-information-name*`;`

Set *macro-variable-name* as a character string of no more than 64 bytes, using the format `?AJS2`*xxxxx*`?`. In the *xxxxx* part, you can use uppercase alphabetic characters (`A` to `Z`), numerals (`0` to `9`), and periods (`.`) .

This parameter can contain up to 2,048 bytes in the `"jpoif=`*macro-variable-name*`:`*passing-information-name*`;"`.

This parameter makes it possible to take over event information of subsequent Unix jobs, PC jobs, and action jobs.

`etm=`*n*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes. This parameter is invalid for a job within the start condition.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

If you define this parameter as a start condition, it is disabled when a job is executed.

`ex="`*execution-agent-name*`";`

Define the name of the execution agent that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

You can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`. This parameter is invalid for a job within the start condition.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`. This parameter is ignored in an event job.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`ets={kl|nr|wr|an};`

Define the state of the event job after the execution time-out period elapses. The default is `kl`. This parameter is invalid for a job within the start condition.

- `kl`: Killed
- `nr`: Ended normally
- `wr`: Ended with warning

- an: Ended abnormally

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

eun=*name-of-the-unit-whose-end-is-being-waited-for*;

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ega={exec|execdeffer|none};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes none.

- exec: Start executing.
- execdeffer: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- none: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

uem={y|n};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.17 JP1 event sending job definition

This paragraph explains how to specify a definition for a JP1 event sending job.

The following gives the format of, and the parameters for a JP1 event sending job definition.

Format

```
[evsid=event-ID;]
[evhst="event-destination-host-name";]
[evsms="message";]
[evssv={em|al|cr|er|wr|no|in|db};]
[evsfr=extended-attribute-name:"value";]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[evsrt={y|n};]
[evspl=check-interval;]
[evsrc=check-count;]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`evsid=`*event-ID*`;`

Define the event ID of an event to be sent.

You can set hexadecimal values of 00000000 to 00001FFF and 7FFF8000 to 7FFFFFFF.

`evhst="`*event-destination-host-name*`";`

Define an event destination host name. This parameter is required if you specify `y` for the `evsrt` parameter.

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

You can specify a macro variable.

`evsms="`*message*`";`

Define a message to be added to an event. You can set a character string of 1 to 1,023 bytes.

You can specify a macro variable.

`evssv={em|al|cr|er|wr|no|in|db};`

Define the event level to be added to an event. The default is `no`.

- `em`: Sets Emergency.
- `al`: Sets Alert.
- `cr`: Sets Critical.
- `er`: Sets Error.
- `wr`: Sets Warning.
- `no`: Sets Notice.
- `in`: Sets Information.
- `db`: Sets Debug.

`evsfr=`*extended-attribute-name*`:"`*value*`";`

Define an extended attribute to be added to an event.

You can set a character string of 5 to 128 bytes in the format of `evsfr=`*extended-attribute-name*`:"`*value*`";`.

You can specify a macro variable.

`pfm={u|p};`

Define a platform type for job execution. The default is `p`.

- `p`: Windows environment
- `u`: UNIX environment

`etm=`*n*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`evsrt={y|n};`

Define whether to check the arrival of the event. The default is `n`.

When you specify `y`, the system checks for the arrival of an event three seconds after the JP1 event is sent.

- `y`: Checks the arrival of the event.
- `n`: Does not check the arrival of the event.

`evspl=`*check-interval*`;`

Define the interval to check for arrival of a JP1 event. You can specify a decimal value between 3 and 600 (seconds).

If you omit this option, the system assumes 10.

`evsrc=`*check-count*`;`

Define how many times to check for arrival of a JP1 event. You can specify a decimal value between 0 and 999 (times).

If you omit this option, the system assumes 10.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.
- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

Cautionary notes

The following describes the notes on defining the event destination host name, the message, and the value of the extended attribute.

- You can use space characters and symbols. However, if you use a special character (`, $, or \) as an ordinary character in UNIX, it must be preceded by the \ mark.

  Examples

  <`> will be specified as <\ `>.

  <$> will be specified as <\$>.

- If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #.

  Examples

  <"> will be specified as <#">.

  <#> will be specified as <##>.

- If you want to use a double quotation mark (") as an ordinary character, prefix the quotation mark by the cast character string \#.

  Example

  <"> should be specified as <\#">.

The values of the event destination host name, message, and extended attribute are enclosed in double quotation marks (") for JP1 event sending, because these specifications might contain space characters and symbols. If you want to specify a \ mark as an ordinary character at the end of a character string in Windows, prefix another \ mark to it.

If passing information contains such a special character, the system may fail to pass on the information correctly or the job may terminate abnormally. If, however, you use the option that validates a double-quotation mark in passing information, any passing information containing a double-quotation mark will be taken over correctly.

Example

The following examples show how to use a special character, a double quotation mark ("), and a number sign (#) as an ordinary character for the values of the event destination host name, message, and extended attribute.

- <`AAA`> will be specified as <\`AAA\`>. (For UNIX only)
- <AAA> will be specified as <\$AAA\$>. (For UNIX only)
- <#AAA#> will be specified as <##AAA##>.
- <"AAA"> will be specified as <\#"AAA\#">.
- <\AAA\> will be specified as <\AAA\\>> (for Windows) or <\\AAA\\> (for UNIX).

4.2.18 Email sending job definition

This paragraph explains how to specify a definition for an email sending job.

The following gives the format of, and the parameters for an email sending job definition.

Format

```
[mladr={to|cc|bcc}:"address";]
[mlprf="profile-name";]
[mlsbj="subject";]
[mltx="text";]
[mlftx="text-file-name";]
```

```
[mlatf="attached-file-name";]
[mlafl="attached-file-list-name";]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`mladr={to|cc|bcc}:"`*address*`";`

Define the email address of a destination.

In the format of `mladr={to|cc|bcc}:"`*address*`";`, you can set up to 20 email addresses at one time.

- `to`: Sends email to a destination.
- `cc`: Sends a copy of email to a destination.
- `bcc`: Sends a blind carbon copy of email to a destination.

You can set a character string of 1 to 256 bytes for an address.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

You can specify a macro variable in the address.

The following table lists the address formats you can use when `pfm=p;` is specified:

Profile type	Address format
Exchange Server#	• Display name • Alias • Internet mail address
Internet mail (SMTP/POP3)	Internet mail address

#

Email cannot be sent to X.400 format addresses.

The following is an example of an address in X.400 format:

```
c=JP;p=MailServer;o=Exchange;g=Taro;s=Hitachi;
```

`mlprf="`*profile-name*`";`

Specify one of the profile names set in the `ProfileName1` to `ProfileName4` environment setting parameters on the agent host on which the email sending job is executed.

This parameter is valid only when you specify `pfm=p;`. This parameter becomes necessary item if you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes.

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character by `#`. That is, use `#"` instead of `"` and use `##` instead of `#`.

You can specify a macro variable.

For details about the environment setting parameters, 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*.

`mlsbj="`*subject*`";`

Define the subject of the email to be sent.

You can set a character string of 0 to 256 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`mltxt="`*text*`";`

Define the text of the email to be sent.

You can specify a string of 1 to 512 bytes (including the number of linefeeds). In UNIX, the final line always contains a linefeed because without a linefeed, the final line is not handled as a line.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`mlftx="`*text-file-name*`";`

Define the text file name of the email to be sent.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`mlatf="`*attached-file-name*`";`

Define an attached file name. This parameter is valid only when you specify `pfm=p;`.

In the format of `mlatf="`*attached-file-name*`";`, you can set up to 20 file names at one time.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

For the format of a list of attached files, see *2.7.3 List of attached files to be sent (Windows only)* in the *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*.

`mlafl="`*attached-file-list-name*`";`

Define a list file name for an attached file. This parameter is valid only when you specify `pfm=p;`.

You can set a character string of 1 to 256 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`pfm={u|p};`

Define a platform type for job execution. The default is `p`.

- `u`: UNIX environment
- `p`: Windows environment

`etm=`*n*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.
- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.19 Message-queue message sending job definition

This paragraph explains how to specify a definition for a message-queue message sending job.

The following gives the format of, and the parameters for a message-queue message sending job definition.

