

JP1 Version 11

**JP1/Automatic Job Management System 3
Troubleshooting**

3021-3-B17-20(E)

Notices

■ Relevant program products

For details about the applicable OS versions, and the service packs and patches required for JP1/Automatic Job Management System 3, see the *Release Notes*.

JP1/Automatic Job Management System 3 - Manager (For Windows):

P-2A12-3KBL JP1/Automatic Job Management System 3 - Manager version 11-50

The above product includes the following:

P-CC2A12-4KBL JP1/Automatic Job Management System 3 - Manager version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)

P-CC2912-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)

P-CC8212-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)

P-CC2A12-3NBL JP1/Automatic Job Management System 3 - Print Option Manager version 11-10 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)

JP1/Automatic Job Management System 3 - Manager (For HP-UX):

P-1J12-3KBL JP1/Automatic Job Management System 3 - Manager version 11-50

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P-CC1J12-4KBL JP1/Automatic Job Management System 3 - Manager version 11-50 (For HP-UX(IPF))

P-CC2912-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)

P-CC8212-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)

P-CC1J12-3NBL JP1/Automatic Job Management System 3 - Print Option Manager version 11-10 (For HP-UX(IPF))

JP1/Automatic Job Management System 3 - Manager (For Solaris):

P-9D12-3KBL JP1/Automatic Job Management System 3 - Manager version 11-50

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P-CC9D12-4KBL JP1/Automatic Job Management System 3 - Manager version 11-50 (For Solaris 11(SPARC), Solaris 10(SPARC))

P-CC2912-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)

P-CC8212-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)

P-CC9D12-3NBL JP1/Automatic Job Management System 3 - Print Option Manager version 11-10 (For Solaris 11(SPARC), Solaris 10(SPARC))

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P-CC2912-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)
P-CC8212-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)
P-CC1M12-3NBL JP1/Automatic Job Management System 3 - Print Option Manager version 11-10 (For AIX)

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P-8112-3KBL JP1/Automatic Job Management System 3 - Manager version 11-50

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P-CC2912-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2)
P-CC8212-39BL JP1/Automatic Job Management System 3 - Web Console version 11-50 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)
P-CC8112-3NBL JP1/Automatic Job Management System 3 - Print Option Manager version 11-10 (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7)

JP1/Automatic Job Management System 3 - Agent (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2):

P-2A12-33BL JP1/Automatic Job Management System 3 - Agent version 11-50

JP1/Automatic Job Management System 3 - Agent (For HP-UX(IPF)):

P-1J12-33BL JP1/Automatic Job Management System 3 - Agent version 11-50

JP1/Automatic Job Management System 3 - Agent (For Solaris 11 (SPARC) and Solaris 10 (SPARC)):

P-9D12-33BL JP1/Automatic Job Management System 3 - Agent version 11-50

JP1/Automatic Job Management System 3 - Agent (For AIX):

P-1M12-33BL JP1/Automatic Job Management System 3 - Agent version 11-50

JP1/Automatic Job Management System 3 - Agent (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7):

P-8112-33BL JP1/Automatic Job Management System 3 - Agent version 11-50

JP1/Automatic Job Management System 3 - Agent Minimal Edition (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2):

P-2A12-38BL JP1/Automatic Job Management System 3 - Agent Minimal Edition version 11-50

JP1/Automatic Job Management System 3 - Agent Minimal Edition (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7):

P-8112-38BL JP1/Automatic Job Management System 3 - Agent Minimal Edition version 11-50

JP1/Automatic Job Management System 3 - View (For Windows):

P-2A12-34BL JP1/Automatic Job Management System 3 - View version 11-50

The above product includes the following:

P-CC2A12-44BL JP1/Automatic Job Management System 3 - View version 11-10 (For Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012 R2, Windows Server 2012, Windows 7, Windows Server 2008 R2)

P-CC2A12-3MBL JP1/Automatic Job Management System 3 - Print Option version 11-50 (For Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012 R2, Windows Server 2012, Windows 7, Windows Server 2008 R2)

JP1/Base (For Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2):
P-2A2C-6LBL JP1/Base version 11-50

JP1/Base (For HP-UX(IPF)):
P-1J2C-6LBL JP1/Base version 11-50

JP1/Base (For Solaris 11 (SPARC) and Solaris 10 (SPARC)):
P-9D2C-6LBL JP1/Base version 11-50

JP1/Base (For AIX):
P-1M2C-6LBL JP1/Base version 11-50

JP1/Base (For Linux 6.1(x64) or later, Linux 7.1, Oracle Linux 6(x64), Oracle Linux 7, SUSE Linux 12, CentOS 6(x64), CentOS 7):
P-812C-6LBL JP1/Base version 11-50

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 Hitachi, Ltd.



■ 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 SQL Server		Microsoft(R) SQL Server
		Microsoft(R) SQL Server Enterprise Edition
MSMQ		Microsoft(R) Message Queue Server
Outlook	Outlook 2007	Microsoft(R) Office Outlook(R) 2007
	Outlook 2010	Microsoft(R) Office Outlook(R) 2010
	Outlook 2013	Microsoft(R) Office Outlook(R) 2013
Outlook Express		Microsoft(R) Outlook(R) Express
Windows 10		Windows(R) 10 Enterprise
		Windows(R) 10 Pro

Abbreviation		Full name or meaning
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 2008	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 Server 2016		Microsoft(R) Windows Server(R) 2016 Datacenter
		Microsoft(R) Windows Server(R) 2016 Standard

Windows is sometimes used generically, referring to Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008.

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Summary of amendments

The following table lists changes in the manuals (3021-3-B12-20(E), 3021-3-B13-20(E), 3021-3-B14-20(E), 3021-3-B15-20(E), 3021-3-B16-20(E), 3021-3-B17-20(E), 3021-3-B18-20(E), 3021-3-B19-20(E), 3021-3-B20-20(E), 3021-3-B21-20(E)) and product changes related to these manuals.

Changes	Location
<p>The Web GUI now support the following functions:</p> <ul style="list-style-type: none"> Viewing monthly schedules Adding execution schedules Change plan (change time) Change plan (execute immediately) Change plan (execution prohibited) Change plan (release change) Change delay monitor 	<p>Overview <i>6.3, 8.2.1, 8.2.2</i></p> <p>System Design (Configuration) Guide <i>3.2.1(3), 3.2.1(4), 3.4.7</i></p> <p>Configuration Guide <i>3.4.3(4), 3.4.3(5)(n), 3.4.3(6), 13.3.3(4), 13.3.3(5)(m), 13.3.3(6)</i></p> <p>Troubleshooting <i>C.1</i></p> <p>Operator's Guide <i>A.4, A.5, A.6, A.7, A.10, A.19, A.20, A.22, A.23, A.24, A.25, A.26, A.27</i></p> <p>Messages <i>KNAK2023-E, KNAK2427-Q, KNAK2428-Q, KNAK2429-E, KNAK2430-Q</i></p>
<p>The API now supports the function to acquire unit information.</p>	<p>Command Reference <i>6.6.1(1), 6.6.1(4), 7.1.2, 7.1.18, 7.3.2, 7.4.5(7), 7.4.5(8), D.1, D.2, D.3, D.4</i></p>
<p>The maximum size of the Java heap on the Web Console server can now be changed, and the default value was changed from 512 MB to 2,048 MB.</p>	<p>Configuration Guide <i>3.4.2, 3.4.9, 13.3.2, 13.3.9</i></p> <p>Administration Guide <i>2.2.5(1)(a), 2.2.5(1)(b)</i></p> <p>Troubleshooting <i>A.4(1), A.4(2)</i></p>
<p>A function was added to enable you to change the colors indicating unit statuses displayed in the windows and dialog boxes of the Web GUI.</p>	<p>Overview <i>6.1</i></p> <p>System Design (Configuration) Guide <i>4.6.1(3)</i></p> <p>Configuration Guide <i>3.4.2, 3.4.8, 13.3.2, 13.3.8</i></p> <p>Administration Guide <i>2.2.5(1)(a), 2.2.5(1)(b)</i></p> <p>Troubleshooting <i>A.4(1), A.4(2)</i></p> <p>Operator's Guide <i>B.</i></p>
<p>The map area in the Monitor dialog box and the Monitor screen of the Web GUI can now switch between displaying unit names and comments.</p>	<p>Operator's Guide <i>A.10, A.11</i></p>
<p>The following functions were added to improve job throughput when multiple scheduler services are active:</p>	<p>System Design (Configuration) Guide <i>3.1.1(1), 3.1.1(5)(a), 3.4.2, 3.4.2(1), 3.4.2(2)</i></p>

Changes	Location
<ul style="list-style-type: none"> Function to reduce the number of ports that are used during job execution Function to output trace logs for each scheduler service <p>In addition to the changes to internal processing, the JP1/AJS3 performance processing that runs when multiple root jobnets start at the same time was improved. As a result, job throughput when a single scheduler service is active was also improved.</p>	<p>Configuration Guide 3.5.1(1), 6.1.1(2), 6.1.1(4)(b), 6.1.5, 6.1.12, 7.1.1, 8.2.9(2), 8.2.9(4)(b), 13.4.4(1), 15.1.1(2), 15.1.1(4)(b), 15.1.5, 15.1.13, 16.1.1, 17.2.9(2), 17.2.9(4)(b), 20.4.1, 20.4.2(4), 20.4.2(116), 20.8.1, 20.8.2(4)</p> <p>Troubleshooting 1.2.3(1), 1.2.4(1), 1.2.4(2)</p> <p>Command Reference 3. <i>ajstrsetsz</i></p> <p>Messages KAVS0788-E, KAVU0244-E, KAVU2229-E, KAVU2231-E</p>
<p>The maximum number of execution agents that can be registered on one manager host can now be increased to 2,048.</p>	<p>Overview A.2</p> <p>System Design (Configuration) Guide 2.1.1, 2.5.1, B.1, B.5</p> <p>Configuration Guide 6.2.28, 15.2.25, 20.3.1, 20.3.2(16)</p> <p>Command Reference 3. <i>ajsagtadd</i></p> <p>Messages 1.3.7(2), KNAC1521-E</p>
<p>To enable the comments on units to be viewed in JP1/IM windows, commenting on units was added as an extended attribute (specific information) of a JP1 event whose OBJECT_TYPE is JOBNET or JOB.</p>	<p>Configuration Guide 20.4.1, 20.4.2(114), 20.4.2(115)</p> <p>Administration Guide A.2(3), A.2(4), A.2(5), A.2(6), A.2(7), A.2(8), A.2(9), A.2(10), A.2(11), A.2(14), A.2(15), A.2(16), A.2(17), A.2(18), A.2(19), A.2(20), A.2(21), A.2(23), A.2(24), A.2(25), A.2(26), A.2(27), A.2(28), A.2(29), A.2(30), A.2(31), A.2(32), A.2(33), A.2(34), A.2(35), A.2(36), A.2(37), A.2(44), A.2(45), A.2(46), A.2(47)</p> <p>Messages 1.3.2, 1.4.1, KAVS0917-E</p>
<p>Commands to specify settings of environment setting parameters were integrated into the <code>ajajs_config</code> command.</p>	<p>Overview 10.5.1(3)(a)</p> <p>System Design (Configuration) Guide 7.2.2</p> <p>Configuration Guide 4.2, 4.2.1, 4.2.2, 6.2, 6.2.18(1), 6.2.21(1), 6.2.22(1), 6.2.24(1), 6.4, 6.4.1(1), 6.4.1(3), 6.4.2(1), 6.4.3(1), 13.4.1(1), 14.2, 14.2.1, 14.2.2, 15.2.20(1), 15.2.22(1), 15.4, 15.4.1(1), 15.4.1(3), 20.7.2(5), 20.10.1, 20.10.2(3)</p> <p>Troubleshooting 1.2.4(1), 1.2.4(2)</p> <p>Command Reference 2. <i>ajajs_config</i>, 4. <i>ajajsqlsetup</i></p>
<p>When the scheduler service is restarted, a job that meets specific conditions now transitions to <i>Wait for prev. to end</i> or to <i>Not executed + Ended</i> status (and not to <i>Unknown end status</i>). This enables you to determine, from the job status</p>	<p>Overview A.2</p>

Changes	Location
after the restart of the scheduler service, whether a user program has started.	Administration Guide 6.2.1(3)(a), 6.4, A.1 Command Reference 3. ajsstart Messages KAVS0266-I
Descriptions were added concerning JP1/AJS3 - Agent Minimal Edition, which limits the number of jobs that can be executed per day to 10.	System Design (Configuration) Guide 2.1.1, 2.1.2(1), 4.2.1, 8.1.3, A.1(2), A.2, A.4, A.7(1), A.7(2), A.7(3), G. Configuration Guide 20.5.1, 20.5.2(93), 20.5.2(94), 20.6.1, 20.7.1, 20.11.1 Administration Guide 7.9.3 Troubleshooting 1.2.4(1), 1.2.4(2) Command Reference 1.5.1, 1.5.9(2), 2. ajsatsetup, 4. ajsqlsetup Messages 1.3.4, 1.3.8, KAVS1931-E, KAVS4540-E, KAVS8100-E, KAVU3607-I, KAVU3608-E, KNAD1000-E, KNAD1704-Q

Legend:

Overview: *JP1/Automatic Job Management System 3 Overview*

System Design (Configuration) Guide: *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*

System Design (Work Tasks) Guide: *JP1/Automatic Job Management System 3 System Design (Work Tasks) Guide*

Configuration Guide: *JP1/Automatic Job Management System 3 Configuration Guide*

Administration Guide: *JP1/Automatic Job Management System 3 Administration Guide*

Troubleshooting: *JP1/Automatic Job Management System 3 Troubleshooting*

Operator's Guide: *JP1/Automatic Job Management System 3 Operator's Guide*

Command Reference: *JP1/Automatic Job Management System 3 Command Reference*

Linkage Guide: *JP1/Automatic Job Management System 3 Linkage Guide*

Messages: *JP1/Automatic Job Management System 3 Messages*

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

Preface

This manual describes how to troubleshoot errors for Job Management Partner 1/Automatic Job Management System 3 (abbreviated hereafter to *JP1/AJS3*).

■ Intended readers

This manual is intended for:

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

■ Organization of this manual

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

1. *Troubleshooting Procedure and Required Data*

Chapter 1 describes the general troubleshooting procedure, the logs that are available to facilitate troubleshooting, and the data you need to collect if a problem occurs during JP1/AJS3 operation.

2. *Troubleshooting Typical Problems*

Chapter 2 describes how to troubleshoot typical problems that might occur when JP1/AJS3 is being used.

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

There are 11 JP1/AJS3 manuals. The following table summarizes their contents.

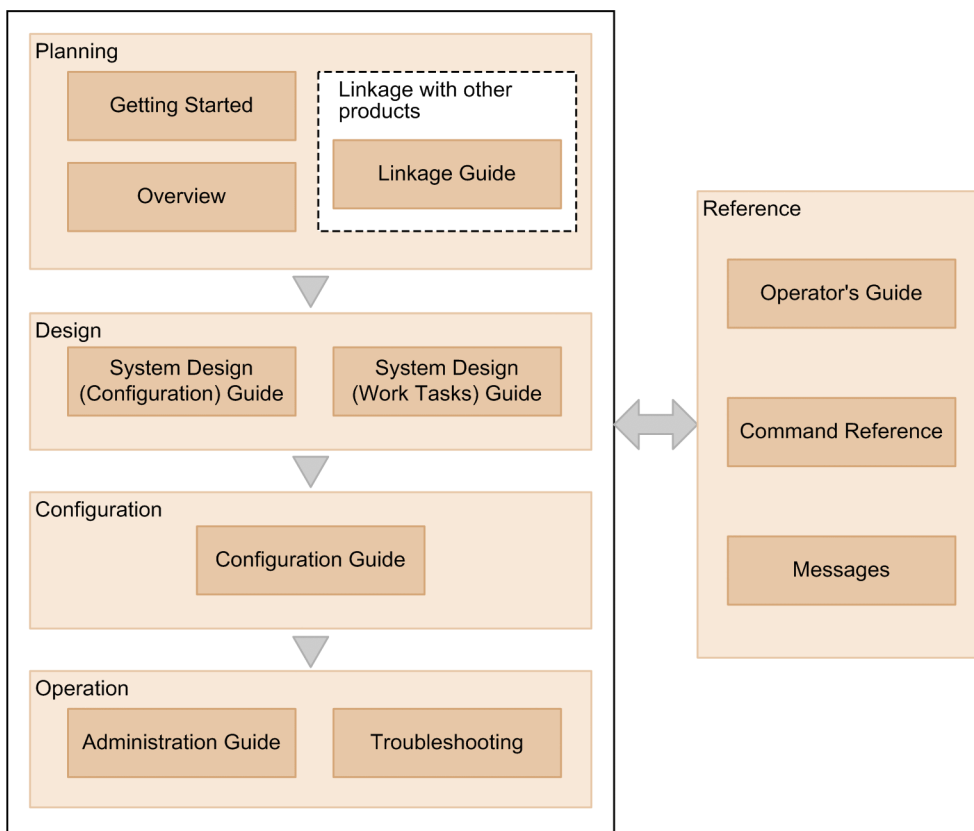
No.	Manual	Contents
1	<i>Getting Started</i> (3021-3-B11(E))	<ul style="list-style-type: none">• Basic JP1/AJS3 operations
2	<i>Overview</i> (3021-3-B12(E))	<ul style="list-style-type: none">• JP1/AJS3 features• Description of functions
3	<i>System Design (Configuration) Guide</i> (3021-3-B13(E))	<ul style="list-style-type: none">• Information that must be considered when designing a system• Cautionary notes on designing a system
4	<i>System Design (Work Tasks) Guide</i> (3021-3-B14(E))	<ul style="list-style-type: none">• Information that must be considered when constructing jobs and jobnets• Cautionary notes on designing jobs and jobnets
5	<i>Configuration Guide</i> (3021-3-B15(E))	<ul style="list-style-type: none">• Installation and setup procedures• Environment setup procedure• Description of environment setting parameters• How to set up functions according to how the system is used
6	<i>Administration Guide</i> (3021-3-B16(E))	<ul style="list-style-type: none">• Information required to operate a system• Know-how useful for JP1/AJS3 operation
7	<i>Troubleshooting</i>	<ul style="list-style-type: none">• How to troubleshoot errors

No.	Manual	Contents
7	(3021-3-B17(E))	<ul style="list-style-type: none"> Data required when an error occurs
8	<i>Operator's Guide</i> (3021-3-B18(E))	<ul style="list-style-type: none"> How to operate JP1/AJS3 - View Description of windows and dialog boxes
9	<i>Command Reference</i> (3021-3-B19(E))	<ul style="list-style-type: none"> Command syntax Syntax and coding examples of information definition files API details and syntax
10	<i>Linkage Guide</i> (3021-3-B20(E))	<ul style="list-style-type: none"> Description of functions that can be used when linked with other products and the setup method
11	<i>Messages</i> (3021-3-B21(E))	<ul style="list-style-type: none"> Messages output by JP1/AJS3

Getting Started refers to *JP1 Version 11 Job Management: Getting Started (Job Scheduler)*. "JP1 Version 11 JP1/Automatic Job Management System 3" is omitted in other manual names.

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 the basic usage of JP1/AJS3	<ul style="list-style-type: none"> <i>Getting Started</i> (3021-3-B11(E)) 	<ul style="list-style-type: none"> <i>Operator's Guide</i> (3021-3-B18(E))
To learn about JP1/AJS3's functionalities	<ul style="list-style-type: none"> <i>Overview</i> 	<ul style="list-style-type: none"> <i>Linkage Guide</i>

Purpose	Required reading	Read as necessary
To learn about JP1/AJS3's functionalities	(3021-3-B12(E))	(3021-3-B20(E))
To configure a system (including installation and setup) that automatically runs jobs	<ul style="list-style-type: none"> • <i>System Design (Configuration) Guide</i> (3021-3-B13(E)) • <i>Configuration Guide</i> (3021-3-B15(E)) 	<ul style="list-style-type: none"> • <i>Linkage Guide</i> (3021-3-B20(E))
To design work tasks that will be automated (including job definitions and schedule definitions)	<ul style="list-style-type: none"> • <i>System Design (Work Tasks) Guide</i> (3021-3-B14(E)) 	<ul style="list-style-type: none"> • <i>Operator's Guide</i> (3021-3-B18(E))
To learn about monitoring and maintaining a running system	<ul style="list-style-type: none"> • <i>Administration Guide</i> (3021-3-B16(E)) 	<ul style="list-style-type: none"> • <i>Troubleshooting</i> (3021-3-B17(E)) • <i>Messages</i> (3021-3-B21(E))
To learn about what action you need to take for problems that occur during operation	<ul style="list-style-type: none"> • <i>Troubleshooting</i> (3021-3-B17(E)) 	<ul style="list-style-type: none"> • <i>Messages</i> (3021-3-B21(E))
To learn about operating JP1/AJS3	<ul style="list-style-type: none"> • <i>Operator's Guide</i> (3021-3-B18(E)) 	<ul style="list-style-type: none"> • <i>Command Reference</i> (3021-3-B19(E))

■ Replacing the term JP1/AJS3 - Agent with JP1/AJS3 - Agent Minimal Edition in this manual

This manual uses the term *JP1/AJS3 - Agent* to mean both JP1/AJS3 - Agent and JP1/AJS3 - Agent Minimal Edition. If you use JP1/AJS3 - Agent Minimal Edition, replace the term *JP1/AJS3 - Agent* with the term *JP1/AJS3 - Agent Minimal Edition* while reading this manual. If, however, a difference between JP1/AJS3 - Agent Minimal Edition and JP1/AJS3 - Agent is described, both terms (*JP1/AJS3 - Agent Minimal Edition* and *JP1/AJS3 - Agent*) are used.

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1

Troubleshooting Procedure and Required Data

This chapter describes the general troubleshooting procedure, logs that are available to facilitate troubleshooting, and the data you need to collect if a problem occurs during JP1/AJS3 operation.

1.1 Troubleshooting procedure

If a problem occurs in JP1/AJS3, use the following procedure to troubleshoot:

1. Check the status.

Check the status of the problem. If a message is output, read it. For details about why each message is output and how to troubleshoot, see the manual *JP1/Automatic Job Management System 3 Messages*.

For details about the information that is logged by JP1/AJS3, see *1.2 Types of log information and storage locations*.

2. Collect data.

You need to collect data to identify the cause of a problem. Collect the necessary data after reading *1.3 Data to be collected when a problem occurs* and *1.4 Collecting data for troubleshooting*.

3. Investigate the problem.

Identify the cause of the problem based on the data you have collected. Either pinpoint where the problem occurred or narrow down the problem range.

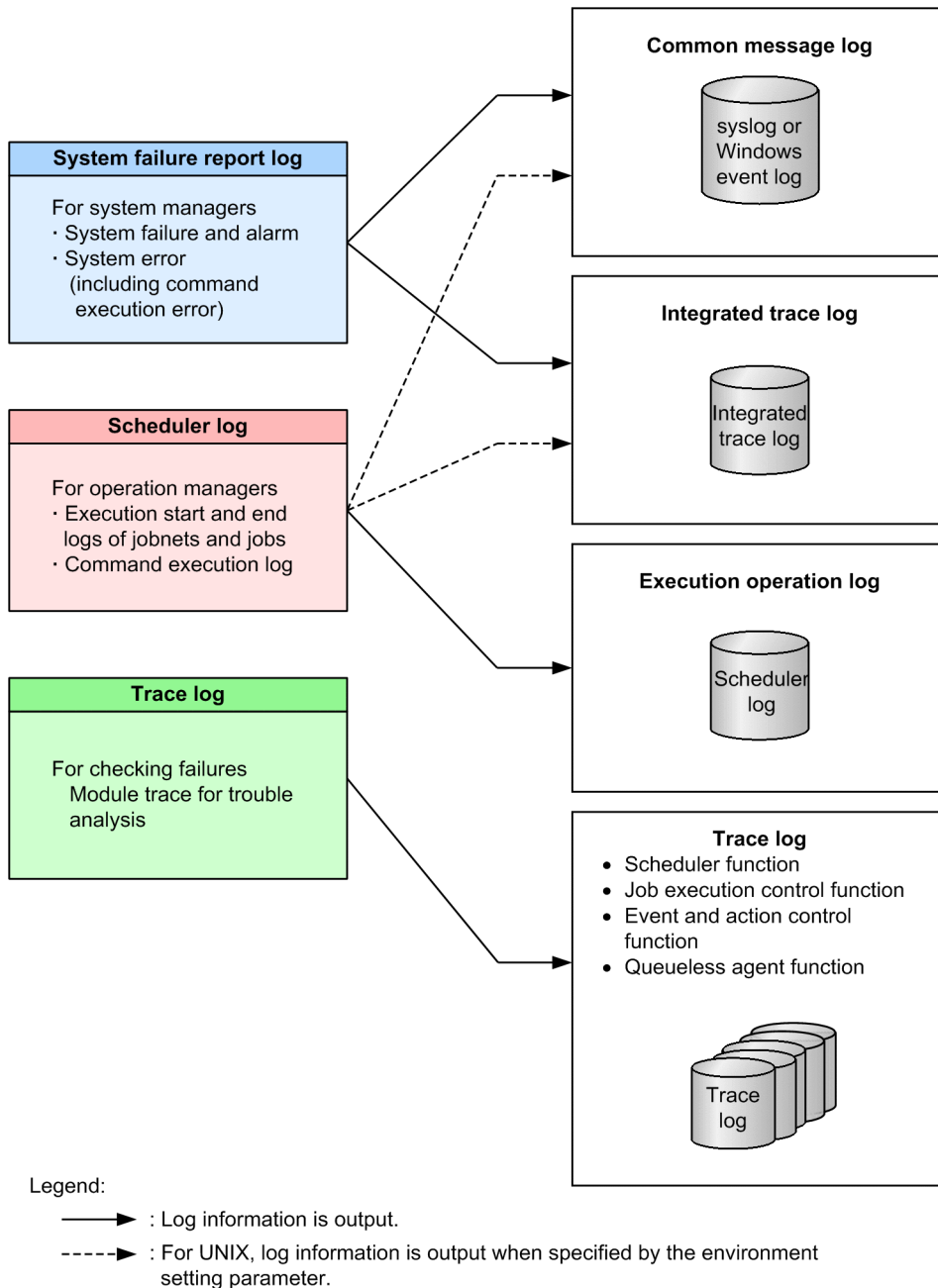
1.2 Types of log information and storage locations

JP1/AJS3 logs three types of information while it is running:

1. System failure log
2. Scheduler log
3. Trace log

The following figure shows where these three types of log information are stored.

Figure 1–1: Storage locations for log information



1.2.1 System failure log

System failure log refers to the information logged for system problems. This information is used by system administrators.

System failure log consists of the common message log and the integrated trace log.

(1) Common message log

The common message log is output to the Windows event log file or the `syslog` file.

(2) Integrated trace log

The integrated trace log contains the trace information that is output by different programs via Hitachi Network Objectplaza Trace Library (HNTRLib2). This information is stored in output files. The integrated trace log contains more detailed messages than those provide by the common message log.

The integrated trace log is output to integrated trace log files.

For details about how to obtain the integrated trace log, see the *JP1/Base User's Guide*.

The integrated trace log is output to the following files by default:

In Windows:

```
system-drive\Program Files (x86)#1,#2
\HITACHI\HNTRLib2\spool\hntr2{1|2|3|4}.log
```

In UNIX:

```
/var/opt/hitachi/HNTRLib2/spool/hntr2{1|2|3|4}.log
```

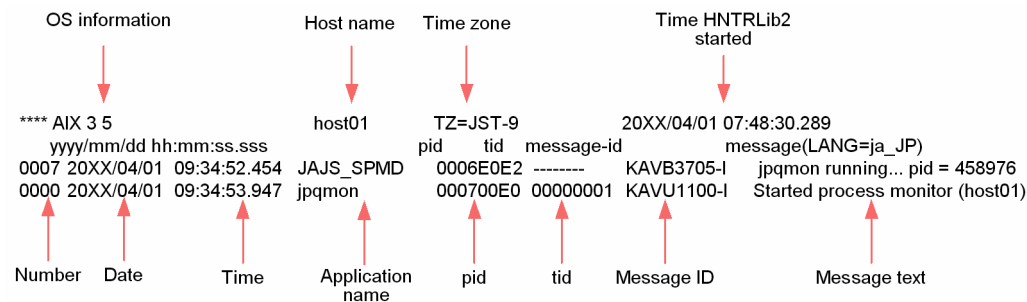
#1
For 32-bit versions of Windows, replace `Program Files (x86)` with `Program Files`.

#2
For JP1/AJS3 - Web Console, replace `Program Files (x86)` with `Program Files`.

You can specify the type of system failure log to be collected in the integrated trace log. To do this, use the `jajs_config` command to specify the type of information to be logged in the `HNTRLOGLEVEL` environment setting parameter.

You can use a text editor to read the integrated trace log files. The following figure shows an example of output to an integrated trace log file.

Figure 1–2: Example of output to an integrated trace log file



The following tables describe the headers and output items in the integrated trace log file.

Table 1–1: Meaning of headers in the integrated trace log file

Header	Explanation
OS information	The OS on which Hitachi Network Objectplaza Trace Library (HNTRLib2) is running.
Host name	The name of the host on which Hitachi Network Objectplaza Trace Library (HNTRLib2) is running.
Time zone	In Windows: The time zone set for the OS. In UNIX: The value of the TZ environment variable for the integrated trace log. If the TZ environment variable is not specified, Unknown is displayed.
Time HNTRLib2 started	The time that Hitachi Network Objectplaza Trace Library (HNTRLib2) started

Table 1–2: Meaning of the output items in the integrated trace log file

Output item	Explanation
Number (4 digits)	The sequence number of the trace record. A number is assigned for each process for which information is logged.
Date (10 bytes)	The date the trace was collected: <i>yyyy/mm/dd</i> (year/month/day)
Time (12 bytes)	The local time the trace was collected: <i>hh:mm:ss.sss</i> (hour:minutes:seconds.milliseconds)
Application name (16 bytes or less)	The name of an application (application identification name). JP1/AJS3 generally outputs the following application names: <ol style="list-style-type: none"> 1. The JP1/AJS3 service: JAJS_SPMD 2. The scheduler process: ajsmasterd 3. The flow control process: ajsflowd (ajsflowd.exe for Windows) 4. The job submit process: ajssubd (ajssubd.exe for Windows) 5. The job completion wait process: ajssubwd (ajssubwd.exe for Windows) 6. The job execution control status notification process: jpqnfyfd (jpqnfyfd.exe for Windows) 7. The schedule control process: ajsschd 8. The event/action control manager process: jpomanager 9. The event/action control agent process: jpoagent 10. The execution interval control process: jpocwttmMain 11. The event (JP1 events, log traps, etc.) monitoring process: jpoeventwatch 12. The event/action control submanager process: jpomgrsub 13. The event/action control subagent process: jpoagsub 14. The job execution control process: jpqmon 15. The job execution control manager process: jpqman 16. The job execution control agent process: jpqagt 17. The network control process: ajsinetd 18. The process that starts when a user logs in to JP1/AJS3 - View: ajsmonsvr 19. The JP1/AJS3 - Queueless Agent service (queueless agent process): ajsqlagtd 20. The JP1/AJS3 - Queueless File Transfer service (queueless file transfer process): ajsqlftpd 21. The JP1/AJS3 Check Manager service: ajschkmand (ajschkmand.exe for Windows) 22. The JP1/AJS3 Check Agent service: ajschkagtd 23. Other processes and commands: The process or command name
pid	The process ID assigned by the OS. A pid is output as a hexadecimal number.
tid	The thread ID that identifies a thread. A tid is output as a hexadecimal number.

Output item	Explanation
Message ID	A message ID appearing in <i>1.2.1 Format of output messages</i> in the manual <i>JP1/Automatic Job Management System 3 Messages</i> . The message IDs in this log are only those used by JP1/AJS3.
Message text	The text of a message output to the integrated trace log. The message texts in this log are those output by JP1/AJS3.

Important

The time that information is recorded in the integrated trace log is the time in the time zone to which the source process belongs. If a user changes the value of the TZ environment variable and then starts a service or executes a command, the time of log information might not match the time zone set for the OS.

1.2.2 Scheduler log

Scheduler log is logged by the JP1/AJS3 scheduler services, and is used by operations administrators. The scheduler log indicates when execution of a jobnet or job started or ended, and how jobnets and jobs were handled.

The JP1/AJS3 scheduler log can be recorded separately for each scheduler service on a JP1/AJS3 - Manager host or for the entire host. To make this specification, use the AJSLOGOUTPUTDEST environment setting parameter. By default, scheduler log is recorded separately for each scheduler service.

- Logging scheduler log for each scheduler service

Scheduler log is logged for each scheduler service when `schedule` is specified in the AJSLOGOUTPUTDEST environment setting parameter. The logged information is output to the file specified in the AJSLOGFILE1 environment setting parameter or AJSLOGFILE2 environment setting parameter. The default destination file is as follows:

For Windows, if the installation folder is the default installation folder or is in a folder protected by the system:

```
%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\log\scheduler\
scheduler-service-name\ajs-log1.log or %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT
\JP1AJS2\log\scheduler\scheduler-service-name\ajs-log2.log
```

The default value for %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`
- `system-drive\Program Files (x86)`

For Windows, if the installation folder is other than the above:

```
JP1/AJS3-installation-folder\log\scheduler\scheduler-service-name\ajs-log1.log or JP1/AJS3-
installation-folder\log\scheduler\scheduler-service-name\ajs-log2.log
```

For UNIX:

```
/var/opt/jplajs2/log/scheduler/scheduler-service-name/ajs-log1.log or /var/opt/
jplajs2/log/scheduler/scheduler-service-name/ajs-log2.log
```

- Logging scheduler log for the entire host

Scheduler log is logged for the entire host when `host` is specified in the AJSLOGOUTPUTDEST environment setting parameter. In this case, the scheduler log logged by different scheduler services is output to one file. The

logged information is output to the file specified in the `HOSTLOGFILE1` environment setting parameter or `HOSTLOGFILE2` environment setting parameter. The default destination file is as follows:

For Windows, if the installation folder is in the default folder or a folder protected by the system:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\log\ajs-host-log1.log` or
`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\log\ajs-host-log2.log`

The default value for `%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`
- `system-drive\Program Files (x86)`

For Windows in which an installation folder other than the above is used:

`JP1/AJS3-installation-folder\log\ajs-host-log1.log` or `JP1/AJS3-installation-folder\log\ajs-host-log2.log`

For UNIX:

`/var/opt/jp1ajs2/log/ajs-host-log1.log` or `/var/opt/jp1ajs2/log/ajs-host-log2.log`

- Logging format for scheduler log

The logging format for scheduler log is as follows:

log-typeΔdateΔtimeΔadditional-information

Legend:

Δ: 1-byte space character

For details about scheduler log, see *C.1 Log entries output by the scheduler services*.

1.2.3 Trace log

A trace log contains trace information that can be used in investigating how a problem has occurred and in determining how time was required to execute each process when a problem has occurred.

The JP1/AJS3 trace information is output to multiple trace log files. The internal format of each trace log file is not public information. In addition, a text editor cannot be used to view the files because the files are binary files.

(1) Scheduler trace

There are two types of scheduler trace log files as follows:

- Common scheduler trace log file

Trace log file to which trace information of all scheduler services is output.

The scheduler trace information on the physical host and all logical hosts is output to a single trace log file.

A JP1/AJS3 - Manager host uses one file, which wraps around to the beginning when the end of the file is reached. The default file size is 20,480 kilobytes. The logging format is binary.

- Scheduler trace log file of each scheduler service

The scheduler trace information of scheduler service is output to this log file in units of scheduler service.

Trace log file to which trace information on a scheduler service is output.

One log file is used for each scheduler service. When the maximum file size is reached, the log records in the file wrap around. The default file size is 20,480 kilobytes. The logging format is binary.

For details about how to output trace log data for individual scheduler services, see *6.1.5 Setting to output a scheduler trace log per scheduler service* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for Windows), or *15.1.5 Setting to output a scheduler trace log per scheduler service* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for UNIX).

Note that you can use the `ajstrsetsz` command to increase the trace log file size.

For details about this command, see `ajstrsetsz` in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

(2) Job execution trace

A JP1/AJS3 - Manager host or a JP1/AJS3 - Agent host logs trace information in one or more files for each function. For details about the names of files, see *1.2.4 List of log files and directories*. The size of each file is 512 kilobytes. You cannot change the file size. The logging format is not public information.

(3) Event and action trace

A JP1/AJS3 - Manager host or a JP1/AJS3 - Agent host logs trace information in two files for each function. For details about the names of these files, see *1.2.4 List of log files and directories*. The size of each file is 128 kilobytes.

(4) Queueless job trace

A JP1/AJS3 - Manager host uses one file, which wraps around to the beginning when the end of the file is reached. A JP1/AJS3 - Agent host also uses one file that wraps around to the beginning when the end of the file is reached. The default file size is 15,360 kilobytes. The logging format is binary. You can change the size of these trace log files by using the `ajsqltrsetsz` command. For details about this command, see `ajsqltrsetsz` in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

(5) Other traces

- JP1/AJS3 Check Manager and JP1/AJS3 Check Agent, which pre-check definitions, each use one trace log file that wraps around to the beginning when the end of the file is reached. The default file size is 3,072 kilobytes. The logging format is binary. You can change the size of these trace log files by using the `ajschktrsetsz` command. For details about this command, see `ajschktrsetsz` in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.
- A JP1/AJS3 - Manager host or a JP1/AJS3 - Agent host logs trace information related to system management in multiple trace log files for each function. For details about the names of files, see *1.2.4 List of log files and directories*. The default size of each file is 384 kilobytes. Note that the logging format is not public information.

1.2.4 List of log files and directories

(1) Log files and directories in Windows

Table 1-4 to *Table 1-7* describe the log file names and folder names of the scheduler logs and the trace logs for each function in JP1/AJS3 for Windows.

The *Log name* column lists the names of the logs created by JP1/AJS3.

In *Log file and folder names* column, the following abbreviations are used for folders:

1. *Mgr_Path*

- If the installation folder is the default installation folder or is in a folder protected by the system^{#1}:
%ALLUSERSPROFILE%#2\Hitachi\JP1\JP1_DEFAULT\JP1AJS2
- If the installation folder is other than the above:
JP1/AJS3 - Manager-installation-folder

The default installation folder is *system-drive*\Program Files (x86)\HITACHI\jp1ajs2.

2. *Agt_Path*

- If the installation folder is the default installation folder or is in a folder protected by the system^{#1}:
%ALLUSERSPROFILE%#2\Hitachi\JP1\JP1_DEFAULT\JP1AJS2
- If the installation folder is other than the above:
JP1/AJS3 - Agent-installation-folder

The default installation folder is *system-drive*\Program Files (x86)\HITACHI\jp1ajs2.

3. *View_Path*

%ALLUSERSPROFILE%#2\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V

4. *Web_Path*

- If the installation folder is the default installation folder or is in a folder protected by the system^{#1}:
%ALLUSERSPROFILE%#2\Hitachi\JP1\JP1_DEFAULT\JP1AJS3web
- If the installation folder is other than the above:
JP1/AJS3 - Web Console-installation-folder

The default installation folder is *system-drive*\Program Files\HITACHI\jp1ajs3WEB.