Format

```
[mqque=queue-name;]
[mqcor=correlation-ID;]
[mqdsc=message-ID;]
[mqprm={y|n};]
[mqmgr=queue-manager-name;]
[mqmdl=model-queue-name;]
[mqpgm=related-queue-management-program-name;]
[mqmfn=format-name;]
[mqmdn="message-data-file-name";]
[mqhld=hold-time;]
[mqpri=priority:]
[mqeqn=dead-letter-queue-name;]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

mqque=*queue-name*;

Define the name of a queue to be sent the message.

You can set a character string of 1 to 48 bytes. Specify a queue name using an MQ character string.

mqcor=*correlation-ID*;

Define a correlation ID to be added to a send message.

You can set a character string of 1 to 24 bytes. You can, however, set only uppercase alphanumeric characters.

mqdsc=*message-ID*;

Define a message ID to be added to a send message.

You can set a character string of 1 to 24 bytes. You can, however, set only uppercase alphanumeric characters.

mqprm={y|n};

Define the permanence of a message to be sent. The default is n.

- y: Permanent
- n: Not permanent

mqmgr=*queue-manager-name*;

Define the name of a queue manager for sending the message.

You can set a character string of 1 to 48 bytes. Specify a queue manager name using an MQ character string.

mqmdl=*model-queue-name*;

Define the name of a model queue for sending the message.

You can set a character string of 1 to 48 bytes. Specify a model queue name using an MQ character string.

mqpgm=*related-queue-management-program-name*;

Define a program name for message destination queue management or a program name for queue management that allows you to identify a queue name.

You can set a character string of 1 to 48 bytes. Specify a program name using an MQ character string.

mqmfn=*format-name*;

Define a format to identify the format of the information in message data.

You can set a character string of 1 to 8 bytes. You can, however, set only uppercase alphanumeric characters.

mqmdn="*message-data-file-name*";

Define the name of a message data file to be sent as the message.

You can set a character string of 1 to 256 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

mqhld=*hold-time*;

Define hold time for a message to be sent.

You can set 1 to 9,999,999 minutes.

mqpri=*priority*;

Define the priority of a message to be sent.

You can set 0 to 9.

mqeqn=*dead-letter-queue-name*;

Define the queue name of a related queue management program to which the message is to be transferred if message send processing encounters an error.

You can set a character string of 1 to 48 bytes. Specify a dead letter queue name using an MQ character string.

pfm={u|p};

Define a platform type for job execution. The default is p.

- u: UNIX environment
- p: Windows environment

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

ex="*execution-agent-name*";

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

ha={y|n};

Define whether to suspend job execution. The default is n.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

jty={q|n};

Define the queuing attribute type. If you do not specify this option, q is assumed.

- q: The queuing attribute exists.
- n: The queuing attribute does not exist.

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.20 MSMQ message sending job definition

This paragraph explains how to specify an MSMQ message sending job definition.

The following gives the format of, and the parameters for MSMQ message sending job definition information.

Format

```
[msqpt="queue-path-name";]
[msqlb="queue-label-name";]
[msrer=correlation-ID;]
[mslmt={-2|-1|n};]
[mshld={-1|n};]
[msmod={h|r};]
[mspri=priority;]
[msjnl={y|n};]
[msunr={y|n};]
[mstfn="text-file-name";]
[msttp=text-type;]
[mslbl="message-label";]
[msapl=application-information;]
```

```
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

msqpt="*queue-path-name*";

Define the path name of a destination queue to be sent the message.

You can set a character string of 1 to 259 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If you define both msqpt="*queue-path-name*"; *and* msqlb="*queue-label-name*"; , *the latter is invalid*.

You can specify a macro variable.

msqlb="*queue-label-name*";

Define the label name of a destination queue to be sent the message.

You can set a character string of 1 to 124 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

If you define both msqpt="*queue-path-name*"; *and* msqlb="*queue-label-name*"; , *the latter is invalid*.

You can specify a macro variable.

msrer=*correlation-ID*;

Define the correlation ID of a send message.

You can set a character string of 1 to 20 bytes. You can, however, specify only uppercase alphanumeric characters.

mslmt={-2|-1|*n*};

Define the delivery limit time for a send message. The default is -2.

- -2: LONG_LIVED
- -1: INFINITE
- *n*: Specify the delivery limit time in seconds. You can set 0 to 2,147,483,647.

mshld={-1|*n*};

Define the period in which message sending is suspended. The default is -1.

- -1: INFINITE
- *n*: Specify the time period in seconds. You can set 0 to 2,147,483,647.

msmod={h|r};

Define delivery mode for a send message. The default is h.

- h: High-speed mode
- r: Recoverable mode

mspri=*priority*;

Define the priority of a send message.

You can set 0 to 7. The default is 3.

msjnl={y|n};

Define whether to store a delivered message into the journal queue. The default is n.

- y: Stores a delivered message into the journal queue.
- n: Does not store a delivered message into the journal queue.

msunr={y|n};

Define whether to store a delivered message into the dead message queue. The default is n.

- y: Stores a delivered message into the dead message queue.
- n: Does not store a delivered message into the dead message queue.

mstfn="*text-file-name*";

Define the name of the file which stores data to be used as the send message text.

You can set a character string of 1 to 259 bytes. Specify a full-path file name.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

msttp=*text-type*;

Define the content type of send message text.

You can set hexadecimal values of 0 to FFFFFFFF.

mslbl="*message-label*";

Define the label of a send message.

You can set a character string of 1 to 249 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

msapl=*application-information*;

Define application information on a send message.

You can set hexadecimal values of 0 to FFFFFFFF.

etm=*n*;

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

ex="*execution-agent-name*";

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character with #. That is, use #" instead of ", and use ## instead of #.

ha={y|n};

Define whether to suspend job execution. The default is n.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.
- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.21 OpenView Status Report job definition

This paragraph explains how to specify an OpenView Status Report job definition.

The following gives the format of, and the parameters for an OpenView Status Report job definition.

Format

```
[cmsts={un|no|wa|mi|ma|cr|re|te|di};]
[cmaif="additional-information";]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

cmsts={un|no|wa|mi|ma|cr|re|te|di};

Define the status to be reported to HP NNM. The default is un.

- un: Unknown
- no: Normal
- wa: Warning
- mi: Minor
- ma: Major
- cr: Critical
- re: Restricted
- te: Testing
- di: Disabled

cmaif="*additional-information*";

Define additional information about a message to be reported to HP NNM.

You can set a character string of 1 to 256 bytes. Note that you cannot use a carriage-return character.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`pfm={u|p};`

Define a platform type for job execution. The default is `p`.

- `u`: UNIX environment
- `p`: Windows environment

`etm=`*`n`*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.
- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.

- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.22 Local power control job definition

This paragraph explains how to specify definition for a local power control job.

The following gives the format of, and the parameters for a local power control job definition.

Format

```
[pwlt={f|r|s};]
[pwlf={m|r|f|p};]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={g|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`pwlt={f|r|s};`

Define the type of execution. The default is `f`.

- `f`: Turns off power. The JP1/AJS3 host will then be started at the time specified in JP1/AJS3 - Manager. For details, see the manual *Job Management Partner 1/Power Monitor Description, User's Guide and Reference*.
- `r`: Shuts down, then restarts the local power supply.
- `s`: Shuts down the local power supply. (You can specify this only with `pfm=p;` set.)

`pwlf={m|r|f|p};`

Define the type of termination request. The default is `f`.

- `m`: (You can specify this only with `pfm=u;` set.)
- `r`: Restrictive termination. (You can specify this only with `pfm=u;` set.)
- `f`: Kill
- `p`: Planned termination. (You can specify this only with `pfm=p;` set.)

`pfm={u|p};`

Define a platform type for job execution. The default is `p`.

- `u`: UNIX environment
- `p`: Windows environment

`etm=`*`n`*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.
- `def`: The JP1 user who owns the job executes the job.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.

- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.23 Remote power control job definition

This paragraph explains how to specify a remote power control job definition.

The following gives the format of, and the parameters for a remote power control job definition.

Format

```
[pwrh="target-host-name";]
[pwrf={o|m|r|f|p|s};]
[pwrn={n|a|c:[mm/dd.]hh:mm};]
[pwrr={y|n};]
[pwrw={y|n};]
[pwrp={p|u};]
[pfm={u|p};]
[etm=n;]
[fd=time-required-for-execution;]
[ex="execution-agent-name";]
[ha={y|n};]
[eu={ent|def};]
[jty={q|n};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`pwrh="`*target-host-name*`";`

Define the name of the JP1/Power Monitor agent host subject to power control.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

`pwrf={o|m|r|f|p|s};`

For the JP1/Power Monitor agent host, define the type of request for how to terminate the monitor application when the system terminates. The default is `p` if you specify `p` in `pwrp`, or `m` if you specify `u` in `pwrp`.

- `o`: Turns on power.
- `m`: Monitored termination. You can specify this only when `pwrp=u;` is specified.
- `r`: Restrictive termination. You can specify this only when `pwrp=u;` is specified.
- `f`: Kill
- `p`: Planned termination. You can specify this only when `pwrp=p;` is specified.
- `s`: Forced stop

`pwrn={n|a|c:[`*mm*`/`*dd*`.]`*hh*`:`*mm*`};`

Define the time when the JP1/Power Monitor agent host will be turned on next. The default is `a`.

- `n`: Does not set the next power-on time.
- `a`: Validates the next power-on time that is set in the JP1/Power Monitor agent host.
- `c:[`*mm*`/`*dd*`.]`*hh*`:`*mm*: Specify the next power-on time.
  mm: You can set 1 to 12 for the month.
  dd: You can set 1 to 31 for the day.
  hh: You can set 0 to 23 for the hours.

mm: You can set 0 to 59 for the minutes.

`pwrr={y|n};`

Define whether to restart the JP1/Power Monitor agent host after it is shut down. The default is `n`.

- `y`: Restarts the agent host.
- `n`: Does not restart the agent host.

`pwrw={y|n};`

Define whether to wait for completion of the turning off the JP1/Power Monitor agent host before terminating the remoter power control job. The default is `n`.

- `y`: Waits for the system to end.
- `n`: Does not wait for the system to end.

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.

`pwrp={p|u};`

Specify the type of platform for the target JP1/Power Monitor host (agent) responsible for performing power control using the remote power control job. The default is `p`.

- `p`: Controls the JP1/Power Monitor agent host in Windows.
- `u`: Controls the JP1/Power Monitor agent host in UNIX.

`pfm={u|p};`

Define a platform type for job execution. The default is `p`.

- `u`: UNIX environment
- `p`: Windows environment

`etm=`*`n`*`;`

Define the time-out period using the relative minutes from the start time. You can set 1 to 1,440 minutes.

`fd=`*time-required-for-execution*`;`

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

`ex="`*execution-agent-name*`";`

Define the name of the execution agent or execution agent group that is used to execute jobs.

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

If you want to use a double quotation mark (`"`) or a number sign (`#`) as a character, prefix the character with `#`. That is, use `#"` instead of `"`, and use `##` instead of `#`.

If the job has the queuing attribute (`jty=q`), you can specify a macro variable.

`ha={y|n};`

Define whether to suspend job execution. The default is `n`.

- `y`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

`eu={ent|def};`

Define the JP1 user who executes the job. The default is `ent`.

- `ent`: The JP1 user who registered the jobnet executes the job.

- `def`: The JP1 user who owns the job executes the job.

`jty={q|n};`

Define the queuing attribute type. If you do not specify this option, `q` is assumed.

- `q`: The queuing attribute exists.
- `n`: The queuing attribute does not exist.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.24 UNIX/PC custom job definition

This paragraph explains how to specify a UNIX/PC custom job definition.

The following gives the format of, and the parameters for a UNIX/PC custom job definition.

Format

```
[cty="custom-job-class-name";]
[te="command-text";]
[sc="script-file-name";]
[prm="parameter";]
[env="environment-variable";]
[so="standard-output-file-name";]
[se="standard-error-output-file-name";]
[etm=n;]
[fd=time-required-for-execution;]
[pr=n;]
[ex="job-execution-agent-host-name";]
[un="target-user-name";]
[jd={nm|ab|cod|mdf|exf};]
[wth=n;]
[tho=n;]
[jdf="end-judgment-file-name";]
[abr={y|n};]
[rjs=lower-limit-of-return-codes-to-be-retried-automatically;]
[rje=upper-limit-of-return-codes-to-be-retried-automatically;]
[rec=maximum-number-of-retry-executions;]
[rei=retry-interval;]
[ha={y|n};]
[eu={ent|def};]
[wkp="work-path-name";]
[ev="environmental-variable-file-name";]
[si="standard-input-file-name";]
[soa={new|add};]
[sea={new|add};]
[ts1="transfer-source-file-name-1";]
[td1="transfer-destination-file-name-1";]
[top1={sav|del};]
[ts2="transfer-source-file-name-2";]
[td2="transfer-destination-file-name-2";]
[top2={sav|del};]
[ts3="transfer-source-file-name-3";]
[td3="transfer-destination-file-name-3";]
[top3={sav|del};]
[ts4="transfer-source-file-name-4";]
[td4="transfer-destination-file-name-4";]
[top4={sav|del};]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

`cty="`*custom-job-class-name*`";`

Define a custom job class name for each linked program.

You can define the types of custom job class names given below.

- For standard custom jobs

  The following gives the class names to be defined to use the custom jobs supported in the standard JP1/AJS3 configuration.

Linked program name	Class name
JP1/FTP	JP1FTP
JP1/AJS3 for Enterprise Applications	JP1AMR3
JP1/AJS3 for Enterprise Applications	JP1AMR3BW
JP1/DH - AJE	DHAJEW

- For custom PC jobs and custom UNIX jobs

  Set *custom-job-class-name* as a character string of no more than 16 bytes, by using the format USER_*any-name* (USER_ cannot be omitted).

  If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

  If you specify any of the following, the icon of the custom job does not appear in the icon list of the Jobnet Editor window:

  - " (double quotation mark)
  - *
  - /
  - : (colon)
  - <
  - >
  - ?
  - \
  - |
  - MS-DOS device names (NUL, CON, AUX, CLOCK$, COM1 to COM9, LPT1 to LPT9, PRN)
  - Character strings beginning with *MS-DOS-device-name*. (period)

  Also, the following characters cannot be specified:

  - Single-byte space
  - Control characters such as a line-feed character or tab character

te="*command-text*";

Define command text.

You can set a character string of 1 to 1,023 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

sc="*script-file-name*";

For the Unix job, define a full-path script file name. For the PC job, define a full-path executable file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

prm="*parameter*";

Define a parameter for the target file.

You can set a character string of 1 to 1,023 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

env="*environment-variable*";

Define an environment variable.

You can set a character string of 1 to 20,479 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

For notes on defining environment variables, see Appendix *A. Notes on Defining Environment Variables and an Environment Variable File*.

You can specify a macro variable.

so="*standard-output-file-name*";

Define a full-path standard output file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

By specifying $JP1AJS2_JPQSTDOUTTEMP$, you can output the standard output file as a temporary file.

You can specify a macro variable.

se="*standard-error-output-file-name*";

Define a full-path standard error output file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

etm=*n*;

Define the time-out period using the relative minutes from the start time.

You can set 1 to 1,440 minutes.

fd=*time-required-for-execution*;

Define the time-required-for-execution within which the job is expected to be terminated.

You can specify a decimal value between 1 and 1,440 (minutes).

pr=*n*;

Define the priority of job execution.

You can set 1 to 5. The lowest priority of execution is 1, while the highest priority is 5. The default depends on the definition of upper-level jobnet. If this parameter is not specified, and if the pr parameter and the ni parameter of all upper-level jobnets of the job are not specified, the priority of the job is assumed to be the value specified for the DEFAULTPRIORITY environment setting parameter (If no value is specified for the DEFAULTPRIORITY environment setting parameter, then the priority is assumed to be 1). For details about the DEFAULTPRIORITY environment setting parameter, see *2.2.2(106) DEFAULTPRIORITY* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

ex="*job-execution-agent-host-name*";

Define the name of the JP1/AJS3 - Agent host to execute a job.

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

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

un="*execution-user-name*";

To use the JP1/AJS3 - Agent host to execute a job, define the user name of the user responsible for job execution.

You can set a character string of 1 to 63 bytes. The user name cannot contain any space characters.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

jd={nm|ab|cod|mdf|exf};

Define the type of end judgment. The default is cod.

If you specify a value other than cod, you cannot specify y for the abr parameter. If you specify y, the KAVS0674-E message is output, and the unit cannot be created.

- nm: Always assumes a normal end.
- ab: Always assumes an abnormal end.
- cod: Normal end if the return code is below a specified value.
- mdf: Normal end if the file is refreshed.
- exf: Normal end if a file is created.

wth=*n*;

Define the threshold for the end with warning.

You can set 0 to 2,147, 483, 647.

tho=*n*;

Define the threshold for the abnormal end.

You can set 0 to 2,147, 483, 647. The default is 0.

jdf="*end-judgment-file-name*";

Define a full-path end judgment file name.

You can set a character string of 1 to 511 bytes.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

You can specify a macro variable.

abr={y|n};

Define whether retrying on an abnormal end is enabled. If you omit this option, the system assumes n.

You can specify y only when you specify cod for the jd parameter.

- y: Automatic retries are performed if an abnormal end occurs.
- n: Automatic retries are not performed if an abnormal end occurs.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rjs=*lower-limit-of-return-codes-to-be-retried-automatically*;

Define the lower limit of the return codes to be retried automatically when automatic retrying is performed for an abnormal end.

You can define the lower limit only when you specify y for the abr parameter.

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold and a value greater than the upper limit of the return codes to be retried automatically, the KAVS0668-E message is output, and the unit cannot be created.

If you omit this option, the system assumes *abnormal-threshold* + 1 when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rje=*upper-limit-of-return-codes-to-be-retried-automatically*;

Define the upper limit of the return codes to be retried automatically if automatic retrying is performed for an abnormal end.

You can define the upper limit only when you specify y for the abr parameter.

You can specify a value from 1 to 4,294,967,295. If you specify a value equal to or smaller than the abnormal threshold and a value smaller than the lower limit of the return codes to be retried automatically, the KAVS0668-E message is output, and unit creation fails.

If you omit this option, the system assumes the maximum value (4,294,967,295) when the job is executed.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rec=*maximum-number-of-retry-executions*;

Define the maximum number of retry executions when automatic retrying is performed for an abnormal end.

You can specify this parameter only when you specify y for the abr parameter.

You can specify a value from 1 to 12 (times). If you omit this option, the system assumes 1.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

rei=*retry-interval*;

Define the retry interval when automatic retrying is performed for an abnormal end.

You can specify this parameter only when you specify y for the abr parameter.

You can specify a value from 1 to 10 (minutes). If you omit this option, the system assumes 1.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ha={y|n};

Define whether to suspend job execution. The default is n.

- y: Suspends jobnet execution.
- n: Does not suspend jobnet execution.

eu={ent|def};

Define the JP1 user who executes the job. The default is ent.

- ent: The JP1 user who registered the jobnet executes the job.
- def: The JP1 user who owns the job executes the job.

wkp="*work-path-name*";

Define the work path name using a full path name.

You can set a character string of 1 to 511 bytes.

For a work path name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

ev="*environmental-variable-file-name*";

Define the environmental variable file name for the agent host.

You can set a character string of 1 to 511 bytes. You can use either an absolute path or a relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

For notes on defining environment variables, see Appendix *A. Notes on Defining Environment Variables and an Environment Variable File*.

si="*standard-input-file-name*";

Define the name of a standard input file on the agent host executing the job.

You can set a character string of 1 to 511 bytes. You can use either an absolute path or a relative path to specify the file name. If you specify a relative path, the system assumes it to be a relative path from the work path for job execution.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

soa={new|add};

Define the append option for a standard output file name. The default is new. This parameter is invalid if the so parameter does not specify the standard output file name.

This cannot be specified in custom PC jobs.

- new: Creates a new file.
- add: Adds information to an existing file.

sea={new|add};

Define the append option for a standard error output file name. The default is new. This parameter is invalid if the se parameter does not specify the standard error output file name.