#1

A *folder protected by the system* is the path to a folder in any of the following:

- *system-drive*\Windows
- *system-drive*\Program Files
- *system-drive*\Program Files (x86)

#2

The default for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

In a cluster system, unless otherwise specified, make the substitutions shown in the following table for the indicated abbreviations.

Table 1–3: Log output folders in a cluster system

Abbreviation in Table 1-4 to Table 1-7	Log output folder in a cluster system
<i>Mgr_Path</i>	<i>shared-disk-name</i> \jp1ajs2
<i>Agt_Path</i>	<i>shared-disk-name</i> \jp1ajs2
<i>Web_Path</i>	<i>shared-disk-name</i> \jp1ajs3web

The *Default disk space* column indicates the disk space allocated to a log file when the default environment settings is used for operation, and is the total disk space size when there are multiple log files. If the user has not changed the size of a log file, the disk space indicated in the table is the disk space allocated to that log file.

The *Maximum disk space* column indicates the maximum amount of disk space that a log file uses. This value includes changes to definitions, and is the total disk space size when there are multiple log files. The values in this column are the maximum values for log files whose size varies according to the definitions.

The *Timing for switching files* column indicates either a limit or the point at which JP1/AJS3 switches the log file (output file for the log) to another file. A value in this column indicates that there are multiple log files, and that the file with the oldest update date is overwritten when the maximum disk space has been reached.

Table 1–4: Log files and folders in JP1/AJS3 - Manager (for Windows)

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
System management log#32	<i>Mgr_Path</i> \log\JAJS_SPMD{1 2 3}.log	Trace log related to starting, stopping, and checking the status of the JP1/AJS3 service#3	384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_SPMD_COMMAND{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_SERVICE{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_DBMD_[<i>embedded-database-setup-ID</i>]{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_HSTD{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_AGTD{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log\JAJS_SCHD_[<i>scheduler-service-name</i>]{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
License management log	<i>Mgr_Path</i> \log\hliclibtrc{1 2 3 4 5}.log	License management log file#3	5,120	5,120	1,024
	<i>Mgr_Path</i> \log\hlicliberr{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>Mgr_Path</i> \log\hliclibmgrtrc{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>Mgr_Path</i> \log\hliclibmgrerr{1 2 3 4 5}.log		5,120	5,120	1,024

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
License management log	<i>Mgr_Path</i> \log\hliclibtrc.conf	Management file for the license management log file#3	256 bytes	256 bytes	Wraparound
	<i>Mgr_Path</i> \log\hlicliberr.conf		256 bytes	256 bytes	Wraparound
	<i>Mgr_Path</i> \log\hliclibmgrtrc.conf		256 bytes	256 bytes	Wraparound
	<i>Mgr_Path</i> \log\hliclibmgrerr.conf		256 bytes	256 bytes	Wraparound
Scheduler log#4	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\ajs-log{1 2}.log	Operating information related to jobnets, jobs, and scheduler services (when scheduler log is logged separately for each scheduler service)	20,480	4,000,000	Size of the scheduler log file specified in the environment settings (10,240)
	<i>Mgr_Path</i> \log\ajs-host-log{1 2}.log	Operating information related to jobnets, jobs, and scheduler services (when scheduler log is logged for the entire host)	20,480	4,000,000	Size of the scheduler log file for the host specified in the environment settings (10,240)
ajsinetd internal log#21	<i>Mgr_Path</i> \log\ajsinetd{1 2}.log	Internal information related to the network control process#3	256	4,000,000	Size of the ajsinetd internal log (128)
ajscdinetd internal log#21	<i>Mgr_Path</i> \log\ajscdinetd{1 2}.log	Internal log for the network control process of JP1/AJS3 - Web Console#3	When a new installation is performed 4,000 When a upgrade installation is performed 256	4,000,000	Size of the ajscdinetd internal log (When a new installation is performed : 4,000, When a upgrade installation is performed : 128)
ajsmonsvr internal log#21	<i>Mgr_Path</i> \log\ajscdmonsvr_scheduler-service-name_{1 2}.log	Internal log for the ajsmonsvr process that JP1/AJS3 - Web Console connects to#3	8,192	32,768	Size of the ajsmonsvr internal log (4,096)
Common scheduler trace log#5, #6	<i>Mgr_Path</i> \log\tracelog	Trace log and information about operations related to scheduler services and jobnets#3, #8	20,480	2,097,151	Wraparound
Scheduler trace log of each scheduler service#5, #6	<i>Mgr_Path</i> \log\tracelog_scheduler-service-name	Trace log and information about operations related to scheduler services and jobnets#3, #8	20,480	2,097,151	Wraparound

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution manager log	<i>Mgr_Path</i> \log\schedule\ <i>scheduler-service-name</i> \jpmexec{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15}.log#11	Trace log related to the job execution control manager process when a job is executed#3	15,360	524,288	Log size specified during log setup (1,024)
	<i>Mgr_Path</i> \log\jpmexec{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15}.log#9,#10				
Job execution agent log#10	<i>Mgr_Path</i> \log\jpaexec{1 2 3 4 5 6 7 8}.log#17	Trace log related to the job execution control agent process when a job is executed#3	4,096	524,288	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jpaexecmon{1 2 3 4 5 6 7 8}.log#18		4,096	524,288	
Job execution client log#11	<i>Mgr_Path</i> \log\jpclic{1 2}.log#19	Execution trace log related to jpclic commands and JpclicAPI functions#3	1,024	524,288	Log size specified during log setup (512)
Job execution status report log#11	<i>Mgr_Path</i> \log\schedule\ <i>scheduler-service-name</i> \jpsr{1 2}.log	Trace log related to job execution control communication when a job is executed#3	1,024	524,288	Log size specified during log setup (512)
Event/action control manager log#7	<i>Mgr_Path</i> \log\schedule\ <i>scheduler-service-name</i> \jpm{1 2 3 4 5 6 7 8 9 10 11 12 13}.log#22	Trace log related to the event/action control manager when an event job is executed#3	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
	<i>Mgr_Path</i> \log\jpm{1 2 3 4 5 6}.log#23				
	<i>Mgr_Path</i> \log\schedule\ <i>scheduler-service-name</i> \jpmgrsub{1 2 3 4 5 6 7 8}.log#22		8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
	<i>Mgr_Path</i> \log\jpmgrsub{1 2 3 4 5 6 7 8}.log#23				
Event/action control agent log#7	<i>Mgr_Path</i> \log\jpaagent{1 2 3 4 5 6 7 8}.log#23	Trace log related to the event/action control agent when an event job is executed#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
	<i>Mgr_Path</i> \log\jpaagentsub{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log#23		16,384	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event monitoring log#7	<i>Mgr_Path</i> \log\jpeventwatch{1 2 3 4 5 6 7 8}.log#23	Execution trace log related to the JP1 event reception monitoring job, Windows event log	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Event monitoring log ^{#7}	<i>Mgr_Path</i> \log \jpoeventwatch{1 2 3 4 5 6 7 8}.log ^{#23}	monitoring job, and log file monitoring job ^{#3}	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event search log ^{#7}	<i>Mgr_Path</i> \log \jpoevsearch{1 2}.log ^{#23}	Trace log related to event searching before the JP1 event reception monitoring job is executed ^{#3}	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
File monitoring log ^{#7}	<i>Mgr_Path</i> \log \jpocwtflMain{1 2 3 4 5 6 7 8 9 10 11 12 13}.log ^{#23}	Execution trace log related to the file monitoring job ^{#3}	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
Execution interval control log ^{#7}	<i>Mgr_Path</i> \log \jpocwtmMain{1 2 3 4 5 6}.log ^{#23}	Execution trace log related to the execution interval control job ^{#3}	1,536	16,777,216 (16 gigabytes)	Log size specified during log setup (256)
Mail monitoring log (common) ^{#7}	<i>Mgr_Path</i> \log \jpocwtlmain{1 2}.log ^{#23}	Execution trace log related to the mail reception monitoring job and mail sending job when the mail linkage function is used ^{#3}	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log \jpomlapisend{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log \jpomlapirec{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log \jpomlapisend2{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Mgr_Path</i> \log \jpomlapirec2{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail monitoring log (when mail linkage is performed on the desktop) ^{#7}	<i>Mgr_Path</i> \log\jpomldsk{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail monitoring log (when mail linkage is performed in the service) ^{#7}	<i>Mgr_Path</i> \log\jpomlsrv{1 2}.log ^{#29}		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Email sending job log (when Outlook not used)	<i>Mgr_Path</i> \sys\prf\profile-name\telmail.{log old} ^{#23}	Trace log related to email sending job execution when Outlook not used ^{#3}	4,096	19,998	Log size specified during log setup (2,048)
	<i>Mgr_Path</i> \sys\prf\profile-name\smaldbg.{log old} ^{#23}		4,096	19,998	Log size specified during log setup (2,048)
	<i>Mgr_Path</i> \sys\prf\profile-name\protocol.{log old} ^{#23}		4,096	19,998	Log size specified during log setup (2,048)
NNM linkage log	<i>Mgr_Path</i> \log\jpoovlink{1 2}.log ^{#5}	Trace log related to monitoring HP NNM is used ^{#3}	512	512	256
Job execution internal log ^{#11}	<i>Mgr_Path</i> \log\jppqagent\jppqagt_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jppqagent\jppqmon_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jppqagent\jppqnjpagt_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jppqagent\jppqnjpdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log ^{#11}	<i>Mgr_Path</i> \log\jppqclient\jppqclient_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #8	10,240	1,048,576	Log size specified during log setup (1,024)
	<i>Mgr_Path</i> \log\jppqclient\jppqclientnjp_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #8	10,240	1,048,576	Log size specified during log setup (1,024)
	<i>Mgr_Path</i> \log\jppqclient\jppqnjpdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jppqmanager\jppqman_{00 01 02 03}.log ^{#11}	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution internal log	<i>Mgr_Path</i> \log\jpmmanager\jpmman_{00 01 02 03}.log#10	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmmanager\jpmmandb_{00 01 02 03}.log#11	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jpmmanager\jpmmandb_{00 01 02 03}.log#10				
	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmmanager\jpmannjp_{00 01 02 03}.log#11	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jpmmanager\jpmannjp_{00 01 02 03}.log#10				
	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmmanager\jpmannjpdata_{00 01}.log#11	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\jpmmanager\jpmannjpdata_{00 01}.log#10				
Job execution internal log#11	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmnotify\jpmnotify_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmnotify\jpmnotifynjp_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\jpmnotify\jpmannjpdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Flow control subprocess internal log	<i>Mgr_Path</i> \log\schedule\scheduler-service-name\ajsflbd{1 2}.log	Trace log related to a unit with wait conditions#3	20,480	4,000,000	Size of the flow control subprocess internal log (10,240)
Job execution environment database reorganization log	<i>Mgr_Path</i> \database\queue\CONDENSE{1 2}.log	--	1,024	1,024	512

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Scheduler database reorganization log	<i>Mgr_Path</i> \database\schedule\ <i>scheduler-service-name</i> \CONDENSE{1 2}.log	--	1,024	1,024	512
Event/action common log ^{#5, #7}	<i>Mgr_Path</i> \log\ <i>jpocommonerr</i> {1 2}.log	.. ^{#3}	16,384	4,194,304 (4 gigabytes)	Log size specified during log setup (8,192)
Event/action common error log ^{#5}	<i>Mgr_Path</i> \log\ <i>jpoproccomerr</i> {1 2}.log	.. ^{#3}	256	256	128
jajs_migrate command trace log	<i>Mgr_Path</i> \log\ <i>jajs_migrate_logical-host-name</i> _{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log ^{#28}	Trace log related to the command that changes the system environment from JP1/AJS2 to JP1/AJS3 ^{#3}	10	200	When the <i>jajs_migrate</i> command is executed
jajs_setup command trace log ^{#5}	<i>Mgr_Path</i> \log\ <i>jajs_setup</i> _{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log ^{#26}	Trace log related to the command that specifies environment settings ^{#3}	200	200	When the <i>jajs_setup</i> command is executed
jajs_config command trace log	<i>Mgr_Path</i> \log\ <i>jajs_config</i> _{1 2}.log	Trace log related to the command that specifies an environment setting parameter ^{#3}	1	256	128
jajs_setup_cluster command trace log ^{#5}	<i>Mgr_Path</i> \log\ <i>jajs_setup_cluster</i> _{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log ^{#26}	Trace log related to the command that configures a cluster environment ^{#3}	200	200	When the <i>jajs_setup_cluster</i> command is executed
jajs_pmtcon command trace log	<i>Mgr_Path</i> \log\ <i>jajs_pmtcon</i> _{1 2}.log	Log output when restricting of connection sources is set ^{#3}	1	256	128
Queueless log ^{#15}	<i>Mgr_Path</i> \log\ajsql-log{1 2}.log	Information related to the jobs executed by the queueless agent service	16,384	4,000,000	Queueless log file size specified in environment settings (8,192)
Queueless trace log ^{#5, #16}	<i>Mgr_Path</i> \log\tracelog.q1	Execution trace log related to queueless jobs and commands related to execution control of queueless jobs ^{#3, #8}	15,360	2,097,151	Wraparound
Queueless job execution internal log ^{#24}	<i>Mgr_Path</i> \log\ajsqlxeclog ^{#5, #25}	Execution trace log related to queueless jobs ^{#3, #8}	24,576	2,097,151	Wraparound
	<i>Mgr_Path</i> \log\ajsqlxeclog_ftpd ^{#5}		10,240	2,097,151	Wraparound

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
The status file used to store information about running queueless jobs#30	<i>Mgr_Path</i> \log\ajsqlstat.dat	Information about running queueless jobs#3, #8	2,048	2,000,000	Wraparound
Maintenance log#5	<i>Mgr_Path</i> \log\ <i>\jajs_maintain_manager</i> {1 2 3 4}.log#12	Information related to database reorganization that is executed during maintenance#3	1,484	1,484	When maintenance is performed
	<i>Mgr_Path</i> \log\ <i>\jajs_maintain_</i> [<i>scheduler-service-name</i>]{1 2 3 4}.log#12		1,484	1,484	When maintenance is performed
Automatic reorganization log#5	<i>Mgr_Path</i> \log\ <i>\jpaautocond</i> {1 2 3 4}.log#13	Information related to database reorganization that is executed during automatic reorganization#3	764	764	When automatic reorganization is performed
	<i>Mgr_Path</i> \log\ <i>\ajsaautocond</i> {1 2 3 4}.log#13		764	764	When automatic reorganization is performed
Definition check log#5, #20	<i>Mgr_Path</i> \log\ajsccheck{1 2}.log	Information related to definition pre-checks	8,192	4,000,000	Definition check log file size specified in the environment settings
Definition check trace log#5, #14	<i>Mgr_Path</i> \log\tracelog.ch	Trace log related to definition pre-checks#3, #8	3,072	2,097,151	Wraparound
Execution log for embedded database operation commands#5	<i>Mgr_Path</i> \log\ <i>\ajsembdbbackup</i> .log	Information related to execution of commands manipulate the embedded database#3	--	--	--#27
	<i>Mgr_Path</i> \log\ <i>\ajsembdbbrstr</i> .log		--	--	--#27
	<i>Mgr_Path</i> \log\embdb\ <i>\ajsembdboplog</i> [<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embdb\ <i>\ajsembdbbrorg</i> [<i>host-name</i>][<i>scheduler-service-name</i>]{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embdb\ <i>\ajsembdbreclaim</i> [<i>host-name</i>][<i>scheduler-service-name</i>]{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embdb\ <i>\ajsembdbaddarea</i> [<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embdb\ <i>\ajsembdbaddlog</i> [<i>embedded-</i>		4,096	4,096	1,024

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Execution log for embedded database operation commands#5	<i>database-setup-ID</i> {1 2 3 4}.log	Information related to execution of commands manipulate the embedded database#3	4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbstop[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbstop_nv[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbstart[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbstart_nv[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbcancel[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbunset[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbbuild[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbsetup[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbstatus[<i>embedded-database-setup-ID</i>] {1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbinstl{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbuninstl{1 2 3 4}.log		4,096	4,096	1,024
	<i>Mgr_Path</i> \log\embddb\ajsembdbmaintain{1 2 3 4}.log		4,096	4,096	1,024

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Agent management trace log#5	<i>Mgr_Path</i> \log\ajsagttrace	..#3, #8	20,480	20,480	Wraparound
Agent management log	<i>Mgr_Path</i> \log\ajsagtmd{1 2}.log	Agent information for agent management control#3	8,192	8,192	4,096
Communication control trace log	<i>Mgr_Path</i> \log\tracelog-nw	..#3, #8	40,960	40,960	Wraparound
Communication control log	<i>Mgr_Path</i> \log\ajsnetwd{1 2 3 4 5}.log	..#3	51,200	51,200	10,240
Export command trace log#5	<i>Mgr_Path</i> \log\jajs_rpenvexport_[logical-host-name]_{1 2 3 4}.log	..#3	256	256	32
	<i>Mgr_Path</i> \log\ajsdbenvexport_[logical-host-name]_{1 2 3 4}.log	..#3	256	256	32
Import command trace log#5	<i>Mgr_Path</i> \log\jajs_rpenvimport_[logical-host-name]_{1 2 3 4}.log	..#3	256	256	32
	<i>Mgr_Path</i> \log\ajsdbenvimport_[logical-host-name]_{1 2 3 4}.log	..#3	256	256	32
Migration command execution log#5	<i>Mgr_Path</i> \log\JP1AJS3_DBCnvExport_{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log#28	Log information related to execution of a migration command#3	10	200	When the ajscnvdbexport command is executed
	<i>Mgr_Path</i> \log\JP1AJS3_DBCnvImport_{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log#28		10	200	When the ajscnvdbimport command is executed
ajsdbmgrd internal log	<i>Mgr_Path</i> \log\ajsdbmgrd_[embedded-database-setup-ID]{1 2}.log	Internal log for the database operation control process#3	8,192	8,192	4,096
Flexible job execution requester log file#5	<i>Mgr_Path</i> \log\ajsfxreq{1 2}.log	Log storing log data output by the flexible job execution requester (manager host#31)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job execution host log file#5	<i>Mgr_Path</i> \log\ajsfxexec{1 2}.log	Log storing log data output by the flexible job execution host (destination agent)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job trace log#5	<i>Mgr_Path</i> \log\ajsfxtrace	..#3, #8	20,480	20,480	Wraparound
Log file for the broadcast agent	<i>Mgr_Path</i> \log\ajsfxbcctl{1 2}.log	..#3	20,480	4,000,000	Log file size specified in

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
and broadcast-execution destination agents ^{#5}	<i>Mgr_Path</i> \log\ajsfxbccct1{1 2}.log	__#3	20,480	4,000,000	environment settings (10,240)
Broadcast agent log file	<i>Mgr_Path</i> \log\ajsfxdstr{1 2}.log	Log storing log data output by the broadcast agent	40,960	4,000,000	Log file size specified in environment settings (20,480)
Internal trace log file for HTTP connection job execution ^{#5}	<i>Mgr_Path</i> \log\ajshttptrace	__#3, #8	20,480	20,480	Wraparound
Agent monitoring trace log	<i>Mgr_Path</i> \log\tracelog.agm	__#3, #8	20,480	20,480	Wraparound

#1

The unit is kilobytes unless otherwise specified. The value in parentheses is the kilobyte value expressed in gigabytes.

#2

The unit is kilobytes. The value in parentheses in this column indicates the default timing for switching log files.

#3

The format of the logged information is not publicly available outside the company.

#4

You can change the disk space size. To do so, use the `ajajs_config` command to specify the desired value in the `LOGSIZE` environment setting parameter.

For details about how to estimate the required disk space, see *3.4.1 Estimating the size of scheduler log files* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#5

Information is also output to the default folder in a cluster system.

#6

You can change the disk space size by using the `ajstrsetsz` command.

#7

You can change the disk space size. To do so, see *3.4.3 Estimating the size of the log information output by event jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#8

The information is in binary format and cannot be read.

#9

In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.

- If JP1/AJS3 09-00 or later has been installed as a new installation:

```
jpqmanexec{1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}.log
```

- If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:

If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system.

```
jpqExecLog_man{1|2|3|4|5|6|7|8|9|10|11|12|13|14|15}.log
```

#10

You can change the disk space size. To do so, see *7.1.4 Estimating the size of the logs output by the execution environment for QUEUE jobs and submit jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#11

You can change the disk space size. To do so, see *3.4.5 Estimating the size of the logs output by execution* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#12

In a cluster system, the file names are different:

1. `jaajs_maintain_manager_[logical-host-name]{1|2|3|4}.log`
2. `jaajs_maintain_[scheduler-service-name]_[logical-host-name]{1|2|3|4}.log`

#13

In a cluster system, the file names are different:

1. `jpqautocond_[logical-host-name]{1|2|3|4}.log`
2. `schedule\ajsaautocond_[logical-host-name]{1|2|3|4}.log`

#14

You can change the disk space size by using the `ajschktrsetsz` command. If you do not use the JP1/AJS3 Check Manager function or the JP1/AJS3 Check Agent function, no trace log file is created.

#15

You can change the disk space size. To do so, use the `jaajs_config` command to specify the desired value in the `AJSQL_LOGSIZE` environment setting parameter.

For details about how to estimate the required disk space, see *7.2.1(1) Estimating the size of the queueless log file* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#16

You can change the disk space size by using the `ajsqltrsetsz` command.

#17

In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.

- If JP1/AJS3 09-00 or later has been installed as a new installation:

`jpqagtexec{1|2|3|4|5|6|7|8}.log`

- If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:

If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system.

`jpqExecLog_agt{1|2|3|4|5|6|7|8}.log`

#18

In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.

- If JP1/AJS3 09-00 or later has been installed as a new installation:

`jpqagtexecmon{1|2|3|4|5|6|7|8}.log`

- If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:

If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system.

`jpqExecLog_agtmon{1|2|3|4|5|6|7|8}.log`

#19

In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.

- If JP1/AJS3 09-00 or later has been installed as a new installation:

```
jqcliexec{1|2}.log
```

- If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:

If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system.

```
jqExecLog_cli{1|2}.log
```

#20

You can change the disk space size. To do so, see *20.7 Setting for the JP1/AJS3 definition pre-check function* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#21

You can change the disk space size. To do so, see *20.4 Setting up the scheduler service environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#22

You can change the log output folders. To do so, change the value specified in the `AJSLOGDIR` environment setting parameter for the `[{JP1_DEFAULT|logical-host-name}\JP1AJSMANAGER\scheduler-service-name]` definition key.

#23

You can change the `Mgr_Path` part differs depending on the value specified in the `WaitInFileOutDir` environment setting parameter for the `[{JP1_DEFAULT|logical-host-name}\JP1AOMMANAGER]` and `[{JP1_DEFAULT|logical-host-name}\JP1AOMAGENT]` definition keys.

#24

You can change the disk space size by using the `ajsqlxecsetsz` command. For details about this command, see *ajsqlxecsetsz* in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

For details about how to estimate the required disk space, see *7.2.1(3) Estimating the size of the internal execution logs for queueless jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#25

The file name is different in a cluster system:

```
Mgr_Path\log\ajsqlxeclog-[logical-host-name]
```

If the full path name is 256 bytes or more, `[logical-host-name]` becomes the first 30 bytes of the logical host name.

#26

The latest execution result is output to the log file numbered 01. When the command is executed, log files are renamed by incrementing their numbers by 1, and a new log file with 01 is created. If the command is executed when a log file with the largest allowed number already exists, the log information in that log file is discarded.

#27

The size of the file increases without limit. Save or delete information in the file as necessary.

#28

The latest execution result is output to the log file with the largest number. If the command is executed when a log file with the largest allowed number already exists, the information in the log file numbered 01 is discarded.

#29

Information is also output to a folder on the physical host in a cluster system. Therefore, you can change the value of *Mgr_Path* even in a cluster system by specifying the value in the `WaitInFileOutDir` environment setting parameter for the `[JP1_DEFAULT\JP1AOMAGENT]` definition key.

#30

You can change the disk space size. To do so, see *20.10 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#31

If a relay agent exists, log data is output to the relay agent. If a relay agent does not exist, log data is output to the manager host.

#32

You can change the disk space size. To do so, see *20.3 Setting up the system management environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table 1–5: Log files and folders in JP1/AJS3 - Agent (for Windows)

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
System management log ^{#22}	<i>Agt_Path</i> \log\JAJS_SPMD{1 2 3}.log	Trace log related to starting, stopping, and checking the status of the JP1/AJS3 service ^{#3}	384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Agt_Path</i> \log\JAJS_SPMD_COMMAND{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	<i>Agt_Path</i> \log\JAJS_SERVICE{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
License management log	<i>Agt_Path</i> \log\hliclibtrc{1 2 3 4 5}.log	License management log file ^{#3}	5,120	5,120	1,024
	<i>Agt_Path</i> \log\hlicliberr{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>Agt_Path</i> \log\hliclibmgrtrc{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>Agt_Path</i> \log\hliclibmgrerr{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>Agt_Path</i> \log\hliclibtrc.conf	Management file for the license management log file ^{#3}	256 bytes	256 bytes	Wraparound
	<i>Agt_Path</i> \log\hlicliberr.conf		256 bytes	256 bytes	Wraparound
	<i>Agt_Path</i> \log\hliclibmgrtrc.conf		256 bytes	256 bytes	Wraparound
	<i>Agt_Path</i> \log\hliclibmgrerr.conf		256 bytes	256 bytes	Wraparound

1. Troubleshooting Procedure and Required Data

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution agent log#7	<i>Agt_Path</i> \log\jppqagtexec{1 2 3 4 5 6 7 8}.log#11	Trace log related to the job execution control agent process when a job is executed#3	4,096	524,288	Log size specified during log setup (512)
	<i>Agt_Path</i> \log\jppqagtexecmon{1 2 3 4 5 6 7 8}.log#12		4,096	524,288	Log size specified during log setup (512)
Job execution client log#7	<i>Agt_Path</i> \log\jppqcliexec{1 2}.log#13	Execution trace log related to jppqxxx commands and JppqxxxAPI functions#3	1,024	524,288	Log size specified during log setup (512)
Event/action control agent log#4	<i>Agt_Path</i> \log\jppoagent{1 2 3 4 5 6 7 8}.log#15	Trace log related to the event/action control agent when an event job is executed#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
	<i>Agt_Path</i> \log\jppoagtsub{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log#15		16,384	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event monitoring log#4	<i>Agt_Path</i> \log\jppoeventwatch{1 2 3 4 5 6 7 8}.log#15	Execution trace log related to the JP1 event reception monitoring job, Windows event log monitoring job, and log file monitoring job#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event search log#4	<i>Agt_Path</i> \log\jppoevsearch{1 2}.log#15	Trace log related to event searching before the JP1 event reception monitoring job is executed#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
File monitoring log#4	<i>Agt_Path</i> \log\jppocwtfMain{1 2 3 4 5 6 7 8 9 10 11 12 13}.log#15	Execution trace log related to the file monitoring job#3	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
Execution interval control log#4	<i>Agt_Path</i> \log\jppocwttmMain{1 2 3 4 5 6}.log#15	Execution trace log related to the execution interval control job#3	1,536	16,777,216 (16 gigabytes)	Log size specified during log setup (256)
Mail monitoring log (common)#4	<i>Agt_Path</i> \log\jppocwtmlmain{1 2}.log#15	Execution trace log related to the mail reception monitoring job and mail sending job when the mail linkage function is used#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Agt_Path</i> \log\jppomlapisend{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Mail monitoring log (common)#4	<i>Agt_Path</i> \log\jppomlapisend{1 2}.log#19	Execution trace log related to the mail reception monitoring job and mail sending job when the mail linkage function is used#3	256	16,777,216 (16 gigabytes)	(128)
	<i>Agt_Path</i> \log\jppomlapirec{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Agt_Path</i> \log\jppomlapisend2{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
	<i>Agt_Path</i> \log\jppomlapirec2{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail monitoring log (when mail linkage is performed on the desktop)#4	<i>Agt_Path</i> \log\jppomldsk{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail monitoring log (when mail linkage is performed in the service)#4	<i>Agt_Path</i> \log\jppomlsrv{1 2}.log#19		256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Email sending job log (when Outlook not used)	<i>Agt_Path</i> \sys\prf\profile-name\telmail.{log old}#15	Trace log related to email sending job execution when Outlook not used#3	4,096	19,998	Log size specified during log setup (2,048)
	<i>Agt_Path</i> \sys\prf\profile-name\smalldbq.{log old}#15		4,096	19,998	Log size specified during log setup (2,048)
	<i>Agt_Path</i> \sys\prf\profile-name\protocol.{log old}#15		4,096	19,998	Log size specified during log setup (2,048)
NNM linkage log	<i>Agt_Path</i> \log\jppoovlink{1 2}.log#6	Trace log related to monitoring when HP NNM is used#3	512	512	256
Job execution internal log#7	<i>Agt_Path</i> \log\jppqagent\jppqagt_{00 01 02 03 04 05 06 07}.log	--#3, #5	4,096	1,048,576	Log size specified during log setup (512)
	<i>Agt_Path</i> \log\jppqagent\jppqmon_{00 01 02 03 04 05 06 07}.log	--#3, #5	4,096	1,048,576	Log size specified during log setup (512)

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution internal log#7	<i>Agt_Path</i> \log\jppqagent\jppqagent_{00 01 02 03 04 05 06 07}.log	..#3, #5	4,096	1,048,576	Log size specified during log setup (512)
	<i>Agt_Path</i> \log\jppqagent\jppqagent_data_{00 01}.log	..#3, #5	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log#7	<i>Agt_Path</i> \log\jppqclient\jppqclient_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #5	10,240	1,048,576	Log size specified during log setup (1,024)
	<i>Agt_Path</i> \log\jppqclient\jppqclientnjp_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #5	10,240	1,048,576	Log size specified during log setup (1,024)
	<i>Agt_Path</i> \log\jppqclient\jppqclient_data_{00 01}.log	..#3, #5	1,024	1,048,576	Log size specified during log setup (512)
Event/action common log#4, #6	<i>Agt_Path</i> \log\jppocommonerr{1 2}.log	..#3	16,384	4,194,304 (4 gigabytes)	Log size specified during log setup (8,192)
jajs_config command trace log	<i>Agt_Path</i> \log\jajs_config_{1 2}.log	Trace log related to the command that specifies an environment setting parameter#3	1	256	128
jajs_setup_cluster command trace log#6	<i>Agt_Path</i> \log\jajs_setup_cluster_{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log#18	Trace log related to the command that configures a cluster environment#3	200	200	When the jajs_setup_cluster command is executed
jajs_pmtcon command trace log	<i>Agt_Path</i> \log\jajs_pmtcon_{1 2}.log	Log data output when restricting of connection sources is set#3	1	256	128
Queueless log#9	<i>Agt_Path</i> \log\ajsql-log{1 2}.log	Information related to jobs executed by the queueless agent service	16,384	4,000,000	Queueless log file size specified in the environment settings (8,192)
Queueless trace log#6, #10	<i>Agt_Path</i> \log\tracelog.q1	Execution trace log related to queueless jobs and commands related to execution control of queueless jobs#3, #5	15,360	2,097,151	Wraparound

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Queueless job execution internal log#16	<i>Agt_Path</i> \log\ajsqlexeclog#6, #17	Execution trace log related to queueless jobs#3, #5	24,576	2,097,151	Wraparound
The status file used to store information about running queueless jobs#20	<i>Agt_Path</i> \log\ajsqlstat.dat	Information about running queueless jobs #3, #5	2,048	2,000,000	Wraparound
Definition check log#6, #14	<i>Agt_Path</i> \log\ajsccheck{1 2}.log	Information related to definition pre-checks	8,192	4,000,000	Definition check log file size specified in the environment settings
Definition check trace log#6, #8	<i>Agt_Path</i> \log\tracelog.ch	Trace log related to definition pre-checks#3, #5	3,072	2,097,151	Wraparound
Flexible job execution requester log file#6	<i>Agt_Path</i> \log\ajsfxreq{1 2}.log	Log storing log data output by the flexible job execution requester (manager host#21)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job execution host log file#6	<i>Agt_Path</i> \log\ajsfxexec{1 2}.log	Log storing log data output by the flexible job execution host (destination agent)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job trace log#6	<i>Agt_Path</i> \log\ajsfxtrace	..#3, #5	20,480	20,480	Wraparound
Log file for the broadcast agent and broadcast-execution destination agents#6	<i>Agt_Path</i> \log\ajsfxbcctl{1 2}.log	..#3	20,480	4,000,000	Log file size specified in environment settings (10,240)
Broadcast agent log file#6	<i>Agt_Path</i> \log\ajsfxdstr{1 2}.log	Log storing log data output by the broadcast agent	40,960	4,000,000	Log file size specified in environment settings (20,480)
Internal trace log file for HTTP connection job execution#6	<i>Agt_Path</i> \log\ajshhttptrace	..#3, #5	20,480	20,480	Wraparound
Job execution history log file#23,#24	<i>Agt_Path</i> \log\jppqjobhistory{0 1}.log	Job execution history log output by JP1/AJS3 - Agent Minimal Edition	1,024	65,536	Log file size specified in environment settings (512)

- #1
The unit is kilobytes unless otherwise specified. The value in parentheses is the kilobytes value expressed in gigabytes.
- #2
The unit is kilobytes. The value in parentheses in this column indicates the default timing for switching log files.
- #3
The format of the logged information is not publicly available outside the company.
- #4
You can change the disk space size. To do so, see *3.4.3 Estimating the size of the log information output by event jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.
- #5
The information is in binary format and cannot be read.
- #6
Information is also output to the default folder in a cluster system.
- #7
You can change the disk space size. To do so, see *3.4.5 Estimating the size of the logs output by execution* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.
- #8
You can change the disk space size by using the `ajschktrsetsz` command. If you do not use the JP1/AJS3 Check Agent function, no trace log file is created.
- #9
You can change the disk space size. To do so, change the value specified for the `AJSQL_LOGSIZE` environment setting parameter by using the `jajs_config` command.
For details about how to estimate the required disk space, see *7.2.1(1) Estimating the size of the queueless log file* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.
- #10
You can change the disk space size by using the `ajsqltrsetsz` command.
- #11
In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.
- If JP1/AJS3 09-00 or later has been installed as a new installation:
`jpgagtexec{1|2|3|4|5|6|7|8}.log`
 - If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:
If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system
`jpgqExecLog_agt{1|2|3|4|5|6|7|8}.log`
- #12
In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.
- If JP1/AJS3 09-00 or later has been installed as a new installation:
`jpgagtexecmon{1|2|3|4|5|6|7|8}.log`
 - If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:
If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system
`jpgqExecLog_agtmon{1|2|3|4|5|6|7|8}.log`

#13

In a cluster system, the file names vary depending on how JP1/AJS3 has been installed.

- If JP1/AJS3 09-00 or later has been installed as a new installation:
jpccliexec{1|2}.log
- If JP1/AJS3 has been installed as an upgrade installation from JP1/AJS2:
If logical hosts have been configured before the upgrade installation, the file names used with JP1/AJS2 are inherited as the log file names in the cluster system
jpcExecLog_cli{1|2}.log

#14

You can change the disk space size. To do so, see *20.7 Setting for the JP1/AJS3 definition pre-check function* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#15

You can change the *Agt_Path* part differs depending on the value specified in the `WaitInfFileOutDir` environment setting parameter for the `[{JP1_DEFAULT|logical-host-name}\JP1AOMAGENT]` definition key.

#16

You can change the disk space size by using the `ajsqlxecsetsz` command. For details about this command, see *ajsqlxecsetsz* in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

For details about how to estimate the required disk space, see *7.2.1(3) Estimating the size of the internal execution logs for queueless jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#17

The file name is different in a cluster system:

```
Agt_Path\log\ajsqlxeclog-[logical-host-name]
```

If the full path name is 256 bytes or more, `[logical-host-name]` becomes the first 30 bytes of the logical host name.

#18

The latest execution result is output to the log file numbered 01. When the command is executed, log files are renamed by incrementing their numbers by 1, and a new log file with 01 is created. If the command is executed when a log file with the largest allowed number already exists, the log information in that log file is discarded.

#19

Information is also output to a folder on the physical host in a cluster system. Therefore, you can change the value of *Agt_Path* even in a cluster system by specifying the value in the `WaitInfFileOutDir` environment setting parameter for the `[JP1_DEFAULT\JP1AOMAGENT]` definition key.

#20

You can change the disk space size. To do so, see *20.10 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#21

If a relay agent exists, log data is output to the relay agent. If a relay agent does not exist, log data is output to the manager host.

#22

You can change the disk space size. To do so, see *20.3 Setting up the system management environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#23

This log file is used exclusively by JP1/AJS3 - Agent Minimal Edition. JP1/AJS3 - Agent does not output log data to this file.

#24

You can change the disk space size. To do so, see *G.2(3) Estimating the job execution history log file* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

Table 1–6: Log files and folders in JP1/AJS3 - View (for Windows)

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files
JP1/AJS3 - View log	<i>View_Path</i> \log\ajs.log	-- ^{#2}	--	1,024	When JP1/AJS3 - View terminates
JP1/AJS3 - View information log ^{#3, #4}	<i>View_Path</i> \log\ajs2view[#nnn_]#3,#4{1 2} ^{#5} .log ^{#6}	-- ^{#2}	2,048	1,048,576	Maximum log file size specified in the Preferences dialog box
License management log	<i>View_Path</i> \log\hliclibtrc{1 2 3 4 5}.log	License management log file ^{#2}	5,120	5,120	1,024
	<i>View_Path</i> \log\hlicliberr{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>View_Path</i> \log\hliclibmgrtrc{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>View_Path</i> \log\hliclibmgrerr{1 2 3 4 5}.log		5,120	5,120	1,024
	<i>View_Path</i> \log\hliclibtrc.conf	Management file for the license management log file ^{#2}	256 bytes	256 bytes	Wraparound
	<i>View_Path</i> \log\hlicliberr.conf		256 bytes	256 bytes	Wraparound
	<i>View_Path</i> \log\hliclibmgrtrc.conf		256 bytes	256 bytes	Wraparound
	<i>View_Path</i> \log\hliclibmgrerr.conf		256 bytes	256 bytes	Wraparound
Custom job registration program log	<i>View_Path</i> \log\ajscjobregm.log	-- ^{#2}	--	1,024	When Register Custom Job dialog box closes
	<i>View_Path</i> \log\cjobregm[#nnn_]#3{1 2} ^{#5} .log ^{#6}	Log data output when a custom job is registered ^{#2}	2,048	2,048	1,024

#1

The unit is kilobytes unless otherwise specified.

#2

The format of the logged information is not publicly available outside the company.

#3

When multiple units are started, a value in the range from 0001 to 9999 is assigned to *n* of #*nnnn*_. When only one unit is started, #*nnnn*_ is omitted.

The *Default disk space* and *Maximum disk space* columns indicate the disk space that is allocated to a log file if only one unit is started.

#4

You can change the disk space size. To do so, open the Preferences dialog box of JP1/AJS3 - View, and on the **Other** page, change the value in the **Max. log file size** text box.