This cannot be specified in custom PC jobs.

- new: Creates a new file.
- add: Adds information to an existing file.

ts1="*transfer-source-file-name-1*";

Define the name of a transfer source file using a full path name.

You can set a character string of 1 to 511 bytes.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

td1="*transfer-destination-file-name-1*";

Define the name of a transfer destination file to be transferred to the agent host.

You can set a character string of 1 to 511 bytes.

The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part means the transfer file's number ranging from 01 to 04.

With this variable specified in the sc or prm parameter, you can execute the job without having to be aware of the transfer destination file name.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

top1={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify the transfer source file name and the transfer destination file name without specifying this parameter, the system assumes sav.

If you specify the transfer source file name without specifying this parameter, the system assumes del.

This cannot be specified in custom PC jobs.

ts2="*transfer-source-file-name-2*";

Define the name of a transfer source file using a full path name.

1 to 511 bytes of characters can be specified.

For a file name including a double quotation mark (") or a cast character (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

td2="*transfer-destination-file-name-2*";

Define the name of a transfer destination file to be transferred to the agent host.

1 to 511 bytes of characters can be specified.

The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part means the transfer file's number ranging from 01 to 04.

With this variable specified in the sc or prm parameter, you can execute the job without having to be aware of the transfer destination file name.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

top2={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify the transfer source file name and the transfer destination file name without specifying this parameter, the system assumes sav.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to del.

This cannot be specified in custom PC jobs.

ts3="*transfer-source-file-name-3*";

Define the name of a transfer source file using a full path name.

1 to 511 bytes of characters can be specified.

For a file name including a double quotation mark (") or a number sign (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

td3="*transfer-destination-file-name-3*";

Define the name of a transfer destination file to be transferred to the agent host.

1 to 511 bytes of characters can be specified.

The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part means the transfer file's number ranging from 01 to 04.

With this variable specified in the sc or prm parameter, you can execute the job without having to be aware of the transfer destination file name.

For a file name including a double quotation mark (") or a cast character (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

top3={sav|del};

Define the option to automatically delete the transfer destination file.

- sav: Saves the file.
- del: Deletes the file.

If you specify the transfer source file name and the transfer destination file name without specifying this parameter, the system assumes sav.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to del.

This cannot be specified in custom PC jobs.

ts4="*transfer-source-file-name-4*";

Define the name of a transfer source file using a full path name.

1 to 511 bytes of characters can be specified.

For a file name including a double quotation mark (") or a cast character (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

td4="*transfer-destination-file-name-4*";

Define the name of a transfer destination file to be transferred to the agent host.

1 to 511 bytes of characters can be specified.

The default is the $JP1AJS2_JPQTEMP*xx*$ variable, where the *xx* part means the transfer file's number ranging from 01 to 04.

With this variable specified in the sc or prm parameter, you can execute the job without having to be aware of the transfer destination file name.

For a file name including a double quotation mark (") or a cast character (#), prefix the character by #. That is, use #" instead of " and use ## instead of #.

This cannot be specified in custom PC jobs.

You can specify a macro variable.

`top4={sav|del};`

Define the option to automatically delete the transfer destination file.

- `sav`: Saves the file.
- `del`: Deletes the file.

If you specify the transfer source file name and the transfer destination file name without specifying this parameter, the system assumes `sav`.

If you specify a transfer source file name without specifying a transfer destination file name and this parameter, this parameter defaults to `del`.

This cannot be specified in custom PC jobs.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.

- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.25 Passing information setting job definition

This paragraph explains how to specify a definition for a passing information setting job.

The following gives the format and parameters for a passing information setting job definition.

Format

```
ty={cpj|rcpj};
cty="AJSVAR";
sc="$JP1AJS2_JPOEXEPATH$/jpqpinfoset";
prm="-o output-variable-1 [-o output-variable-2...]";
env="AJS2SO_GLOBMACFILE=?AJS2SO_GLOBMACFILE?";
env="AJS2SO_STDOUTFILE=?AJS2SO_STDOUTFILE?";
env="AJS2SO_RE_output-variable-1=regular-expression-1";
   [env="AJS2SO_RE_output-variable-2=regular-expression-2";...]
[wth=n;]
[tho=n;]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

ty={cpj|rcpj};

Specify cpj as a general rule. If you are defining the passing information setting job as a recovery job, specify rcpj.

cty="AJSVAR";

The value of this parameter is fixed.

sc="$JP1AJS2_JPOEXEPATH$/jpqpinfoset";

The value of this parameter is fixed.

prm="-o *output-variable-1* [-o *output-variable-2*...]";

Specify each output variable by macro variable name, omitting the first five characters (?AJS2) and the last character (?). For example, to output information to the macro variable ?AJS2VAR?, specify -o VAR.

You can set a character string of 1 to 1,023 bytes in each output variable. A maximum of 32 output variables can be specified.

env="AJS2SO_GLOBMACFILE=?AJS2SO_GLOBMACFILE?";

The value of this parameter is fixed.

env="AJS2SO_STDOUTFILE=?AJS2SO_STDOUTFILE?";

The value of this parameter is fixed.

env="AJS2SO_RE_*output-variable-1=regular-expression-1*";[env="AJS2SO_RE_*output-variable-2=regular-expression-2*";...]

Define a regular expression for each of the output variables you specified in prm. In *output-variable-x*, specify the same value as specified in *output-variable-x* in prm.

The results extracted by the regular expressions you specify here are set as the values of the macro variables corresponding to the output variables.

`wth=n;`

Define the threshold for the end with warning. You can set 0 to 2,147,483,647.

`tho=n;`

Define the threshold for the abnormal end.

You can set 0 to 2,147,483,647. The default is `0`.

`mm={and|or};`

Define the wait method with respect to the specified units whose ends are being waited for.

The default is `and`.

- `and`: Start executing at completion of all units whose ends are being waited for.
- `or`: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`nmg={y|n};`

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`eun=`*name-of-the-unit-whose-end-is-being-waited-for*`;`

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`ega={exec|execdeffer|none};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes `none`.

- `exec`: Start executing.
- `execdeffer`: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- `none`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

`uem={y|n};`

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes `n`.

- `y`: Start executing.
- `n`: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.2.26 Start condition definition

This paragraph explains how to specify a start condition definition.

To define start conditions, specify the unit definition parameter for the root jobnet, and then the unit attribute parameter for start conditions. For the start condition unit, attach the string `.CONDITION`. For the start condition unit, you can define up to 32 event jobs. Note, however, that you cannot define a recovery job for an event job.

The following gives the format of, and the parameters for a start condition definition.

Format

```
[cond={and|or};]
[mcs={m|w|s};]
[cgs={y|n};]
[ab={exec|hold|stop};]
```

Parameters

`cond={and|or};`

Define the connection type of start conditions. The default is `and`.

- `and`: ANDs start conditions.
- `or`: ORs start conditions.

`mcs={m|w|s};`

Specify how the system behaves if there is already a monitoring generation whose status is *Now monitoring* when the monitoring of start conditions is started. If you omit this option, the system assumes `m`.

- `m`: The system starts the monitoring of start conditions. As a result, multiple monitoring generations are started. In this case, occurrence of one event causes start conditions of multiple generations to be satisfied.
- `w`: The system does not start the monitoring of start conditions, and waits for the monitoring generation in *Now running* status to terminate. In this situation, if a timeout for the jobnet occurs, the status changes to *Skipped so not exe*.
- `s`: The system skips starting the monitoring of start conditions. The status of the skipped monitoring generation becomes *Skipped so not exe*.

`cgs={y|n};`

Specify whether to stay execution of a generation of a jobnet if the generation's start conditions are satisfied while another generation is already in *Now running* status when concurrent execution of jobnet generations is disabled. If you omit this option, the system assumes `y`.

- `y`: Execution of the jobnet is not repeated so that the generation stays.

  If there is already a generation in *Now running* status when the start conditions of the next generation are satisfied, the system stays execution of the next generation until the generation in *Now running* status terminates. The status of the next generation is *Wait for start cond.* until the generation is executed.
- `n`: Execution of the jobnet is repeated so that the generation does not stay.

  If there is already a generation in *Now running* status when the start conditions of the next generation are satisfied, the system does not stay execution of the next generation. The status of the next generation becomes *Skipped so not exe*.

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. The default is exec.

- 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).

4.2.27 Specifying the definition of a jobnet connector

This subsection describes how to specify the definition of a jobnet connector.

The definition format and parameters that can be specified are as follows.

Format