#5

The value in {1|2} indicates the log file number, which is fixed at 2.

If the size of the file specified with 1 reaches the upper limit, data continues to be output to the file specified by 2. If the size of the file specified by 2 also reaches the upper limit, the information in the file specified by 1 is deleted and data continues to be output to the file specified by 1.

#6

If the multiuser remote desktop connection function is enabled, the output destination changes to the folder below. Note that *OS-user-name* does not include domain information.

```
View_Path\log\OS-user-name
```

For details about the multiuser remote desktop connection function, see 11.2.7 *Allowing multiple users to concurrently use JP1/AJS3 - View via remote desktop connections* in the *JP1/Automatic Job Management System 3 Operator's Guide*.

Table 1–7: Log files and folders in JP1/AJS3 - Web Console (for Windows)

Log name	Log file and folder names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files
Command log ^{#2}	<i>Web_Path</i> \log\ajswebsetup{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about setup command operations	128	16,384	Wraparound
	<i>Web_Path</i> \log\jajs_web_service{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about start and stop of service	128	16,384	Wraparound
Application server log ^{#2}	<i>Web_Path</i> \log\appserver{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about operations and API requests	8,192	16,384	Wraparound
Application server common log	<i>Web_Path</i> \log\appserversys{1 2}.log	Log data about start and stop of web applications	8,192	8,192	Wraparound

#1

The unit is kilobytes unless otherwise specified.

#2

You can change the disk space size. To do so, see 4.6.1(1) *Log sizes and the number of log files output by the Web Console server* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

(2) Log files and directories in UNIX

Table 1-9 and Table 1-11 describe the log file names and the directory names of the scheduler logs and the trace logs for each function in JP1/AJS3 for UNIX.

The *Log name* column lists the names of the logs created by JP1/AJS3.

The *Log file and directory names* column lists the names of the JP1/AJS3 log files in full-path-name form.

In a cluster system, consider the path names indicate the directories in the *Log output directory in a cluster system* column in the following table unless otherwise specified.

Table 1–8: Log output directories in a cluster system

Value in Table 1-9 and Table 1-11	Log output directory in a cluster system
/var/opt/jp1ajs2/	shared-disk-name/jp1ajs2
/var/opt/jp1ajs3web/	shared-disk-name/jp1ajs3web

The *Default disk space* column indicates the disk space allocated to a log file when the default environment setting is used for operation, and is the total disk space size when there are multiple log files. If the user has not changed the size of a log file, the disk space indicated in the table is the disk space allocated to that log file.

The *Maximum disk space* column indicates the maximum disk space that a log file uses. This value includes changes to definitions, and is the total disk size when there are multiple log files. The values in this column are the maximum values for log files whose size varies according to the definitions.

The *Timing for switching files* change column indicates either a limit or the point at which JP1/AJS3 switches the log file (output file for the log) to another file. A value in this column indicates that there are multiple log files and that the file with the oldest update date is overwritten when the maximum disk space is reached. A value in parentheses indicates the default timing for switching log files.

Table 1–9: Log files and directories of JP1/AJS3 - Manager (for UNIX)

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
System management log#27	/var/opt/jp1ajs2/log/JAJS_SEMD{1 2 3}.log	Trace log related to starting, stopping, and checking the status of the JP1/AJS3 service#3	384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	/var/opt/jp1ajs2/log/JAJS_SEMD_COMMAND{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	/var/opt/jp1ajs2/log/JAJS_DBMD_ <i>embedded-database-setup-ID</i> {1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	/var/opt/jp1ajs2/log/JAJS_HSTD{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)

1. Troubleshooting Procedure and Required Data

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
System management log#27	/var/opt/jp1ajs2/log/JAJS_AGTD{1 2 3}.log	Trace log related to starting, stopping, and checking the status of the JP1/AJS3 service#3	384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	/var/opt/jp1ajs2/log/JAJS_SCHD_[scheduler-service-name]{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
Scheduler log#4	/var/opt/jp1ajs2/log/schedule/scheduler-service-name/ajs-log{1 2}.log	Operating information related to jobnets, jobs, and scheduler services (when scheduler log is logged separately for each scheduler service)	20,480	4,000,000	Size of the scheduler log specified in environment settings (10,240)
	/var/opt/jp1ajs2/log/ajs-host-log{1 2}.log	Operating information related to jobnets, jobs, and scheduler services (when scheduler log is logged for the entire host)	20,480	4,000,000	Size of the scheduler log for the host specified in the environment settings (10,240)
ajsinetd internal log#5, #18	/var/opt/jp1ajs2/log/ajsinetd{1 2}.log	Internal information related to the network control process#3	256	4,000,000	Size of the ajsinetd internal log (128)
ajscdinetd internal log#18	/var/opt/jp1ajs2/log/ajscdinetd{1 2}.log	Internal log for the network control process of JP1/AJS3 - Web Console#3	256	4,000,000	Size of the ajscdinetd internal log (128)
ajsmonsvr internal log#18	/var/opt/jp1ajs2/log/ajscdmonsvr_scheduler-service-name_{1 2}.log	Internal log for the ajsmonsvr process that JP1/AJS3 - Web Console connects to#3	8,192	32,768	Size of the ajsmonsvr internal log (4,096)
Common scheduler trace log#5, #6	/var/opt/jp1ajs2/log/tracelog	Trace log and information about operations related to scheduler services and jobnets#3, #8	20,480	2,097,151	Wraparound
Scheduler trace log of each scheduler service#5, #6	/var/opt/jp1ajs2/log/tracelog_scheduler-service-name	Trace log and information about operations related to scheduler services and jobnets#3, #8	20,480	2,097,151	Wraparound

Log name	Log file and directory names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Job execution manager log	/var/opt/jplajs2/log/schedule/ <i>scheduler-service-name</i> /jppqmanexec{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15}.log ^{#12}	Trace log related to the job execution control manager process when a job is executed ^{#3}	15,360	524,288	Log size specified during log setup (1,024)
	/var/opt/jplajs2/log/jppqmanexec{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15}.log ^{#11}				
Job execution agent log ^{#12}	/var/opt/jplajs2/log/jppqagtexec{1 2 3 4 5 6 7 8}.log	Trace log related to the job execution control agent process when a job is executed ^{#3}	4,096	524,288	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jppqagtexeccld{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jppqagtexecdmn{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jppqagtexecmon{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
Job execution client log ^{#12}	/var/opt/jplajs2/log/jppqcliexec{1 2}.log	Execution trace log related to jppqxxx commands and JppqxxxAPI functions ^{#3}	1,024	524,288	Log size specified during log setup (512)
Job execution status report log ^{#12}	/var/opt/jplajs2/log/schedule/ <i>scheduler-service-name</i> /jppqnfyexec{1 2}.log	Trace log related to job execution control communication when a job is executed ^{#3}	1,024	524,288	Log size specified during log setup (512)
Event/action control manager log ^{#7}	/var/opt/jplajs2/log/schedule/ <i>scheduler-service-name</i> /jppomanager{1 2 3 4 5 6 7 8 9 10 11 12 13}.log	Trace log related to the event/action control manager when an event job is executed ^{#3}	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
	/var/opt/jplajs2/log/jppomanager{1 2 3 4 5 6}.log				
	/var/opt/jplajs2/log/schedule/ <i>scheduler-service-name</i> /jppomgrsub{1 2 3 4 5 6 7 8}.log		8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Event/action control manager log#7	/var/opt/jp1ajs2/log/jpomgrsub{1 2 3 4 5 6 7 8}.log	Trace log related to the event/action control manager when an event job is executed#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event/action control agent log#7	/var/opt/jp1ajs2/log/jpoagent{1 2 3 4 5 6 7 8}.log	Trace log related to the event/action control agent when an event job is executed#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
	/var/opt/jp1ajs2/log/jpoagtsub{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log		16,384	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event monitoring log#7	/var/opt/jp1ajs2/log/jpoeventwatch{1 2 3 4 5 6 7 8}.log	Execution trace log related to the JP1 event reception monitoring job and log file monitoring job#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event search log#7	/var/opt/jp1ajs2/log/jpoevsearch{1 2}.log	Trace log related to event searching before the JP1 event reception monitoring job is executed#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
File monitoring log#7	/var/opt/jp1ajs2/log/jpocwtf1Main{1 2 3 4 5 6 7 8 9 10 11 12 13}.log	Execution trace log related to the file monitoring job#3	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
Execution interval control log#7	/var/opt/jp1ajs2/log/jpocwtmMain{1 2 3 4 5 6}.log	Execution trace log related to the execution interval control job#3	1,536	16,777,216 (16 gigabytes)	Log size specified during log setup (256)
Mail monitoring log#7	/var/opt/jp1ajs2/log/jpocwtlmain{1 2}.log	Execution trace log related to the mail reception monitoring job when the mail linkage function is used#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail delivery log#7	/var/opt/jp1ajs2/log/jpomailrecv{1 2}.log	Execution trace log related to the mail reception monitoring job when the mail delivery function of mail linkage is used#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
NNM linkage log	/var/opt/jp1ajs2/log/jpooovlink{1 2}.log#5	Trace log related to monitoring when HP NNM is used#3	512	512	256

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution internal log#12	/var/opt/jplajs2/log/jpqagent/jpqagt_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqagent/jpqmon_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqagent/jpqnpjagt_{00 01 02 03 04 05 06 07}.log	..#3, #8	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqagent/jpqnpjdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log#12	/var/opt/jplajs2/log/jpqclient/jpqclient_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #8	10,240	1,048,576	Log size specified during log setup (1,024)
	/var/opt/jplajs2/log/jpqclient/jpqclientnpj_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #8	10,240	1,048,576	Log size specified during log setup (1,024)
	/var/opt/jplajs2/log/jpqclient/jpqnpjdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqmanager/jpqman_{00 01 02 03}.log#12	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqmanager/jpqman_{00 01 02 03}.log#11				
	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqmanager/jpqmandb_{00 01 02 03}.log#12	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqmanager/jpqmandb_{00 01 02 03}.log#11				
	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqmanager/jpqmannjp_{00 01 02 03}.log#12	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)

Log name	Log file and directory names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Job execution internal log	/var/opt/jplajs2/log/jpqmanager/jpqmannjp_{00 01 02 03}.log ^{#11}	..#3, #8	2,048	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqmanager/jpqnjpdata_{00 01}.log ^{#12}	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/jpqmanager/jpqnjpdata_{00 01}.log ^{#11}				
Job execution internal log ^{#12}	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqnotify/jpqnotify_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqnotify/jpqnotifynjp_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
	/var/opt/jplajs2/log/schedule/scheduler-service-name/jpqnotify/jpqnjpdata_{00 01}.log	..#3, #8	1,024	1,048,576	Log size specified during log setup (512)
Flow control subprocess internal log	/var/opt/jplajs2/log/schedule/scheduler-service-name/ajsflbd{1 2}.log	Trace log related to units with wait conditions ^{#3}	20,480	4,000,000	Size of the flow control subprocess internal log (10,240)
Job execution environment database reorganization log	/var/opt/jplajs2/database/queue/CONDENSE{1 2}.log	--	1,024	1,024	512
Scheduler database reorganization log	/var/opt/jplajs2/database/schedule/scheduler-service-name/CONDENSE{1 2}.log	--	1,024	1,024	512
Event/action common log ^{#5, #7}	/var/opt/jplajs2/log/jpocommonerr{1 2}.log	..#3	16,384	4,194,304 (4 gigabytes)	Log size specified during log setup (8,192)
Event/action common error log ^{#5}	/var/opt/jplajs2/log/jpoproccommerr{1 2}.log	..#3	256	256	128
jajs_migrate command trace log	/var/opt/jplajs2/log/jajs_migrate_logical-host-name_{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log ^{#24}	Trace log related to the command that changes the system environment from JP1/AJS2 to JP1/AJS3 ^{#3}	10	200	When the jajs_migrate command is executed

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
jajs_setup command trace log#5	/var/opt/jplajs2/log/jajs_setup_{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log#22	Trace log related to the command that specifies environment settings#3	200	200	When the jajs_setup command is executed
jajs_config command trace log	/var/opt/jplajs2/log/jajs_config_{1 2}.log	Trace log related to the command that specifies an environment setting parameter#3	1	256	128
jajs_setup_cluster command trace log#5	/var/opt/jplajs2/log/jajs_setup_cluster_{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log#22	Trace log related to the command that configures a cluster environment#3	200	200	When the jajs_setup_cluster command is executed
jplajs2_setup_cluster command trace log#9	/var/opt/jplajs2/log/JAJS_SETUP/logical-host-name/jajs_setup.log#10	Trace log related to the command that sets up a logical host#3	10	100	None
jajs_killall_cluster command trace log	shared-dircetory/jplajs2/log/jajs_killall_cluster_logical-host-name.{1 2 3 4 5}.log	Trace log related to the command that kills a process associated with a logical host#3	50	50	When the jajs_killall_cluster command is executed
jajsshoadminusr command trace log	/var/opt/jplajs2/log/jajssadminusr_{1 2}.log	Setting and reference log for AJS administrators#3	1	256	128
jajs_pmtcon command trace log	/var/opt/jplajs2/log/jajs_pmtcon_{1 2}.log	Log data output when restricting of connection sources is set#3	1	256	128
Queueless log#16	/var/opt/jplajs2/log/ajsql-log{1 2}.log	Information related to jobs executed by the queueless agent service	16,384	4,000,000	Queueless log file size specified in the environment settings (8,192)
Queueless trace log#5, #17	/var/opt/jplajs2/log/tracelog.q1	Execution trace log related to queueless jobs and commands related to execution control of queueless jobs#3, #8	15,360	2,097,151	Wraparound
Queueless job execution internal log#20	/var/opt/jplajs2/log/ajsql-execlog#5, #21	Execution trace log related to queueless jobs#3, #8	24,576	2,097,151	Wraparound
	/var/opt/jplajs2/log/ajsql-execlog_ftpd#5		10,240	2,097,151	Wraparound
The status file used to store information about	/var/opt/jplajs2/log/ajsqlstat.dat	Information about running queueless jobs#3, #8	2,048	2,000,000	Wraparound

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
running queueless jobs#25	/var/opt/jplajs2/log/ajsqlstat.dat	Information about running queueless jobs#3, #8	2,048	2,000,000	Wraparound
Maintenance log#5	/var/opt/jplajs2/log/jajs_maintain_manager{1 2 3 4}.log#13	Information related to database reorganization that is executed during maintenance#3	1,484	1,484	When maintenance is performed
	/var/opt/jplajs2/log/jajs_maintain_[scheduler-service-name]{1 2 3 4}.log#13		1,484	1,484	When maintenance is performed
Automatic reorganization log#5	/var/opt/jplajs2/log/jpqaautocond{1 2 3 4}.log#14	Information related to database reorganization that is executed during automatic reorganization#3	764	764	When automatic reorganization is performed
	/var/opt/jplajs2/log/ajsautocond{1 2 3 4}.log#14		764	764	When automatic reorganization is performed
Definition check log#5, #19	/var/opt/jplajs2/log/ajsccheck{1 2}.log	Information related to definition pre-checks	8,192	4,000,000	Definition check log file size specified in the environment settings
Definition check trace log#5, #15	/var/opt/jplajs2/log/tracelog.ch	Trace log related to definition pre-checks#3, #8	3,072	2,097,151	Wraparound
Execution log for embedded database operation commands#5	/var/opt/jplajs2/log/ajsembdbbackup.log	Information related to the execution of commands for manipulating the embedded database#3	--	--	__#23
	/var/opt/jplajs2/log/ajsembdbbrstr.log		--	--	__#23
	/var/opt/jplajs2/log/embdb/ajsembdboplog[embedded-database-setup-ID]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jplajs2/log/embdb/ajsembdbbrorg[host-name][scheduler-service-name]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jplajs2/log/embdb/ajsembdbreclaim[host-name][scheduler-service-name]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jplajs2/log/embdb/ajsembdbaddarea[embedded-database-setup-ID]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jplajs2/log/embdb/ajsembdbaddlog[embedded-		4,096	4,096	1,024

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Execution log for embedded database operation commands#5	<i>database-setup-ID</i> {1 2 3 4}.log	Information related to the execution of commands for manipulating the embedded database#3	4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbstop[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbstop_nv[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbstart[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbstart_nv[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbcancel[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbunset[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbbuild[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbsetup[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbstatus[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbinstl{1 2 3 4}.log		4,096	4,096	1,024

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Execution log for embedded database operation commands#5	/var/opt/jp1ajs2/log/embdb/ajsembdbuninstl{1 2 3 4}.log	Information related to the execution of commands for manipulating the embedded database#3	4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbmaintain{1 2 3 4}.log		4,096	4,096	1,024
	/var/opt/jp1ajs2/log/embdb/ajsembdbmgrctl[<i>embedded-database-setup-ID</i>]{1 2 3 4}.log		4,096	4,096	1,024
Agent management trace log#5	/var/opt/jp1ajs2/log/ajsagttrace	..#3, #8	20,480	20,480	Wraparound
Agent management log	/var/opt/jp1ajs2/log/ajsagtmd{1 2}.log	Agent information for agent management control#3	8,192	8,192	4,096
Communication control trace log	/var/opt/jp1ajs2/log/tracelog-nw	..#3, #8	40,960	40,960	Wraparound
Communication control log	/var/opt/jp1ajs2/log/ajsnetwd{1 2 3 4 5}.log	..#3	51,200	51,200	10,240
Export command trace log#5	/var/opt/jp1ajs2/log/jajs_rpenvexport_[<i>logical-host-name</i>]{1 2 3 4}.log	..#3	256	256	32
	/var/opt/jp1ajs2/log/ajbdbenvexport_[<i>logical-host-name</i>]{1 2 3 4}.log	..#3	256	256	32
Import command trace log#5	/var/opt/jp1ajs2/log/jajs_rpenvimport_[<i>logical-host-name</i>]{1 2 3 4}.log	..#3	256	256	32
	/var/opt/jp1ajs2/log/ajbdbenvimport_[<i>logical-host-name</i>]{1 2 3 4}.log	..#3	256	256	32
Migration command execution log#5	/var/opt/jp1ajs2/log/JP1AJS3_DBCnvExport_{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log#24	Log information related to execution of a migration command#3	10	200	When the ajscnvdbexport command is executed
	/var/opt/jp1ajs2/log/JP1AJS3_DBCnvImport_{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20}.log#24		10	200	When the ajscnvdbimport command is executed
ajbdbmgrd internal log	/var/opt/jp1ajs2/log/ajbdbmgrd_[<i>embedded-database-setup-ID</i>]{1 2}.log	Internal log for the database operation control process#3	8,192	8,192	4,096

Log name	Log file and directory names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
ajsshmdel command trace log	/var/opt/jplajs2/log/ajsshmdel{1 2}.log	Log output when shared memory information is deleted ^{#3}	1	256	128
Flexible job execution requester log file ^{#5}	/var/opt/jplajs2/log/ajsfxreq{1 2}.log	Log storing log data output by the flexible job execution requester (manager host ^{#26})	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job execution host log file ^{#5}	/var/opt/jplajs2/log/ajsfxexec{1 2}.log	Log storing log data output by the flexible job execution host (destination agent)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible Job trace log ^{#5}	/var/opt/jplajs2/log/ajsfxtrace	..#3, #8	20,480	20,480	Wraparound
Log file for the broadcast agent and broadcast-execution destination agents ^{#5}	/var/opt/jplajs2/log/ajsfxbcctl{1 2}.log	..#3	20,480	4,000,000	Log file size specified in environment settings (10,240)
Broadcast agent log file ^{#5}	/var/opt/jplajs2/log/ajsfxdstr{1 2}.log	Log storing log data output by the broadcast agent	40,960	4,000,000	Log file size specified in environment settings (20,480)
Internal trace log file for HTTP connection job execution ^{#5}	/var/opt/jplajs2/log/ajshhttptrace	..#3, #8	20,480	20,480	Wraparound
Agent monitoring trace log ^{#5}	/var/opt/jplajs2/log/tracelog.agm	..#3, #8	20,480	20,480	Wraparound

#1
The unit is kilobytes. The value in parentheses is the kilobytes value expressed in gigabytes.

#2
The unit is kilobytes. The value in parentheses in this column indicates the default timing for switching log files.

#3
The format of the logged information is not publicly available outside the company.

#4
You can change the disk space size. To do so, use the `jajs_config` command to change the value specified in the `LOGSIZE` environment setting parameter.
For details about how to estimate the required disk space, see *3.4.1 Estimating the size of scheduler log files* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#5
Information is also output to the default directory in a cluster system.

#6

You can change the disk space size by using the `ajstrsetsz` command.

#7

You can change the disk space size. To do so, see *3.4.3 Estimating the size of the log information output by event jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#8

The information is in binary format and cannot be read.

#9

The `jp1ajs2_setup_cluster` command trace log contains information that is logged when a logical host is set up. The log size does not increase during operation.

#10

If a logical host already exists and you create another logical host, a log directory is created under the name of the new logical host.

#11

You can change the disk space size. To do so, see *7.1.4 Estimating the size of the logs output by the execution environment for QUEUE jobs and submit jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#12

You can change the disk space size. To do so, see *3.4.5 Estimating the size of the logs output by execution* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#13

The file names are different in a cluster system:

1. `jajs_maintain_manager_[logical-host-name]{1|2|3|4}.log`
2. `jajs_maintain_[scheduler-service-name]_[logical-host-name]{1|2|3|4}.log`

#14

The file names are different in a cluster system:

1. `jpqautocond_[logical-host-name]{1|2|3|4}.log`
2. `ajsautocond_[logical-host-name]{1|2|3|4}.log`

#15

You can change the disk space size by using the `ajscmrsetsz` command. If you do not use the JP1/AJS3 Console Manager function or the JP1/AJS3 Console Agent function, no trace log file is created.

#16

You can change the disk space size. To do so, change the value specified for the `AJSQL_LOGSIZE` environment setting parameter by using `jajs_config` command. For details about how to estimate the required disk space, see *7.2.1(1) Estimating the size of the queueless log file* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#17

You can change the disk space size by using the `ajsqltrsetsz` command.

#18

You can change the disk space size. To do so, see *20.4 Setting up the scheduler service environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#19

You can change the disk space size. To do so, see *20.7 Setting for the JP1/AJS3 definition pre-check function* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#20

You can change the disk space size by using the `ajsqlxecsetsz` command. For details about this command, see *ajsqlxecsetsz* in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

For details about how to estimate the required disk space, see *7.2.1(3) Estimating the size of the internal execution logs for queueless jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#21

The file name is different in a cluster system:

```
/var/opt/jp1ajs2/log/ajsqlxeclog-[logical-host-name]
```

If the full path name is 256 bytes or more, `[logical-host-name]` becomes the first 30 bytes of the logical host name.

#22

The latest execution result is output to the log file numbered 01. When the command is executed, log files are renamed by incrementing their numbers by 1, and a new log file with 01 is created. If the command is executed when a log file with the largest allowed number already exists, the log information in that log file is discarded.

#23

The size of the file increases without limit. Save or delete information in the file as necessary.

#24

The latest execution result is output to the log file with the largest number. If the command is executed when a log file with the largest allowed number already exists, the information in the log file numbered 01 is discarded.

#25

You can change the disk space size. To do so, see *20.10 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#26

If a relay agent exists, log data is output to the relay agent. If a relay agent does not exist, log data is output to the manager host.

#27

You can change the disk space size. To do so, see *20.3 Setting up the system management environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table 1–10: Log files and directories in JP1/AJS3 - Agent (for UNIX)

Log name	Log file and directory names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
System management log ^{#19}	/var/opt/jp1ajs2/log/JAJS_SPMD{1 2 3}.log	Trace log related to starting, stopping, and checking the status of the JP1/AJS3 service ^{#3}	384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)
	/var/opt/jp1ajs2/log/JAJS_SPMD_COMMAND{1 2 3}.log		384	33,554,432 (32 gigabytes)	Log size specified during log setup (128)

1. Troubleshooting Procedure and Required Data

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Job execution agent log#9	/var/opt/jp1ajs2/log/jpqaexec{1 2 3 4 5 6 7 8}.log	Trace log related to the job execution control agent process when a job is executed#3	4,096	524,288	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqaexecclld{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqaexecdmn{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqaexecmon{1 2 3 4 5 6 7 8}.log		4,096	524,288	Log size specified during log setup (512)
Job execution client log#9	/var/opt/jp1ajs2/log/jpqccliexec{1 2}.log	Execution trace log related to jpqxxx commands and JpqxxxAPI functions#3	1,024	524,288	Log size specified during log setup (512)
Event/action control agent log#4	/var/opt/jp1ajs2/log/jpoagent{1 2 3 4 5 6 7 8}.log	Trace log related to the event/action control agent when an event job is executed#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
	/var/opt/jp1ajs2/log/jpoagtsub{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log		16,384	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event monitoring log#4	/var/opt/jp1ajs2/log/jpoeventwatch{1 2 3 4 5 6 7 8}.log	Execution trace log related to the JP1 event reception monitoring job and log file monitoring job#3	8,192	16,777,216 (16 gigabytes)	Log size specified during log setup (1,024)
Event search log#4	/var/opt/jp1ajs2/log/jpoevsearch{1 2}.log	Trace log related to event searching before the JP1 event reception monitoring job is executed#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
File monitoring log#4	/var/opt/jp1ajs2/log/jpocwtf1Main{1 2 3 4 5 6 7 8 9 10 11 12 13}.log	Execution trace log related to the file monitoring job#3	26,624	16,777,216 (16 gigabytes)	Log size specified during log setup (2,048)
Execution interval control log#4	/var/opt/jp1ajs2/log/jpocwtmMain{1 2 3 4 5 6}.log	Execution trace log related to the execution interval control job#3	1,536	16,777,216 (16 gigabytes)	Log size specified during log setup (256)

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
Mail monitoring log#4	/var/opt/jp1ajs2/log/jpocwtmlmain{1 2}.log	Execution trace log related to the mail reception monitoring job when the mail linkage function is used#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
Mail delivery log#4	/var/opt/jp1ajs2/log/jpomailrecv{1 2}.log	Execution trace log related to the mail reception monitoring job when the mail delivery function of mail linkage is used#3	256	16,777,216 (16 gigabytes)	Log size specified during log setup (128)
NNM linkage log	/var/opt/jp1ajs2/log/jpooovlink{1 2}.log#6	Trace log related to monitoring when HP NNM is used#3	512	512	256
Job execution internal log#9	/var/opt/jp1ajs2/log/jpqagent/jpqagt_{00 01 02 03 04 05 06 07}.log	..#3, #5	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqagent/jpqmon_{00 01 02 03 04 05 06 07}.log	..#3, #5	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqagent/jpqnpjagt_{00 01 02 03 04 05 06 07}.log	..#3, #5	4,096	1,048,576	Log size specified during log setup (512)
	/var/opt/jp1ajs2/log/jpqagent/jpqnpjdata_{00 01}.log	..#3, #5	1,024	1,048,576	Log size specified during log setup (512)
Job execution internal log#9	/var/opt/jp1ajs2/log/jpqclient/jpqclient_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #5	10,240	1,048,576	Log size specified during log setup (1,024)
	/var/opt/jp1ajs2/log/jpqclient/jpqclientnjp_{00 01 02 03 04 05 06 07 08 09}.log	..#3, #5	10,240	1,048,576	Log size specified during log setup (1,024)
	/var/opt/jp1ajs2/log/jpqclient/jpqnpjdata_{00 01}.log	..#3, #5	1,024	1,048,576	Log size specified during log setup (512)
Event/action common log#4, #6	/var/opt/jp1ajs2/log/jpocommonerr{1 2}.log	..#3	16,384	4,194,304 (4 gigabytes)	Log size specified during log setup (8,192)

Log name	Log file and directory names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files#2
jajs_config command trace log	/var/opt/jplajs2/log/jajs_config_{1 2}.log	Trace log related to the command that specifies an environment setting parameter#3	1	256	128
jajs_setup_cluster command trace log#6	/var/opt/jplajs2/log/jajs_setup_cluster_{01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20}.log#16	Trace log related to the command that configures a cluster environment#3	200	200	When the jajs_setup_cluster command is executed
jplajs2_setup_cluster command trace log#7	/var/opt/jplajs2/log/JAJS_SETUP/logical-host-name/jajs_setup.log#8	Trace log related to the command that sets up a logical host#3	10	100	None
jajs_killall_cluster command trace log	shared-directory/jplajs2/log/jajs_killall_cluster_logical-host-name.{1 2 3 4 5}.log	Trace log related to the command that kills a process associated with a logical host#3	50	50	When jajs_killall_cluster is executed
jajsshowsadminusr command trace log	/var/opt/jplajs2/log/jajsadminusr_{1 2}.log	Setting and reference log for AJS administrators#3	1	256	128
jajs_pmtcon command trace log	/var/opt/jplajs2/log/jajs_pmtcon_{1 2}.log	Log data output when restricting of connection sources is set#3	1	256	128
Queueless log#11	/var/opt/jplajs2/log/ajsqlog{1 2}.log	Information related to the jobs executed by the queueless agent service	16,384	4,000,000	Queueless log file size specified in the environment settings (8,192)
Queueless trace log#6, #12	/var/opt/jplajs2/log/trace.log	Execution trace log related to queueless jobs and commands related to execution control of queueless jobs#3, #5	15,360	2,097,151	Wraparound
Queueless job execution internal log#14	/var/opt/jplajs2/log/ajsqlexeclog#6, #15	Execution trace log related to queueless jobs#3, #5	24,576	2,097,151	Wraparound
The status file used to store information about running queueless jobs#17	/var/opt/jplajs2/log/ajsqstat.dat	Information about running queueless jobs#3, #5	2,048	2,000,000	Wraparound
Definition check log#6, #13	/var/opt/jplajs2/log/ajscheck{1 2}.log	Information related to definition pre-checks	8,192	4,000,000	Definition check log file size specified in the environment settings

Log name	Log file and directory names	Logged information	Default disk space ^{#1}	Maximum disk space ^{#1}	Timing for switching files ^{#2}
Definition check trace log ^{#6, #10}	/var/opt/jp1ajs2/log/trace.log.ch	Trace log related to definition pre-checks ^{#3, #5}	3,072	2,097,151	Wraparound
ajsshmdel command trace log	/var/opt/jp1ajs2/log/ajsshmdel{1 2}.log	Log output when shared memory information is deleted ^{#3}	1	256	128
Flexible job execution requester log file ^{#6}	/var/opt/jp1ajs2/log/ajsfxreq{1 2}.log	Log storing log data output by the flexible job execution requester (manager host ^{#21})	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible job execution host log file ^{#6}	/var/opt/jp1ajs2/log/ajsfxexec{1 2}.log	Log storing log data output by the flexible job execution host (destination agent)	20,480	4,000,000	Log file size specified in environment settings (10,240)
Flexible Job trace log ^{#6}	/var/opt/jp1ajs2/log/ajsfxtrace	__#3, #5	20,480	20,480	Wraparound
Log file for the broadcast agent and broadcast-execution destination agents ^{#6}	/var/opt/jp1ajs2/log/ajsfxbcctl{1 2}.log	__#3	20,480	4,000,000	Log file size specified in environment settings (10,240)
Broadcast agent log file ^{#6}	/var/opt/jp1ajs2/log/ajsfxdstr{1 2}.log	Log storing log data output by the broadcast agent	40,960	4,000,000	Log file size specified in environment settings (20,480)
Internal trace log file for HTTP connection job execution ^{#6}	/var/opt/jp1ajs2/log/ajshhttptrace	__#3, #5	20,480	20,480	Wraparound
Job execution history log file ^{#20, #21}	/var/opt/jp1ajs2/log/jpqjobhistory{0 1}.log	Job execution history log output by JP1/AJS3 - Agent Minimal Edition	1,024	65,536	Log file size specified in environment settings (512)

#1
The unit is kilobytes. The value in parentheses is the kilobytes value expressed in gigabytes.

#2
The unit is kilobytes. The value in parentheses in this column indicates the default timing for switching log files.

#3
The format of the logged information is not publicly available outside the company.

#4
You can change the disk space size. To do so, see *3.4.3 Estimating the size of the log information output by event jobs* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#5

The information is in binary format and cannot be read.

#6

Information is also output to the default directory in a cluster system.

#7

The `jp1ajs2_setup_cluster` command trace log contains information that is logged when a logical host is set up. The log size does not increase during operation.

#8

If a logical host already exists and you create another logical host, a log directory is created under the name of the new logical host.

#9

You can change the disk space size. To do so, see *7.1.4 Estimating the size of the logs output by the execution environment for QUEUE jobs and submit jobs in the JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#10

You can change the disk space size by using the `ajschktrsetsz` command. If you do not use the JP1/AJS3 Check Agent function, no trace log file is created.

#11

You can change the disk space size. To do so, change the value specified for the `AJSQL_LOGSIZE` environment setting parameter by using `jaajs_config` command. For details about how to estimate the required disk space, see *7.2.1(1) Estimating the size of the queueless log file in the JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#12

You can change the disk space size by using the `ajsqltrsetsz` command.

#13

You can change the disk space size. To do so, see *20.7 Setting for the JP1/AJS3 definition pre-check function in the JP1/Automatic Job Management System 3 Configuration Guide*.

#14

You can change the disk space size by using the `ajsqlxecsetsz` command. For details about this command, see *ajsqlxecsetsz* in *4. Commands Used for Special Operation in the manual JP1/Automatic Job Management System 3 Command Reference*.

For details about how to estimate the required disk space, see *7.2.1(3) Estimating the size of the internal execution logs for queueless jobs in the JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#15

The file name is different in a cluster system:

```
/var/opt/jp1ajs2/log/ajsqlxeclog-[logical-host-name]
```

If the full path name is 256 bytes or more, `[logical-host-name]` becomes the first 30 bytes of the logical host name.

#16

The latest execution result is output to the log file numbered 01. When the command is executed, log files are renamed by incrementing their numbers by 1, and a new log file with 01 is created. If the command is executed when a log file with the largest allowed number already exists, the log information in that log file is discarded.

#17

You can change the disk space size. To do so, see *20.10 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#18

If a relay agent exists, log data is output to the relay agent. If a relay agent does not exist, log data is output to the manager host.

#19

You can change the disk space size. To do so, see *20.3 Setting up the system management environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#20

This log file is used exclusively by JP1/AJS3 - Agent Minimal Edition. JP1/AJS3 - Agent does not output log data to this file.

#21

You can change the disk space size. To do so, see *G.2(3) Estimating the job execution history log file* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

Table 1–11: Log files and folders in JP1/AJS3 - Web Console (for UNIX)

Log name	Log file and folder names	Logged information	Default disk space#1	Maximum disk space#1	Timing for switching files
Command log#2	/var/opt/jp1ajs3web/log/ajswebsetup{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about setup command operations	128	16,384	Wraparound
	/var/opt/jp1ajs3web/log/jajs_web{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about service startup command operations	128	16,384	Wraparound
	/var/opt/jp1ajs3web/log/jajs_web_stop{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about service stop command operations	128	16,384	Wraparound
Application server log#2	/var/opt/jp1ajs3web/log/appserver{1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16}.log	Log data about operations and API requests	8,192	16,384	Wraparound
Application server common log	/var/opt/jp1ajs3web/log/appserversys{1 2}.log	Log data about start and stop of web applications	8,192	8,192	Wraparound

#1

The unit is kilobytes unless otherwise specified.

#2

You can change the disk space size. To do so, see *4.6.1(1) Log sizes and the number of log files output by the Web Console server* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

1. Troubleshooting Procedure and Required Data

1.3 Data to be collected when a problem occurs

This section describes the data you need to collect when a problem occurs.

A problem might be caused by JP1/AJS3, the OS, a user program, or an operator error. For these reasons, you might need to collect the data discussed in this section in addition to the JP1/AJS3 logs.

JP1 provides *data collection tools* for batch collection of required data. Data that can be collected using the initial settings of the data collection tools are indicated with symbols in the tables above.

1.3.1 Data to collect in Windows

(1) Log information about the OS

You need to collect the following log information about the OS.

Table 1–12: OS log information that must be collected when a problem occurs

Type of information	Default storage location for files	Collection by the tool
Windows event log	--	Y
Windows registry information	--	Y
hosts file services file	1. <i>system-folder</i> \system32\drivers\etc\hosts 2. <i>system-folder</i> \system32\drivers\etc\services	Y
Machine configuration ^{#1}	--	Y
List of program products with running services ^{#1}	--	Y
Network configuration ^{#1}	--	Y
Memory dump	--	N ^{#2}
Crash dump	--	N ^{#2}
Problem report	--	N ^{#2}

Legend:

Y: The data collection tools can collect data.

N: The data collection tools cannot collect data.

--: There is no default file name or default storage location.

#1

Various kinds of computer information that include this information, such as the hardware environment, software environment, and Internet environment, can be obtained.

Obtaining this information might take several minutes. While the information is being obtained, the System Information window is displayed. However, because the window closes automatically, you do not need to close it manually.

#2

For details about how to collect these dumps, see [1.4.1\(2\) Obtain a dump file](#).

(2) Information about JP1

You need to collect the following information about JP1. If the problem occurs while your system is connected to a network, you also need to obtain the files on the host to which the system is connected.

Table 1–13: JP1 information to be collected for a problem occurring in JP1/AJS3

Type of information	Default storage location for files	Collection by the tool
Log files Work files Definition files	<ol style="list-style-type: none"> 1. <i>JP1/Base-installation-folder</i>\log 2. <i>JP1/Base-installation-folder</i>\conf\user_acl 3. <i>Mgr_Data_Path</i>^{#1}\log 4. <i>JP1/AJS3 - Manager-installation-folder</i>\conf 5. <i>Mgr_Data_Path</i>^{#1}\sys 6. <i>Mgr_Data_Path</i>^{#1}\database 7. <i>Mgr_Data_Path</i>^{#1}\jobinf^{#2} 8. <i>Mgr_Data_Path</i>^{#1}\tmp\schedule^{#2} 9. <i>JP1/AJS3 - Manager-installation-folder</i>\PATCHLOG.txt 10. <i>JP1/AJS3 - View-installation-folder</i>\PATCHLOG.txt 11. <i>JP1/AJS3 - View-installation-folder</i>\resource 12. %ALLUSERSPROFILE%^{#1} \Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log 13. %ALLUSERSPROFILE%^{#1} \Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf 14. <i>JP1/AJS3 - Web Console-installation-folder</i>\PATCHLOG.TXT 15. <i>JP1/AJS3 - Web Console-installation-folder</i>\conf 16. <i>JP1/AJS3 - Web Console-installation-folder</i>\sys 17. <i>JP1/AJS3 - Web Console-installation-folder</i>\uCPsb\CC\server\usrconf 18. <i>JP1/AJS3 - Web Console-installation-folder</i>\uCPsb\CC\web\redirector 19. <i>JP1/AJS3 - Web Console-installation-folder</i>\uCPsb\httpsd\conf 20. <i>Web_Data_Path</i>^{#4}\conf 21. <i>Web_Data_Path</i>^{#4}\log <p>In a cluster system, you also need to obtain the following folders:</p> <ol style="list-style-type: none"> 1. <i>shared-folder</i>\JP1BASE\log 2. <i>shared-folder</i>\JP1BASE\conf 3. <i>shared-folder</i>\JP1AJS2 4. <i>shared-folder</i>\jplajs3web 	Y
Integrated trace log folder	<i>system-drive</i> \Program files (x86) ^{#2,#3} \HITACHI\HNTRLib2\spool	Y
Folder containing product information files	<i>system-drive</i> \Program Files (x86) ^{#2,#3} \HITACHI\jplcommon\JP1AJS2	Y
List of files in the database directory	--	Y
List of JP1/Base files	--	Y
Information on shared memory used while JP1/AJS3 is running	--	Y

Legend:

Y: The data collection tools can collect data.

--: There is no default file name or default storage location.

#1

Mgr_Data_Path indicates the following path:

If the installation folder is the default installation folder or is in a folder protected by the system:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2`

The default value for `%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
- *system-drive*\Program Files (x86)

If the installation folder is other than the above:

JP1/AJS3 - Manager-installation-folder

The default installation folder is *system-drive*\Program Files\HITACHI\jp1ajs2.

#2

For 32-bit versions of Windows, replace Program Files (x86) with Program Files.

#3

For JP1/AJS3 - Web Console, replace Program Files (x86) with Program Files.

#4

One of the following paths is indicated in *Web_Data_Path*:

If the installation folder is the default installation folder or is in a folder protected by the system:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS3WEB`

The default value for `%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

If the installation folder is other than the above:

JP1/AJS3 - Web Console-installation-folder

The default installation folder is *system-drive*\Program Files\HITACHI\jp1ajs3WEB.

(3) JP1/AJS3 processes

Check the operating status of processes on the **Processes** page of the Task Manager window of Windows.

For details about JP1/AJS3 processes, see [B.2 Processes \(for Windows\)](#).

(4) Operation data

Collect the following information about the operation that was being performed when the problem occurred:

1. Details about the operation
2. Time that the problem occurred
3. Machine configuration (the version of each OS, host name, JP1/AJS3 - Manager and JP1/AJS3 - Agent configuration)

4. Whether the problem is reproducible
5. Name of the user who logged in from JP1/AJS3 - View (if there is one)
6. Name of the user who logged in if JP1/AJS3 - Web Console is used and login is performed from the Web GUI or a user application

(5) Error information displayed on the screen

Make hard copies of the following:

1. Windows on the screen when an application error has occurred
2. Error message dialog box (and display the displayed information when a details button (if there is one) is clicked)
3. Information in the Command Prompt window if the problem occurred during the execution of a command

(6) Information about the embedded database

You need to collect the following information about the embedded database.

Table 1–14: JP1 information to be collected for a problem occurring in JP1/AJS3

Type of information	Default storage location for files	Collection by the tool
Definition file	<i>embedded-database-practical-directory</i> \conf	Y
Failure information	<i>embedded-database-practical-directory</i> \spool	Y
Database information	Unload file that is obtained by specifying the <code>-k unld</code> option in the <code>ajsembdbroorg</code> command	Y

Legend:

Y: The data collection tools can collect data.

(7) Other information

In addition to the above information, you need to collect the following information:

1. Contents of **System Log** and **Application Log** of the Windows Event Viewer window
2. Arguments specified in a command when the problem occurs during the execution of a command

1.3.2 Data to collect in UNIX

(1) Log information about the OS

You need to collect the following log information about the OS.

Table 1–15: OS log information that must be collected when a problem occurs in JP1/AJS3

Type of information	Default file name or default storage location for files	Collection by the tool
syslog ^{#1}	1. /var/adm/syslog/syslog.log (for HP-UX)	Y

1. Troubleshooting Procedure and Required Data

Type of information	Default file name or default storage location for files	Collection by the tool
syslog ^{#1}	2. /var/adm/messages (for Solaris) 3. /var/adm/syslog/ or /var/adm/syslog/* (for AIX) 4. /var/log/messages* (for Linux)	Y
hosts file services file passwd file environment file ^{#2} inittab file	1. /etc/hosts 2. /etc/services 3. /etc/passwd 4. /etc/environment 5. /etc/inittab	Y
Patch information for each OS	--	Y
Shared library file for each OS	--	Y
List of processes	--	Y
core file ^{#3}	1. core under /opt/jplajs2 2. core under /var/opt/jplajs2 3. core in the home directory of the OS user that is mapped to a JP1/AJS3 - View login user (this information cannot be collected by the tool) 4. core under /opt/jplbase 5. core under /var/opt/jplbase/log You also need to collect the following file in a cluster system: /shared-directory/jplajs2/database/core	Y ^{#4}
Error log information ^{#2}	--	Y
Network configuration	--	Y
Information about installed Hitachi products	/etc/.hitachi/pplistd/pplistd	Y

Legend:

Y: The data collection tools can collect data.

--: There is no default file name or default storage location.

#1

Depending on the system settings, the past `syslog` information might be required for investigation. If `syslog` is set to be changed frequently in the system settings, manually collect past `syslog` files.

#2

This information is collected only for AIX.

#3

Do not limit the core file output setting of the JP1/AJS3 processes when not the setting violates the security policies of the host you are using.

If the output of core file is incomplete, you might not be able to identify the cause of the error. For details about the setting, see the documentation for your OS.

#4

You need to manually obtain the `core` file in the current directory if information is output to the `core` file by executing a command. In addition, if the problem occurred in the network control process while JP1/AJS3 - View was being used, you need to manually obtain the `core` file in the home directory of the OS user mapped to the JP1 user who was logged in.

(2) Information about JP1

You need to collect the following information about JP1. If the problem occurred while your system was connected to a network, you also need to obtain files on the host to which the system is connected.

Table 1–16: JP1 information to be collected for a problem occurring in JP1/AJS3

Type of information	Default storage location for files	Collection by the tool
Log files Work files Definition files	<ol style="list-style-type: none"> 1. /var/opt/jplajs2/log 2. /var/opt/jplbase/log 3. /etc/opt/jplbase/conf/user_acl 4. /etc/opt/jplajs2/conf 5. /var/opt/jplajs2/database 6. /var/opt/jplajs2/sys 7. /var/opt/jplajs2/jobinf 8. /var/opt/jplajs2/tmp/schedule 9. /opt/jplajs2/PatchHistory 10. /opt/jplajs2/PatchLog 11. /var/opt/jplajs3web/log 12. /var/opt/jplajs3web/sys 13. /etc/opt/jplajs3web/conf 14. /opt/jplajs3web/PatchLog 15. /opt/jplajs3web/sys 16. /opt/jplajs3web/uCPSB/CC/server/usrconf 17. /opt/jplajs3web/uCPSB/CC/web/redirector 18. /opt/jplajs3web/uCPSB/httpsd/conf <p>In a cluster system, you also need to obtain the following directories:</p> <ol style="list-style-type: none"> 1. /shared-directory/jplajs2 2. /shared-directory/jplbase/log 3. /shared-directory/jplbase/conf 4. /shared-directory/jplajs3web 	Y
Integrated trace log directory	/var/opt/hitachi/HNTRLib2/spool	Y
List of files in the database directory	--	Y
List of JP1/Base files	--	Y
Information required for analysis of the <code>core</code> file	--	Y

Legend:

Y: The data collection tools can collect data.

--: There is no default file name or default storage location.

Important

When you collect information, use the `tar` command instead of the `cp` command. Because the directory from which files are obtained also contains system files, using the `cp` command might lead to unexpected results.

(3) JP1/AJS3 processes

Use the `ps` command to check the operation status of processes.

For details about JP1/AJS3 processes, see *B.3 Processes (for UNIX)*.

(4) Operation data

Collect the following information about the operation that was being performed when the problem occurred:

1. Details about the operation
2. Time that the problem occurred
3. Machine configuration (the version of each OS, host name, JP1/AJS3 - Manager and JP1/AJS3 - Agent configuration)
4. Whether the problem is reproducible
5. Name of the user who logged in from JP1/AJS3 - View (if there is one)
6. Name of the user who logged in if JP1/AJS3 - Web Console is used and login is performed from the Web GUI or a user application

(5) Information about the embedded database

You need to collect the following information about the embedded database.

Table 1–17: JP1 information to be collected for a problem occurring in JP1/AJS3

Type of information	Default storage location for files	Collection by the tool
Definition file	<i>embedded-database-practical-directory/conf</i>	Y
Failure information	<i>embedded-database-practical-directory/spool</i>	Y
Database information	Unload file that is obtained by specifying the <code>-k unld</code> option in the <code>ajsembdbrogrg</code> command	Y

Legend:

Y: The data collection tools can collect data.

(6) Other information

When trouble occurred at the time of command execution, collecting of the argument specified in the command is needed.

1.4 Collecting data for troubleshooting

By collecting data, you can investigate and identify the causes of a problem, and then take the necessary measures. This section describes how to collect data when a problem occurs.

1.4.1 Collecting data for troubleshooting in Windows

(1) Execute the data collection tool

JP1/AJS3 provides the data collection tools listed in the following table. Use one of these tools according to the operational requirements.

Table 1–18: Data collection tools provided by JP1/AJS3 (for Windows)

Data collection tool	Description
<code>jajs_log.bat</code>	Use this tool if you have not changed the output destinations of log files and other data from the defaults, or if you do not need to collect data other than the data collected by default.
<code>_04.bat</code>	Use this tool if you have changed the output destinations of log files and other data from the defaults, or if you need to collect data other than the data collected by default. You can customize this tool according to the output destinations or the data to be collected.

For details about how to set up the data collection tool (`_04.bat`), see *7.1 Collecting log data* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

The following shows examples of executing the data collection tool:

When executing `jajs_log.bat`:

```
C:\>C:\Program Files\HITACHI\JP1AJS2\tools\jajs_log.bat
```

When executing the file `trouble.bat` that is created by customizing `_04.bat`:

```
C:\>C:\usertools\trouble.bat
```

By default, the results of executing the data collection tool are output under `%TEMP%\jplajs2\backlog`. Back up these folders.

When you use the data collection tools in a cluster system, you can collect data by specifying a logical host name. The data collection tools also provide options for limiting the amount of data that is collected. For details on the data collection tools used in Windows, see *jajs_log.bat* or *_04.bat (Windows only)* in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

(2) Obtain a dump file

If a STOP error occurs in Windows or if an application crashes, you might have to obtain dump files (a memory dump and a crash dump) and a problem report.

The following describes how to obtain a dump file and a problem report.

(a) How to obtain a dump file

You need to manually obtain a dump file that is output when a problem occurs.

Cautionary note

To output a dump file when a problem occurs, you must specify the settings in advance. For details about how to set the output of dump files, see *7.1.2 Procedure for setting the outputting of a dump file* in the manual *JP1/Automatic Job Management System 3 Configuration Guide*.

(b) How to obtain a problem report

You can detect problems on a target host and find solutions for each problem. If a JP1/AJS3 process terminates because of an application error, use the following procedure to obtain a problem report.

To obtain a problem report:

1. In Control Panel, click **Action Center**.
The Action Center dialog box opens.
2. Click **Maintenance**.
The Maintenance menu appears.
3. Under **Check for solutions to problem reports**, click **View reliability history**.
The Reliability Monitor dialog box opens.
4. Click **View all problem reports**.
The Problem Reporting dialog box opens.
5. Double-click the applicable problem.
Details about the problem report appear.
6. Click **Copy to clipboard**.
7. Copy the text into a text editor, and save the file.
Use the problem report text file as data for investigating the failure.

(3) Check the status of processes

In Windows, start Task Manager and open the **Processes** page. Check the operating status of processes.

For details about JP1/AJS3 processes, see *B.2 Processes (for Windows)*.

(4) Check the operation data

For the problem that has occurred, check the operation data and record it. You need to check the following information:

1. Details about the operation
2. Time that the problem occurred
3. Machine configuration (the version of each OS, host name, JP1/AJS3 - Manager and JP1/AJS3 - Agent configuration)
4. Whether the problem is reproducible
5. Name of the user, if any, who logged in from JP1/AJS3 - View
6. Name of the user who logged in if JP1/AJS3 - Web Console is used and login is performed from the Web GUI or a user application

(5) Collect error information displayed on the screen

Make hard copies of the following:

1. Windows on the screen when an application error has occurred
2. Error message dialog box
Displayed information when a details button, if any, is clicked
3. Information in the Command Prompt window if the problem occurred during the execution of a command
Before making a hard copy of the Command Prompt window, make the following preparations by using **Console in Control Panel**:

Options page

Select **QuickEdit Mode**.

Layout page

Enter 500 in **Height of Screen Buffer Size**.

(6) Collect information about the embedded database

You need the following information if an error occurs while you are using the embedded database:

- Data needed to investigate the cause
- Information needed to re-create the embedded database environment

The following describes how to collect the above information.

(a) Information needed to investigate the cause

To investigate the cause of an error, you mainly need to collect information about the OS and information about the embedded database. Use OS commands to collect information about the OS. Use embedded database commands to collect information about the embedded database.

If you use the support service to solve problems, you must submit the information listed in the table below. This table describes the type of information needed to investigate the cause of problems and how to collect information for each type of problem. Problems are classified into seven levels, of which level 1 has the highest priority.

Problems are grouped by type as follows:

1. Performance

The following processing or operation takes too much time:

- Startup of the embedded database system (including normal startup, restart, and startup after action has been taken for a failure)
- Stopping of the embedded database system (including normal stopping and forced stopping)
- Execution of an operation command for the embedded database

2. No response

A response is not returned when the following processing or operation is performed:

- Startup of the embedded database system (including normal startup, restart, and startup after action has been taken for a failure)
- Stopping of the embedded database system (including normal stopping and forced stopping)
- Execution of an operation command for the embedded database

3. Abnormal end

One of the following has occurred:

- Abnormal termination of the embedded database system
- Abnormal termination of an embedded database process
- Abnormal termination of an operation command for the embedded database

Table 1–19: Information needed to investigate the cause of failures and how to collect that information

No.	Component	Information to be collected	Collection method	Performance	No response	Abnormal end
1	OS	Windows event log	Use an OS function (command).	1	1	1
2		CPU usage rate and device status	Use the performance monitor.	3	4	3
3	Embedded database	Information about embedded database failures	Obtain the files under the following folders and store them on a DAT or another storage device: <ul style="list-style-type: none"> • <i>embedded-database-practical-directory</i>\spool • <i>embedded-database-practical-directory</i>\tmp An error log file, a command log file, remote command information files, and node switching function information files are output to the above folders.	2	2	2
4			Error log file The error log is output to a file under <i>embedded-database-practical-directory</i> \spool\errlog.	2	2	2
5			Command log file The command log is output to a file under <i>embedded-database-practical-directory</i> \spool\cmdlog.	2	2	2
6			Remote command information files The information about remote commands is output to <i>embedded-database-practical-directory</i> \spool\pdrshs1 and pdrshs2.	2	2	2
7			Node switching function information files Information about the node switching function is output	2	2	2

No.	Component	Information to be collected	Collection method	Performance	No response	Abnormal end
7	Embedded database	Information about embedded database failures	to <i>embedded-database-practical-directory</i> \spool\pdshs1 and pdshs2.	2	2	2
8		Specification difference absorption library error information files	The error information about the specification difference absorption library is output to <i>embedded-database-practical-directory</i> \UXPLDIR\SPOOL\uxpllog1 and uxpllog2.	2	2	2
9		Embedded database system definitions	Obtain the files under <i>embedded-database-practical-directory</i> \conf and store them on a DAT or another storage device.	4	5	4
10		SQL trace file and error log file	Obtain the output files and store them on a DAT or another storage device. A file name begins with pderr or pdsq1.	--	6	5
11		System log file	Use the <code>ajsembdboplog</code> command to unload the system log. Obtain the unload log file and store it on a DAT or another storage device.	6	7	6

Legend:

--: The information need not be collected.

Note

The size of a file increases at a fixed rate if additional data continues to be stored in the file as a result of redirection. Because such a file takes up disk space, instead use `bat` files, which can be switched and reused after several generations.

(b) Information needed to re-create the embedded database environment

If a problem occurs during operation of the embedded database, you might need to re-create the environment that produced the problem to test whether the problem is reproducible or to investigate the cause of the problem. To enable this procedure, collect the following information needed to re-create the embedded database environment.

- `conf` under the embedded database practical directory (if the user has changed the definition files)
- Environment variables related to the embedded database
- Data in the embedded database

Use the `ajsembdborg` command to collect the data in the embedded database.

To collect the information needed to re-create the embedded database environment:

1. Start the embedded database.
2. Execute the `ajsembdborg` command with the `-k unld` option specified.
3. Save `conf` under the embedded database practical directory in a folder of your choice.
4. Record the environment variables related to the embedded database.

For details about how to use the `ajsembdborg` command and a description of the command, see 9.2.2 *Reorganizing a database* in the *JP1/Automatic Job Management System 3 Administration Guide*.

1.4.2 Collecting data for troubleshooting in UNIX

(1) Execute the data collection tool

JP1/AJS3 provides the data collection tools listed in the following table. Use one of these tools according to the operational requirements.

Table 1–20: Data collection tools provided by JP1/AJS3 (for UNIX)

Data collection tool	Description
<code>jajs_log</code>	Use this tool if you have not changed the output destinations of log files and other data from the defaults, or if you do not need to collect data other than the data collected by default.
<code>_04</code>	Use this tool if you have changed the output destinations of log files and other data from the defaults, or if you need to collect data other than the data collected by default. You can customize this tool according to the output destinations or the data to be collected.

For details about how to set up the data collection tool (`_04`), see 16.1 *Collecting log data* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

The following shows examples of executing the data collection tool:

When executing `jajs_log`:

```
# /opt/jp1ajs2/tools/jajs_log
```

When executing the file `trouble.sh` that is created by customizing `_04`:

```
# /home/jp1ajs2/trouble.sh
```

By default, the results of executing the data collection tool are output under `/tmp/jp1ajs2/trouble/`. Back up these files.

When you use the data collection tools in a cluster system, you can collect data by specifying a logical host name. The data collection tools also provide options for limiting the amount of data that is collected. For details on the data collection tools used in UNIX, see *jajs_log or _04 (UNIX only)* in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

(2) Obtain the contents of the core file

Obtain the contents of the `core` file if the file has been output.

The `core` file is output to one of the following directories:

1. `/opt/jp1ajs2/bin`^{#1}
2. `/var/opt/jp1ajs2/database`^{#1}
3. `/opt/jp1ajs3web/bin`^{#1}
4. User home directory^{#2}

5. Current directory in which the command was executed

#1

The data collection tools can be used to collect data.

#2

If the `core` file was output after connection from JP1/AJS3 - View, this directory is the home directory of the mapped OS user.

If you want to collect only the information needed for analysis of the `core` file, use the `ajs2collectcore` command. For details about this command, see *ajs2collectcore (UNIX only)* in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

Do not limit the core file output setting of the JP1/AJS3 processes when not the setting violates the security policies of the host you are using. If the output of core file is incomplete, you might not be able to identify the cause of the error. For details about the setting, see the documentation for your OS.

(3) Check the status of processes

Use the `ps` command to check the operating status of processes.

For details about JP1/AJS3 processes, see *B.3 Processes (for UNIX)*.

(4) Check the operation data

For the problem that has occurred, check the operation data and record it. You need to check the following information:

1. Details about the operation
2. Time that the problem occurred
3. Machine configuration (the version of each OS, host name, JP1/AJS3 - Manager and JP1/AJS3 - Agent configuration)

You can check the machine configuration by executing a command. The following table lists the commands you can use to check the machine configuration for each OS.

Table 1–21: UNIX commands that can be used to check the machine configuration

OS	Command for checking the OS version	Command for checking the size of physical memory on the host	Command for checking the process information and required memory size
HP-UX	<code>/usr/bin/uname -a</code>	<code>/usr/sbin/dmesg</code>	<code>/usr/bin/ps -elf</code>
Solaris	<code>/usr/bin/uname -a</code>	<code>/usr/sbin/prtconf</code>	<code>/usr/bin/ps -elf</code>
AIX	<code>/usr/bin/uname -a</code>	<code>/usr/sbin/bootinfo -r</code>	<code>/usr/bin/ps -elf</code>
Linux	<code>/bin/uname -a</code>	<code>/usr/bin/free</code> (or <code>/bin/cat/proc/meminfo</code>)	<code>/bin/ps -elf</code>

Note

The options used in each command in the above table are typical options of the respective OSs. How the options are specified might vary depending on the environment being used. For details, see the documentation for the applicable OS.

4. Whether the problem is reproducible
5. Name of the users, if any, who logged in from JP1/AJS3 - View.

6. Name of the user who logged in if JP1/AJS3 - Web Console is used and login is performed from the Web GUI or a user application

(5) Collect information about the embedded database

You need the following information if an error occurs while you are using the embedded database:

- Data needed to investigate the cause
- Information needed to re-create the environment of the embedded database

The following describes how to collect the above information.

(a) Information required to investigate the cause

To investigate the cause of an error, you mainly need to collect information about the OS and information about the embedded database. Use OS commands to collect information about the OS. Use the embedded database commands to collect information about the embedded database.

If you use the support service to solve problems, you must submit the information listed in the table below. This table describes the type of information needed to investigate the cause of problems and how to collect information for each type of problem. Problems are classified into seven levels, of which level 1 has the highest priority.

Problems are grouped by type as follows:

1. Performance

The following processing or operation takes too much time:

- Startup of the embedded database system (including normal startup, restart, and startup after action has been taken for a failure)
- Stopping of the embedded database system (including normal stopping and forced stopping)
- Execution of an operation command for the embedded database

2. No response

A response is not returned when the following processing or operation is performed:

- Startup of the embedded database system (including normal startup, restart, and startup after action has been taken for a failure)
- Stopping of the embedded database system (including normal stopping and forced stopping)
- Execution of an operation command for the embedded database

3. Abnormal end

One of the following has occurred:

- Abnormal termination of the embedded database system
- Abnormal termination of an embedded database process
- Abnormal termination of an operation command for the embedded database

Table 1–22: Information needed to investigate the cause of failures and how to collect that information

No.	Component	Information to be collected	Collection method	Performance	No response	Abnormal end
1	OS	syslog	Use an OS function (command).	1	1	1

No.	Component	Information to be collected	Collection method	Performance	No response	Abnormal end
2	OS	CPU usage rate and device status	Use an OS command, such as the <code>sar</code> command, to collect the information. For details about the commands, see the documentation for the OS.	3	4	3
3		CPU running status and memory status for processes	Use an OS command, such as the <code>top</code> command, to collect the information. For details about the commands, see the documentation for the OS.	3	4	3
4		Virtual memory	Use an OS command, such as the <code>vmstat</code> command, to collect the information. For details about the commands, see the documentation for the OS.	3	4	3
5		Network status	Use an OS command, such as the <code>netstat</code> command, to collect the information. For details about the commands, see the documentation for the OS.	3	4	3
6	Embedded database	Information about embedded database failures	Obtain the files under the following directories and store them on a DAT or another storage device: <ul style="list-style-type: none"> <i>embedded-database-practical-directory</i>/spool <i>embedded-database-practical-directory</i>/tmp An error log file and a command log file are output to the above directories.	2	2	2
7			Error log file The error log is output to a file under <i>embedded-database-practical-directory</i> /spool/errlog.	2	2	2
8			Command log file The command log is output to a file under <i>embedded-database-practical-directory</i> /spool/cmdlog.	2	2	2
9	Embedded database system definitions	Embedded database system definitions	Obtain the files under <i>embedded-database-practical-directory</i> /conf and store them on a DAT or another storage device.	4	5	4
10		SQL trace file and error log file	Obtain the output files and store them on a DAT or another storage device. A file name begins with <code>pderr</code> or <code>pdsql</code> .	--	6	5
11		System log file	Use the <code>ajsembdboplog</code> command to unload the system log. Obtain the unload log file and store it on a DAT or another storage device.	6	7	6

Legend:

--: Information need not be collected.

Note

The size of a file increases at a fixed rate if additional data continues to be stored in the file as a result of redirection. Because such a file takes up disk space, instead create general-purpose shell scripts, which allow files to be switched and reused after several generations.

(b) Information needed to re-create the embedded database environment

If a problem occurs during operation of the embedded database, you might need to re-create the environment that produced the problem to test whether the problem is reproducible or to investigate the cause of the problem. To enable this procedure, collect the following information needed to re-create the embedded database environment.

- `conf` under the embedded database practical directory (if the user has changed the definition files)
- Environment variables related to the embedded database
- Data in the embedded database

Use the `ajsembdborg` command to collect the data in the embedded database.

To collect the information needed to re-create the embedded database environment:

1. Start the embedded database.
2. Execute the `ajsembdborg` command with the `-k unld` option specified.
3. Save `conf` under the embedded database practical directory in a folder of your choice.
4. Record the environment variables related to the embedded database.

For details about how to use the `ajsembdborg` command and a description of the command, see *9.2.2 Reorganizing a database* in the *JPI/Automatic Job Management System 3 Administration Guide*.

2

Troubleshooting Typical Problems

This chapter describes how to troubleshoot typical problems that might occur while JP1/AJS3 is being used.

2.1 Troubleshooting problems related to setup, service startup, and JP1/AJS3 operation

This section describes how to troubleshoot the problems related to setup, service startup, and JP1/AJS3 operation.

2.1.1 Troubleshooting problems related to setup

(1) JP1/AJS3 setup does not terminate normally

Possible causes are as follows:

- If the KAVU5921-E message (Environment settings or the logical host name is invalid.) is output:

JP1/Base might not have been set up, or a logical host name specified during setup for cluster operation might be invalid.

Check the setup procedure and perform it again. During setup for cluster operation, make sure that you specify both the `-mh` option and a logical host name in the `jpgimport` command.

- If the KAVU5950-E message (The same identifier or object name is already specified. (line:line-number)) is output:

An agent definition (`$agent`), queue definition (`$queue`), or exclusive execution resource definition (`$res`) in the configuration definition file for the execution environment (`jpgsetup.conf`) for QUEUE jobs and submit jobs might be invalid.

Check the definitions in the configuration definition file for the execution environment for QUEUE jobs and submit jobs. Correct any definitions that need to be corrected, and set up JP1/AJS3 again.

The storage location of the configuration definition file for the execution environment for QUEUE jobs and submit jobs is as follows:

In Windows:

```
JP1/AJS3-installation-folder\conf\jpgsetup.conf
```

In UNIX:

```
/etc/opt/jp1ajs2/conf/jpgsetup.conf
```

Make sure that the definitions in the configuration definition file for the execution environment for QUEUE jobs and submit jobs meet the following conditions:

- A duplicate ID is not defined in `$agent $an` (n is an agent ID).
- The same ID is not shared by `def_queue $qn` (n is a default queue ID) and `$queue $qn` (n is a queue ID).
- A duplicate ID is not defined in `$queue $qn` (n is a queue ID).
- A duplicate ID is not defined in `$res $rn` (n is an exclusive execution resource ID).
- A duplicate agent name is not defined.
- A duplicate queue name is not defined.
- A duplicate exclusive execution resource name is not defined.

For details about the definitions in the configuration definition file for the execution environment for QUEUE jobs and submit jobs (`jpgsetup.conf`), see `jpgimport` in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

2.1.2 Troubleshooting problems related to service startup

(1) A JP1/AJS3 service has not started

Possible causes are as follows:

- If the KAVU5285-E message (There is no the database table, or it is short of the system resources. (*reason-location*)) is output to the integrated trace log:
If you are using QUEUE jobs or submit jobs, the job execution environment database for QUEUE jobs and submit jobs might not have been created correctly. Use the `jqimport` command to create or re-create the job execution environment database for QUEUE jobs and submit jobs. For details about how to create or re-create the database, see [2.11.2 Procedure for re-creating the execution environment database for QUEUE jobs and submit jobs](#).
- If the KAVU5284-E message (It is short of the system resources. (*reason-location*)) is output to the integrated trace log:
System resources, such as semaphores, required for JP1/AJS3 operation might not be sufficient.
Check the estimate for system resources, make sure that system resources are sufficient, and then restart JP1/AJS3.
- If you start a JP1/AJS3 service when memory is insufficient, the KAVU1203-E message (The agent process could not be started. (Reason code: 12)) or the KAVU1204-E message (The manager process could not be started. (Reason code: 12)) might be output to the integrated trace log. If either message is output, reconsider the memory estimate. If any unnecessary applications are running, stop them and restart the JP1/AJS3 service.
- When you start a JP1/AJS3 service, the KAVU1203-E message (The agent process could not be started. (Reason code: 0xffffffff)) or the KAVU1204-E message (The manager process could not be started. (Reason code: 0xffffffff)) might be output to the integrated trace log. If either message is output, initialization of the JP1/AJS3 service might have failed. Check the message that is output immediately before this message in the integrated trace log, eliminate the cause of the error, and then restart the JP1/AJS3 service.
- When the JP1/AJS3 service is started, the following messages might be output to the integrated trace log:
 - KAVU1103-I Process monitor (*logical-host-name*) is already running on the same host.
 - KAVU4111-E Job queuing control (*logical-host-name*) or `jqimport` command is already running on the same host.
 - KAVS0500-E Scheduler service has already started.

If any of the messages above are output, the JP1/AJS3 service might have terminated abnormally without stopping JP1/AJS3 processes. In this case, forcibly terminate the remaining JP1/AJS3 processes, and then restart the JP1/AJS3 service as described below.

In Windows:

On both the physical and logical hosts, stop the JP1/AJS3 service, and then use the task manager to check whether JP1/AJS3 processes remain. If JP1/AJS3 processes remain, use the task manager to terminate them forcibly or restart the system.

In UNIX:

If the JP1/AJS3 service on the physical host cannot be started, stop the JP1/AJS3 service on both the physical and logical hosts, and then execute the `ps` command to check whether JP1/AJS3 processes remain. If JP1/AJS3 processes remain, use the `kill` command to terminate them forcibly.

If the JP1/AJS3 service on the logical host cannot be started, execute the `jaajs_killall.cluster` command on that logical host to terminate the remaining processes forcibly.

- If the KAVS8033-E message (An error occurred during the processing of the connection source restriction function. (code: *cause-code*, host: *host-name*) *maintenance-information*) is output to the integrated trace log:
Reading of the connection permission configuration file might have failed. Confirm the following:
 - The connection permission configuration file is in the environment settings storage folder.
 - You have access permission for the connection permission configuration file.
- If you try to start the JP1/AJS3 service without entering the IP address of the local host in the manager connection permission configuration file, the KAVU4335-E message (The request sent from the host (*connection-source-IP-address*) was ignored. (*reason*, *host-name*)) is output to the integrated trace log, and the JP1/AJS3 service stops. If this message is output, enter all IP addresses, including the loopback and logical host IP addresses, that might be used as the connection source IP address in the manager connection permission configuration file, and then try to start the JP1/AJS3 service.

(2) A JP1/AJS3 service takes too much time to start

When JP1/AJS3 starts, it requests the authentication server to perform initialization. Even if the authentication server is not running, JP1/AJS3 can still start, but startup takes time.

To prevent a slow startup, before you start JP1/AJS3, start the authentication server.

2.1.3 Troubleshooting problems related to JP1/AJS3 operation

(1) JP1/AJS3 does not function normally

Check for the following:

- JP1/AJS3 is not in a status in which programs can stop, such as the standby, resume, and suspended status.
- If you have changed the system time, make sure that you did so by using the procedure described in 7.9.3 *Changing the date and time of the system* in the *JP1/Automatic Job Management System 3 Administration Guide*.

(2) An error occurs during communication using IPv6 addresses

Check the items listed below. For details about IPv6 addresses, see 2.3.5 *Communication using IPv6 addresses* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

- If the JP1/AJS3 service does not start on the manager host, make sure that the manager host is an IPv4/IPv6 host. The JP1/AJS3 service does not start unless the manager host supports the IPv4 protocol.
- If communication using IPv6 addresses is impossible, execute the `jp1ping` command to check the connection with the destination host. For details, see the *JP1/Base User's Guide*.

2.2 Troubleshooting problems related to the job execution environment

This section describes how to troubleshoot problems related to the job execution environment.

If an error has occurred on the existing agent host or if an agent host whose configuration definition can be changed is a remote host, take the following action:

Create an execution agent by using the `ajsatgadd` command. If you are using QUEUE jobs and submit jobs, use the `jpqimport` command to define the configuration of the execution environment for QUEUE jobs and submit jobs. Then use the `jpqagtadd` command or the `jpqqeopen` command to enable the new agent to be used.

If you specify 1 for the `AutoCreate` environment setting parameter at setup, an alternate execution agent or agent is automatically added when a job is submitted. You also can use the added alternate execution agent or agent to execute the job.

System administrators must specify the automatic definition of agents at setup to be ready for potential emergencies such as an agent host failure. If jobs are to be executed with the automatic definition of agents enabled, the user executing the jobs must be a JP1 user with `JP1_JPQ_User` permission and `JP1_JPQ_Admin` permission. Because an error could occur if any of the following conditions exists, make sure beforehand that they will not arise:

- Memory becomes insufficient.
- Disk space becomes insufficient.
- Access to the database fails.
- An existing queue is already using the same name.
- The number of agents reaches the maximum number that has been defined.
- A communication error that disables connection to the manager host occurs.
- The event/action control manager process is no longer running.
- Access permission for adding an execution agent or an agent has not been granted.

Use the following procedure to set the automatic definition of agents and to execute a job.

To set the automatic definition of agents:

1. Configure the `AutoCreate` environment setting parameter.

Specify the value for the `AutoCreate` environment setting parameter as follows:

```
"AutoCreate"=dword:1
```

If a failure occurs on the agent host, perform the following step:

2. Execute a job.

For JP1/AJS3 - View (for Windows):

Specify the name of the agent host to be automatically defined in **Exec-agent** in the Define Details dialog box for the job, and register the job for execution.

For the `jpqjbsub` command:

Specify the name of the agent host to be automatically defined in the `-ah` option and execute the command.

Cautionary notes

- An execution agent is added when a job is registered for execution. If the job fails, the execution agent will remain. If you want to delete the execution agent, use the `ajsagtdel` command.

- An agent is added when a job is submitted. If the job fails, the agent will remain. If you want to delete the agent, use the `jpgagt del` command.
- If you want to enable the automatic definition of agents while JP1/AJS3 is running, you need to restart JP1/AJS3.

Supplementary note

The setting values for an automatically added execution agent and the setting values for the default queue for an agent are the same as the default setting values specified at setup. The following table lists the default setting values.

Table 2–1: Setting items and default values for an added execution agent

Setting item for the execution agent	Default value
Execution host name	Same as the execution agent name
Maximum number of concurrently executable jobs	00:00-00:00=5 (maximum of five concurrent jobs, 24 hours a day)
Job transfer restriction status	Enabled
Explanation	None

Use the `ajsagtalt` command to change the setting values of execution agents. For details about this command, see *ajsagtalt* in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

Table 2–2: Setting items and default values for an added agent and the default queue of the agent

Setting item for the default queue	Default value
Period for changing the concurrently executable job limit and the value of the limit	00:00-00:00=5 (maximum of five concurrent jobs, 24 hours a day)
Maximum number of jobs	100
Warning level for the number of jobs	80
Status of the job entrance	open
Status of the job exit	open
Agent to be connected	Local agent host
Priority level of the agent	1

You can use the following commands to change the setting values for an added agent and the default queue of the agent:

- `jpgagtalt`
- `jpgquealt`
- `jpgqueopen`
- `jpgqueclose`
- `jpgagtlink`
- `jpgagtunlink`

For details about the commands, see *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

2.3 Troubleshooting problems related to login to JP1/AJS3 - View

This section describes how to troubleshoot problems that might occur when you attempt to log in to JP1/AJS3 - View.

2.3.1 Troubleshooting problems if you are unable to log in to JP1/AJS3

Possible causes are as follows:

- If the KAVV400-E message (Cannot connect to the host (*host-name*) . Detailed information: *port-number, IP-address*) is output:
Check the following and take appropriate actions.
 - Check whether the following command can be executed normally:
`ping IP-address-or-host-name-of-destination-host`
If the destination host does not send a response, the destination host is not running or is unable to connect to the network.
 - Check whether the JP1/AJS3 service is running on the destination host.
To check the service status:
In Windows:
In the Services dialog box or the Services window, check whether the status of the JP1/AJS3 service is **Start**. Alternatively, open the Task Manager window, and on the **Processes** page, check whether the **ajsinetd** process is running.
In UNIX:
Execute the `ps` command to check whether the **ajsinetd** process is running.
 - Check whether there is a firewall between the source and destination hosts. If there is, check whether packet filtering is configured correctly. To do so, read the explanation in *A. List of Port Numbers* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.
 - Check whether the port number in the message matches the port number defined in the `services` file of the destination host.
- If the KAVV412-E message (The host name is specified incorrectly.) is output:
Specify settings so that the host name can be resolved.
- If the KAVV452-E message (Cannot connect because the number of connections exceeded the maximum.) is output:
Check the following environment setting parameters to determine if the settings for the maximum number of JP1/AJS3 - View connections for logical hosts or for scheduler services are correct:
 - `MAXSESSION` environment setting parameter (maximum number of JP1/AJS3 - View connections for logical hosts)
 - `SERVICEMAXSESSION` environment setting parameter (maximum number of JP1/AJS3 - View connections for scheduler services)
For details, see *20.4 Setting up the scheduler service environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.
- If the KAVV457-E message (The user name or password is invalid.) is output:
 - Check whether the JP1 user name and password you entered for login are correct.

- Check whether the JP1 user name and password you entered for login are registered correctly on the authentication server for the connection destination.
- If the primary authentication server is blocked in an environment where a secondary authentication server is installed, check whether the user settings on the primary authentication server are identical with those on the secondary authentication server. It is possible that if you changed your password, the new password might not have been registered on the secondary authentication server and is registered only on the primary authentication server.
- If the KAVV458-E message (`User mapping failed. The user was not associated with an OS user at the connection destination.`) is output:
Execute the `jbsgetumap` command on the destination host, check the standard output data, and check the points discussed below. For details about the `jbsgetumap` command, see the *JP1/Base User's Guide*.
 - If the JP1 user name that you entered when you logged in to JP1/AJS3 - Manager from JP1/AJS3 - View is not directed to the standard output, the user mapping settings on the destination host are invalid (no mapping is completed between JP1 users and OS users).
 - If anything other than `*` is output as the server host name for the JP1 user name, check whether the server host name matches the name of the local host.
Also see the explanation of user mapping in the *JP1/Base User's Guide*, and make sure that the name of the local host is specified correctly.
 - Make sure that the OS user name output to the standard output is the name of an existing OS user.
Also check the following if the destination host runs on Windows:
 - Make sure that the OS user name to be mapped to the JP1 user name has not been changed in the JP1/Base password management settings.
 - Make sure that the password of any mapped OS user has not been changed in the OS.
 - Make sure that the accounts of mapped OS users have not been locked out.
 - Make sure that the accounts of mapped OS users have permissions that allow local logon.
- If the KAVV459-E message (`An error occurred in JP1/Base at the connection destination.`) is output:
Check the following:
 - Make sure that the authentication server host name specified on the destination host is correct.
 - If the authentication server host name is correct, make sure that an authentication server is running on that host.
Note that if the local host is specified as the authentication server in a UNIX environment, you must set up JP1/Base so that JP1/Base starts as the authentication server. For details, see the explanation of the authentication server settings in the *JP1/Base User's Guide*.
- If the KAVV3102-E message (`Connection denied.`) is output:
Check the KAVS8040-E message that is output to the integrated trace log on the connection destination manager host. If necessary, add any required IP addresses in the manager connection permission configuration file, and then execute the `jaajs_pmtcon` command.
- If the KAVV3103-E message (`An error occurred while processing was being performed for SSL communication.`) is output:
This message is output if communication with the connection destination manager host is encrypted. Make sure that the route certificate for verifying the server certificate on the connection destination manager host has been deployed correctly on the JP1/AJS3 - View host. Also make sure that the communication encryption settings (whether to enable or disable encryption) specified in JP1/AJS3 - View and JP1/AJS3 - Manager are the same.