```
[ncr=connection-destination-root-jobnet-name;]
[ncex={y|n};]
[nchn="connection-host-name";]
[ncsv=connection-service-name;]
[mm={and|or};]
[nmg={y|n};]
[eun=name-of-the-unit-whose-end-is-being-waited-for;]
[ega={exec|execdeffer|none};]
[uem={y|n};]
```

Parameters

ncr=*connection-destination-root-jobnet-name*;

Specify the unit full name of the root jobnet for which you want to control the execution order by using this jobnet connector. If the root jobnet is immediately under a planning group, specify the unit full name of the planning group. You can specify a character string of 1 to 930 bytes.

ncex={y|n};

If the execution order of a root jobnet is to be controlled, define whether to enable linkage between scheduler services. If you omit this option, the system assumes n.

- y: Linkage between scheduler services is enabled.

  Linkage with jobnet connectors defined on other hosts or in other scheduler services is possible.
- n: Linkage between scheduler services is disabled.

  Linkage with jobnet connectors defined in only the same scheduler service is possible.

nchn="*connection-host-name*";

Specify the name of the host on which the jobnet to be connected has been defined.

You can specify a character string of 1 to 255 bytes. You cannot specify spaces, tab characters, or linefeed characters.

If you specify this option when y has not been specified for the ncex parameter, an error occurs.

If you want to use a double quotation mark (") or a number sign (#) as a character, prefix the character by #. That is, use #" instead of " and use ## instead of #.

ncsv=*connection-service-name*;

Specify the name of the scheduler service in which the jobnet to be connected has been defined. You can specify a character string of 1 to 30 bytes.

If you specify this option when y has not been specified for the ncex parameter, an error occurs.

mm={and|or};

Define the wait method with respect to the specified units whose ends are being waited for.

The default is and.

- and: Start executing at completion of all units whose ends are being waited for.
- or: Start executing at completion of one of the units whose ends are being waited for.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

nmg={y|n};

Define the behavior when there are no generations of the root jobnet for the specified unit whose end is being waited for.

The default is n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

eun=*name-of-the-unit-whose-end-is-being-waited-for*;

Define the full-path name of a unit whose end is being waited for.

To specify multiple units, repeat the parameter. You can specify a maximum of 32 units.

You can use a character string of 1 to 930 bytes as the unit name.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

ega={exec|execdeffer|none};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the execution generation ends abnormally.

If you omit this option, the system assumes none.

- exec: Start executing.
- execdeffer: Do not start executing. However, if the execution generation is in the *Skipped so not exe.* status, start executing.
- none: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

uem={y|n};

Specify the behavior when a jobnet with start conditions is specified as the jobnet whose end is being waited for and the monitoring generation is in the *Unmonitored* + *Ended* status.

If you omit this option, the system assumes n.

- y: Start executing.
- n: Do not start executing.

You cannot specify this parameter when the JP1/AJS3 database is the compatible ISAM configuration.

4.3 Examples of specifying unit definition parameters

This subsection gives the following six examples of specifying unit definition parameters.

- Example of defining a job group
- Example of defining a jobnet
- Example of defining a job
- Example of defining a related nested jobnet
- Example of defining start conditions for the root jobnet
- Example of defining a jobnet connector

4.3.1 Example of defining a job group

(1) Example of defining a job group

This example covers definition of a job group that meets the following conditions:

- One job group is defined.
- The job group name is `group`.
- The unit attributes are `owner: update`, `group: references`, and `others: references`.
- In the calendar, set Saturday and Sunday as closed days. The base time is 6:00.

The following gives an example of definition.

```
/* Create new job group "group" */
unit=group;
  {
    ty=g;
    cl=sa;
    cl=su;
    stt=06:00;
  }
```

(2) Example of defining a planning group

This example covers definition of a planning group which meets the following conditions:

- One planning group is defined.
- The planning group name is `pgroup`.

The following gives an example of definition.

```
/* Create new planning group "pgroup" */
unit=group;
  {
    ty=g;
    gty=p;
  }
```

4.3.2 Example of defining a jobnet

This example covers definition of a jobnet which meets the following conditions:

- One jobnet is defined.
- The jobnet name is `net`.
- The unit attributes are `owner: update`, `group: operations` and `others: reference`.
- The start time of jobnet execution is 13:00 on June 30, 20XX.
- The jobnet is executed every day.

The following gives an example of definition.

```
/* Create new jobnet "net" */
unit=net;
  {
    ty=n;
    sd=1,20XX/6/30;
    st=1,13:00;
    cy=1,(1,d);
  }
```

4.3.3 Example of defining a job

This example covers definition of a job which meets the following conditions:

- One job is defined.
- The job name is `job`.

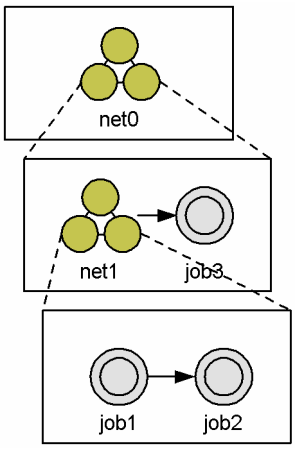
The following gives an example of definition.

```
/* Create new job "job" */
unit=job;
  {
    ty=j;
    te="sleep 10";
  }
```

4.3.4 Example of defining a related nested jobnet

This example covers creation of a new jobnet that meets the following conditions:

- The following jobnet is defined.



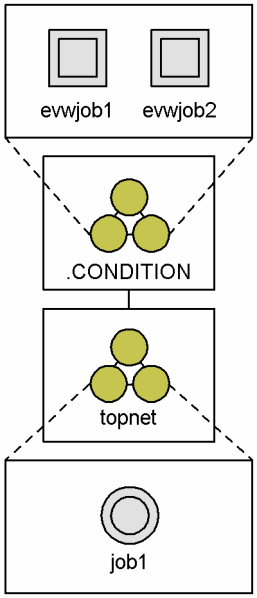
The following gives an example of definition.

```
/* Create new jobnet "net0" */
unit=net0;
  {
    ty=n;
    ar=(f=net1,t=job3);

    /* Define jobnet "net1" */
    unit=net1;
      {
        ty=n;
        ar=(f=job1,t=job2);

        /* Define job "job1" */
        unit=job1;
          {
            ty=j;
          }

        /* Define job "job2" */
        unit=job2;
          {
            ty=j;
          }
      }

    /* Define job "job3" */
    unit=job3;
      {
        ty=j;
      }
  }
```

4.3.5 Example of defining start conditions for the root jobnet

This example covers creation of a new jobnet that meets the following conditions:

- The following root jobnet `topnet` (with the start conditions) is defined.



- For jobnet `.CONDITION` with the start conditions, set *reception of an event whose event ID is 111 or 222*.

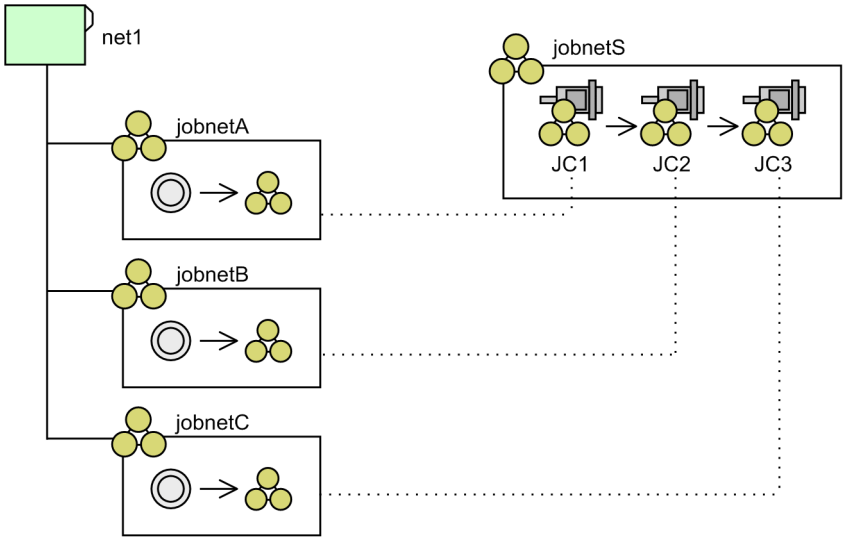
The following gives an example of definition.

```
unit=topnet;
  {
    /* Start to define the start conditions */
    ty=n;

      /* Define jobnet ".CONDITION" with the start conditions */
      unit=.CONDITION;
        {
          /* Start jobnet "topnet" if either of the two events */
          /* meets the conditions */
          ty=rc;
          cond=or;

             /* Define the first event job */
             unit=evwjob1;
               {
                 ty=evwj;
                 evid=111;
               }

             /* Define the second event job */
             unit=evwjob2;
               {
                 ty=evwj;
                 evid=222;
               }
        }
      /* Define jobnet "topnet" */
      unit=job1;
        {
            ty=j;
        }
  }
```

4.3.6 Example of defining a jobnet connector

This subsection shows an example of defining jobnet connectors under the following conditions:

- Jobnet connectors for controlling the execution order of root jobnets `jobnetA`, `jobnetB`, and `jobnetC` are defined.
- Root jobnet `jobnetA` is first executed, then root jobnet `jobnetB` is executed, and finally root jobnet `jobnetC` is executed.
- The jobnet connectors are defined as `JC1`, `JC2`, and `JC3` in jobnet `jobnetS`.



The following explains how you can define jobnet connectors under the above conditions.

First, create jobnet `jobnetS` in which jobnet connectors will be defined. Then, in `jobnetS`, define jobnet connectors `JC1`, `JC2`, and `JC3`, which control the execution order of root jobnets `jobnetA`, `jobnetB`, and `jobnetC`.

```
/* Create jobnet jobnetS */
unit=jobnetS,,jp1admin,;
  {
    ty=n;
    el=JC1,nc,;
    el=JC2,nc,;
    el=JC3,nc,;
    ar=(f=JC1,t=JC2,seq);
    ar=(f=JC2,t=JC3,seq);

    /* Define jobnet connector JC1 */
    unit=JC1;
      {
        ty=nc;
        ncr=/net1/jobnetA;
      }

    /* Define jobnet connector JC2 */
    unit=JC2;
      {
        ty=nc;
        ncr=/net1/jobnetB;
      }

    /* Define jobnet connector JC3 */
    unit=JC3;
      {
        ty=nc;
        ncr=/net1/jobnetC;
      }
  }
```

Next, for each of the root jobnets `jobnetA`, `jobnetB`, and `jobnetC`, define execution order control information (such as the name of the jobnet connector that controls the root jobnet).