2.3.2 Troubleshooting problems if the destination host is disconnected immediately after login to JP1/AJS3

Possible causes are as follows:

- If the KAVV401-E message (The data to the connection destination could not be sent or received.) is output:

If the destination host is a Windows host, its desktop heap area might be insufficient.

To reduce consumption of the desktop heap area on the destination host, specify the following environment setting parameters:

- REUSELOGON environment setting parameter (method for starting the logon session process)
- LOGONSHMAX environment setting parameter (number of sessions sharing the logon)

For details, see *20.4 Setting up the scheduler service environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

2.4 Troubleshooting problems related to the Web GUI

This section describes how to troubleshoot problems related to the Web GUI.

2.4.1 If a screen is not displayed or is corrupted

Possible causes are as follows:

- The OS or web browser might not be supported. Check the version of the OS or web browser.
- If the zoom rate of the web browser is not 100%, the displayed information might be corrupted. Make sure that the zoom rate is 100%.
- If the text size of the OS is not 100%, the displayed information might be corrupted. Make sure that the text size is 100%.
- If the pop-up blocker is enabled in your web browser, the display of some Web GUI screens and dialog boxes might be blocked. In the pop-up block settings in your web browser, add the address of the Web Console server to the allowed sites, to release the server from the pop-up block.

2.4.2 If the login window does not appear when SSL communication is used

HTTPS connections use SSL communication and HTTP connections do not use SSL communication. If the login window does not appear when an HTTPS connection is used although the login window appears when an HTTP connection is used, possible causes are as follows:

- SSL communication might be disabled in the web browser. Make sure that SSL communication is enabled in the web browser.
- The private keys for the server and server certificate might not match. Re-create a server private key and certificate signing request (CSR) to obtain the server certificate again, and then restart the JP1/AJS3 HTTP Server service.

2.4.3 If an error occurs when a window is opened or an operation is performed immediately after upgrade installation

The data stored in the cache for the web browser before the upgrade installation might still exist. Use the web browser to delete the cached temporary files.

2.5 Troubleshooting problems if processing of a jobnet with a start condition is delayed

In some cases, when a large number of events occur unexpectedly for a specific jobnet with a start condition, processing is delayed because large quantities of unprocessed data are stored on the event/action control manager. For example, an operation for an event job is delayed or an event job does not end quickly even if an event that matches the specified condition occurs.

In such cases, you can end the delay by deleting the information contained in the event/action control manager.

The following example shows how you can restore operational status if a system problem occurs:

1. A large number of events occur unexpectedly for a specific jobnet with a start condition.
2. The manager host slows down because there is too much data to be processed, causing other event jobs to be held in queues or other problems to occur.
3. The event/action control manager outputs the KAVT0333-W message to the integrated trace log.
4. You receive the message output in step 3, and notice that a problem has occurred on the event/action control manager.
5. Execute the `jpomanevshow` command to obtain information about the agents that frequently send data, and the jobnet with a start condition.
6. Use the information you obtain in step 5 (*unit ID*) and either of the following commands to identify the name of the jobnet related to the problem.
 - `ajsname` command
This command outputs the unit name to the standard output file.
 - `jpomanjobshow` command
This command outputs a list of event jobs being executed on the manager to the standard output file.
7. Forcibly terminate the jobnet with a start condition identified in step 6.
If the termination is successful, troubleshooting ends here.
8. If you could not stop the jobnet in step 7 or could not identify the jobnet name in step 6, assume that it will be difficult to restore operational status while JP1/AJS3 is running, and stop the scheduler service.
9. On the agent with the problem, execute the `jpomanevreset` command for the scheduler service you stopped in step 8, and restore the status of the event/action control manager.
10. If you use the `jpomanevreset` command to continue the event job or the start condition, eliminate the cause of the problem in step 1 on the applicable agent host.
11. Start the scheduler service you stopped in step 8.

For details about the commands, see 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*. For details about how to stop the scheduler service, see 7.5.2 *Stopping the scheduler service* in the *JP1/Automatic Job Management System 3 Administration Guide*.

2.6 Troubleshooting problems related to jobs and jobnets

This section describes how to troubleshoot problems related to jobs and jobnets.

2.6.1 Troubleshooting problems related to the registration of jobs and jobnets for execution

If an error occurs during registration for execution, the following schedule rules might be specified for the root jobnet. Do not specify these schedule rules.

- A past date is specified as a start date, and no processing cycle is set in the schedule rule.
- An invalid date (for example, 2/30) is specified as a start date in the schedule rule.
- A closed day is specified as a start date in the schedule rule, but no closed day is specified in the calendar definition to be used.
- A closed day is specified as a start date in the schedule rule, but **Do not execute** is specified as the substitute schedule method for closed day jobs.
- **Do not execute** is specified as the substitute schedule method for closed day jobs in the schedule rule, but closed days are specified in all the calendar definitions to be used.
- The same schedule rule as that for a jobnet specified in the exclusive schedule is set. (All planned executions must be in the exclusive schedule.)
- A definition that disables calculation of the same execution date from the schedule rule number that corresponds to a schedule rule number of an upper level jobnet is created.
- If an invalid unit, such as one that does not exist, is specified in a job group or exclusive schedule that references the calendar, the status of the jobnet becomes *shutdown* status.
- For a schedule that is planned to be executed soon, the schedule is changed dynamically according to the status and time so that the planned execution might not be carried out as scheduled.

If any of the above schedules is set in a nested jobnet, the jobnet is handled as *Not sched. to exec.*, and execution does not occur until the status is temporarily changed.

2.6.2 Troubleshooting problems related to standard jobs, HTTP connection jobs, action jobs, and custom jobs

This subsection describes how to troubleshoot problems that might occur when you execute standard jobs, HTTP connection jobs, action jobs, and custom jobs.

(1) Executing a standard job, action job, or custom job results in a startup failure

Possible causes are as follows:

- If a file or directory on a disk mounted on a file system that is distributed over a network (such as an NFS) is used in the definition parameters:
Do not use disks mounted on file systems that are distributed over a network (such as an NFS) to store the files and directories to be created or referenced by JP1/AJS3. If you do use such disks, JP1/AJS3 might not work properly.

However, files and directories that are used only for the definition parameters of the following jobs can be stored on disks mounted on file systems that are distributed over a network (such as an NFS):

- Execution file name for the job
- Standard output file name for the job
- Standard error output file name for the job
- Environment file name for the job
- File to transfer name for the job
- Destination file name for the job
- Work path for the job
- Work directory for job environment settings
- Home directory of the execution OS user

If the network cannot be accessed while you are using the above definition parameters, job execution might fail or be delayed.

- For queueless jobs (PC jobs, Unix jobs, and actions jobs for which **Queueless Agent** is specified in **Exec. Service**), host names specified in **Exec-agent** are case sensitive. Make sure that the host names specified on the hosts that execute queueless jobs are correctly specified in **Exec-agent**.
- If the KAVU4571-W message (The user mapping (*JPI-user-name*) at the agent (*agent-host-name*) failed.) is output to the integrated trace log:
User mapping might not be specified correctly. For example, user mapping might not be specified on the host that executes a job, or the specified JP1 user or execution user might not be registered.
Check the user mapping settings, and re-execute (re-register) the job.
- If the KAVU4580-W message (The user (*user-name*) does not have administrator permission at the agent (*agent-host-name*) .) is output to the integrated trace log (for UNIX only):
An execution user without superuser privilege might have attempted to execute a job with job execution priority 4 or 5.
To execute a job with job execution priority 4 or 5 in UNIX, the execution user must have superuser privilege (*root* user).
In Windows, however, the execution user does not need to have administrator privileges to execute a job with job execution priority 4 or 5.
- If the KAVU4512-W message (The specified queue (*queue-name*) does not exist.) or the KAVU4511-W message (The specified agent (*agent-host-name*) does not exist.) is output to the integrated trace log:
The name of the specified execution host or queue for the QUEUE job or submit job might be invalid.
Check whether the execution environment has been created correctly for the QUEUE job or submit job.
To check, execute the `jpqexport` command and output the agent name (job execution host name) or queue name that is currently defined to a file. Agent names are not case sensitive. Queue names are case sensitive.
After checking the agent name and the queue name, re-execute (re-register) the QUEUE job or submit job.
- If the KAVU4514-W message (The job cannot be registered because the entrance to queue (*queue-name*) is closed.) is output to the integrated trace log:
The queue might not be ready to accept the QUEUE job or submit job.
Execute the `jpqqshow` command to check the status (`ENTRYSTATUS`) of the job entrance of the queue. To check the status of the job entrance of the default queue for an agent, specify the agent host name with the `-ah` option specified. To check the status of the job entrance of other queues, specify the queue name with the `-q` option specified.

If the job entrance is closed (when `ENTRYSTATUS:CLOSE` is specified), execute the `jpqqqueueopen` command to open the job entrance.

- If the KAVU4515-W message (The job cannot be registered because the queue (*queue-name*) reached the maximum number of jobs (*maximum-number*) .) is output to the integrated trace log:
The number of QUEUE jobs or submit jobs might have reached the maximum number of queuing jobs and running jobs.
Execute the `jpqqshow` command to check the maximum number (`MAXQUEUE`) for QUEUE jobs or submit jobs. During operation, make sure that the number of QUEUE jobs or submit jobs stays below the maximum number. To change the maximum value for QUEUE jobs and submit jobs, use either the `jpqqqueuealt` command to change the maximum number of jobs in a queue, or the `jpqqimport` command to re-create the job execution environment database for QUEUE jobs and submit jobs. For details about how to re-create the database, see [2.11.2 Procedure for re-creating the execution environment database for QUEUE jobs and submit jobs](#).
- If the KAVU4520-W message (The job cannot be registered because the system already reached the maximum number of jobs (*maximum-number*) , as stipulated in environment setting (*logical-host-name*) .) is output to the integrated trace log:
The number of QUEUE jobs or submit jobs might have reached the maximum number of queuing jobs and running jobs in the system.
The maximum number of jobs allowed in the system is specified in the `MaximumContentJob` environment setting parameter.
During operation, make sure that the number of QUEUE jobs and submit jobs stays below the maximum number of jobs allowed in the system.
If you want to change the maximum number of jobs allowed in the system, see the *Release Notes*, and specify an appropriate value.
- If the KAVU3586-W message (The privilege for service account was not set .) or the KAVU3571-W message (User mapping (*JP1-user-name*) failed .) is output to the integrated trace log (for Windows only):
The JP1/AJS3 service account might not be set up as a user account. In addition, the user account might not have the necessary permissions.
Set up the JP1/AJS3 service account as a user account and grant the necessary permissions. For details about setting up accounts for JP1/AJS3 services, see [4.2 JP1/AJS3 service settings](#) in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*. If you change the JP1/AJS3 service account, restart the JP1/AJS3 services.
- If the KAVU4581-W message (The execution file (*file-name*) at the agent (*agent-host-name*) is not an executable file .) is output to the integrated trace log:
The application file name associated with the file type might contain a space character.
In Windows Explorer, click **View** and then **Options** to display the Options dialog box. On the **File Types** page of the dialog box, check the associated application. If the application name contains a space character, enclose the file name in double quotation marks (").
- If the KAVU4531-W message (The agent (*agent-host-name*) host name might be invalid .) is output to the integrated trace log:
The agent host name might be invalid, or resolution of the agent host name to an IP address might not be possible. Check whether the agent host name is valid. Also check the `hosts` file to make sure that the host name can be resolved to an IP address.
- If the KAVU4530-W message (The agent (*agent-host-name*) might have stopped, or an obstacle might have occurred .) is output to the integrated trace log:
The JP1/AJS3 service on the agent (job execution host) or the computer itself might have stopped, or a network error might have occurred.
Check the status of the agent, JP1/AJS3 service, and network.

- If the KAVU3521-W message (The job (*job-number*) process could not be generated. (reason code : *reason-code*)) is output to the integrated trace log:
An attempt to start the job might have failed because of insufficient memory.
Check the memory size estimate.
- If the KAVU4597-W message (A missed job at the agent (*agent-host-name*) was forcibly terminated.) or the KAVU4538-W message (The status of job (*job-number*) missed at the agent (*agent-host-name*) was changed to recovered (*status*)) is output to the integrated trace log:
The above messages are output in the following cases:
 - When a job is being executed on JP1/AJS3 - Manager, the JP1/AJS3 - Manager host or a JP1/AJS3 process goes down, after which JP1/AJS3 - Manager is restarted.
 - When a job is being executed on a remote execution host (agent), the execution host or a JP1/AJS3 process goes down, after which JP1/AJS3 on the execution host is restarted.
 - When a job is being executed on a remote execution host (agent), the JP1/AJS3 - Manager host and then the execution host go down, after which the JP1/AJS3 - Manager host and the execution host are restarted.

For QUEUE jobs and submit jobs, if a job is forcibly ended without its end status being reflected in the job execution environment database, the end status of the job becomes unknown, and a KAVU4597-W message or a KAVU4538-W message is output.
Register the applicable jobnet or job for re-execution as needed.
- If the KAVU4546-W message (The PATH variable could not be acquired at the agent (*agent-host-name*)) is output to the integrated trace log (for UNIX only):
Check the login script of the execution OS user for any condition that causes processing to end prematurely.
If the login script contains any entries unnecessary for job execution by JP1/AJS3, either delete them, or skip them by appropriately specifying the JP1JobID environment variable.
- If the KAVU5282-W message (A system call error occurred during a database process. (module : *reason-location* [*reason-code*], reason code : *reason-code*)) is output to the integrated trace log:
The number of job information items regarding QUEUE jobs and submit jobs might have exceeded 200,000.
Use the following procedure to change the number of days for retaining job information, and re-create the job execution environment database for QUEUE jobs and submit jobs.
To re-create the job execution environment database:
 1. Change the number of days for retaining job information.
Specify a number of days so that the number of job information items will not exceed 200,000.
Use the `jajs_config` command to specify the `PreserveTerm` environment setting parameter.
 2. Use the `jpgimport` command to re-create the job execution environment database for QUEUE jobs and submit jobs.
- If the KAVU3577-W message (A system call (*function-name*) error occurred in a job execution process. (reason code : *reason-code*)) is output to the integrated trace log (for UNIX only):
The directory specified in the work path for job execution might not be treated as the current directory. The directory specified in the work path is the directory that operates as the current directory.
- If the KAVU4548-W message (The temporary file at the agent (*agent-host-name*) cannot be accessed.) or the KAVU4583-W message (The execution shell is missing at the agent (*agent-host-name*)) is output to the integrated trace log, the OS user mapped to the JP1 user might not be able to log in to the OS. If a message is output, check the following:
 - If the KAVU4548-W message is output
Check whether the home directory specified in `/etc/passwd` exists.

- If the KAVU4583-W message is output
Check whether the login shell specified in `/etc/passwd` exists.
- If the KAVU7533-E message (The execution user (*user-name*) mapped from JP1 user (host name = *host-name*, JP1 user = *user-name*) is invalid. (Reason code: 1326)) is output to the integrated trace log, in Windows, the access token of the OS user who executed the job might not have been obtained. Possible causes are as follows:
 - The access token could not be obtained because of a temporary error in the Win32API functions.
 - If the user who executed the job is a domain user, the domain user could not log on temporarily because the domain controller was not running or for another reason. During JP1/AJS3 operation, an access token is obtained when a job is executed. However, JP1/AJS3 is not aware of the number and status of domain controllers at that point. You must therefore be careful when you restart a domain controller while a job is being executed.

To avoid the above situations that temporarily prevent an access token from being obtained, you can specify settings to enable the reuse of access tokens. Doing so reduces the number of times required to obtain access tokens to a minimum and the number of such errors. For details, see *6.2.17 Reusing access tokens for job execution* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Also note that when you reuse access tokens, the method of using the desktop heap changes.

Thoroughly verify operation of the entire system to avoid any problems. For details, see *6.2.17(3) Notes* in the *JP1/Automatic Job Management System 3 Configuration Guide*. For details about access tokens, see *5.4.1 User account for job execution* in the manual *JP1/Automatic Job Management System 3 Overview* as well.

- If the KAVU4721-E message (The request was rejected. (*job-number*)) is output to the integrated trace log:
Check the KAVU3296-E message that is output to the integrated trace log on the host where the job was to be executed. If necessary, add any required IP addresses in the agent connection permission configuration file, and then execute the `jajs_pmtcon` command.
- If the KAVS8029-E message (The request was rejected. (*unit-name*)) is output to the integrated trace log:
Check the KAVS8039-E message that is output to the integrated trace log on the host where the job was to be executed. If necessary, add any required IP addresses in the agent connection permission configuration file, and then execute the `jajs_pmtcon` command.

(2) Executing an HTTP connection job results in a startup failure

Possible causes are as follows:

- A directory mounted on NFS or a similar file system connected to a network is used in the following definition parameters:
 - Standard output file name for the job
 - Standard error output file name for the job
 - Home directory of the execution OS user

A job might be unable to start or execution of a job might be delayed if the job cannot access a network.

- If the KAVU4571-W message (The user mapping (*JP1-user-name*) at the agent (*agent-host-name*) failed.) is output to the integrated trace log:
User mapping might not be specified correctly. For example, user mapping might not be specified on the host that executes a job, or the specified JP1 user or execution user might not be registered.
Check the user mapping settings, and re-execute (re-register) the job.

- If the KAVU4580-W message (The user (*user-name*) does not have administrator permission at the agent (*agent-host-name*) .) is output to the integrated trace log (for Linux only):
An execution user without superuser privilege might have attempted to execute a job with job execution priority 4 or 5.
To execute a job with job execution priority 4 or 5 in Linux, the execution user must have superuser privilege (`root` user).
In Windows, however, the execution user does not need to have administrator privileges to execute a job with job execution priority 4 or 5.
- If the KAVU3586-W message (The privilege for service account was not set .) or the KAVU3571-W message (User mapping (*JP1-user-name*) failed.) is output to the integrated trace log (for Windows only):
The JP1/AJS3 service account might not be set up as a user account. In addition, the user account might not have the necessary permissions.
Set up the JP1/AJS3 service account as a user account and grant the necessary permissions. For details about setting up accounts for JP1/AJS3 services, see 4.2 *JP1/AJS3 service settings* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*. If you change the JP1/AJS3 service account, restart the JP1/AJS3 services.
- If the KAVU4531-W message (The agent (*agent-host-name*) host name might be invalid.) is output to the integrated trace log:
The agent host name might be invalid, or resolution of the agent host name to an IP address might not be possible. Check whether the agent host name is valid. Also check the `hosts` file to make sure that the host name can be resolved to an IP address.
- If the KAVU4530-W message (The agent (*agent-host-name*) might have stopped, or an obstacle might have occurred.) is output to the integrated trace log:
The JP1/AJS3 service on the agent (job execution host) or the computer itself might have stopped, or a network error might have occurred.
Check the status of the agent, JP1/AJS3 service, and network.
- If the KAVU3521-W message (The job (*job-number*) process could not be generated. (reason code : *reason-code*)) is output to the integrated trace log:
An attempt to start the job might have failed because of insufficient memory.
Check the memory size estimate.
- If the KAVU4597-W message (A missed job at the agent (*agent-host-name*) was forcibly terminated.) or the KAVU4538-W message (The status of job (*job-number*) missed at the agent (*agent-host-name*) was changed to recovered (*status*) .) is output to the integrated trace log:
The above messages are output in the following cases:
 - When a job is being executed on JP1/AJS3 - Manager, the JP1/AJS3 - Manager host or a JP1/AJS3 process goes down, after which JP1/AJS3 - Manager is restarted.
 - When a job is being executed on a remote execution host (agent), the execution host or a JP1/AJS3 process goes down, after which JP1/AJS3 on the execution host is restarted.
 - When a job is being executed on a remote execution host (agent), the JP1/AJS3 - Manager host and then the execution host go down, after which the JP1/AJS3 - Manager host and the execution host are restarted.
 Register the applicable jobnet or job for re-execution as needed.
- If the KAVU4546-W message (The `PATH` variable could not be acquired at the agent (*agent-host-name*) .) is output to the integrated trace log (for Linux only):
Check the login script of the execution OS user for any condition that causes processing to end prematurely.
If the login script contains any entries unnecessary for job execution by JP1/AJS3, either delete them, or skip them by appropriately specifying the `JP1JobID` environment variable.

- If the KAVU4548-W message (The temporary file at the agent (*agent-host-name*) cannot be accessed.) or the KAVU4583-W message (The execution shell is missing at the agent (*agent-host-name*) .) is output to the integrated trace log, the OS user mapped to the JP1 user might not be able to log in to the OS. If a message is output, check the following:
 - If the KAVU4548-W message is output
Check whether the home directory specified in `/etc/passwd` exists.
 - If the KAVU4583-W message is output
Check whether the login shell specified in `/etc/passwd` exists.
- If the KAVU7533-E message (The execution user (*user-name*) mapped from JP1 user (`host name = host-name, JP1 user = user-name`) is invalid. (Reason code: 1326)) is output to the integrated trace log, in Windows, the access token of the OS user who executed the job might not have been obtained. Possible causes are as follows:
 - The access token could not be obtained because of a temporary error in the Win32API functions.
 - If the user who executed the job is a domain user, the domain user could not log on temporarily because the domain controller was not running or for another reason. During JP1/AJS3 operation, an access token is obtained when a job is executed. However, JP1/AJS3 is not aware of the number and status of domain controllers at that point. You must therefore be careful when you restart a domain controller while a job is being executed.

To avoid the above situations that temporarily prevent an access token from being obtained, you can specify settings to enable the reuse of access tokens. Doing so reduces the number of times required to obtain access tokens to a minimum and the number of such errors. For details, see *6.2.17 Reusing access tokens for job execution* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Also note that when you reuse access tokens, the method of using the desktop heap changes.

Thoroughly verify operation of the entire system to avoid any problems. For details, see *6.2.17(3) Notes* in the *JP1/Automatic Job Management System 3 Configuration Guide*. For details about access tokens, see *5.4.1 User account for job execution* in the manual *JP1/Automatic Job Management System 3 Overview* as well.

- If the KAVU4721-E message (The request was rejected. (*job-number*)) is output to the integrated trace log:
Check the KAVU3296-E message that is output to the integrated trace log on the host where the job was to be executed. If necessary, add any required IP addresses in the agent connection permission configuration file, and then execute the `jajs_pmtcon` command.
- If the KAVS8029-E message (The request was rejected. (*unit-name*)) is output to the integrated trace log:
Check the KAVS8039-E message that is output to the integrated trace log on the host where the job was to be executed. If necessary, add any required IP addresses in the agent connection permission configuration file, and then execute the `jajs_pmtcon` command.

(3) Executing a standard job, action job, or custom job results in an abnormal end

Possible causes are as follows:

- An environment variable used in executing the job might be invalid. There are two types of environment variables: those that are defined directly in a job and those that are specified in an environment variable file.
To check whether inappropriate environment variables are being used, see *1.4 Environment variables* in the manual *JP1/Automatic Job Management System 3 Command Reference*.
- A file name specified in a job might be invalid.
Check the following regarding file names:

- Each job execution file name (execution file name for Windows and script file name for UNIX), environment variable file name, standard input file name, standard output file name, and standard error output file name must be unique. (An exception is that the standard output file name and the standard error output file name can have the same name).
- The standard output file name and the standard error output file name must be different for jobs that are executed concurrently.
- The standard output or the standard error output might have been competing for use of the redirect destination during processing of the executable file specified in a job. Check the following:
 - Make sure the standard output file or the standard error output file specified in the job is different from the redirect destination file for the standard output or the standard error output specified in the executable file.
 - If you concurrently execute multiple jobs with executable files specified, make sure different file names are specified as the redirect destinations for the standard output and the standard error output in the executable file.
- The settings in `/etc/loggingroup` might be invalid (when the execution host is HP-UX).

If an OS user who executes a job belongs to multiple groups and needs to access multiple groups, login groups must be specified in `/etc/loggingroup`. If login groups are not specified in `/etc/loggingroup`, only those group IDs defined in `/etc/passwd` are valid. Any group IDs not defined in `/etc/passwd` are invalid. For example, if an OS user named `jp1user` belongs to groups A and B (group A is defined in `/etc/passwd` and group B is not defined in `/etc/passwd`), the OS user cannot reference the files of group B. To enable access to multiple groups, copy the group definition in `/etc/group` to `/etc/loggingroup`, or create a symbolic link between `/etc/group` and `/etc/loggingroup`. For details, see the documentation for the OS.

- The following commands might not operate correctly, as described below (when the execution host is Windows):
 - When a job containing the `net use` command is executed, an attempt to disconnect a network folder fails. Two measures are available for handling this problem.

The first is to specify the `net use` command in a single batch file that is used to connect and disconnect network folders.

The second is to change the account for the applicable JP1/AJS3 service to a user account and execute the job containing the `net use` command with the new account for the JP1/AJS3 service (user account). For details about how to change the account for a JP1/AJS3 service to a user account, also see *4.2.3 Changing the JP1/AJS3 service settings (Windows only)* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.
 - When a job containing the `ftp` command is executed, standard output data is not output. Two measures are available for handling this problem.

The first is to specify the `-v` option in the `ftp` command.

The second is to specify `CON` as the standard input file name, standard output file name, and standard error output file name when you define the job. If you specify `CON` for these file names, data is output to the standard output file and standard error output file. However, the standard error output messages related to the job are not output to JP1/AJS3 - View when you use JP1/AJS3 - View to display the detailed execution results. In addition, you cannot use the `jpqjobget` command to obtain information from the standard output file and the standard error output file.

Cautionary note

If the same problem occurs when you use a command other than the `ftp` command, specify `CON` as described above.
 - When a job containing a command other than those described above is executed, the job does not run correctly. JP1/AJS3 jobs are executed as *services* that are independent of the logon session of OS users so that JP1/AJS3 jobs can be executed even if an OS user has not logged on to Windows. Accordingly, the execution results of

jobs might not be the same when JP1/AJS3 is used to execute the jobs and when the Command Prompt window is used to execute the jobs.

You can use the `AT` command or Task Scheduler provided by Windows to check whether jobs are executed correctly from a Windows service (at this time, the Schedule service or the Task Scheduler service of Windows starts the jobs). If a job does not run correctly from a Windows service, it will not run correctly from a JP1/AJS3 service, either. In such cases, you must check the commands and programs used in the job, and correct them if necessary.

The verification procedure is as follows when the browser is Internet Explorer 4.0 or later.

When using Internet Explorer 4.0 or later

To check the commands and programs used in a job:

1. In Windows, open the Services dialog box, and clear the **Enable Service to interact with Desktop** check box for the Task Scheduler service.
2. Restart the Task Scheduler service.
3. On the desktop, click the **My Computer** icon and open the **Scheduled Tasks** folder.
4. Use the wizard to set up a task.

When you set up the task, specify the job to be executed and the account of the execution user.

5. Check the execution result of the job.

Note that the Schedule service, the Task Scheduler service, and the JP1/AJS3 service generate job processes in slightly different ways. Therefore, even if a job does not run correctly when JP1/AJS3 is used, it might run correctly when a Windows service is used. For example, JP1/AJS3 might not be able to reference the information about the printers and applications specified in the logon session of an OS user if the information is stored in the registry. This is so even if the account of the OS user is specified for the execution user of the job, (sometimes with result the printing to a printer from the job, or application startup is not done correctly). In such cases, the OS user who executes the job must log on to Windows (execution host of JP1/AJS3) and execute the job.

Alternatively, specify the necessary settings as described in *6.2.16 Executing a job that requires a user profile in the JP1/Automatic Job Management System 3 Configuration Guide*.

If you want to grant only users of the local server the access permissions for execution users, specify OS users in *server-name\user-name* format.

- Job startup might fail because memory is insufficient.
Check the memory size estimate.
- If the following messages are output to the integrated trace log (for Windows only):
 - KAVU4254-E message (It cannot access the database (*logical-host-name*) . (reason code : *reason-code*))
 - KAVU5287-E message (The database table is locked. (*reason-location*))

These messages appear if the ISAM files for the job execution environment cannot be accessed when a QUEUE job or a submit job is executed. Make sure that the following are not executed simultaneously:

- Data collection tool of JP1/AJS3
- A command that operates on the ISAM database, such as a command that verifies or condenses the ISAM database for JP1/Base or JP1/AJS3 (except for the `jpqdbcond -L` command)
- A backup program

Additionally to the above, the same problem might occur if a program is executed to open the database file for the job execution environment for QUEUE jobs and submit jobs in exclusive mode or in share mode in which only reading of files is shared. When you schedule this type of task, schedule it so that it will not be executed while jobs are being run.

- If the following messages are output to the integrated trace log (for UNIX only):

- KAVU4547-W message (You are not authorized to access the temporary file at the agent (*agent-host-name*) .)
- KAVU4560-W message (You lack access permission for the standard output file (*file-name*) at the agent (*agent-host-name*) .)
- KAVU4563-W message (You lack access permission for the standard error output file (*file-name*) at the agent (*agent-host-name*) .)

If the KAVU4547-W message is output, the owner group of the work directory might be the secondary group of the job execution user, and the permission for the work directory might be 770 (the work directory is specified in the WorkPath environment setting parameter in the [JP1_DEFAULT\JP1NBQAGENT\Process] definition key).

If the KAVU4560-W or KAVU4563-W message is output, the owner group of the directory containing the specified file (*file-name* in the messages) might be the secondary group of the job execution user, and the permission for the directory might be 770.

Take one of the following actions:

- If the KAVU4547-W message is output, change the access permission for the work directory so that the secondary group can access the directory.
- Change the permission for the directory containing the specified file to one that allows the secondary group to access the directory. Also, change the permission for the specified file to one that allows the secondary group to read and write to the file.
- Change the owner group of the directory and the specified file from the secondary group to the primary group of the job execution user.
- Enable the necessary options as specified in *15.2.18 Enabling the file access permission check for the ACL and secondary group settings during job execution* in the *JP1/Automatic Job Management System 3 Configuration Guide*.
- If the KAVU4551-W message (You are not authorized to access the execution file (*file-name*) at the agent (*agent-host-name*) .) is output to the integrated trace log (for UNIX only):

The owner group of the directory containing the specified execution file (*file-name* in the message) might be the secondary group of the job execution user and the permission might be 770.

Take one of the following actions:

- Change the permission for the directory containing the specified file to 771, and change the permission for the specified file to 774.
- Change the owner group of the directory and the specified file from the secondary group to the primary group of the job execution user.
- Enable the necessary options as described in *15.2.18 Enabling the file access permission check for the ACL and secondary group settings during job execution* in the *JP1/Automatic Job Management System 3 Configuration Guide*.
- Sometimes, the execution file name of a job cannot be correctly determined.

In UNIX:

When \$0 (script file name) is referenced in a script file, \$0 might be replaced by a script file name beginning with JPQ_EXEC_ instead of the script file name specified in the job definition.

This file name is the name of a script file that is temporarily created by JP1/AJS3 in the following cases (the script file is created in the work path that is used when the job is executed):

- You execute a job containing the command that is specified in **Command statement** on the **Definition** page in the Define Details - [UNIX Job] dialog box of JP1/AJS3 - View.
- You execute a script file whose name does not begin with #! *shell-name* in **Script file name** on the **Definition** page in the Define Details - [UNIX Job] dialog box of JP1/AJS3 - View[#].

- You execute a script file whose name does not begin with #! *shell-name* in the `-sc` option of the `jpqj obsub` command.

#

If the name of the execution shell is not written on the first line of the script file specified in **Script file name**, JP1/AJS3 creates a temporary script file with the execution shell name added to the first line, and executes the file as a job.

If you specify a command in **Command statement** and a script file name in **Script file name** at the same time, the specified command and script file name are merged into a temporary file in the sequence command and then script file name. Therefore, when a command is specified in **Command statement**, a temporary file is created regardless of whether an execution shell name is written in a script file (a temporary file is also created if a tab or space character is specified in **Command statement**).

To avoid creating temporary script files, define jobs so that none of the above conditions arise.

In Windows:

When the first argument (%0 in a batch file) in an execution file for Windows is referenced, the first argument might not be replaced by the execution file name specified in the job definition. This is because execution file names are converted to short file names in 8.3 format when JP1/AJS3 starts jobs.

To start a job without converting the execution file name in 8.3 format, see *6.2.15 Executing a job by using a long file name* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

- If the following message is output to the integrated trace log (for Windows only):
 - KAVU7533-E message (The execution user (*user-name*) mapped from JP1 user (host name = *host-name*, JP1 user name = *user-name*) is invalid. (reason code: 1792).)

If you execute a job with a user account that is different from the account for the JP1/AJS3 service and the Net Logon service is not running, this message might be output and the job might end abnormally. If this message appears, check whether the Net Logon service is running.

- If either of the following error messages is displayed when a job ends abnormally (for Windows only):
 - The job ends abnormally with return code 259 or -1, and the following message is output:
KAVU3284-W message (A system call error occurred in the internal process (*logical-host-name*). (module:*reason-location* [*reason-location*], reason code = 0x2013000a))
 - The job ends abnormally, and the following message output to the standard error output for the job:
The process cannot access the file. The file is being used by another process.

The above might occur when both of the following conditions exist:

1. When you register a job, a standard output file or standard error output file is explicitly specified by using either of the following methods:
 - The file is specified in the detailed definition of the job.
 - The file is specified in the job execution control command when you register the job.
2. Either of the following occurs for the file specified in step 1:
 - In the program to be executed as a job, the file is opened with a function when the object-sharing method is either read-protected or write-protected.
 - In the batch file to be executed as a job, the file is opened by using redirection.

As the standard output file or standard error output file when you register a job, do not specify a file opened from within a program executed as a job or opened by redirection from a batch file. However, if the file is opened from within the program by using a function call, you can get around the problem by opening the file with a setting that permits shared reading or shared writing.

- If either of the following messages is output to the integrated trace log:
 - KAVU5501-E message (*message-from-database-system*)

- KAVU5290-E message (The database file size is larger than the limit, or memory could not be allocated. (reason location: *reason-location* [*reason-location*], reason number: *reason-number*))

An ISAM file might be invalid.

These errors might occur if you perform one of the following operations:

- You forcibly shut down the system or turn off the power while the JP1/AJS3 service is still running.
- You attempt to write to an ISAM file when there is insufficient disk space.

Check the status of the ISAM files. If an ISAM file is invalid, create the file again. For details about how to check the status of ISAM files and re-create them, see [2.11 Troubleshooting problems related to invalid ISAM files](#).

- When you execute a job on an execution host running AIX or Linux, the resource limits defined for the user executing the job might not take effect. This could cause the job to end abnormally due to insufficient resources.

In AIX and Linux, when you define resource limits in `/etc/security/limits` (In Linux, `/etc/security/limits.conf`) for the user executing a job, the values will not take effect when the job is executed. Therefore, define the resource limits for the user (root) who starts JP1/AJS3.

For details, see *Resource limits when Unix jobs are executed* in [7.4 Notes on using Unix jobs](#) in the *JP1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

- If the following message is output to the integrated trace log:
 - KAVU2251-E message (An error occurred in SSL communication processing. (*logical-host-name*, *connection-destination-host-name*, *maintenance-information*))

The communication encryption settings (whether to enable or disable encryption) on the manager and agent hosts do not match. Stop the JP1/AJS3 service, match the settings on both hosts, and then restart the JP1/AJS3 service.

(4) Executing an HTTP connection job results in an abnormal end

Possible causes are as follows:

- A file name specified in a job might be invalid.
Check the following regarding file names:
 - The standard output file name and the standard error output file name must be different for jobs that are executed concurrently.
- Job startup might fail because memory is insufficient.
Check the memory size estimate.
- If the following messages are output to the integrated trace log (for Linux only):
 - KAVU4547-W message (You are not authorized to access the temporary file at the agent (*agent-host-name*)).
 - KAVU4560-W message (You lack access permission for the standard output file (*file-name*) at the agent (*agent-host-name*)).
 - KAVU4563-W message (You lack access permission for the standard error output file (*file-name*) at the agent (*agent-host-name*)).

If the KAVU4547-W message is output, the owner group of the work directory might be the secondary group of the job execution user, and the permission for the work directory might be 770 (the work directory is specified in the `WorkPath` environment setting parameter in the `[JP1_DEFAULT\JP1NBQAGENT\Process]` definition key).

If the KAVU4560-W or KAVU4563-W message is output, the owner group of the directory containing the specified file (*file-name* in the messages) might be the secondary group of the job execution user, and the permission for the directory might be 770.

Take one of the following actions:

- If the KAVU4547-W message is output, change the access permission for the work directory so that the secondary group can access the directory.
- Change the permission for the directory containing the specified file to one that allows the secondary group to access the directory. Also, change the permission for the specified file to one that allows the secondary group to read and write to the file.
- Change the owner group of the directory and the specified file from the secondary group to the primary group of the job execution user.

Enable the necessary options as specified in *15.2.18 Enabling the file access permission check for the ACL and secondary group settings during job execution* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

- If the following message is output to the integrated trace log (for Windows only):
 - KAVU7533-E message (The execution user (*user-name*) mapped from JP1 user (host name = *host-name*, JP1 user name = *user-name*) is invalid. (reason code: 1792).)

If you execute a job with a user account that is different from the account for the JP1/AJS3 service and the Net Logon service is not running, this message might be output and the job might end abnormally. If this message appears, check whether the Net Logon service is running.

- When you execute a job on an execution host running Linux, the resource limits defined for the user executing the job might not take effect. This could cause the job to end abnormally due to insufficient resources.
In Linux, when you define resource limits in `/etc/security/limits.conf` for the user executing a job, the values will not take effect when the job is executed. Therefore, define the resource limits for the user (root) who starts JP1/AJS3.

For details, see *Resource limits when jobs are executed* in *7.9 Notes on using HTTP connection jobs* in the *JP1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

- If the following message is output to the integrated trace log:
 - KAVU2251-E message (An error occurred in SSL communication processing. (*logical-host-name*, *connection-destination-host-name*, *maintenance-information*))

The communication encryption settings (whether to enable or disable encryption) on the manager and agent hosts do not match. Stop the JP1/AJS3 service, match the settings on both hosts, and then restart the JP1/AJS3 service.

(5) The status of a standard job, HTTP connection job, action job, or custom job does not change

Possible causes are as follows:

- If the KAVU3531-W message (The manager (*logical-host-name*) host name might be invalid.) is output to the integrated trace log:
The host name of the manager might be invalid, or the host name might not be resolved to an IP address.
Check whether the host name of the manager is valid. Also check the `hosts` file to make sure that the host name can be resolved to an IP address. If a DNS server is used, specify settings so that FQDN-format host names will be resolved to IP addresses.
- The number of currently running jobs might have reached the maximum number of concurrently executable jobs.
Execute the `ajsagtshow` command to check the number of currently running jobs (JOB) and the maximum number of concurrently executable jobs (CON-EXE).

Specify the maximum number of concurrently executable jobs taking into considering the execution time of jobs and the number of jobs to be executed per unit time. To change the maximum number of concurrently executable jobs, use the `ajsagtalt` command.

For details about this command, see `ajsagtshow` in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

To determine whether the maximum number of concurrently executable jobs has been reached when job execution takes too much time or you cannot register a job, you can specify settings beforehand that output an appropriate message to the integrated trace log. For details about how to specify these settings, see 6.2.13 *Outputting a message that reports that the maximum number of concurrently executable jobs has been reached* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for Windows) or 15.2.13 *Outputting a message that reports that the maximum number of concurrently executable jobs has been reached* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for UNIX).

- While JP1/AJS3 was running, a backup program might have been executed to make backup copies of files and directories used by JP1/AJS3.

Do not execute a backup program while JP1/AJS3 is running.

- If the KAVS1922-W message is output to the Windows event log or syslog while a queueless job is waiting for execution, the communication encryption settings (whether to enable encryption) on the manager and agent hosts might not match. Queueless jobs are PC jobs, Unix jobs, and action jobs for which **Queueless Agent** is specified in **Exec. Service**. Stop the JP1/AJS3 service, queueless agent service, and queueless file transfer service, make sure that the encryption settings on both hosts match, and then restart the service that you stopped.

(6) Registering a standard job, action job or custom job, or manipulating a queue results in an access permission error

An invalid access permission has been set for the JP1/Base authentication server.

Specify the correct access permission for the JP1_Queue resource group. Registering jobs and manipulating queues require one of the following permissions: JP1_JPQ_Admin, JP1_JPQ_Operator, and JP1_JPQ_User.

(7) The shell does not read environment variables (AIX only)

In AIX, the information in `/etc/environment` is not inherited.

See the explanation in 13.4.2 *Changing the login scripts* in the *JP1/Automatic Job Management System 3 Configuration Guide*, and change the login script. The following example shows how to change the login script:

```
if [ "$JP1JobID" != "" ] ; then
  . /etc/environment
  export environment-variable-to-be-specified
fi
```

After `/etc/environment` has been read, execute the `export` command for the environment variable to be specified.

Cautionary notes

- The above setting is valid only for `sh` and `ksh` (`.profile`). It is invalid for other shell scripts such as `csh`.
- When you specify the above setting, `/etc/environment` is read into the login script, possibly causing and the setting sequence of the information to change. Therefore, when you add processing that reads `/etc/environment` into the login script, check whether the environment variables set in `/etc/environment`

are also specified in the login script. In addition, be careful about where you add `/etc/environment`. We recommend that you set the login script to read `/etc/environment` at the beginning of the login script.

(8) A job ends normally without executing the job process

In UNIX, JPI/AJS3 executes the login script when it executes a job. When the login script contains a command that ends the login script, such as the `exit` command shown below, the job ends normally before the job process is executed.

```
/usr/bin/sh ; exit
```

To avoid premature ending of the job, change the login script so that the `exit` command is not executed.

For details about how to change the login script, see *13.4.2 Changing the login scripts* in the *JPI/Automatic Job Management System 3 Configuration Guide*.

(9) Automatic retry is not performed when the retry interval has elapsed

Automatic retry might be delayed if there are a large number of jobs. Temporarily change the jobnet schedule or forcibly terminate the executing units to reduce the number of jobs that are executed simultaneously.

To set up automatic retry, you need to estimate the number of jobs, which also includes the number of retry executions. For details, see *1.3 Design considerations* in the *JPI/Automatic Job Management System 3 System Design (Configuration) Guide*.

(10) A task is delayed because automatic retry is performed concurrently for jobs

If jobs being executed on an agent host have ended concurrently due to, for example, an error on the agent host, automatic retry is performed for these jobs concurrently, increasing the number of jobs.

If you detect that the task is delayed because automatic retry has caused the number of jobs to increase, execute the `ajsagtal` command to restrict jobs from being accepted on the execution agent where the error occurred. After agent host recovery, execute the `ajsagtal` command again to cancel the restriction on job acceptance.

If automatic retry occurs when an error that requires some time for recovery has occurred, the increasing number of jobs might affect job execution performance. Therefore, when setting up automatic retry, specify the smallest necessary range of return codes. For details about automatic retry, see *2.4.13 Automatic retry for abnormally ending jobs* in the *JPI/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

2.6.3 Troubleshooting problems related to action jobs

This subsection describes how to troubleshoot problems that are specific to action jobs.

(1) Execution of an action job fails at startup

Check whether the platform defined for the action job is the same as that defined for the agent that executes the action job. If the agent platform is different, change it to the platform defined for the action job.

(2) Execution of an action job results in display of an error message (for example, "DLL not found") on the execution host

A program needed to run an action job for message queue linkage or MSMQ linkage might not be installed on the host that executes the job.

Check whether the environment for the execution host is correct.

2.6.4 Troubleshooting problems related to event jobs

This subsection describes how to troubleshoot problems that are specific to event jobs.

(1) Condition not satisfied, although the specified host name is correct for JP1 event reception monitoring

An event server name has been specified as the host name in a JP1 event.

Check whether the event server name is the same as the name specified in the event service definition. Note that the host name in a JP1 event is case sensitive.

(2) When an event reception job is used, a condition match occurs on an unexpected event

When a JP1 event reception monitoring job, a log file monitoring job, and a Windows event log monitoring job are defined, character strings are specified for the following items:

JP1 event reception monitoring job:

- Event issuer user name
- Event issuer group name
- Event issuer host name
- Message
- Event details
- Extended attribute (if required)

Log file monitoring job:

- Trap data
- Data other than log information

Windows event log monitoring job:

- Description

Partial matching is used for the character strings specified for the above items. Check whether a partial match has occurred for the specified character string.

If you want to find an exact match, use a regular expression. For example, if you want to find an exact match of `spring` as the event issuing host name, specify `^spring$` in Windows.

For details about regular expressions in Windows, see the *JP1/Base User's Guide*. For details about regular expressions in UNIX, see the UNIX documentation.

(3) An event job fails to execute at startup

- If the KAVT0414-E message (The request was rejected. (AjsServiceName=scheduler-service-name, UnitID=unit-ID, ExecID=execution-ID, maintenance-information)) is output to the integrated trace log:

Check the KAVT0992-E message that is output to the integrated trace log on the host where the job was to be executed. If necessary, add any required IP addresses in the agent connection permission configuration file, and then execute the `jaajs_pmtcon` command.

2.6.5 Troubleshooting problems related to jobnet connectors

This subsection describes how to troubleshoot problems related to jobnet connectors.

(1) A Jobnet connector does not terminate

Use the jobnet monitor or another method to check the execution status of the connection destination jobnet. If the status of that jobnet is *Ended normally*, *Ended abnormally*, or *Ended with warning*, a failure might have occurred. If the status is different from the above, the jobnet connector is waiting for a jobnet to end at the connection destination (the normal status).

If you want to advance the execution without waiting for the jobnet to end at the connection destination, change the status of the jobnet connector to *Ended normally*. Note, however, that the status of the jobnet connector and the status of the connection destination jobnet no longer match.

When the connection destination jobnet ends, use the messages output to the integrated trace log, and to the Windows event log or to `syslog`, to eliminate the cause of the failure. Next, re-execute the connection destination jobnet. When you re-execute the connection destination jobnet, generations are connected between the jobnet containing the jobnet connector and the connection destination jobnet, resulting in normal operation of the jobnet connector. For details about connecting generations, see 2.2.4(2) *Rules governing connections between jobnet connectors and connection-destination jobnets* in the *JPI/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

If you want to advance the execution of the jobnet connector without re-executing the connection destination jobnet, change the status of the jobnet connector to *Ended normally*. Note, however, that the status of the jobnet connector and the status of the jobnet on the connection destination will no longer match.

(2) A connection destination jobnet does not start after the scheduled start time is reached

Use the jobnet monitor or another method to check the execution status of the jobnet containing the jobnet connector. When the execution order control method is set to synchronous and the jobnet connector is waiting, the jobnet status is normal. If the jobnet connector is executing, a failure might have occurred.

When the execution order control method is set to synchronous and you want to start executing the connection destination jobnet without waiting for the jobnet connector to start, temporarily change the execution order control method to asynchronous.

2.6.6 Troubleshooting problems related to units with wait conditions

This subsection describes how to troubleshoot problems related to units with wait conditions.

(1) A unit with a wait condition remains in the Wait for prev. to end or Wait for start time status and is not executed

In the Wait Conditions Statuses window, check the execution status of the unit whose end is being waited for, and then take appropriate action based on this status as described below.

If the unit whose end is being waited for is running:

The unit with a wait condition is still waiting for the termination of the unit whose end is being waited for. Wait until the unit whose end is being waited for terminates.

If the unit whose end is being waited for has ended abnormally:

An error might have occurred in the unit whose end is being waited for. Eliminate the cause of the error according to the messages output to the integrated trace log and to the Windows event log or to `syslog`. Next, either re-execute the unit whose end is being waited for or change the status of this unit to *Ended normally*.

If the unit whose end is being waited for is not registered:

Register for execution the unit whose end is being waited for.

If the unit whose end is being waited for is suspended:

Release the unit whose end is being waited for from the suspend status.

If the unit whose end is being waited for has no scheduled generations:

If **Do not execute** is selected for **If not waiting for any generations** in the Waiting Condition Settings window, the unit with a wait condition waits for a scheduled generation to be created for the unit whose end is being waited for, and for execution of the generation to end. If you want to execute the unit with a wait condition, create an execution schedule for the unit whose end is being waited for.

If you want to execute the unit with a wait condition without waiting for the unit whose end is being waited for to end, temporarily disable the wait for the unit whose end is being waited for. For details about how to temporarily change the wait condition, see 4.5.15 *Temporarily changing the wait condition settings for a jobnet or job* in the manual *JPI/Automatic Job Management System 3 Overview*.

(2) A unit with a wait condition ends abnormally without being executed

In the Wait Conditions Statuses window, check the unit with a wait condition and the unit whose end is being waited for.

If the unit whose end is being waited for ends, but the unit with a wait condition ends abnormally, the definition of the unit whose end is being waited for might be invalid. For details about invalid definitions for units whose end is being waited for, see 2.2.5(7) *Checking units whose ends are being waited for* in the *JPI/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

If the definition of the unit whose end is being waited for is invalid, perform the procedure listed below.

To correct the problem, perform the following:

1. Correct the invalid definition for the unit whose end is being waited for.
2. Re-execute the unit whose end is being waited for.
3. Make sure that the status of the unit whose end is being waited for is *Now running*, and re-execute the unit with a wait condition.

If you want to re-execute only the unit with a wait condition, temporarily disable the wait for the unit whose end is being waited for, and then re-execute the unit with a wait condition. For details about how to temporarily change wait

conditions, see *4.5.15 Temporarily changing the wait condition settings for a jobnet or job* in the manual *JP1/Automatic Job Management System 3 Overview*.

2.6.7 Troubleshooting problems related to a flexible job distributed by a load balancer

This subsection describes how to troubleshoot problems that are related to a flexible job distributed by a load balancer.

(1) The status of a flexible job changes from "Now running" to "Ended abnormally" when monitoring ends

Possible causes are as follows:

- The execution result of a job might not be returned from the destination agent due to a communication error or one of the following network setting errors:
 - Error in the security settings for the load balancer
 - Error in the firewall settings
 - Failure in name resolution
- The load balancer might fail while a job is being executed on the destination agent.
- While a job is being executed on the destination agent, the destination agent might be deleted by a scale-in operation.
- While a job is being executed on the destination agent, the destination agent might fail.
- While a job is being executed on the destination agent, the manager host might fail over and the execution result might be reported from the destination agent before the JP1/AJS3 Autonomous Agent Messenger service starts.

Correct the problem as follows:

1. If a load balancer is used, make sure that the load balancer is running and the network settings are correct.
2. Take action by referring to the execution result of the user program.

(2) The status of a flexible job changes to "Killed"

Possible causes are as follows:

- While a job is being executed on the destination agent, the relay agent might fail.
- While a job is being executed on the destination agent, the relay agent might fail over.
- While a job is being executed on the destination agent, the manager host might fail.

Correct the problem as follows:

1. Make sure that the necessary services are running on the relay agent and manager host.
2. Take action by referring to the execution result of the user program.

(3) A user program terminates abnormally

Check the return value and the message sent to the standard error output and, if necessary, re-execute the flexible job.

(4) The status of a flexible job changes to "Failed to start"

Possible causes are as follows:

- The specification of relay agents might be incorrect.
- A connection attempt might have been refused by the connection source restriction function enabled on a relay agent.

Remove the cause of the problem according to the message that is output.

2.6.8 Troubleshooting problems related to a flexible job executed by broadcast execution

This subsection describes how to troubleshoot problems that are related to a flexible job executed by broadcast execution.

(1) A flexible job executed by broadcast execution terminates abnormally

Possible causes and their remedial actions vary depending on whether broadcast execution is in Sync mode or Async mode. Take action as appropriate.

Sync mode:

The action to be taken varies depending on whether the job execution results include the contents of the standard error output for each destination agent.

- If the job execution results include the contents of the standard error output for each destination agent: A problem might have occurred on one or more of the destination agents. If a problem occurs on at least one destination agent during broadcast execution of a flexible job, the job status is judged to be *Ended abnormally*. Check the information output for each destination agent, and then take action as appropriate.
- If the job execution results do not include the contents of the standard error output for each destination agent: A problem might have occurred on the relay agent (or the manager if no relay agent is used) or on the broadcast agent. Based on the output message, take action as appropriate on the relay agent (or the manager) or broadcast agent.

Async mode:

The action to be taken varies depending on whether *maintenance-information-4* in the KAVS8100-E message is the host name of a destination agent. Take action as appropriate.

- If *maintenance-information-4* in the KAVS8100-E message is the host name of a destination agent: The broadcast agent might not be able to send an execution request to the indicated destination agent. Take measures so that the broadcast agent can communicate with the destination agent indicated by *maintenance-information-4*.
- If *maintenance-information-4* in the KAVS8100-E message is not the host name of a destination agent: The relay agent (or the manager if no relay manager is used) might not be able to communicate with the broadcast agent. Take measures so that the relay agent or manager is able to communicate with the broadcast agent.

(2) Jobs are not executed on a broadcast-execution destination agent

The following shows possible causes and actions to be taken in a case where jobs are not executed on a broadcast-execution destination agent:

- The agent is not set up as a destination agent.

On a destination agent where jobs are not executed, use the `ajsfxbcstatus` command to check whether the broadcast agent has been set up correctly. If not, use the `ajsatsetup` command to set up the broadcast agent correctly.

- The JP1/AJS3 Autonomous Agent service is not running.

On a destination agent where jobs are not executed, check whether the JP1/AJS3 Autonomous Agent service is running. If the service is not running, start it.

- The destination agent cannot communicate with the broadcast agent.

On a destination agent where jobs are not executed, check whether the KAVS8146-E message has been output to the integrated trace log. If the message has been output, communication with the broadcast agent did not succeed. In this case, revise the communication environment settings, such as the firewall settings.

(3) A non-existent destination agent is requested to execute a flexible job by broadcast execution

The KAVS8100-E message might be output if an attempt is made to execute a flexible job by broadcast execution on a destination agent that has been deleted, for example, as a result of scaling-in. For broadcast execution of a flexible job, if the heartbeat of a destination agent stops, a destination agent is removed from broadcast agent management 60 minutes (default value) after its heartbeat stops. Therefore, if destination agents are deleted, for example, as a result of scaling-in, execute a flexible job after 60 minutes have passed.

The time before destination agents are removed from management can be changed by using the `FXBC_MANAGEDAGT_REMOVEDTIME` environment setting parameter. For the

`FXBC_MANAGEDAGT_REMOVEDTIME` environment setting parameter, see 20.9.2(7)

`FXBC_MANAGEDAGT_REMOVEDTIME` in the *JP1/Automatic Job Management System 3 Configuration Guide*.

2.7 Troubleshooting problems related to the embedded database

This section describes how to troubleshoot problems that might occur when the embedded database is being used.

2.7.1 Embedded database processing when a problem occurs and the action to be taken by the embedded database system administrator

This subsection describes the following items related to the processing of the embedded database when a problem occurs, and the action to be taken by the embedded database system administrator.

(1) The responsibilities of the embedded database system administrator when a problem occurs

When a problem occurs, the embedded database system administrator collects the troubleshooting information output to the following locations:

In Windows:

- Files under *embedded-database-practical-directory*\spool
- Files under *embedded-database-practical- directory*\tmp
- Files under *embedded-database-practical- directory*\uxpldir
- Windows event log

In UNIX:

- Files under *embedded-database-practical-directory*/spool
- Files under *embedded-database-practical-directory*/tmp
- syslog

Remarks

The information required to troubleshoot a problem is described in [2.7.7 Information to be collected](#). The embedded database system administrator must refer to this information when troubleshooting.

(2) The information obtained by the embedded database when a problem occurs

The following table describes the troubleshooting information obtained by the embedded database when a problem occurs.

Table 2–3: Troubleshooting information obtained by the embedded database when a problem occurs

Information	Description
Message log files In Windows: <i>embedded-database-practical-directory</i> \spool \pdlog1, pdlog2	Messages output by the embedded database. Back up this information when a problem occurs.

Information	Description
<p>In UNIX: <i>embedded-database-practical-directory/spool/pdlog1,pdlog2</i></p>	<p>Messages output by the embedded database. Back up this information when a problem occurs.</p>
<p>Standard output and standard error output for command execution</p>	<p>Information and error messages output by commands. This information appears on the screen from which the commands were entered. To save the information to a file, redirect the standard output and standard error output as needed.</p>
<p>In Windows: Windows event log (Windows)</p> <p>In UNIX: <i>syslog</i></p>	<p>Messages output by the embedded database.</p> <p>In UNIX, use an OS editor to view this information. Note that messages might not be output when too many processes are attempting to access <i>syslog</i>.</p>
<p>Core save files[#] (in UNIX) <i>embedded-database-practical-directory/spool/save/file-name</i></p>	<p>Data and stack information obtained in UNIX systems from processes related to the embedded database. Because only three such files can be saved at any one time, back up the core save files that you want to keep.</p> <p>The file name format is <i>ajs2n</i>, where <i>n</i> is the sequence number of the core save file (1 to 3). Note that in some cases, sequence numbers might not be assigned.</p>
<p>Abort information file[#]</p> <p>In Windows: <i>embedded-database-practical-directory\spool\save\file-name</i></p> <p>In UNIX: <i>embedded-database-practical-directory/spool/save/file-name</i></p>	<p>Abort information. Back up this information if it is output. If the abort information consists of abort codes only, you can view them by using any text editor. The file name format is <i>abcode.process-ID-of-server-process</i>.</p>
<p>Snap information captured at the time the problem occurred[#]</p> <p>In Windows: <i>embedded-database-practical-directory\spool\save\file-name</i></p> <p>In UNIX: <i>embedded-database-practical-directory/spool/save/file-name</i></p>	<p>Snap information captured at the time the problem occurred. Back up this information if it is output. The file name format is <i>ajs2n.deb</i>, where <i>n</i> is the sequence number of the file (1 to 3). Note that in some cases, sequence numbers might not be assigned.</p>
<p>Shared memory dump file[#]</p> <p>In Windows: <i>embedded-database-practical-directory\spool\pdshmdump\file-name</i></p> <p>In UNIX: <i>embedded-database-practical-directory/spool/pdshmdump/file-name</i></p>	<p>Data collected from shared memory by the embedded database. Back up this information if it is output. The file name format is <i>ajs2.rmb.process-ID-of-server-process</i>.</p>
<p>Simple dump file[#]</p> <p>In Windows: <i>embedded-database-practical-directory\spool\directory-for-each-server\file-name</i></p> <p>In UNIX: <i>embedded-database-practical-directory/spool/directory-for-each-server/file-name</i></p>	<p>Data collected from shared memory and process-specific memory by the embedded database. Back up this information if it is output. The file name is the combination of the date and the process ID.</p>
<p>Command trace files</p> <p>In Windows: <i>embedded-database-practical-directory\spool\cmdlog1,cmdlog2</i></p>	<p>The history information of executed commands, including commands that the embedded database generates internally. Back up the files before viewing this information in any text editor.</p>

Information	Description
<p>In UNIX: <i>embedded-database-practical-directory</i>/spool/ cmdlog1,cmdlog2</p>	The history information of executed commands, including commands that the embedded database generates internally. Back up the files before viewing this information in any text editor.
<p>Error log files</p> <p>In Windows: <i>embedded-database-practical-directory</i>\spool \errlog\errlog1,errlog2</p> <p>In UNIX: <i>embedded-database-practical-directory</i>/spool/ errlog/errlog1,errlog2</p>	Internal information output by the embedded database. Back up this information if it is output.
<p>Connected-user information file</p> <p>In Windows: <i>embedded-database-practical-directory</i>\spool \cctusrinf</p> <p>In UNIX: <i>embedded-database-practical-directory</i>/spool/ cctusrinf</p>	Information about users who were connected when the embedded database terminated. Use any text editor to view this information.
<p>Connected-user details file</p> <p>In Windows: <i>embedded-database-practical-directory</i>\spool \cctusrdtl</p> <p>In UNIX: <i>embedded-database-practical-directory</i>/spool/ cctusrdtl</p>	
<p>Locked resource management table information file</p> <p>In Windows: <i>embedded-database-practical-directory</i>\spool \pdlckinf\output-date.mem</p> <p>In UNIX: <i>embedded-database-practical-directory</i>/spool/ pdlckinf/output-date.mem</p>	User information when a deadlock, lock-wait timeout, or insufficient locked-resource management table error occurs due to exclusive control by the embedded database. Use any text editor to view this information. Back up this information if it is output.

#

This troubleshooting information is output whenever the server process of the embedded database terminates abnormally. You can tell whether this process has terminated abnormally by checking for output of the KFPS01820-E message. If the message has been output, you can check the server name, process ID, and end state. Note that the following circumstances under which troubleshooting information might not be output.

- If the end state begins with the letter c or d, no troubleshooting information will be output.
- If the end state is 007f in Windows or 0009 in UNIX, the abort information file, core save files, and shared memory dump file will not be output.

(3) Embedded database processing when a problem occurs

The following describes the processing performed by the embedded database performs when a problem occurs.

(a) System recovery when the embedded database terminates abnormally

If, after the embedded database has terminated abnormally, the cause of the problem is eliminated and the embedded database is restarted, the embedded database restores the system to the status existing before the problem occurred.

(b) Processing when the embedded database repeatedly terminates abnormally

If the embedded database terminates abnormally, restart processing is executed. However, if the restart processing terminates abnormally three times in succession within 30 minutes, no more attempts to restart will be made. At this point, the embedded database system administrator must eliminate the cause of the problem, and then use the `ajsembdbstart` command to restart the embedded database.

(4) Action to be taken when a problem occurs in an embedded database process

When a problem occurs in an embedded database process, the process terminates abnormally. The embedded database then starts the recovery process and executes the rollback procedure. Because the process in question restarts automatically, the embedded database system administrator is not required to take any action. However, depending on the extent of the problem, the embedded database might terminate abnormally. If it does terminate abnormally, the embedded database restarts automatically. The embedded database system administrator must then eliminate the cause of the problem, and re-execute the operation.

2.7.2 The action to be taken if the embedded database is unable to start

This subsection describes the action to be taken if the embedded database is unable to start.

(1) Action to be taken if the embedded database is unable to start normally

The following table describes the possible causes of a failure of the embedded database to start normally and the actions to be taken.

Table 2–4: Possible causes and actions to be taken if the embedded database is unable to start normally

Possible cause	Action to be taken
The embedded database is not installed or set up correctly.	Install or set up the embedded database again.
The system definition contains an error.	A message reporting that the system definition contains an error is output. Correct the error in the system definition based on the information in the message.
Memory or file capacity is insufficient.	A message reporting that system memory or file capacity is insufficient is output. Either stop unnecessary processes, or delete unnecessary files. If the message is related to shared memory, review the system definition. If the message is related to process-specific memory, stop all unnecessary processes. In UNIX, if necessary, check the settings of the operating system parameters related to shared memory of the OS. For details about the operating system parameters, see the <i>Release Notes</i> .
Files required to start the embedded database are missing.	A message reporting that a file or files required to start the embedded database are missing. Create the required file or files based on the information in that message.
A problem has occurred in a file required to start the embedded database.	Refer to the messages, and check the file where the problem occurred. Eliminate the cause of the problem, and then restart the embedded database.
The OS is not properly configured to act as the execution environment for the embedded database.	Reconfigure the OS.
The current system log file cannot be allocated.	Use the <code>ajsembdbaddlog</code> command to add a system log file.

(2) Action to be taken if the embedded database is unable to restart

When the embedded database cannot be restarted, review the messages that are output during the restart processing. The following table lists the possible causes of a failure of the embedded database to restart and the actions to be taken.

Table 2–5: Possible causes and actions to be taken if the embedded database is unable to restart

Possible cause	Action to be taken
The embedded database is unable to restart because a problem occurred in the RD area used by the master directory.	See (3) <i>Action to be taken if a problem occurs in the system area</i> .
The embedded database failed to restart after a log was added and the single server definition was edited (the KFPS00715-E message is output).	Execute the <code>ajsembdbstart</code> command with the <code>-R</code> option specified.
The embedded database cannot be restarted in UNIX due to a problem other than the above.	See (4) <i>Action to be taken if another type of problem occurs (in UNIX)</i> .

(3) Action to be taken if a problem occurs in the system area

The embedded database cannot be restarted if a problem has occurred in the system area. In this case, you must restore the system area by using the procedure below. The system area contains internal information about the embedded database system. For details about the commands, see 3. *Commands Used for Normal Operations* in the manual *JPI/Automatic Job Management System 3 Command Reference*.

To restore the system area:

1. Use the `ajsembdbstart` command with the `-r` option specified to start the embedded database.
2. Use the `ajsembdbrstr` command to restore the system area.
3. Use the `ajsembdbstop` command to terminate the embedded database.
4. Use the `ajsembdbstart` command to start the embedded database.
5. Use the `ajsembdbrstr` command to restore the RD area where the problem occurred.

We recommend that you check the execution results after each command is executed to ensure that the command was executed successfully.

(4) Action to be taken if another type of problem occurs (in UNIX)

The following describes the action to be taken if a problem other than those described above occurs in UNIX. For details about the commands used for this purpose, see 3. *Commands Used for Normal Operations* in the manual *JPI/Automatic Job Management System 3 Command Reference* or 2. *Commands Used during Setup* in the manual *JPI/Automatic Job Management System 3 Command Reference*.

(a) If the embedded database process registered in the OS has not started

Sometimes, an embedded database process registered in the OS might not start due to a fault of some kind. The OS will make several attempts to start the process before giving up, after which you will be unable to start the embedded database by using the `ajsembdbstart` command. At this point, take action by using the following procedure.

To correct the problem:

1. Execute the `ajsembdbinstl` command.

Note that if power is shut off and the server that hosts the embedded database stops while the database is running, the same problem might occur immediately after you turn the power back on and start the OS. This is because the status of the disk that contains the embedded database practical directory is the failed status. Take the same recovery action as described above.

(b) If the embedded database process registered in the OS has started

If the embedded database process registered in the OS has started, take action by using to the following procedure.

To correct the problem:

1. When you execute the `ajsembdbstart` command, a message is output. Use the information in the message to resolve the problem.

2.7.3 Action to be taken if the embedded database is unable to terminate

This subsection describes the action to be taken if the embedded database is unable to terminate.

(1) Action to be taken if the embedded database is unable to terminate because processes are connected

The following describes the action to be taken if the embedded database is unable to terminate because processes are still connected.

The embedded database will not terminate until all JP1/AJS3 processes have terminated. Make sure that all JP1/AJS3 services have stopped on the JP1/AJS3 - Manager host and any logical hosts. If a command is being executed, wait for the command to finish before terminating the embedded database. You can use the `ajsembdbcancel` command to forcibly terminate an executing command.

2.7.4 Action to be taken if the OS terminates abnormally

This subsection describes embedded database processing if the OS terminates abnormally, and the action to be taken by the embedded database system administrator.

(1) Embedded database processing

If the OS terminates abnormally due to a problem, the embedded database also terminates abnormally.

(2) Action to be taken by the embedded database system administrator

Perform the following step after you restart the OS.

1. Back up the troubleshooting information output to *embedded-database-practical-directory\spool* and *embedded-database-practical-directory\tmp* (*embedded-database-practical-directory/spool* and *embedded-database-practical-directory/tmp* in UNIX). For details about the troubleshooting information that is output by the embedded database, see [2.7.1\(2\) The information obtained by the embedded database when a problem occurs](#).

2.7.5 Action to be taken if a communication error or power failure occurs

This subsection describes the action to be taken if the Communication error or Power failure occur.

(1) Action to be taken if a communication error occurs

An error message reporting that a communication error has occurred in the transaction will be displayed.

Investigate the cause of the error, and then terminate the embedded database and take action to resolve the problem. If the communication error prevents you from terminating the embedded database normally, then forcibly terminate the embedded database.

(2) Action to be taken if a power failure occurs

When the OS and the embedded database are restarted following recovery from a power failure, the power backup mechanism in the hardware restores the system to the point immediately before the power failure occurred.

Cautionary note (for Windows)

If the KFPO00107-E message ("*aa....aa (bb....bb) " failed. errno = 999 : dd....dd*") is output when a command is executed or the embedded database starts, an embedded database work file might have become corrupted. If so, make sure that the embedded database has stopped, and then delete and restore all of the files listed below. Note that the files from number 4 and up might not exist in your system.

1. *embedded-database-practical-directory*\uxpldir\spool\system\filmng.dat
2. *embedded-database-practical-directory*\uxpldir\spool\system\flg.dat
3. *embedded-database-practical-directory*\uxpldir\spool\system\shmmng.dat
4. *embedded-database-practical-directory*\spool\~pdatmode
5. *embedded-database-practical-directory*\spool\~pdipcid
6. *embedded-database-practical-directory*\spool\oslmqid
7. *embedded-database-practical-directory*\spool\oslsmid
8. *embedded-database-practical-directory*\spool\pdprcsts
9. *embedded-database-practical-directory*\spool\scdqid1
10. *embedded-database-practical-directory*\spool\scdqid2
11. *embedded-database-practical-directory*\tmp\pdommenv
12. All files under *embedded-database-practical-directory*\uxpldir\spool\shm
13. *embedded-database-practical-directory*\uxpldir\spool\system\semmng.dat
14. *embedded-database-practical-directory*\uxpldir\spool\system\msgmng.dat

After you delete these files, make sure that *embedded-database-practical-directory*\tmp is not being accessed by any other applications, such as Windows Explorer, when you restart the embedded database.

2.7.6 Action to be taken if a disk failure occurs

This subsection describes the action to be taken if a disk failure occurs.

To correct a disk failure:

1. Initialize the hard disk.
Replace the hard disk and initialize it.
2. Set up partitions.
Set up partitions on the initialized hard disk in the same manner that they existed on the previous hard disk.
3. If regular files were used in UNIX, initialize the UNIX file system.
If regular files were used in the embedded database file system area, initialize the partitions for the UNIX file system. However, this operation is not necessary if the partitions have already been initialized. For details about how to initialize the UNIX file system, see the documentation for the OS.
4. Re-create the embedded database environment.
If embedded database files had been created on the disk with the problem, execute `ajsembdbunset` to delete the environment and then use `ajsembdbbuild` to re-create the environment. Next, use `ajsembdbrstr` to restore the backup you created by using `ajsembdbbackup`.

2.7.7 Information to be collected

For details about the information that needs to be collected when a problem occurs while the embedded database is being used, see [1.3.1\(6\) Information about the embedded database](#) (for Windows) or [1.3.2\(5\) Information about the embedded database](#) (for UNIX).

For details about how to collect data, see [1.4.1\(6\) Collect information about the embedded database](#) (for Windows) or [1.4.2\(5\) Collect information about the embedded database](#) (for UNIX).

2.7.8 Action to be taken if an embedded database operation command error is detected

This subsection describes the action to be taken if an embedded database operation command error is detected.

(1) Action to be taken if an error occurs during embedded database maintenance

The following table describes the causes of errors that might occur during embedded database maintenance when the `jajs_setup` or `jajs_setup_cluster` command is executed, and the actions to be taken.

Table 2–6: Causes of errors that might occur during embedded database maintenance and actions to be taken

Return value	Error cause	Action to be taken
1	An option was specified incorrectly.	Specify the correct option, and re-execute the command.
2	Creation of a temporary directory failed.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
3	The setup identifier specified in the <code>-id</code> option is invalid.	Specify the correct setup identifier, and re-execute the command.

Return value	Error cause	Action to be taken
4	The embedded database corresponding to the setup identifier specified in the <code>-id</code> option is already installed.	Specify the setup identifier of an embedded database that is not installed, and re-execute the command.
5	There is no available setup identifier that JP1/AJS3 can allocate.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
6	Acquisition of the embedded-database port number failed.	
7	The port number specified in the <code>-p</code> option is invalid.	Specify the correct port number, and re-execute the command.
8	An unexpected error occurred.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
9	The port number specified in the <code>-p</code> option is already being used.	Specify a port number that is not being used, and re-execute the command.
10	There is no available port number that JP1/AJS3 can allocate.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
11	There is no available table prefix that JP1/AJS3 can allocate.	
12	The specified embedded database configuration file was incorrectly edited by a user or is damaged.	Specify the correct embedded DB configuration file, and execute a command again.
24	The user who performed installation doesn't have administrator privileges.	A user who has administrator privileges must re-execute the command.

(2) Action to be taken if an error occurs during installation of the embedded database

The following table describes the causes of errors that might occur during installation of the embedded database and the actions to be taken.

Table 2–7: Causes of errors that might occur during installation of the embedded database and actions to be taken

Return value	Error cause	Action to be taken
-66	Because the embedded DB file is being used by some process (such as Event Viewer, a virus scan program, or backup software), certain files cannot be updated.	Restart the OS, and then re-execute the command while the following processes are not running: <ul style="list-style-type: none"> • Event Viewer • Virus scan programs • Backup software
1	An option was specified incorrectly.	Specify the correct option, and re-execute the command.
2	Creation of a temporary directory failed.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
3	The host name specified in the <code>-mh</code> option is invalid.	Specify the correct host name, and re-execute the command.
4	The setup identifier specified in the <code>-id</code> option is invalid.	Specify the correct setup identifier, and re-execute the command.
5	The embedded database corresponding to the setup identifier specified in the <code>-id</code> option is already installed.	Specify the setup identifier of an embedded database that is not installed, and re-execute the command.

Return value	Error cause	Action to be taken
6	The installation execution log of the embedded database was not found.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
7	There is no installation image of the embedded database, or you do not have permission for the path specified in the <code>-s</code> option.	Either store an installation image of the embedded database in the directory pointed to by the path specified in the <code>-s</code> option, or change the permission for the specified path, and then re-execute the command. If you are performing the operation as an AJS administrator, make sure that the AJS administrators have the appropriate permission for the specified path.
8	Registration of the configuration definition failed.	Check the execution permissions for the command, and re-execute the command.
9	The combination of the setup identifier of the embedded database to be installed and the installation directory is invalid.	When you specify the setup identifier of an embedded database that is already installed, specify the installation directory that corresponds to the setup identifier, and then re-execute the command. When you specify the setup identifier of an embedded database that is not installed, specify the installation directory of an embedded database that is not installed, and then re-execute the command.
12	Some of the files to be copied during installation are missing.	The probable causes are as follows: <ul style="list-style-type: none"> Because multiple <code>ajsembdbinstl</code> commands were executed simultaneously for the same setup identifier, the files to be copied during installation are in the invalid status. Re-execute the <code>ajsembdbinstl</code> command. For any other case: Save the directories under the JP1/AJS3 installation directory, and then contact the system administrator.
24	The user who attempted installation doesn't have administrator privileges.	A user who has administrator privileges must re-execute the command.
61	Files required for installation are missing.	Store the installation image of the embedded database in the directory specified in the <code>-s</code> option, and then re-execute the command.
63	An error occurred during registration in the OS.	See the <i>Release Notes</i> , and make sure that all required OS patches and packages have been installed. Also check whether the installation directory specified in the <code>-i</code> option meets the following conditions: <ul style="list-style-type: none"> The installation directory name consists of the following characters: <p>In Windows:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Space character - The path separator \ - Period (.) - Underscore (_) - Left parenthesis (() - Right parenthesis ()) <p>In UNIX:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Underscore (_) - Slash (/) The length of the path for the installation directory is 118 bytes or less. <p>Make sure that the above conditions are satisfied, and then re-execute the command. If this error reoccurs, back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.</p>

Return value	Error cause	Action to be taken
65	A disk access error occurred.	Make sure that the disk on which the embedded database is to be installed has sufficient free space, and then re-execute the command. If the error occurs again even when the disk has sufficient free space, back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
66	There is not enough free space on the installation disk for the embedded database.	Make sure that the installation disk for the embedded database has sufficient free space, and then re-execute the command.
68	A startup option (parameter) is invalid.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
72	The user who attempted installation does not have the superuser privilege.	A user who has the superuser privilege must re-execute the command.
78	The OS is not a supported OS for JP1/AJS3.	Check whether the OS is supported for JP1/AJS3. If the OS is supported, back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
80	In Windows: The status of the embedded database service with the specified setup identifier is not the stopped status. In UNIX: The embedded database specified for the installation directory is currently running.	Stop the embedded database, and re-execute the command.
82	In Windows: An embedded database that has the same setup identifier is already installed. In UNIX: A database other than the embedded database is already installed in the installation directory.	Check the specified installation directory, and if necessary, change it.
83	An error occurred during registration in the exception list of the Windows firewall.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
85	The contents of the patch information file are invalid.	
86	Deletion of the patch information failed.	
87	Deletion of the patch information failed. You need to restart the OS.	
88	The <code>pdservice.exe</code> process is being executed.	
89	The display name for the embedded database service duplicates an existing name.	
90	The display name for the node switching service duplicates an existing name.	
91	The source name for the Windows event log duplicates an existing name.	
92	An abnormal condition occurred during registration of the display name for the embedded database service.	
93	An abnormal condition occurred during registration of the display name for the node switching service.	

Return value	Error cause	Action to be taken
94	An abnormal condition occurred during registration of the source name for the Windows event log.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
95	The status of the embedded database is not the stopped status.	Stop the embedded database, and then re-execute the command.
96	The file to be used to install the version upgrade is being used.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
60	An error other than above occurred.	

(3) Action to be taken if an error occurs during uninstallation of the embedded database

The following table describes the causes of errors that might occur during uninstallation of the embedded database and the actions to be taken.