```
/* Modify the definition of jobnet jobnetA */
unit=jobnetA,,jp1admin,;
  {
    ty=n;
       ...
       ...
    ncl=y;
    ncn=/AJSROOT1/net1/jobnetS/JC1;
    ncs=n;
  }

/* Modify the definition of jobnet jobnetB */
unit=jobnetB,,jp1admin,;
  {
    ty=n;
       ...
       ...
    ncl=y;
    ncn=/AJSROOT1/net1/jobnetS/JC2;
    ncs=n;
  }

/* Modify the definition of jobnet jobnetC */
unit=jobnetC,,jp1admin,;
  {
    ty=n;
       ...
       ...
    ncl=y;
    ncn=/AJSROOT1/net1/jobnetS/JC3;
    ncs=n;
  }
```

4.4 Creating a schedule information file

In a schedule information file, define the schedules of jobnet and job execution. To use the `ajsentry` command to register fixed jobnet execution, specify the schedule information file and determine the fixed schedule.

This section explains how to create the schedule information file.

4.4.1 Format of the schedule information file

Figure 4-2 shows how to specify the schedule information parameters in the schedule information file.

Figure 4－2: Format of the schedule information file

```
/* comment */                                                    ..... (A)
 schedule-information-parameter-for-jobnet                       ..... (B)
    {                                                            ..... (C)
        schedule-information-parameter-group-for-job             ..... (D)
        schedule-information-parameter-for-lower-level-jobnet
            {
                nest-definitions-of-lower-level-jobnet
                nest-definitions-of-lower-level-jobnet
                nest-definitions-of-lower-level-jobnet
            }
        schedule-information-parameter-for-lower-level-jobnet
        schedule-information-parameter-for-lower-level-jobnet
        schedule-information-parameter-for-lower-level-jobnet
    }                                                            ..... (E)

 multiple-generation-definitions-of-schedule-information-parameter
 multiple-generation-definitions-of-schedule-information-parameter
 multiple-generation-definitions-of-schedule-information-parameter
```

The following explains each item in the file.

(A) *comment*

To make a comment, enclose it within `/*` and `*/`.

You cannot write a comment in a line where you have defined a schedule information parameter for a jobnet or job.

(B) *schedule-information-parameter-for-jobnet*

Specify the schedule information parameters for a jobnet.

The following gives the format of this item.

```
PN=information-1[:[information-2][:[information-3][:[information-4][:[information-5][:
    [information-6][[:[information-7][:[information-8][[:[infomation-9]]]];
```

The following explains each parameter.

information-1

Specify a jobnet name. You can set a character string of 1 to 30 bytes. Note that if the character encoding is UTF-8 and `sjis` is specified for the `DEFLENTYPE` environment setting parameter, you can specify from 1 to 30 bytes after conversion to Shift-JIS.

information-2

Specify the start time of jobnet execution in the format of *YYYYMMDDHHMM*.

The following explains the contents of *YYYYMMDDHHMM*.

YYYY: Year of execution. The value you can set ranges from the calendar year of the date when jobnet execution is registered to the calendar year 2036.

MM: Month of execution. You can set 1 to 12 as the month value.

DD: Day of execution. You can set 1 to 31 as the day value.

HH: Hours of execution. You can set 0 to 47 as the hours value.

MM: Minutes of execution. You can set 0 to 59 as the minutes value.

The following are the defaults.

Root jobnet: Time of registration for execution

Nested jobnet: No execution schedule

information-3

Specify whether to suspend jobnet execution. The default is the hold attribute defined for the jobnet.

- `h`: Suspends jobnet execution.
- `n`: Does not suspend jobnet execution.

information-4

Define the time when the delayed jobnet start is monitored. By default, the delayed start is not monitored.

- Specify the absolute time in the format of *HHMM*.

  HH: Hours of the time when to monitor the delayed start. You can set 0 to 47 as the hours value.

  MM: Minutes of the time when to monitor the delayed start. You can set 0 to 59 as the minutes value.
- Specify the relative minutes in the format of *RMMMM*.

  R: Specify the type of the relative value for determining when to start delay monitoring. `'M'` refers to the relative minutes from the time when to start root jobnet execution, `'U'` to the relative minutes from the time when to start upper-level jobnet execution, and `'C'` to the relative minutes from the time when to start jobnet execution.

  MMMM: Specify the period until the start of delay monitoring as the relative minutes from the jobnet start time. You can set 1 to 2,879 minutes.

information-5

Specify the time when the delayed jobnet end is monitored. By default, the delayed end is not monitored.

- Specify the absolute time in the format of *HHMM*.

  HH: Hours of the time when to monitor the delayed start. You can set 0 to 47 as the hours value.

  MM: Minutes of the time when to monitor the delayed start. You can set 0 to 59 as the minutes value.
- Specify the relative minutes in the format of *RMMMM*.

  R: Specify the type of the relative value for determining when to start delay monitoring. `'M'` refers to the relative minutes from the time when to start root jobnet execution, `'U'` to the relative minutes from the time when to start upper-level jobnet execution, and `'C'` to the relative minutes from the time when to start jobnet execution.

  MMMM: Specify the period until the start of delay monitoring as the relative minutes from the jobnet start time. You can set 1 to 2,879 minutes.

information-6

Specify the priority of execution. You can set `n`, or 1 to 5. If you set `n`, the system inherits the priority of execution defined for the upper-level jobnet. The lowest priority is 1, while the highest priority is 5.

The system defaults to the priority of schedule execution defined for the jobnet.

information-7

Define the time for the jobnet to wait for an event. By default, the time to wait for an event is not set.

- `n`: Does not set the time to wait for an event.
- Specify the absolute time in the format of *HHMM*.

  HH: Hours of the time when to start waiting for an event. You can set 0 to 47 as the hours value.

  MM: Minutes of the time when to start waiting for an event. You can set 0 to 59 as the minutes value.
- Specify the relative minutes in the format of *RMMMM*.

  R: Refers to the relative minutes from the time when to start jobnet execution.

  MMMM: Specify the period until the start of waiting for an event by the relative minutes from the time when to start jobnet execution. You can set 1 to 2,879 minutes.
- `U`: Waits without any limit.

information-8

Specify the number of times the jobnet waits for an event. By default, a wait for an event is not set.

- `n`: Does not set a wait for an event.
- *N*: Specify the number of times the jobnet waits for an event. You can set 1 to 999.
- `U`: Wait without any limit for an event.

information-9

Specify the schedule rule number for the jobnet. You can specify a value from 1 to 144.

If you have suspended jobnets registered for fixed execution and added other jobnets, you can specify this information to calculate the schedule for such additional jobnets by using the schedule for upper-level jobnets. (For example, if you suspend jobnet A registered for fixed execution and add jobnet B, you can calculate the schedule for jobnet B from the schedule for jobnet A.)

If this information is omitted or if there is no match with the schedule rule number for upper-level jobnets, the system does not set the schedule for the jobnet being added during the suspend process.

(C) `{`

Indicates the start of a schedule information parameter.

The contents between { and corresponding } provide one schedule information parameter. One schedule information parameter provides one jobnet execution schedule.

(D) *schedule-information-parameter-group-for-job*

Specify schedule information parameters for a job.

Specify the parameters immediately after the schedule information parameter for the jobnet containing the job. The following gives the format of a schedule information parameter for a job.

```
PJ=information-1:[information-2]:[information-3];
```

The following explains each parameter.

information-1

Specify a job name. You can set a character string of 1 to 30 bytes. Note that if the character encoding is UTF-8 and `sjis` is specified for the `DEFLENTYPE` environment setting parameter, you can specify from 1 to 30 bytes after conversion to Shift-JIS.

information-2

Specify whether to execute the job. The default is `y`.

- `y`: Executes the job.
- `n`: Does not execute the job.

information-3

Specify whether to suspend job execution. Default is the hold attribute defined for the job.

- `h`: Suspends job execution.
- `n`: Does not suspend jobnet execution.

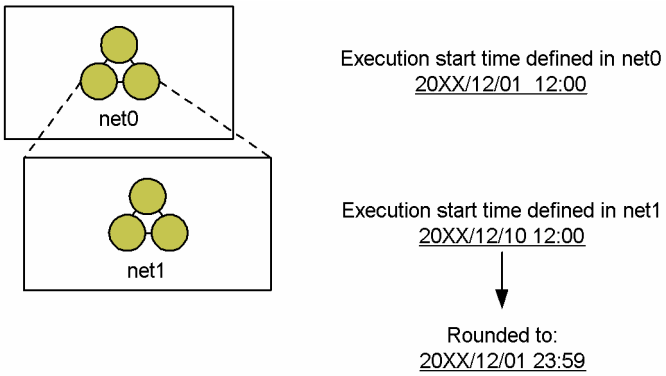
(E) `}`

Indicates the end of a schedule information parameter.

4.4.2 Notes on defining a schedule information parameter

The following are notes on defining a schedule information parameter.

- You cannot use a schedule information parameter to define a schedule for a unit not defined by using the `ajsdefine` command.
- If multiple schedule information parameters are defined for one jobnet execution schedule, only the last defined schedule information parameter is valid.
- For a nested jobnet, define schedules for all the units contained in the nested jobnet using the schedule information parameter. Otherwise, the system does not execute the nested jobnet.
- When you omit the schedule information parameter for a job, the job is executed in the same schedule for the jobnet if it is executed.
- If the execution schedule time of the lower-level jobnet is more than 24 hours after the base time of upper-level jobnet execution, the system rounds this time within 24 hours. The following gives an example of the rounding.

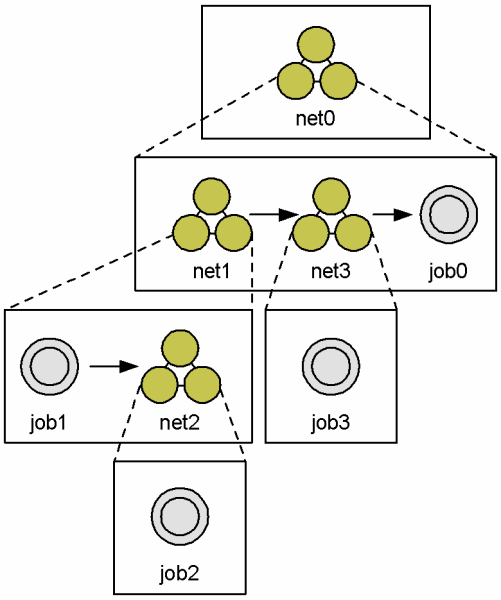


For the jobnet having the above configuration, the execution start time of jobnet `net1` is rounded to 23:59 December 1, 20XX.

4.5 Example of a schedule information parameter

This subsection gives an example of a schedule information parameter to define a schedule for a jobnet which meets the conditions below.

The following shows the configuration of the units.



The following table covers schedules to be defined.

Unit	Execution start time	Hold attribute for execution
net0	20XX/12/1 12:00	Hold
net1	20XX/12/1 12:00	Not hold
job1	Execute	Not hold
net2	20XX/12/1 14:00	Not hold
job2	Execute	Not hold
net3	20XX/12/1 13:00	Hold
job3	Not execute	N/A
job0	Execute	Not hold

Legend:

N/A: Not applicable

The following gives an example of description.