Table 2–8: Causes of errors that might occur during uninstallation of the embedded database and actions to be taken

Return value	Error cause	Action to be taken
1	An option was specified incorrectly.	Specify the correct option, and re-execute the command.
2	Creation of a temporary directory failed.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
3	JP1_DEFAULT cannot be specified in the -mh option.	Specify a correct host name, and re-execute the command.
4	The host name specified in the -mh option is invalid.	
5	There is no installation information directory for the embedded database.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
6	There is no uninstallation information directory for the embedded database.	
7	The name of the installation directory for the embedded database cannot be resolved.	
8	An unexpected error occurred.	
9	Output of the environment creation information file for the embedded database failed.	
10	The unsetup operation for the embedded database failed.	Take action based on the error message output before this message, and then re-execute the command.
11	Deletion of the configuration definition failed.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
24	The user who attempted uninstallation doesn't have administrator privileges.	A user has administrator privileges must re-execute the command.
63	An error occurred during cancellation of registration in the OS.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
65	A disk access error occurred.	

Return value	Error cause	Action to be taken
72	The user who attempted uninstallation does not have the superuser privilege.	A user who has the superuser privilege must re-execute the command.
81	In Windows: The embedded database that has the specified setup identifier is not installed. In UNIX: The embedded database is not installed in the installation directory.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.
88	Some files cannot be deleted because an executing embedded-database process remains.	Restart the OS, and then re-execute the command.
60	An error other than above occurred.	Back up the directories under the JP1/AJS3 installation directory, and contact the system administrator.

(4) Action to be taken if an error occurs during embedded database setup

The following table describes the causes of errors that might occur during embedded database setup and the actions to be taken. If an identifier other than "_JF0" is used as the embedded database identifier, replace the "_JF0" portion in command names or folder paths with the embedded database identifier that is used.

Table 2–9: Causes of errors that might occur during embedded database setup and actions to be taken

Code	Message ID	Error cause	Action to be taken
7	KFPX29607	There are no files.	Back up the following information, and contact the system administrator:
8	KFPX29608	An attempt to open a file failed.	In Windows: <ul style="list-style-type: none"> • Folders and files under <i>JP1/AJS3-installation-folder</i>\embddb_JF0 • Files under <i>JP1/AJS3-installation-folder</i>#\log\embddb
9	KFPX29609	An attempt to read a file failed.	In UNIX: <ul style="list-style-type: none"> • Directories and files under /opt/jp1ajs2/embddb/_JF0 • Files under /var/opt/jp1ajs2/log/embddb
10	KFPX29610	Generation of a file failed.	
11	KFPX29611	Creation of a directory failed.	
12	KFPX29612	The table and system areas are insufficient.	Make sure that the disk has sufficient free space.
13	KFPX29613	The table and system areas are insufficient.	
14	KFPX29614	The table and system areas are insufficient.	
15	KFPX29615	The table and system areas are insufficient.	
16	KFPX29616	An error occurred during creation of the table and system areas.	If the maximum file size is set to 2 gigabytes or less in the OS file system settings, change it to a value greater than 2 gigabytes or to unlimited.
17	KFPX29617	An error occurred during initialization of the system area.	Back up the following information, and contact the system administrator: In Windows: <ul style="list-style-type: none"> • Folders and files under <i>JP1/AJS3-installation-folder</i>\embddb_JF0

Code	Message ID	Error cause	Action to be taken
17	KFPX29617	An error occurred during initialization of the system area.	<ul style="list-style-type: none"> Files under <i>JP1/AJS3-installation-folder#</i>\log\embdb In UNIX: <ul style="list-style-type: none"> Directories and files under /opt/jp1ajs2/embdb/_JF0 Files under /var/opt/jp1ajs2/log/embdb
18	KFPX29618	An error occurred during startup of the embedded database or initialization of the table area.	<ul style="list-style-type: none"> Make sure that the name of the host on which the embedded database is built can be resolved, and that communication is possible with the resulting IP address. The system resources required by the embedded database are insufficient. See 3.2.5 <i>Estimating the values for kernel parameters</i> in the <i>JP1/Automatic Job Management System 3 System Design (Configuration) Guide</i>, and check the required resources.
19	KFPX29619	An internal error occurred in the embedded database.	Back up the following information, and contact the system administrator: In Windows: <ul style="list-style-type: none"> Folders and files under <i>JP1/AJS3-installation-folder</i>\embdb_JF0 Files under <i>JP1/AJS3-installation-folder#</i>\log\embdb In UNIX: <ul style="list-style-type: none"> Directories and files under /opt/jp1ajs2/embdb/_JF0 Files under /var/opt/jp1ajs2/log/embdb
20	KFPX29620	An error occurred during the creation of a temporary file.	
23	KFPX29623	An internal error occurred in the embedded database.	
24	KFPX29624 KFPS00031	The embedded database environment has already been created.	Uninstall JP1/AJS3 and then re-install JP1/AJS3.
25	KFPX29625	Memory is insufficient.	Secure sufficient memory.
26	KFPX29626	An internal error occurred in the embedded database.	Back up the following information, and contact the system administrator: In Windows: <ul style="list-style-type: none"> Folders and files under <i>JP1/AJS3-installation-folder</i>\embdb_JF0 Files under <i>JP1/AJS3-installation-folder#</i>\log\embdb In UNIX: <ul style="list-style-type: none"> Directories and files under /opt/jp1ajs2/embdb/_JF0 Files under /var/opt/jp1ajs2/log/embdb
27	KFPX29627	An internal error occurred in the embedded database.	

#

One of the following folders will be used:

- If the installation destination folder is the default folder or a folder under a folder protected by the system
 %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2
 The default for %ALLUSERSPROFILE% is *system-drive*\ProgramData.
 A "folder protected by the system" refers to the following paths:
 - Paths under *system-drive*\Windows
 - Paths under *system-drive*\Program Files
 - Paths under *system-drive*\Program Files (x86) (for 64-bit Windows)
- If the installation target folder is none of the above
JP1/AJS3 - Manager-installation-folder

2.7.9 Action to be taken if a JP1/AJS3 - Manager installation or uninstallation error is detected

This subsection describes the action to be taken if a JP1/AJS3 - Manager installation or uninstallation error is detected. The following situations are covered:

- Action to be taken if a JP1/AJS3 - Manager installation error occurs
- Action to be taken if a JP1/AJS3 - Manager uninstallation error occurs

(1) Action to be taken if a JP1/AJS3 - Manager installation error occurs

The following table describes the causes of errors that might occur during installation of JP1/AJS3 - Manager and the actions to be taken.

Table 2–10: Causes of errors that might occur during installation of JP1/AJS3 - Manager and actions to be taken

Error code	Error cause	Action to be taken
63	OS patches and packages required for JP1/AJS3 operation have not been installed.	See the <i>Release Notes</i> , install all required OS patches and packages, and then uninstall JP1/AJS3 and install it again.
66	There is not enough free space on the installation disk for the embedded database.	Check the environment being used to install JP1/AJS3. Check whether there is sufficient free space on the disk.
80	The previously installed embedded database has not been uninstalled.	Perform the following procedure: In Windows: 1. Execute the following command: <code>ajsembdbstop -f -id _JF0</code> 2. Execute the following command: <code>JP1/AJS3-installation-folder#\sys\install\embdbuninst1_JF0.cmd</code> 3. Delete all of the following folders and files: Folders and files under <code>JP1/AJS3-installation-folder\embdb_JF0</code> In UNIX: 1. Execute the following command: <code>ajsembdbstop -f -id _JF0</code> 2. In edit mode, delete the <code>pdprcd</code> process for <code>_JF0</code> registered in <code>/etc/inittab</code> . 3. Use the <code>kill</code> command to terminate the <code>pdprcd</code> process for <code>_JF0</code> displayed by using the <code>ps</code> command. 4. Delete all of the following directories and files: Directories and files under <code>/opt/jp1ajs2/embdb/_JF0</code>
82		
95		

#

One of the following folders will be used:

- If the installation destination folder is the default folder or a folder under a folder protected by the system
`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2`
 The default for `%ALLUSERSPROFILE%` is `system-drive\ProgramData`.

A "folder protected by the system" refers to the following paths:

- Paths under *system-drive*\Windows
- Paths under *system-drive*\Program Files
- Paths under *system-drive*\Program Files (x86) (for 64-bit Windows)
- If the installation target folder is none of the above
JP1/AJS3 - Manager-installation-folder

(2) Action to be taken if a JP1/AJS3 - Manager uninstallation error occurs

The following table describes the causes of errors that might occur during uninstallation of JP1/AJS3 and the actions to be taken.

Table 2–11: Causes of errors that might occur during uninstallation of JP1/AJS3 - Manager and actions to be taken

Error code	Error cause	Action to be taken
5	There is no installation directory for the embedded database.	<p>The information about an embedded database that has already been uninstalled might still remain in the common definition of JP1/AJS3.</p> <p>Perform the following procedure:</p> <ol style="list-style-type: none"> Execute the <code>ajsembdbuninst1</code> command for the setup identifiers of all the embedded databases installed in JP1/AJS3. For details about this command, see <i>ajsembdbuninst1</i> in 2. <i>Commands Used during Setup</i> in the manual <i>JP1/Automatic Job Management System 3 Command Reference</i>. Execute all of the following commands to delete the common definition: <pre> jbsunsetcnf -i -h JP1_DEFAULT or logical-host-name -c JP1AJS2 -n EMBDBINSTALL jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDB jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDBPORT </pre> For details about the <code>jbsunsetcnf</code> command, see the <i>JP1/Base User's Guide</i>.
6	Information required for uninstalling the embedded database does not exist.	
81	The embedded database has not been installed.	
10	The unsetup operation for the embedded database failed.	<p>Possible causes are as follows:</p> <ul style="list-style-type: none"> Information about an embedded database that has already been uninstalled still remains in the common definition of JP1/AJS3. Memory is insufficient. <p>Check the environment being used to uninstall JP1/AJS3. Also check whether there is sufficient free memory.</p> <p>If this error reoccurs, perform the following procedure:</p> <ol style="list-style-type: none"> Execute the <code>ajsembdbuninst1</code> command for the setup identifiers of all the embedded databases installed in JP1/AJS3. For details about this command, see <i>ajsembdbuninst1</i> in 2. <i>Commands Used during Setup</i> in the manual <i>JP1/Automatic Job Management System 3 Command Reference</i>. Execute all of the following commands to delete the common definition: <pre> jbsunsetcnf -i -h JP1_DEFAULT or logical-host-name -c JP1AJS2 -n EMBDBINSTALL jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDB jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDBPORT </pre>

Error code	Error cause	Action to be taken
10	The unsetup operation for the embedded database failed.	For details about the <code>jbsunsetcnf</code> command, see the <i>JP1/Base User's Guide</i> .

2.8 Troubleshooting problems related to the execution of commands

This section describes how to troubleshoot problems related to the execution of commands.

If executed commands end normally but the execution results are inappropriate, JP1/AJS version 5 or earlier might be installed.

Make sure that the command path is specified in the `PATH` environment variable and is enabled, and then re-execute the command.

2.9 Troubleshooting problems related to mail system linkage (for Windows only)

This section describes how to troubleshoot problems related to mail system linkage performed in Windows.

2.9.1 Troubleshooting problems related to email sending jobs that do not use Outlook

(1) How to create a profile

To create a profile, execute the `jpomailprof` command with the `-add` option specified.

For details about how to create a profile, see 2.2.2(2) *Creating profiles* in the *JP1/Automatic Job Management System 3 Linkage Guide*. For details about the `jpomailprof` command, see *jpomailprof (Windows only)* in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

(2) Communication with the SMTP server fails

In the Execution Result Details dialog box of JP1/AJS3 - View, check whether any messages from KAVT3828-E to KAVT3833-E were output. If any were output, the profile settings might be wrong. Review the profile according to the instructions provided in the message.

(3) The email sending job ends abnormally

Check the following and take appropriate action.

- In the Execution Result Details dialog box of JP1/AJS3 - View, check whether the KAVT3825-E message was output. If it was output, access to the profile might have failed. Review the access permissions for the execution user according to the instructions provided in the message.

(4) An email cannot be sent or received while the email sending job is running

Check the following and take appropriate action.

- Make sure that the following two profiles have the same name. Note that the profile names are case sensitive and that single-byte characters and multi-byte characters are distinguished.
 - Profile that was actually created
 - Profile specified in the email sending job
- Make sure that the mail server you are trying to connect to is running.

(5) The email sending job ended normally, but the email has not arrived

If the email sending job has ended normally, the email has been sent to the SMTP server. Check the following:

- Use JP1/AJS3 - View to check whether the correct email destination is specified in the definition of the job. If the email destination is not correct, correct the definition of the email sending job.

- Check the SMTP server log to see if the email was sent correctly. If the email was sent correctly, an error has occurred on either the communication path or the receiving-side host. Take appropriate action.

(6) The email sending job is forcibly terminated, but the telmail.exe process still remains

If the email sending job is forcibly terminated, the telmail.exe process might have been disconnected from JP1/AJS3, but might still remain for a certain time until the processing being performed is completed.

Check the following and take appropriate action.

- After forcibly terminating the email sending job, use the task manager or task list to check whether the telmail.exe process remains. If the process remains, terminate it manually.

2.9.2 Troubleshooting problems related to the email sending job and email reception monitoring job that use Outlook

(1) How to create a profile

In Windows, click **Start**, and then **Control Panel**. In Control Panel, click the **Mail** icon. When a dialog box[#] for creating a profile for Outlook appears, specify the necessary settings.

#

The dialog box that is displayed differs depending on whether a profile has been created.

When a profile has been created:

The *default-profile-name* Properties dialog box appears.

On the **Services** page, click the **Show Profiles** button. The Mail dialog box appears. On the **General** page, click the **Add** button. You can start creating a profile.

When no profile has been created:

The Mail dialog box appears.

On the **General** page, click the **Add** button. You can start creating a profile.

Note that you cannot correctly create a profile in the Internet Accounts dialog box. For details, see [\(2\) A profile cannot be created correctly](#) below.

In addition, when you create a profile, specify a unique profile name. For details, see [2.3.4 Setting up the environment for the mail system linkage](#) in the *JP1/Automatic Job Management System 3 Linkage Guide*.

(2) A profile cannot be created correctly

The profile might have been created in the Internet Accounts dialog box. Therefore, make sure that the 32-bit version of Outlook 2013, the 32-bit version of Outlook 2010, or Outlook 2007 is installed.

(3) Email sending and email reception monitoring jobs do not operate as intended

Mail system linkage operates on the premise that Outlook can independently send and receive emails in the system. If email sending and email reception monitoring jobs do not operate as intended, first use the procedure below to check whether emails can be sent and received normally.

Note that when operation profiles have been created or changed, mail system linkage might be disabled if Outlook starts without using the new profiles.

1. Make sure that Outlook can start.
2. Make sure the Outlook email program is set as the default email program for the system.

For details about how to specify this setting, see *Help* in Outlook.

If email sending and email reception monitoring jobs are executed without the Outlook email program set as the default program, Outlook opens a dialog box that displays the message `Please run Microsoft Outlook and set it as the default mail client`. Email sending and email reception monitoring are disabled.

3. Make sure that Outlook can send and receive emails normally.

Without starting JP1/AJS3, check whether Outlook can independently send and receive emails normally. To do so, adjust the following items to match the mail system linkage that will be used with JP1/AJS3:

- Machine
- Profile
- Destination for emails to be sent
- Sender, subject, and text of emails to be received
- Account used to log on to the mail system from Outlook

Even if you plan to execute only email sending jobs or only email reception monitoring jobs, make sure that both email sending and email reception for operate normally, as described above.

If Outlook is used offline, open the **File** menu of Outlook and switch the Outlook mode from offline to online. When in offline mode, Outlook is not connected to any mail server.

4. Make sure that neither of the following types of dialog boxes requesting a response appears when Outlook starts, sends an email, or receives an email:
 - A dialog box that prompts you to enter the server name, user name, and password
 - A dialog box that prompts you to perform an operation, such as clicking a button, after which Outlook waits for you to perform the operation

Automatic operations that use mail system linkage are disabled in environments where either type of dialog box appears. If either type of dialog box appears, correct the profile so that it does not appear.

5. If Outlook 2007 is used, make sure that the Outlook window has a toolbar when it opens. Also make sure that the toolbar has a **Send/Receive** button.

Mail system linkage will not operate normally if the Outlook 2007 window does not display a toolbar or the toolbar does not have a **Send/Receive** button.

Note that when you use the 32-bit version of Outlook 2013 and the 32-bit version of Outlook 2010, you do not need to check for the toolbar because the toolbar is not displayed in that version's window.

If Outlook is unable to operate normally when operating independently, review and correct the profile settings and the connection to the mail server.

If you have determined that Outlook operation is normal, check the following and take appropriate action:

- Make sure that the following three profiles have the same name. Also make sure that the use of single-byte and multi-byte characters and of upper-case and lower-case is identical for all the names.
 - Name of the profile created in the system
 - Profile name specified for the environment setting parameters `ProfileName1` to `ProfileName4`

For details, see 2.3.4 *Setting up the environment for the mail system linkage* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

- Profile specified in the mail sending job and mail reception monitoring job
- If you are using mail system linkage on a desktop, make sure that the JP1/AJS3 mail monitoring process is already running. If you are using mail system linkage in a service, make sure that the JP1/AJS3 Mail service is already running.
- If you intend to use mail system linkage in a service, make sure that the account of the user who logged in to Windows when the profile was created, rather than a system account, has been set up as an account for the JP1/AJS3 Mail service. The JP1/AJS3 Mail service does not work with a system account.
- If you have changed the values of the environment setting parameters for mail system linkage, restart the JP1/AJS3 service. Also, if mail system linkage is being used on a desktop, restart the JP1/AJS3 mail monitoring process. If mail system linkage is being used in a service, restart the JP1/AJS3 Mail service.

(4) Mail sending job and mail reception monitoring job ends abnormally

If an error message is followed by a mail system error code in the format `MAPI CODE=xxxxxxx`, find the cause of the error in the following table and take appropriate action.

Table 2–12: Mail system error codes and their meaning

MAPI code	Meaning
8004010D	Disk space is insufficient.
8004010E	Resources are insufficient.
80040111	Logon failed.
80040115	A network failure occurred.
80040116	A disk I/O error occurred.
80040124	The mail account is invalid.
8004010F	The destination address does not exist.
80040607	The destination address does not exist.
80040700	The destination address is ambiguous.

(5) A sent email is not placed in the Sent Items tray (it remains in the Outbox tray), or an email that is supposed to have arrived on the mail server is not placed in the Inbox tray

An email sending job executes the processing up to the point where new emails are sent to the Outbox of Outlook. The processing for sending emails from the Outbox of Outlook to the mail server, however, is executed by Outlook. Therefore, if emails remain in the Outbox of Outlook, see (3) *Email sending and email reception monitoring jobs do not operate as intended*, and check whether Outlook can independently send and receive emails.

If Outlook cannot normally send or receive emails independently, check and correct the profile settings and the connection to the mail server.

(6) Troubleshooting of any other problem

Check the following:

- Make sure that you are using the prerequisite version of Outlook. For details, see *2.3.1(1) Mail systems that support linkage* in the manual *JP1/Automatic Job Management System 3 Linkage Guide*. Also make a hard copy of the Outlook version information and make sure that the correct version is being used.
- If you are using Outlook 2013 or Outlook 2010, make sure that you are not using the 64-bit version of Outlook.
- If an email reception monitoring job takes a long time to find applicable received emails, check the Inbox of Outlook to see whether it contains many unread emails. The email reception monitoring job references all unread emails in the Inbox of Outlook, and continues processing until it finds the emails that meet the conditions defined for the job. As a result, if the Inbox contains many unread emails that do not meet the job conditions, the processing takes a long time.

2.10 Troubleshooting agent failures that might affect manager processing

When you use submit jobs, you can use emergency commands to restore the system if an agent failure affects manager processing.

Using the emergency commands, you can check the job execution status if a failure occurs on an agent and take appropriate action. Because the emergency commands request job execution control over a communication path that is not used for normal commands, you can execute the commands immediately.

Important

Use the emergency commands only to restore the system if an agent failure affects the processing of the manager. If you use the emergency commands frequently, JP1/AJS3 might not be able to respond to failures.

The following table describes the commands executable as emergency commands. When using a command as an emergency command, add the `-em` option.

Table 2–13: Commands that can be used as emergency commands

Purpose	Command	Description
Closing the queue entrance and exit	<code>jpqqueclose</code>	Use this command to close a queue's entrance and exit to prevent additional jobs from being queued, thereby preventing the failure from affecting other areas.
Opening the queue entrance and exit	<code>jpqqueopen</code>	Use this command to open a queue's entrance and exit when linkage with the failed agent becomes available.
Displaying information about a queue	<code>jpqqueshow</code>	Use this command to check the number of jobs in the queue and the number of jobs being executed when you change queue attributes.
Changing the number of jobs in a queue, the maximum value, and the warning value	<code>jpqquealt</code>	Use this command to increase the maximum number of jobs that can be temporarily held in a queue after you change queue attributes so that operation can continue after restoration.
Changing the maximum number of concurrently executable jobs on an agent	<code>jpqagtalt</code>	Use this command to execute priority jobs by using the maximum number of concurrently executable jobs to control alias agents.
Displaying information about an agent	<code>jpqagtshow</code>	Use this command to check the number of jobs being executed on an agent when you change an agent's attribute.
Changing the priority levels when multiple agents are connected	<code>jpqagtlink</code>	Use this command to change the priority levels for distributed startup of agents when a single queue is connected to multiple agents.
Canceling a job	<code>jpqjobcan</code>	Use this command to cancel the execution of a job waiting to be executed, placed on hold, or waiting for the specified time.

2.11 Troubleshooting problems related to invalid ISAM files

This section describes how to check the status of invalid ISAM files and how to re-create ISAM files.

If the ISAM files for the execution environment database for JP1/AJS3 QUEUE jobs and submit jobs become invalid, problems such as failure to start a job that uses a queue might occur. In such cases, perform the procedure described in [2.11.2 Procedure for re-creating the execution environment database for QUEUE jobs and submit jobs](#).

2.11.1 Procedure for checking the status of ISAM files

The following describes the procedure for checking the status of ISAM files.

If ISAM files are invalid, re-create them.

To check the status of ISAM files:

1. Stop the JP1/AJS3 service.
2. Execute the `Jischk` command to check whether the ISAM files are valid.

For Windows hosts:

```
Jischk -l 3 job-execution-environment-database-storage-directory-name#\JPQ*
```

For UNIX hosts:

```
/opt/jp1base/bin/Jischk -l 3 job-execution-environment-database-storage-directory-name#/JPQ*
```

#

For *job-execution-environment-database-storage-directory-name*, specify the directory name set in the `DatabasePath` environment setting parameter. For details about the `DatabasePath` environment setting parameter, see [20.5.2\(3\) DatabasePath](#) in the *JP1/Automatic Job Management System 3 Configuration Guide*.

3. Check the output messages.

If one of the following messages is output, the corresponding ISAM file is invalid:

- KAIU013-E Invalid key definition file detected.
- KAIU014-E Invalid key file detected.
- KAIU015-E Invalid data file detected.

For details about the `Jischk` command and the messages it outputs, see the *JP1/Base User's Guide*.

2.11.2 Procedure for re-creating the execution environment database for QUEUE jobs and submit jobs

To re-create the database used by the execution environment for QUEUE jobs and submit jobs:

1. Make sure that the JP1/AJS3 service is not running.
2. Use the `jpgexport` command to back up the definition of the execution environment for QUEUE jobs and submit jobs.

In Windows:

```
jpqexport [-mh logical-host-name] -dt isam -co jpqsetup.conf#
```

In UNIX:

```
/opt/jplajs2/bin/jpqexport [-mh logical-host-name] -dt isam -co jpqsetup.conf#
```

Although you can use any file name, for management purposes, we recommend that you use `jpqsetup.conf`.

#

Specify `-mh logical-host-name` to match the operating environment.

Depending on how an ISAM file is corrupted, attempts by the `jpqexport` command to access the file might result in an error. If you created a backup of the configuration definition file for the execution environment for QUEUE jobs and submit jobs (`jpqsetup.conf`), use it. If you do not have a backup, see `jpqimport` in *4. Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*, and create the configuration definition file for the execution environment for QUEUE jobs and submit jobs.

3. Delete the files and temporary files in the database storage directory for the execution environment for QUEUE jobs and submit jobs.

In Windows:

```
del execution-environment-database-storage-directory-for-QUEUE-jobs-and-submit-jobs\*#1
del work-directory-when-execution-environment-manager-process-for-QUEUE-jobs-and-submit-jobs-is-executing\M_JPQ*#2
```

In UNIX:

```
rm execution-environment-database-storage-directory-for-QUEUE-jobs-and-submit-jobs/*#1
rm work-directory-when-execution-environment-manager-process-for-QUEUE-jobs-and-submit-jobs-is-executing/M_JPQ*#2
```

#1

For `execution-environment-database-storage-directory-for-QUEUE-jobs-and-submit-jobs`, specify the folder specified in the `DatabasePath` environment setting parameter for the `[{JP1_DEFAULT|logical-host-name}\JP1NBQMANAGER\Database]` definition key. For details about the `DatabasePath` environment setting parameter, see *20.5.2(3) DatabasePath* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#2

For `work-directory-when-execution-environment-manager-process-for-QUEUE-jobs-and-submit-jobs-is-executing`, specify the folder specified in the `WorkPath` environment setting parameter for the `[{JP1_DEFAULT|logical-host-name}\JP1NBQMANAGER\Process]` definition key. For details about the `WorkPath` environment setting parameter, see *20.5.2(1) WorkPath (for manager process)* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

4. Use the `jpqimport` command to re-create the ISAM files by using the file you backed up in step 2 as the execution environment definition for QUEUE jobs and submit jobs.

In Windows:

```
jpqimport [-mh logical-host-name] -dt isam -ci jpqsetup.conf#
```

In UNIX:

```
/opt/jplajs2/bin/jpqimport [-mh logical-host-name] -dt isam -ci jpqsetup.conf#
```

#

Specify `-mh logical-host-name` to match the operating environment.

5. Check the messages that are output when you execute the `jpgimport` command, and check whether the ISAM files are created successfully.

If the `jpgimport` command did not terminate normally, you will not be able to start the JP1/AJS3 service. If you are unsure as to whether the command was executed successfully, use the `jpgexport` command as described in step 2 to output the definition again. Then check whether the agent definition and queue definition in the definition output before re-creation of the ISAM files matches those in the definition after re-creation.

6. Restart the JP1/AJS3 service.

For details about the `jpgexport` and `jpgimport` commands, see 2. *Commands Used during Setup* in the manual *JP1/Automatic Job Management System 3 Command Reference* or 4. *Commands Used for Special Operation* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

For details about the `jbsgetcnf` command, see the *JP1/Base User's Guide*.

2.12 Troubleshooting problems if JP1/AJS3 - View does not display scheduler services

This section describes how to troubleshoot problems if JP1/AJS3 - View does not display scheduler services.

If a scheduler service is not displayed as intended in an environment where scheduler service access restrictions are enabled, some settings in JP1/AJS3 - Manager might be incorrect. Check the following in JP1/AJS3 - Manager:

- Make sure that a JP1 resource group is set as the root job group. If a JP1 resource is not set, set an appropriate JP1 resource group as the root job group by using the `ajscchange` command.
- Make sure that the logged-in JP1 user has permission to access the JP1 resource group set as the root job group.
- Make sure that the OS user mapped to the logged-in JP1 user can access the following directories that constitute the scheduler service:
 - Database directory
 - Temporary directory
 - Job information directory
 - Backup information directory

2.13 Troubleshooting during the replication of a virtual machine after installing and setting up JP1/AJS3

This section describes troubleshooting during the replication of a virtual machine after installing and setting up JP1/AJS3.

2.13.1 Troubleshooting in the event that a job, jobnet, process, or embedded database terminates abnormally during the startup of the JP1/AJS3 service

This subsection describes troubleshooting in the event that a job, jobnet, process, or embedded database terminates abnormally during the startup of the JP1/AJS3 service.

(1) If the `ajsinetd` process terminates abnormally during the startup of the JP1/AJS3 service on a replicated virtual machine

If the `ajsinetd` process terminates abnormally and the KAVS1007-E message is output, a possible cause is that the replicated virtual machine failed to resolve the IP address of the local host. In this case, perform the following procedure:

1. Check the error message in the integrated trace log.
2. Make sure that the host name of the replicated virtual machine is correctly set. If the host name has already been set correctly, make sure that the IP address of the local host can be resolved from the host name on the replicated virtual machine.

(2) If a job or jobnet terminates abnormally during the startup of the JP1/AJS3 service on a replicated virtual machine

If a job or jobnet terminates abnormally and the KAVS0265-E or KAVS0262-E message is output, a possible cause is that the JP1/AJS3 service that was terminated during a job execution on the replicated virtual machine was not cold-started. In this case, perform the following procedure:

1. Check the error message in the integrated trace log.
2. Stop the JP1/AJS3 service on the replicated virtual machine.
3. Restart the JP1/AJS3 service in cold-start mode.

(3) If the embedded database terminates abnormally during the startup of the JP1/AJS3 service on a replicated virtual machine

If the embedded database terminates abnormally and the KFP00219-E message is output, a possible cause is that the system common definition file for the embedded database contains incorrect settings. In this case, perform the following procedure:

1. Identify the incorrect settings according to the KFP00219-E message.
2. Correct the system common definition file for the embedded database.
3. Restart the JP1/AJS3 service.

2.13.2 Troubleshooting in the event that an error message or warning message is output during the startup of the JP1/AJS3 service on a replicated virtual machine

This subsection describes troubleshooting in the event that an error message or warning message is output during the startup of the JP1/AJS3 service.

(1) If the event/action control agent process outputs an error message on a replicated virtual machine during the startup of the JP1/AJS3 service

If the KAVT0512-E message is output during the startup of the JP1/AJS3 service, a possible cause is that the agent process did not delete the manager host name on the replicated virtual machine. In this case, perform the following procedure:

1. Stop the JP1/AJS3 services.
2. On the replicated virtual machine, execute the `jpoagoc` command to delete the manager host name from the agent process.
3. Restart the JP1/AJS3 service.

(2) If a warning message is output to syslog or the event log on a replicated virtual machine during the startup of the JP1/AJS3 service

If the KFPS00615-W message is output during the startup of the JP1/AJS3 service, a possible cause is that the settings in the system common definition file for the embedded database are not correct. In this case, perform the following procedure:

1. Check the message in syslog or the event log.
2. Stop the JP1/AJS3 services.
3. Check and correct the settings in the system common definition file for the embedded database.
4. Restart the JP1/AJS3 service.

2.14 Troubleshooting problems related to the SSL communication

This section describes how to troubleshoot problems related to the SSL communication.

2.14.1 Troubleshooting in the event that the JP1/AJS3 service fails to start when SSL communication is enabled

The SSL communication settings might be incorrectly specified or the server certificate, private key, or route certificate might be incorrectly deployed.

- If the KAVS8204-E message is output, the JP1/Base common definition information contains errors. Check and, if necessary, revise the JP1/Base common definition information, and then start the JP1/AJS3 service.

For details about the JP1/Base common definition information, see the *JP1/Base User's Guide*.

- If one of the KAVS8201-E to KAVS8203-E messages is output, the server certificate, private key, or route certificate is incorrectly deployed. Check and, if necessary, revise the deployment of the server certificate, private key, and route certificate, and then start the JP1/AJS3 service.

For details about how to set the SSL communication, see *21.4 Setting up the communication using SSL* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

2.14.2 The KNAC0610-W, KAVU2252-W, KAVT0417-W, or KAVT0995-W message is output to the integrated trace log

The validity period of the server certificate used by the connection destination host has expired. Re-obtain the server certificate, and then replace the currently deployed server certificate with the new one.



Appendixes

A. List of Files and Directories

This appendix lists the files and directories for each JP1/AJS3-series program.

A.1 JP1/AJS3 - Manager files and directories

The following table lists the JP1/AJS3 - Manager files and directories for each OS.

(1) In Windows

The following table lists the files and folders for the Windows version of JP1/AJS3 - Manager according to their uses.

Supplementary note

For the tables listing log files and directories, see [1.2.4 List of log files and directories](#).

How to read the tables

- The tables listing files and directories use the following abbreviations:

Abbreviation	Folder indicated by the abbreviation
<i>Mgr_Path</i>	JP1/AJS3 - Manager installation folder
<i>Mgr_Data_Path</i>	The value is different depending on the installation folder. If the installation folder is the default installation folder or is in a folder protected by the system: %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2 A folder protected by the system is the path to a folder in any of the following: <ul style="list-style-type: none"><i>system-drive</i>\Windows<i>system-drive</i>\Program Files<i>system-drive</i>\Program Files (x86) If the installation folder is other than the above: <i>JP1/AJS3 - Manager installation folder</i>
<i>Embdb_Path</i>	Embedded database practical directory For details about the embedded database practical directory, see 2.6.4 Database settings that are set up in JP1/AJS3 in the <i>JP1/Automatic Job Management System 3 System Design (Configuration) Guide</i> .

- The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.
- By default, *Mgr_Path* is *SystemDrive*\Program files (x86)\HITACHI\jplajs2.
- By default, *Base_Path* is *SystemDrive*\Program files (x86)\HITACHI\jplbase.
- An asterisk (*) indicates a string of one or more characters.

(a) Common files and folders

Table A–1: Files that the user can modify (JP1/AJS3 - Manager for Windows)

Item	File name
JP1/AJS3 startup process definition file	<ul style="list-style-type: none"><i>Mgr_Path</i>\conf\jplajs_spm�.conf<i>Mgr_Path</i>\conf\jplajs_dbmd.conf<i>Mgr_Path</i>\conf\jplajs_hstd.conf<i>Mgr_Path</i>\conf\jplajs_agtd.conf<i>Mgr_Path</i>\conf\jplajs_schđ.conf

Item	File name
JP1/AJS3 extended startup process definition file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\jplajs_service_0700.conf • <i>Mgr_Path</i>\conf\jplajs_dbmd_0700.conf • <i>Mgr_Path</i>\conf\jplajs_hstd_0700.conf • <i>Mgr_Path</i>\conf\jplajs_agtd_0700.conf • <i>Mgr_Path</i>\conf\jplajs_schd_0700.conf
JP1/AJS3 system management event definition file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\jplajs_param.conf
JP1/AJS3 pre-start process definition file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\jplajs_spmd_pre.conf
Configuration definition file for the execution environment for QUEUE jobs and submit jobs	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\jppqsetup.conf
Customization file that disables the menu commands available in the JP1/AJS3 - View window ^{#1}	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\conf\profiles\<i>JP1-user-name</i> \jajsDisableMenu
Executable command settings file ^{#2}	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\conf\profiles\<i>(jajsExecutableCommand)</i> \jajsExecutableCommand • <i>Mgr_Data_Path</i>\conf\profiles\<i>(jajsExecutableCommand)</i> \i>JP1-user-name\jajsExecutableCommand
System common definition for the embedded database ^{#3}	<ul style="list-style-type: none"> • <i>Embdb_Path</i>\conf\pdsys
Single server definition for the embedded database ^{#3}	<ul style="list-style-type: none"> • <i>Embdb_Path</i>\conf\ajs2

Note

On the logical host, replace *Mgr_Path* with the following folder:

shared-folder\jplajs2

#1

This file is created by the user in order to disable menu commands in JP1/AJS3 - View. For details, see *11.3.9 Disabling menus* in the *JP1/Automatic Job Management System 3 Operator's Guide*.

#2

This file is created by the user to enable the execution of JP1/AJS3 commands in JP1/AJS3 - View. For details, see *11.3.18 Allowing execution of JP1/AJS3 commands* in the *JP1/Automatic Job Management System 3 Operator's Guide*.

#3

For details, see *23.1 Preparation for using an embedded database* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table A–2: Files and folders that the user can reference (JP1/AJS3 - Manager for Windows)

Item	File or folder name
Executable file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\bin\
Library file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\lib\
Environment-settings file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\#
Readme file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\Readme_ja.txt • <i>Mgr_Path</i>\Readme_en.txt
Version information file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\Version.txt
Tool file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\tools\

Item	File or folder name
Header file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\include

#

On the logical host, replace *Mgr_Path* with the following folder:

shared-folder\jplajs2

Table A–3: Files and folders that the user does not need to modify or reference (JP1/AJS3 - Manager for Windows)

Item	File or folder name
Job information storage folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\jobinf\
Database storage folder for JP1/AJS3	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\database\
Job/jobnet information storage folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\database\schedule\
Queue information database storage folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\database\queue\
Job/jobnet information backup folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\backup\schedule\
JP1/AJS3 file system folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\sys\
System file folder for an event/action control agent	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\sys\infoagt
Information folder for an event/action control manager	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\sys\schedule\scheduler-service-name\infodir\
Work file storage folder for JP1/AJS3	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\tmp\
Product information file storage folder	<ul style="list-style-type: none"> • <i>system-drive</i>\Program Files (x86)\HITACHI\jplcommon\JP1AJS2
Profile storage folder for sending emails without using Outlook	<ul style="list-style-type: none"> • <i>profile-storage-folder</i>^{#1}\sys\prf
Folder storing the files used by the JP1/AJS3 Autonomous Agent service and JP1/AJS3 Autonomous Agent Messenger service	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\embsch\ • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\embsch\
Embedded database files and folders ^{#2}	See <i>Table A-4</i> .

Note

On the logical host, replace *Mgr_Data_Path* with the following folder:

shared-folder\jplajs2

#1

For *profile-storage-folder*, substitute the value set for the `WaitInfFileOutDir` environment setting parameter of the [`{JP1_DEFAULT|logical-host-name}\JP1AOMAGENT`] definition key. For details about the `WaitInfFileOutDir` environment setting parameter, see *20.6.2(14) WaitInfFileOutDir (for agent processes)* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#2

The system common definition and single server definition for the embedded database are exceptions.

Table A–4: Embedded database files and folders (for Windows)

Item	File or folder name
Executable file storage folder	• <i>Embdb_Path</i> \bin
Library file storage folder	• <i>Embdb_Path</i> \lib
Executable file library storage folder	• <i>Embdb_Path</i> \client
Troubleshooting information storage folder	• <i>Embdb_Path</i> \spool
Embedded database work folder	• <i>Embdb_Path</i> \tmp
System definition file storage folder	• <i>Embdb_Path</i> \conf
Client environment definition file storage folder	• <i>Embdb_Path</i> \conf\emb
Embedded database settings file storage folder	• <i>Embdb_Path</i> \conf\ajsdbst
Folder for files used by the embedded database	• <i>Embdb_Path</i> \.dbenv • <i>Embdb_Path</i> \UXPLDIR
Data area directory	• <i>Embdb_Path</i> \dbarea#
System file area directory	• <i>Embdb_Path</i> \dbarea#
Work area directory	• <i>Embdb_Path</i> \dbarea#

#

These folders are automatically created when setup is performed during installation or the setup command is executed. The paths of the created folders differ depending on the options specified in the setup command. For details, see 2.6.4 *Database settings that are set up in JP1/AJS3* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

(b) Files when HP NNM linkage is used

Table A–5: Files that the user can modify or reference (when JP1/AJS3 - Manager for Windows and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	• <i>Mgr_Path</i> \conf\jpoov.conf (Environment definition)

Note

On the logical host, replace *Mgr_Path* with the following folder:
shared-folder

Table A–6: Files that the user does not need to modify or reference (when JP1/AJS3 - Manager for Windows and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	• <i>Mgr_Path</i> \bin\jplajs2_f (Field definition) • <i>Mgr_Path</i> \bin\snmpd.extend (MIB object definition) • <i>Mgr_Path</i> \bin\jplajs2_j (Menu definition for Japanese)

Item	File name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\bin\jplajs2_e (Menu definition for English) • <i>Mgr_Path</i>\bin\trpcajs2j (Event definition for Japanese) • <i>Mgr_Path</i>\bin\trpcajs2e (Event definition for English) • <i>Mgr_Path</i>\bin\trustajs2 (Trusted command definition)

Supplementary note

Logs are output to the default folders even in a cluster configuration.