```
/* Start to define schedule information on jobnet "net0" */
PN=net0:20XX12011200:h:::::;
 {
   /* Start to define schedule information on jobnet "net1" */
   PN=net1:20XX12011200:n:::::;
    {
      PJ=job1:y:n;

      /* Start to define schedule information on jobnet "net2" */
      PN=net2:20XX12011400:n:::::;
       {
         PJ=job2:y:n;
       }
    }

   /* Start to define schedule information on jobnet "net3" */
   PN=net3:20XX12011300:h:::::;
    {
      PJ=job3:n:;
    }

  /* Start to define schedule information on job "job0" */
  PJ=job0:y:n;
 }
```

4.6 File of registered execution-schedule information for jobnets

A file of registered execution-schedule information for jobnets to which jobnet execution registration information is exported by executing the `ajsrgexport` command.

The information that has been exported to this file can be imported to the manager by executing the `ajsrgimport` command.

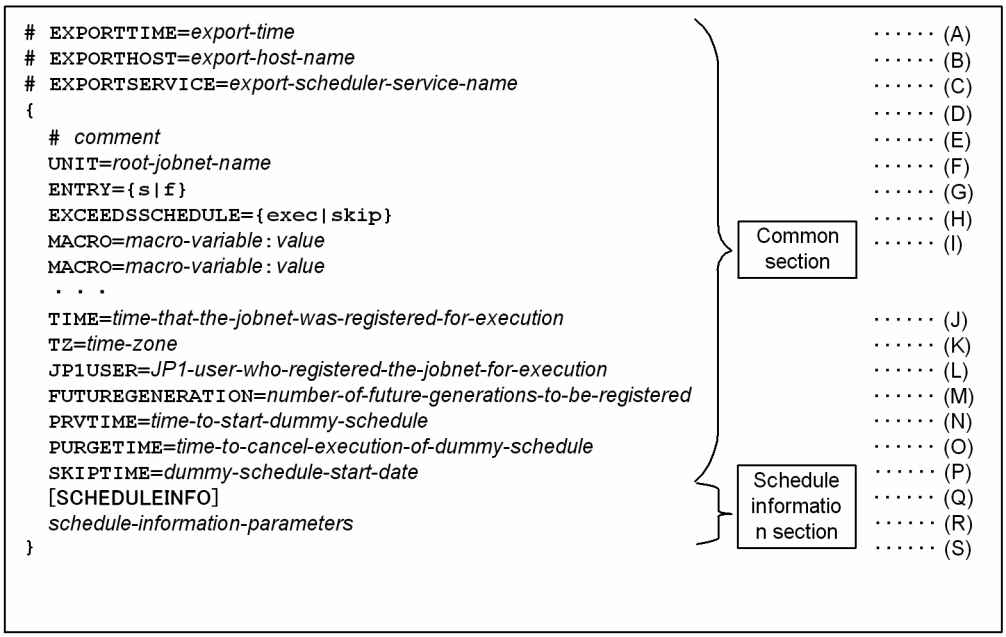
Cautionary note

We do not recommend that you modify a file of registered execution-schedule information for jobnets that has been exported. If a modified file is imported, the system might be unable to operate correctly.

4.6.1 Format of a file of registered execution-schedule information for jobnets

The following figure shows the format of parameters defined in a file of registered execution-schedule information for jobnets.

Figure 4-3: Format of parameters defined in a file of registered execution-schedule information for jobnets



The following describes the items specified in the file.

(A) *export-time*

The time that the registered execution-schedule information was exported is output.

Output format:

Japanese: *YYYY/MM/DD hh:mm:ss*

English: *MMM DD YYYY hh:mm:ss*

(B) *export-host-name*

The name of the host on which the registered execution-schedule information was exported is output.

Output format:

FQDN format (In a non-DNS environment, a short name is output.)

(C) *export-scheduler-service-name*

The name of the scheduler service from which the registered execution-schedule information was exported is output. If the scheduler service name was not specified when the `ajsrgexport` command was executed, the default scheduler service name is output.

(D) Start of parameter specifications

A left curly bracket (`{`) is used to indicate the start of a group of registered execution-schedule information parameters. This item cannot be omitted. The end of the group is indicated by a right curly bracket (`}`). A left curly bracket (`{`) and a right curly bracket (`}`) must be specified in pairs. A group of registered execution-schedule information parameters is specified for each jobnet.

(E) *comment*

A line that begins with a hash mark (`#`) is treated as a comment line.

A comment cannot be specified on a line on which a parameter has been defined.

A comment line can be added anywhere in the file.

(F) `UNIT`=*root-jobnet-name*

Specifies the unit full name of the root jobnet to be registered for execution. You can specify a character string of 1 to 930 bytes.

This parameter cannot be omitted. Multiple `UNIT` parameters cannot be specified.

The unit full name cannot be followed by a host name, scheduler service name, or execution ID.

(G) `ENTRY={s|f}`

Specifies the type of execution registration. Either of the following types can be specified:

`s`: The jobnet is registered for planned execution.

`f`: The jobnet is registered for fixed execution.

This parameter cannot be omitted. Multiple `ENTRY` parameters cannot be specified.

(H) `EXCEEDSSCHEDULE={exec|skip}`

Specifies whether the jobnet is executed if the scheduled time for execution has already passed when the scheduler service is started.

`exec`

The jobnet is executed even if the scheduled time for execution has already passed when the scheduler service is started.

`skip`

The jobnet is not executed if the scheduled time for execution has already passed when the scheduler service is started.

If this parameter is omitted, the command assumes that `EXCEEDSSCHEDULE=exec` is specified.

Multiple `EXCEEDSSCHEDULE` parameters cannot be specified.

(I) `MACRO`=*macro-variable-name*`:`*value*

Specifies a macro variable name and the value to be passed via the macro variable during execution of the jobnet. One `MACRO=` specification can be followed by only one pair of macro variable name and value.

A maximum of 32 `MACRO` parameters can be specified.

Specification of `MACRO` parameters is required only when macro variables are used. Each `MACRO` parameter must be specified on a separate line. If multiple `MACRO` parameters are specified, the total number of characters that can be specified is 4,085 bytes.

Note that, after the file is imported and the job is executed, the macro variables specified here are inherited each time the next generation is created. Therefore, the specification of MACRO parameters is valid only in the following two cases: (1) when the execution registration type is registration for planned execution (ENTRY=s) and (2) when the number of future generations is specified in registration for fixed execution (when both ENTRY=f and FUTUREGENERATION=*x* (*x*: 1 to 99) are specified). If the execution registration type is other than the above, the specification of MACRO parameters is ignored. Specifically, the specification of MACRO parameters is ignored if the execution registration type is period-specified registration for fixed execution (that is, when ENTRY=f and FUTUREGENERATION=0 are specified or when ENTRY=f is specified and FUTUREGENERATION=*x* is not specified). If the execution registration type is period-specified registration for fixed execution, the parameters must be specified in the (R) section.

macro-variable-name

The character string specified as a macro variable name can consist of upper-case letters, numeric characters, and periods (.).

The maximum length of the character string specified as a macro variable name is 62 bytes, excluding the question mark (?) at the beginning and the question mark (?) at the end of the string.

value

Any character string can be specified.

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

example 1

In the following example, only one macro variable is specified.

```
MACRO=AJS2ENV:/data/job_report
```

example 2

In the following example, multiple macro variables are specified.

```
MACRO=AJS2ENV:/data/job_report
MACRO=AJS2COM:c:\temp\test.exe
```

(J) TIME=*time-that the-jobnet-was-registered-for-execution*

The time that the jobnet was registered for execution is specified in the *YYYY*/*MM*/*DD* △ *hh*:*mm* format (△ : space). You can specify a character string of 16 bytes. If this parameter is omitted, the time that the ajsrgimport command was executed is assumed. The valid range of a value that can be specified is from 1994/01/01 00:00 to 2036/12/31 23:59. If **Registered day** is specified in the jobnet schedule rule, the schedule is calculated by using this time as the base point.

(K) TZ=*time-zone*

Specifies the time zone. You can specify a character string of 99 bytes. If this parameter is omitted, the system behaves in the same way as when the time zone is not specified.

(L) JP1USER=*JP1-user-who-registered-the-jobnet-for-execution*

Specifies the JP1 user who registered the jobnet for execution. You can specify a character string of 31 bytes. If this parameter is omitted, the JP1 user who executed the ajsrgimport command is assumed.

(M) FUTUREGENERATION=*number-of-future-generations-to-be-registered*

Specifies the number of generations scheduled to be executed at the next and the following times. You can specify a value from 1 to 99. If the execution registration type is registration for planned execution (ENTRY=s), the specification of this parameter is ignored.

(N) PRVTIME=*time-to-start-dummy-schedule*

This parameter is used for schedule calculation, and must not be changed.

(O) PURGETTIME=*time-to-cancel-execution-of-dummy-schedule*

This parameter is used for schedule calculation, and must not be changed.

(P) SKIPTIME=*dummy-schedule-start-time*

This parameter is used for schedule calculation, and must not be changed.

Note that when the file is imported, the generation management process automatically sets the value for this parameter. Therefore, after importing file of registered execution-schedule information for jobnets, even if you export that same information file without changing any settings, the SKIPTIME parameter values in the import and export files might be different. However, this difference causes no special problem.

(Q) Schedule information section

Schedule information is specified below the [SCHEDULEINFO] line. This section is required if schedule information parameters need to be specified. Note that if the execution registration type is registration for planned execution (ENTRY=s), the specification in this section is ignored.

(R) *schedule-information-parameters*

Parameters that determine the schedule information to be applied to registration for fixed execution are specified. If the execution registration type is registration for planned execution (ENTRY=s), these parameters are ignored. If the format of any schedule information parameter specified here conflicts with the configuration of the jobnet to be registered for execution, the KAVS4826-E message is output.

Schedule information parameters are specified in the following format.

```
PN=information-1:[information-2]:[information-3]:[information-4]:[information-5]:
    [information-6][:[information-7]:[information-8]:[infomation-9][:[infomation-10]:
    [infomation-11]:[infomation-12]:[infomation-13]:[infomation-14]:[infomation-15]:
    [infomation-16]:[infomation-17]]];
```

The following explains the items in the section.

information-1 to *information-9*

For details about the *information-1* to *information-9*, see *(B)schedule-information-parameter-for-jobnet* in *4.4.1 Format of the schedule information file*.

information-10

Specifies the jobnet execution order control method.

y: The jobnet is executed synchronously.

n: The jobnet is executed asynchronously.

This item can be specified for only a root jobnet. If this item is omitted, the system behaves according to the root jobnet definition.

This item is ignored if it is specified for a nested jobnet.

information-11

Specifies the jobnet monitoring time (equivalent to the time-required-for-execution within which the job is expected to be terminated). You can specify a decimal value between 1 and 2,879 (minutes).

None: The jobnet is monitored according to the definition.

0: The jobnet is not monitored.

1 to 2879: The jobnet is monitored by using the specified value.

information-12

Specifies whether to execute the unit if the time to start the unit has already passed when the service is started.

exec: The unit is executed even if the time to start has already passed.

skip: The unit is not executed if the time to start has already passed.

This item can be specified for only a root jobnet. If you omit this option, the system assumes exec.

This item is ignored if it is specified for a nested jobnet.

information-13

Specifies the time that the jobnet was registered for execution. The time is specified in the *YYYYMMDDTTMM* format (in both Japanese and English). This item cannot be omitted.

This item can be specified for only a root jobnet.

This item is ignored if it is specified for a nested jobnet.

information-14

Specifies the time zone. The maximum length of the time zone that can be specified is 99 bytes.

This item can be specified for only a root jobnet. If this item is omitted, the system behaves in the same way as when the time zone is not specified.

This item is ignored if it is specified for a nested jobnet.

Note that the time zone must be enclosed in double quotation marks (").

information-15

Specifies the name of the JP1 user who registered the jobnet for execution (the name of the JP1 user who executed the `ajsentry` command).

This item can be specified for only a root jobnet. If this item is omitted, the user who executed the command is assumed.

This item is ignored if it is specified for a nested jobnet.

Note that the name of the JP1 user who registered the jobnet for execution must be enclosed in double quotation marks (").

information-16

Specifies macro variable information.

`0`: The macro variables specified in the common section are not used, and the macro variables specified in the schedule information section are used. If `""` (null) is specified as a macro variable in the schedule information section, the macro variable is not used.

`1`: The macro variables specified in the common section are used.

This item can be specified for only a root jobnet. This item is ignored if it is specified for a nested jobnet.

information-17

Specifies a macro variable name and the value to be passed via the macro variable during execution of the jobnet.

This item can be specified for only a root jobnet. This item is ignored if it is specified for a nested jobnet.

Note that the macro variable must be enclosed in double quotation marks (").

For jobs, schedule information parameters are specified in the following format.

```
PJ=information-1:[information-2]:[information-3];
```

For details about the *information-1* to *information-3*, see *(D)schedule-information-parameter-group-for-job* in *4.4.1 Format of the schedule information file*.

(S) End of parameter specifications

A right curly bracket (}) is used to indicate the end of a group of execution registration information parameters. This item cannot be omitted.

If an export file containing the registered execution-schedule information about a root jobnet that has been registered for planned execution is imported, the schedule is created based on items (A) to (P) in the common section.

When registered execution-schedule information about a root jobnet that has been registered for fixed execution is exported, if schedule information that has already been generated exists, the information is output to the schedule information section. Therefore, if the exported file is then imported, schedule information is generated based on the

parameters in the schedule information section. Also, be careful if the FUTUREGENERATION value in (M) is at least 1 and the number of schedules generated in the schedule information section when the file is imported is less than the specified number of generations. In this case, the rest of the schedules are generated based on items (A) to (P) in the common section.

Appendixes

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, AJS*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 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**[#1]
  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**[#1]
  5. Environment variables specified for **Environment file**[#2]
  6. Environment variables used 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

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

#3

Applies only when JP1/AJS3 Queueless Agent is specified as the execution target service.

- 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# 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, AJS*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 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, AJS*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 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 script file for the job to be executed.

B. Privileges Required for Operation as the AJS Administrator

B.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.

Table B-1: Commands that are restricted when used by an AJS administrator

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.

B.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.

The following table describes the directories and files on which AJS administrators can perform command operations, and the required access permissions.

Table B-2: Access permissions required by AJS administrators for command operations 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	p	Execution agent profile	r
4		e	Unit-attribute profile	r
5		o	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	rx
23		i	Embedded database practical directory	rwx
24	ajsembdboplog	o	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

No.	Command	Option	File or directory requiring access permissions	Required permissions for the AJS administrator
28	ajsembdbrstr	bf	Backup file	r
29		l	Unload log file	r
30		ld	Unload log storage directory	rx
31		e	Directory where output results stored	rwx
32	ajsembdbunset	i	Embedded database practical directory	rwx
33	jajs_migrate	T	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		C	Embedded database settings file	r
43	jp1ajs2_setup_cluster	d	Shared directory	rwx
44	jpqdbcond	d	Work file directory	rwx
45	jpqexport	co	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 files and directories in the data directory	rw

Legend

--: Not applicable

#

You need access permission for the applicable files or directories regardless of whether you specify an option.

C. Version Revisions

This appendix lists the changes in each version of the JP1/AJS series programs.

C.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.

C.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.

- 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.

C.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.

- The embedded database settings file is now generated when an embedded database is set up. If this file is specified when the `ajsembdbbuild` 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)

(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.

- 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.

C.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:

    - 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.

(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.

- Support for Windows Vista has been added.

C.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.

C.6 Revisions in 07-50

The following lists the revisions in 07-50 for each program.

(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

- 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.

C.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.

- 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

D. Reference Material for This Manual

This appendix provides reference information, including various conventions, for this manual.

D.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* 1 (3021-3-326(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

- *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))

D.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#
JP1/AJS2 - Client Toolkit		Job Management Partner 1/Automatic Job Management System 2 - Client Toolkit#
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#
	JP1/IM - Central Scope	Job Management Partner 1/Integrated Manager - Central Scope#
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.

D.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

D.4 Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1,024 bytes.
- 1 MB (megabyte) is $1{,}024^2$ bytes.
- 1 GB (gigabyte) is $1{,}024^3$ bytes.
- 1 TB (terabyte) is $1{,}024^4$ bytes.

D.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.

D.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.

D.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[#]\HITACHI\JP1AJS2

and

system-drive\Program Files[#]\HITACHI\JP1AJS2CM

Default installation folder of JP1/AJS3 - Agent:

system-drive\Program Files[#]\HITACHI\JP1AJS2

Default installation folder of JP1/AJS3 - View:

system-drive\Program Files[#]\HITACHI\JP1AJS2V

#

For 64-bit versions of Windows, replace Program Files with Program Files (x86).

D.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.

D.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.

D.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.

D.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.

D.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. 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*xxxxx*? 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

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W