(c) Files and folders when mail linkage is used

Table A–7: Files and folders that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Manager for Windows and mail linkage are used)

Item	File or folder name
Default passing-information file ^{#1}	• <i>Mgr_Data_Path</i> \tmp\infodir\mail\JPO*.tmp
Storage folder for a file attached to mail for inherited information of an email reception monitoring job ^{#2}	• <i>Mgr_Data_Path</i> \tmp\infodir\mail*_*\

Note

On the logical host, replace *Mgr_Data_Path* with the following folder:

shared-folder

#1

This file is used if you do not specify the *EvjobInfFile* environment setting parameter.

If you specify the *EvjobInfFile* environment setting parameter, the system creates the *mail* folder under the specified folder and uses it.

For details about the list of files attached to the received email to be stored in the directory for storing passed event or job information, see 2.6.3 *List file for email reception monitoring job (Windows only)* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

#2

In this folder, the files attached to the mail are stored with the file name they had when attached.

Table A–8: Folders that the user can reference (when JP1/AJS3 - Manager for Windows and mail linkage are used)

Item	Folder name
Default passing-information file folder [#]	• <i>Mgr_Data_Path</i> \tmp\infodir\mail\

Note

On the logical host, replace *Mgr_Data_Path* with the following folder:

shared-folder

#

This folder is used if you do not specify the *EvjobInfFile* environment setting parameter.

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` folder under the specified folder and uses it.

(d) Files and folders when PC jobs are used

Table A–9: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Manager for Windows and PC jobs are used)

Item	File name
Standard output file#1	Defined by the user
Standard error output file#2	Defined by the user

#1

This file is used when you open the Define Details - [PC Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**. The data increases uniformly when you select **Append** in **Standard output**.

#2

This file is used when you open the Define Details - [PC Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**. The data increases uniformly when you select **Append** in **Standard error**.

(e) Files and folders when HTTP connection jobs are used

Table A–10: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Manager for Windows and HTTP connection jobs are used)

Item	File name
Standard output file#1	Defined by the user
Standard error output file#2	Defined by the user

#1

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**.

#2

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**.

(f) Files and folders when JP1/AJS3 Console Manager is used

The tables listing files and folders that are used by JP1/AJS3 Console Manager use the following abbreviations:

- *CM_Path*: JP1/AJS3 - Manager installation folder\cm
- *CM_Data_Path*: The value is different depending on the installation folder.

If the installation folder is the default installation folder or is in a folder protected by the system:

`%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2CM`

A folder protected by the system is the path to a folder in any of the following:

- *system-drive*\Windows
- *system-drive*\Program Files

- *system-drive*\Program Files (x86)

If the installation folder is other than the above:

JP1/AJS3 - Manager installation folder\cm

The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

Table A–11: Files that the user can create and modify (when JP1/AJS3 - Manager for Windows and JP1/AJS3 Console Manager are used)

Item	File or folder name
Environment settings file for JP1/AJS3 Console Manager	• <i>CM_Path</i> \conf\ajs2cm.conf

Table A–12: Files and folders that the user can reference (when JP1/AJS3 - Manager for Windows and JP1/AJS3 Console Manager are used)

Item	File or folder name
Execution file storage folder	• <i>CM_Path</i> \bin\
Environment-settings file storage folder	• <i>CM_Path</i> \conf\
Environment settings model file for JP1/AJS3 Console Manager	• <i>CM_Path</i> \conf\ajs2cm.conf.model

Table A–13: Files and folders that the user does not need to modify or reference (when JP1/AJS3 - Manager for Windows and JP1/AJS3 Console Manager are used)

Item	File or folder name
Data directory	• <i>CM_Data_Path</i> #\database
File for the creation of JP1/AJS3 Console Manager environment settings model file	• <i>CM_Path</i> \conf\ajs2cm.conf.model.model

#

On the logical host, replace *CM_Data_Path* with the following folder:

shared-folder\jp1ajs2cm

Table A–14: Log file storage folders (when JP1/AJS3 - Manager for Windows and JP1/AJS3 Console Manager is used)

Item	File or folder name
Trace log	• <i>CM_Data_Path</i> \log

(g) Files and folders when JP1/AJS3 Console Agent is used

Table A–15: Files and folders for JP1/AJS3 Console Agent (JP1/AJS3 Console Agent for Windows)

Item	File or folder name
Temporary file storage folder for JP1/AJS3 Console Agent	• <i>Mgr_Data_Path</i> \tmp\console_agent
Execution file	• <i>Mgr_Path</i> \bin\ajsca*.exe#1 • <i>Mgr_Path</i> \bin\ajsca*.dll#1

Item	File or folder name
Execution file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\bin\jplajs2camsg*.dll^{#1}
Environment settings model file for JP1/AJS3 Console Agent	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\ajs2ca.conf.model
Environment settings file for JP1/AJS3 Console Agent	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\ajs2ca.conf
Log file storage folder	<ul style="list-style-type: none"> • <i>Mgr_Data_Path</i>\log
File for creation of JP1/AJS3 Console Agent environment settings model file	<ul style="list-style-type: none"> • <i>Mgr_Path</i>\conf\ajs2ca.conf.model.model^{#2}

#1

An asterisk (*) indicates a string of one or more characters.

#2

Do not modify this file.

Cautionary note

The system creates files in the EVERYONE full-control mode.

(2) In UNIX

The following table lists the files and directories for the UNIX version of JP1/AJS3 - Manager according to their uses.

Supplementary note

For the tables listing log files and directories, see [1.2.4 List of log files and directories](#).

How to read the tables

- An asterisk (*) indicates a string of one or more characters.
- *Embdb_Path* indicates the embedded database practical directory. For details about the embedded database practical directory, see [2.6.4 Database settings that are set up in JP1/AJS3 in the JP1/Automatic Job Management System 3 System Design \(Configuration\) Guide](#).

(a) Common files and directories

Table A–16: Files that the user can modify (JP1/AJS3 - Manager for UNIX)

Item	File name
JP1/AJS3 startup process definition file	<ul style="list-style-type: none"> • /etc/opt/jplajs2/conf/jplajs_spm�.conf • /etc/opt/jplajs2/conf/jplajs_dbmd.conf • /etc/opt/jplajs2/conf/jplajs_hstd.conf • /etc/opt/jplajs2/conf/jplajs_agtd.conf • /etc/opt/jplajs2/conf/jplajs_schd.conf
JP1/AJS3 extended startup process definition file	<ul style="list-style-type: none"> • /etc/opt/jplajs2/conf/jplajs_service_0700.conf • /etc/opt/jplajs2/conf/jplajs_dbmd_0700.conf • /etc/opt/jplajs2/conf/jplajs_hstd_0700.conf • /etc/opt/jplajs2/conf/jplajs_agtd_0700.conf • /etc/opt/jplajs2/conf/jplajs_schd_0700.conf
JP1/AJS3 system management event definition file	<ul style="list-style-type: none"> • /etc/opt/jplajs2/conf/jplajs_param.conf
JP1/AJS3 pre-start process definition file	<ul style="list-style-type: none"> • /etc/opt/jplajs2/conf/jplajs_spm�_pre.conf

Item	File name
Environment settings file for the scheduler service	• /etc/opt/jp1ajs2/conf/AJS3_Schedule.conf
Execution environment settings file for jobs	• /etc/opt/jp1ajs2/conf/AJS3_Queue.conf
the event/action execution environment settings file	• /etc/opt/jp1ajs2/conf/AJS3_EVAction.conf
Environment settings file for the scheduler service (for compatibility with JP1/AJS2 - Manager) ^{#1}	• /etc/opt/jp1ajs2/conf/Schedule.conf
Execution environment settings file for jobs (for compatibility with JP1/AJS2 - Manager) ^{#1}	• /etc/opt/jp1ajs2/conf/Queue.conf
Configuration definition file for the execution environment for QUEUE jobs and submit jobs	• /etc/opt/jp1ajs2/conf/jpqsetup.conf
the event/action execution environment settings file (for compatibility with JP1/AJS2 - Manager) ^{#1}	• /etc/opt/jp1ajs2/conf/EVAction.conf
Queueless-job execution environment settings file	• /etc/opt/jp1ajs2/conf/Queueless.conf
Customization file that disables the menu commands available in the JP1/AJS3 - View window ^{#2}	• /etc/opt/jp1ajs2/conf/profiles/JP1-user-name/jajsDisableMenu
Executable command settings file ^{#3}	• /etc/opt/jp1ajs2/conf/profiles/(jajsExecutableCommand)/jajsExecutableCommand • /etc/opt/jp1ajs2/conf/profiles/(jajsExecutableCommand)/JP1-user-name/jajsExecutableCommand
System common definition for the embedded database ^{#4}	• Embdb_Path/conf/pdsys
Single server definition for the embedded database ^{#4}	• Embdb_Path/conf/ajs2

Note

On the logical host, replace /etc/opt/jp1ajs2 with the following directory:

shared-directory/jp1ajs2

#1

The environment does not include this file if the JP1/AJS3 - Manager installation is a new installation. This file is the environment file for compatibility with JP1/AJS2 - Manager, and can be used only in a compatible ISAM configuration of JP1/AJS3 - Manager.

#2

This file is created by the user in order to disable menu commands in JP1/AJS3 - View. For details, see *11.3.9 Disabling menus* in the *JP1/Automatic Job Management System 3 Operator's Guide*.

#3

This file is created by the user to enable the execution of JP1/AJS3 commands in JP1/AJS3 - View. For details, see *11.3.18 Allowing execution of JP1/AJS3 commands* in the *JP1/Automatic Job Management System 3 Operator's Guide*.

#4

For details, see *23.1 Preparation for using an embedded database* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table A–17: Files and directories that the user can reference (JP1/AJS3 - Manager for UNIX)

Item	File or directory name
Execution file storage directory	• /opt/jplajs2/bin/
Library file storage directory	• /opt/jplajs2/lib/
Message catalog	• /opt/jplajs2/lib/nls/\$LANG
Environment settings file storage directory	• /etc/opt/jplajs2/conf/#
Help file storage directory	• /opt/jplajs2/doc/
Tool file storage directory	• /opt/jplajs2/tools/

 On the logical host, replace /etc/opt/jplajs2 with the following directory:
shared-directory/jplajs2

Table A–18: Files and directories that the user does not need to modify or reference (JP1/AJS3 - Manager for UNIX)

Item	File or directory name
Job information storage directory	• /var/opt/jplajs2/jobinf/
Database storage directory for JP1/AJS3	• /var/opt/jplajs2/database/
Job/jobnet information storage directory	• /var/opt/jplajs2/database/schedule/
Queue information database storage directory	• /var/opt/jplajs2/database/Queue/
Job/jobnet information backup directory	• /var/opt/jplajs2/backup/schedule/
System file directory for JP1/AJS3	• /var/opt/jplajs2/sys/
System file directory for an event/action control agent	• /var/opt/jplajs2/sys/infoagt
Information folder for an event/action control manager	• /var/opt/jplajs2/sys/schedule/ <i>scheduler-service-name</i> /infodir/
Work file storage directory for JP1/AJS3	• /var/opt/jplajs2/tmp/
Folder storing the files used by the JP1/AJS3 Autonomous Agent service and JP1/AJS3 Autonomous Agent Messenger service	• /opt/jplajs2/embsch/ • /var/opt/jplajs2/embsch/
Embedded database files and directories#	See Table A-19 .

Note
 On the logical host, replace /var/opt/jplajs2 with the following directory:
shared-directory/jplajs2

 The system common definition and single server definition for the embedded database are exceptions.

Table A–19: Embedded database files and directories (for UNIX)

Item	File or directory name
Executable file storage directory	• <i>Embdb_Path</i> /bin

Item	File or directory name
Library file storage directory	• <i>Embdb_Path/lib</i>
Executable file library storage directory	• <i>Embdb_Path/client</i>
Troubleshooting information storage directory	• <i>Embdb_Path/spool</i>
Embedded database work directory	• <i>Embdb_Path/tmp</i>
System definition file storage directory	• <i>Embdb_Path/conf</i>
Client environment definition file storage directory	• <i>Embdb_Path/conf/emb</i>
Embedded database settings file storage directory	• <i>Embdb_Path/conf/ajsdbst</i>
Directory for files used by the embedded database	• <i>Embdb_Path/conf/Inittab</i>
	• <i>Embdb_Path/.dbenv</i>
	• <i>/dev/HiRDB/pth</i>
Data area directory	• <i>Embdb_Path/dbarea#</i>
System file area directory	• <i>Embdb_Path/dbarea#</i>
Work area directory	• <i>Embdb_Path/dbarea#</i>

#

These folders are automatically created when setup is performed during installation or the setup command is executed. The paths of the created folders differ depending on the options specified in the setup command. For details, see 2.6.4 *Database settings that are set up in JP1/AJS3* in the *JP1/Automatic Job Management System 3 System Design (Configuration) Guide*.

(b) Files and directories when HP NNM linkage is used

Table A–20: Files and directories that the user can modify or reference (when JP1/AJS3 - Manager for UNIX and HP NNM linkage are used)

Item	File or directory name
Definition file for linkage with HP NNM	• <i>/etc/opt/jp1ajs2/conf/jpooov.conf</i> (Environment definition)

Note

On the logical host, replace */etc/opt/jp1ajs2* with the following directory:
shared-directory/jp1ajs2

Table A–21: Files and directories that the user does not need to modify or reference (when JP1/AJS3 - Manager for UNIX and HP NNM linkage are used)

Item	File or directory name
Definition directory for linkage with HP NNM	• <i>/etc/opt/jp1ajs2/OV/</i>
Definition file for linkage with HP NNM	• <i>/etc/opt/jp1ajs2/OV/jp1ajs2_f</i> (Field definition)
	• <i>/etc/opt/jp1ajs2/OV/snmpd.extend</i> (MIB object definition)
	• <i>/etc/opt/jp1ajs2/OV/trustajs2</i>

Item	File or directory name
Definition file for linkage with HP NNM	(Trusted command definition) <ul style="list-style-type: none"> • /etc/opt/jp1ajs2/OV/\$LANG/jp1ajs2 (Menu definition) <ul style="list-style-type: none"> • /etc/opt/jp1ajs2/OV/\$LANG/trpcajs2 (Event definition) <ul style="list-style-type: none"> • /etc/opt/jp1ajs2/OV/\$LANG/jajsovm.cat (Message catalog)

(c) Files and directories when mail linkage is used

Table A–22: Files that the user references, and must manage deleting during operation (when JP1/AJS3 - Manager for UNIX and mail linkage are used)

Item	File name
Default passing-information file ^{#1}	• /var/opt/jp1ajs2/sys/infoagt/tmp/infodir/mail/MLDT*
Failed mail file for mail linkage ^{#2}	• /var/opt/jp1ajs2/sys/infoagt/tmp/mail/errmail
Temporary mail file for mail linkage ^{#2}	• /var/opt/jp1ajs2/tmp/mailbox/ <i>monitored-user-name</i>

Note

On the logical host, replace /var/opt/jp1ajs2 with the following directory:
shared-directory/jp1ajs2

#1

This file is used if you do not specify the `EvjobInfFile` environment setting parameter.
 If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` directory under the specified directory and uses it.

#2

The data in the file increases uniformly when mail linkage is used.

Table A–23: Directories that the user can reference (when JP1/AJS3 - Manager for UNIX and mail linkage are used)

Item	Directory name
Default passing-information file directory [#]	• /var/opt/jp1ajs2/sys/infoagt/tmp/infodir/mail/
Temporary mail file directory for mail linkage	• /var/opt/jp1ajs2/tmp/mailbox/

Note

On the logical host, replace /var/opt/jp1ajs2 with the following directory:
shared-director/jp1ajs2

#

This directory is used if you do not specify the `EvjobInfFile` environment setting parameter.
 If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` directory under the specified directory and uses it.

(d) Files and directories when Unix jobs are used

Table A–24: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Manager for UNIX and Unix jobs are used)

Item	File name
Standard output file#1	Defined by the user
Standard error output file#2	Defined by the user

#1

This file is used when you open the Define Details - [UNIX Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**. The data increases uniformly when you select **Append** in **Standard output**.

#2

This file is used when you open the Define Details - [UNIX Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**. The data increases uniformly when you select **Append** in **Standard error**.

(e) Files and directories when HTTP connection jobs are used

Table A–25: Files that the user references and files whose deletion must be managed during operation (when JP1/AJS3 - Manager for UNIX and an HTTP connection job are used)

Item	File name
Standard output file#1	Defined by the user
Standard error output file#2	Defined by the user

#1

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**.

#2

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**.

(f) Files and directories when JP1/AJS3 Console Manager is used

Table A–26: Files that the user can create and modify (when JP1/AJS3 - Manager for UNIX and JP1/AJS3 Console Manager is used)

Item	File or directory name
Environment settings file for JP1/AJS3 Console Manager	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2cm/conf/ajs2cm.conf

Table A–27: Files and directories that the user can reference (when JP1/AJS3 - Manager for UNIX and JP1/AJS3 Console Manager are used)

Item	File or directory name
Execution file storage directory	<ul style="list-style-type: none"> • /opt/jp1ajs2cm/bin/ • /opt/jp1ajs2cm/lib/
Message catalog	<ul style="list-style-type: none"> • /opt/jp1ajs2cm/lib/nls/\$LANG
Environment settings file storage directory	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2cm/conf/

Item	File or directory name
Environment settings model file for JP1/AJS3 Console Manager	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2cm/conf/ajs2cm.conf.model

Table A–28: Files and directories that the user does not need to modify or reference (when JP1/AJS3 - Manager for UNIX and JP1/AJS3 Console Manager are used)

Item	File or directory name
Data directory	<ul style="list-style-type: none"> • /var/opt/jp1ajs2cm/database

Note

On the logical host, replace /var/opt/jp1ajs2cm with the following directory:
shared-directory/jp1ajs2cm

Table A–29: Log file storage directories(when JP1/AJS3 - Manager for UNIX and JP1/AJS3 Console Manager are used)

Item	File or directory name
Log file storage directory	<ul style="list-style-type: none"> • /var/opt/jp1ajs2cm/log

(g) Files and directories when JP1/AJS3 Console Agent is used

Table A–30: Files and directories for JP1/AJS3 Console Agent (JP1/AJS3 Console Agent for UNIX)

Item	File or directory name
Temporary file storage directory for JP1/AJS3 Console Agent	<ul style="list-style-type: none"> • /var/opt/jp1ajs2/tmp/console_agent
Execution file	<ul style="list-style-type: none"> • /opt/jp1ajs2/bin/ajsca*# • /opt/jp1ajs2/bin/jp1ajs2casetup • /opt/jp1ajs2/lib/libAjsca*#
Message catalog	<ul style="list-style-type: none"> • /opt/jp1ajs2cm/lib/nls/\$LANG
Automatic start/termination script	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/jajsca_start.model • /etc/opt/jp1ajs2/jajsca_start • /etc/opt/jp1ajs2/jajsca_stop.model • /etc/opt/jp1ajs2/jajsca_stop
Start/termination script for JP1/AJS3 Console Agent service	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/ajscainetd_startstop
Environment settings model file for JP1/AJS3 Console Agent	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/conf/ajs2ca.conf.model
Environment settings file for JP1/AJS3 Console Agent	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/conf/ajs2ca.conf
Log file storage directory	<ul style="list-style-type: none"> • /var/opt/jp1ajs2/log

#

An asterisk (*) indicates a string of one or more characters.

A.2 JP1/AJS3 - Agent files and directories

The following table lists the JP1/AJS3 - Agent files and directories for each OS.

(1) In Windows

The following table lists the files and folders for the Windows version of JP1/AJS3 - Agent according to their uses.

Supplementary note

For the tables listing log files and directories, see [1.2.4 List of log files and directories](#).

How to read the tables

- The tables listing files and directories use the following abbreviations:

- *Agt_Path*: JP1/AJS3 - Agent installation folder

- *Agt_Data_Path*: The value is different depending on the installation folder.

If the installation folder is the default installation folder or is in a folder protected by the system:

%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2

A folder protected by the system is the path to a folder in any of the following:

- *system-drive*\Windows

- *system-drive*\Program Files

- *system-drive*\Program Files (x86)

If the installation folder is other than the above:

JP1/AJS3 - Agent installation folder

- The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.
- By default, *Agt_Path* is *SystemDrive*\Program files (x86)\HITACHI\jplajs2.
- By default, *Base_Path* is *SystemDrive*\Program files (x86)\HITACHI\jplbase.
- An asterisk (*) indicates a string of one or more characters.

(a) Common files and folders

Table A–31: Files that the user can modify (JP1/AJS3 - Agent for Windows)

Item	File name
JP1/AJS3 startup process definition file	• <i>Agt_Path</i> \conf\jplajs_spm�.conf
JP1/AJS3 extended startup process definition file	• <i>Agt_Path</i> \conf\jplajs_service_0700.conf
JP1/AJS3 system management event definition file	• <i>Agt_Path</i> \conf\jplajs_param.conf

Note

On the logical host, replace *Agt_Path* with the following folder:

shared-folder/jplajs2

Table A–32: Files and folders that the user can reference (JP1/AJS3 - Agent for Windows)

Item	File or folder name
Execution file storage folder	• <i>Agt_Path</i> \bin\
Library file storage folder	• <i>Agt_Path</i> \lib\
Environment-settings file storage folder	• <i>Agt_Path</i> \conf\
Readme file	• <i>Agt_Path</i> \Readme_ja.txt • <i>Agt_Path</i> \Readme_en.txt

Item	File or folder name
Version information file	<ul style="list-style-type: none"> • <i>Agt_Path</i>\Version.txt

Note

On the logical host, replace *Agt_Path* with the following folder:

shared-folder/jplajs2

Table A–33: Files and folders that the user does not need to modify or reference (JP1/AJS3 - Agent for Windows)

Item	File or folder name
System file folder for JP1/AJS3	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\sys\
System file folder for an event/action control agent	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\sys\infoagt
Work file storage folder for JP1/AJS3	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\tmp\
Product information file storage folder	<ul style="list-style-type: none"> • <i>system-drive</i>\Program Files (x86)\HITACHI\jplcommon\JP1AJS2
Profile storage folder for sending emails without using Outlook	<ul style="list-style-type: none"> • <i>profile-storage-folder</i>#\sys\prf
Folder storing the files used by the JP1/AJS3 Autonomous Agent service and JP1/AJS3 Autonomous Agent Messenger service	<ul style="list-style-type: none"> • <i>Agt_Path</i>\embsch\ • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\embsch\

Note

On the logical host, replace *Agt_Data_Path* with the following folder:

shared-folder/jplajs2

#

For *profile-storage-folder*, substitute the value set for the WaitInfFileOutDir environment setting parameter of the [{JP1_DEFAULT|*logical-host-name*}\JP1AOMAGENT] definition key. For details about the WaitInfFileOutDir environment setting parameter, see 20.6.2(14) *WaitInfFileOutDir (for agent processes)* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

(b) Files when HP NNM linkage is used

Table A–34: Files that the user can modify or reference (when JP1/AJS3 - Agent for Windows and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • <i>Agt_Path</i>\conf\jpoov.conf (Environment definition)

Note

On the logical host, replace *Agt_Path* with the following folder:

shared-folder/jplajs2

Table A–35: Files that the user does not need to modify or reference (when JP1/AJS3 - Agent for Windows and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • <i>Agt_Path</i>\bin\jplajs2_f (Field definition) • <i>Agt_Path</i>\bin\snmpd.extend (MIB object definition) • <i>Agt_Path</i>\bin\jplajs2_j (Menu definition for Japanese) • <i>Agt_Path</i>\bin\jplajs2_e (Menu definition for English) • <i>Agt_Path</i>\bin\trpcajs2j (Event definition for Japanese) • <i>Agt_Path</i>\bin\trpcajs2e (Event definition for English) • <i>Agt_Path</i>\bin\trustajs2 (Trusted command definition)

(c) Files and folders when mail linkage is used

Table A–36: Files and folders that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Agent for Windows and mail linkage are used)

Item	File or folder name
Default passing-information file ^{#1}	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\tmp\infodir\mail\JPO*.tmp
Storage folder for a file attached to mail for inherited information of an email reception monitoring job ^{#2}	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\tmp\infodir\mail*_*\

Note

On the logical host, replace *Agt_Data_Path* with the following folder:

shared-folder/jplajs2

#1

This file is used if you do not specify the `EvjobInfFile` environment setting parameter.

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` folder under the specified folder and uses it.

For details about the list of files attached to received email to be stored in the directory for storing passed event or job information, see 2.6.3 *List file for email reception monitoring job (Windows only)* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

#2

In this folder, the files attached to the mail are stored with the file names they had when attached.

Table A–37: Folders that the user can reference (when JP1/AJS3 - Agent for Windows and mail linkage are used)

Item	Folder name
Default passing-information file folder [#]	<ul style="list-style-type: none"> • <i>Agt_Data_Path</i>\tmp\infodir\mail\

Note

On the logical host, replace *Agt_Data_Path* with the following folder:

shared-folder/jp1ajs2

#

This folder is used if you do not specify the `EvjobInfFile` environment setting parameter.

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` folder under the specified folder and uses it.

(d) Files and folders when PC jobs are used

Table A–38: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Agent for Windows and PC jobs are used)

Item	File name
Standard output file ^{#1}	Defined by the user
Standard error output file ^{#2}	Defined by the user

#1

This file is used when you open the Define Details - [PC Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**. The data increases uniformly when you select **Append** in **Standard output**.

#2

This file is used when you open the Define Details - [PC Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**. The data increases uniformly when you select **Append** in **Standard error**.

(e) Files and folders when HTTP connection jobs are used

Table A–39: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Agent for Windows and HTTP connection jobs are used)

Item	File name
Standard output file ^{#1}	Defined by the user
Standard error output file ^{#2}	Defined by the user

#1

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**.

#2

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**.

(2) In UNIX

The following table lists the files and directories for the UNIX version of JP1/AJS3 - Agent according to their uses.

Supplementary note

For the tables listing log files and directories, see [1.2.4 List of log files and directories](#).

Note

An asterisk (*) indicates a string of one or more characters.

(a) Common files and directories

Table A–40: Files that the user can modify (JP1/AJS3 - Agent for UNIX)

Item	File name
JP1/AJS3 startup process definition file	• /etc/opt/jp1ajs2/conf/jp1ajs_spmf.conf
JP1/AJS3 extended startup process definition file	• /etc/opt/jp1ajs2/conf/jp1ajs_service_0700.conf
JP1/AJS3 system management event definition file	• /etc/opt/jp1ajs2/conf/jp1ajs_param.conf
Environment settings file for job execution	• /etc/opt/jp1ajs2/conf/AJS3_Queue.conf
the event/action execution environment settings file	• /etc/opt/jp1ajs2/conf/AJS3_EVAction.conf
Environment settings file for job execution (for compatibility with JP1/AJS2 - Agent) [#]	• /etc/opt/jp1ajs2/conf/Queue.conf
the event/action execution environment settings file (for compatibility with JP1/AJS2 - Agent) [#]	• /etc/opt/jp1ajs2/conf/EVAction.conf
Queueless-job execution environment settings file	• /etc/opt/jp1ajs2/conf/Queueless.conf

Note

On the logical host, replace /etc/opt/jp1ajs2 with the following directory:

shared-directory/jp1ajs2

#

The environment does not include this file if the JP1/AJS3 - Agent installation is a new installation. This file is the environment file for compatibility with JP1/AJS2 - Agent, and can be used only in JP1/AJS3 - Agent after an upgrade from JP1/AJS2 - Agent.

Table A–41: Files and directories that the user can reference (JP1/AJS3 - Agent for UNIX)

Item	File or directory name
Execution file storage directory	• /opt/jp1ajs2/bin/
Library file storage directory	• /opt/jp1ajs2/lib/
Message catalog	• /opt/jp1ajs2/lib/nls/\$LANG
Environment settings file storage directory	• /etc/opt/jp1ajs2/conf/#

#

On the logical host, replace /etc/opt/jp1ajs2 with the following directory:

Shared-directory/jp1ajs2

Table A–42: Files and directories that the user does not need to modify or reference (JP1/AJS3 - Agent for UNIX)

Item	File or directory name
System file directory for JP1/AJS3	• /var/opt/jp1ajs2/sys/
System file directory for an event/action control agent	• /var/opt/jp1ajs2/sys/infoagt
Work file storage directory for JP1/AJS3	• /var/opt/jp1ajs2/tmp/

Item	File or directory name
Folder storing the files used by the JP1/AJS3 Autonomous Agent service and JP1/AJS3 Autonomous Agent Messenger service	<ul style="list-style-type: none"> • /opt/jp1ajs2/embsch/ • /var/opt/jp1ajs2/embsch/

Note

On the logical host, replace /var/opt/jp1ajs2 with the following directory:
shared-directory/jp1ajs2

(b) Files and directories when HP NNM linkage is used

Table A–43: Files and directories that the user can modify or reference (when JP1/AJS3 - Agent for UNIX and HP NNM linkage are used)

Item	File or directory name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/conf/jpooov.conf (Environment definition)

Note

On the logical host, replace /etc/opt/jp1ajs2 with the following directory:
shared-directory/jp1ajs2

Table A–44: Files and directories that the user does not need to modify or reference (when JP1/AJS3 - Agent for UNIX and HP NNM linkage are used)

Item	File or directory name
Definition directory for linkage with HP NNM	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/OV/
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • /etc/opt/jp1ajs2/OV/jp1ajs2_f (Field definition) • /etc/opt/jp1ajs2/OV/snmpd.extend (MIB object definition) • /etc/opt/jp1ajs2/OV/trustajs2 (Trusted command definition) • /etc/opt/jp1ajs2/OV/\$LANG/jp1ajs2 (Menu definition) • /etc/opt/jp1ajs2/OV/\$LANG/trpcajs2 (Event definition) • /etc/opt/jp1ajs2/OV/\$LANG/jajsovm.cat (Message catalog)

(c) Files and directories when mail linkage is used

Table A–45: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Agent for UNIX and mail linkage are used)

Item	File name
Default passing-information file ^{#1}	<ul style="list-style-type: none"> • /var/opt/jp1ajs2/sys/infoagt/tmp/infodir/mail/MLDT*
Failed mail file for mail linkage ^{#2}	<ul style="list-style-type: none"> • /var/opt/jp1ajs2/sys/infoagt/tmp/mail/errmail
Temporary mail file for mail linkage ^{#2}	<ul style="list-style-type: none"> • /var/opt/jp1ajs2/tmp/mailbox/<i>monitored-user-name</i>

Note

On the logical host, replace `/var/opt/jp1ajs2` with the following directory:

shared-folder/jp1ajs2

#1

This file is used if you do not specify the `EvjobInfFile` environment setting parameter.

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` directory under the specified directory and uses it.

#2

The data in the file increases uniformly when mail linkage is used.

Table A–46: Directories that the user can reference (when JP1/AJS3 - Agent for UNIX and mail linkage are used)

Item	Directory name
Default passing-information file directory [#]	<ul style="list-style-type: none"><code>/var/opt/jp1ajs2/sys/infoagt/tmp/infodir/mail/</code>
Temporary mail file directory for mail linkage	<ul style="list-style-type: none"><code>/var/opt/jp1ajs2/tmp/mailbox/</code>

Note

On the logical host, replace `/var/opt/jp1ajs2` with the following directory:

shared-folder/jp1ajs2

#

This directory is used if you do not specify the `EvjobInfFile` environment setting parameter.

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` directory under the specified directory and uses it.

(d) Files and directories when Unix jobs are used

Table A–47: Files that the user references, and for which deletion must be managed during operation (when JP1/AJS3 - Agent for UNIX and Unix jobs are used)

Item	File name
Standard output file ^{#1}	Defined by the user
Standard error output file ^{#2}	Defined by the user

#1

This file is used when you open the Define Details - [UNIX Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**. The data increases uniformly when you select **Append** in **Standard output**.

#2

This file is used when you open the Define Details - [UNIX Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**. The data increases uniformly when you select **Append** in **Standard error**.

(e) Files and directories when HTTP connection jobs are used

Table A–48: Files that the user references and files whose deletion must be managed during operation (when JP1/AJS3 - Agent for UNIX and an HTTP connection job are used)

Item	File name
Standard output file#1	Defined by the user
Standard error output file#2	Defined by the user

#1

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard output**.

#2

This file is used when you open the Define Details - [HTTP Connection Job] dialog box, choose the **Definition** page, and specify a desired file name in **Standard error**.

A.3 JP1/AJS3 - View files and directories

The following table lists the JP1/AJS3 - View files and folders according to their purpose.

Note that the access control settings of these files and folders must not be changed. If these files and folders become inaccessible, the following problems occur:

- JP1/AJS3 - View cannot be started.
- An I/O error occurs during operation of JP1/AJS3 - View.
- JP1/AJS3 - View assumes that the settings files do not exist, and continues processing by using the default settings.

How to read the tables

- The tables listing files and directories use the following abbreviations:
 - *View_Path*: JP1/AJS3 - View installation folder
- By default, *View_Path* is *SystemDrive*\Program files (x86)\HITACHI\JP1AJS2V.
- *nnnn* indicates any value from 0001 to 9999.

#

For 32-bit versions of Windows, replace Program Files (x86) with Program Files.

Table A–49: Files that the user can create and modify (JP1/AJS3 - View)

Item	File name
User-specified option file	• %ALLUSERSPROFILE%#\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\ <i>JP1-user-name</i> \ajs2view_opt.conf
System common settings file	• %ALLUSERSPROFILE%#\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\ajs2view_common.conf
Custom job extended settings file	• %ALLUSERSPROFILE%#\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\custom.dir\ <i>custom-job-name</i> .cjsx
File for specifying the names of the hosts that use non-encrypted communication	• <i>View_Path</i> \conf\ssl\nosslhost.conf

The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

Table A–50: Files and folders that the user can reference (JP1/AJS3 - View)

Item	File or folder name
Environment-settings file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\
Model file for the user-specified option file	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\ajs2view_opt_en.conf.model
Model file for the user-specified option file (for version 10-50 or earlier)	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\ssl\ajs2view_opt_en.conf.V10.model
Model file for the system common settings file	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\ajs2view_common.conf.model
JP1/AJS3 command information settings file	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\<i>JP1-user-name</i>\ajs2view_command.conf
Wallpaper setting file	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\<i>JP1-user-name</i>\MapBackGround\wallpaper.conf • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\<i>JP1-user-name</i>\MapBackGround\wallpaper#<i>nnnn</i>.conf
Default value setting file	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\<i>JP1-user-name</i>\ajs2view_def.conf
Custom job registration information folder	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\<i>custom.dir</i>\
Model file for the custom job extended settings file	<p>In Windows 8.1, Windows 8, Windows Server 2012, Windows 7, Windows Server 2008, or Windows Vista:</p> <ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\<i>custom.dir</i>\CJNAME.cjx.model <p>In Windows Server 2003 or Windows XP Professional:</p> <ul style="list-style-type: none"> • <i>View_Path</i>\<i>custom.dir</i>\CJNAME.cjx.model
Readme file	<ul style="list-style-type: none"> • <i>View_Path</i>\Readme_ja.txt • <i>View_Path</i>\Readme_en.txt
Version information file	<ul style="list-style-type: none"> • <i>View_Path</i>\Version.txt
Help file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\doc\
Help index file	<ul style="list-style-type: none"> • <i>View_Path</i>\doc\ja\ajsmn.htm • <i>View_Path</i>\doc\en\ajsmn.htm
Tool file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\tools\
File for specifying the names of the hosts that use non-encrypted communication	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\ssl\nosslhost.conf.model

The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

Table A–51: Folders that the user does not need to modify or reference (JP1/AJS3 - View)

Item	Folder name
Execution file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\bin\
Java class file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\classes\

Item	Folder name
Library file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\lib\
Image file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\image\
Add-in information folder	<ul style="list-style-type: none"> • <i>View_Path</i>\addin.dir\
Resource file storage folder	<ul style="list-style-type: none"> • <i>View_Path</i>\resource\ • <i>View_Path</i>\sys\
Custom job definition work folder	<ul style="list-style-type: none"> • <i>system-drive</i>\Temp
Product information file storage folder	<ul style="list-style-type: none"> • <i>system-drive</i>\Program Files\HITACHI\jp1common\JP1AJS2 (In the 32-bit version of Windows) • <i>system-drive</i>\Program Files (x86)\HITACHI\jp1common\JP1AJS2 (In the 64-bit version of Windows)
Java GUI process information storage folder	<ul style="list-style-type: none"> • %TEMP%\hsperfdata_<i>OS-user-name</i>

#

The default value for %TEMP% is one of the following folders:

system-drive\Users*OS-user-name*\AppData\Local\Temp

Table A–52: Log files (JP1/AJS3 - View)

Item	File name
JP1/AJS3 - View log	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log \ajs.log
JP1/AJS3 - View information log	<ul style="list-style-type: none"> • %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log \ajs2view[#<i>nnnn</i>_]#2{1 2}#3.log

#1

The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

#2

If a single instance of JP1/AJS3 - View is started, the system omits #*nnnn*_. If multiple instances of JP1/AJS3 - View are started concurrently, the system assigns a value from 0001 to 9999 to each instance of JP1/AJS3 - View. When multiple instances of JP1/AJS3 - View are started concurrently, the log files are output as follows:

- ajs2view1.log
- ajs2view#0001_1.log
- ajs2view#0002_1.log

#3

The value in {1|2} indicates the log file number, which is fixed at 2.

If the size of the file specified as 1 reaches the upper limit, log data is continuously output to the file specified as 2. If the size of the file specified as 2 also reaches the upper limit, the information in the file specified as 1 is deleted, after which log data is continuously output to this file.

(1) Files when HP NNM linkage is used

Table A–53: Files that the user does can modify or reference (when JP1/AJS3 - View and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • <i>View_Path</i>\conf\jpoov.conf (Environment definition)

Table A–54: Files that the user does not need to modify or reference (when JP1/AJS3 - View and HP NNM linkage are used)

Item	File name
Definition file for linkage with HP NNM	<ul style="list-style-type: none"> • <i>View_Path</i>\bin\jplajs2_f (Field definition) • <i>View_Path</i>\bin\snmpd.extend (MIB object definition) • <i>View_Path</i>\bin\jplajs2_j (Menu definition for Japanese) • <i>View_Path</i>\bin\jplajs2_e (Menu definition for English) • <i>View_Path</i>\bin\trpcajs2j (Event definition for Japanese) • <i>View_Path</i>\bin\trpcajs2e (Event definition for English) • <i>View_Path</i>\bin\trustajs2 (Trusted command definition)
Log for linkage with HP NNM	<ul style="list-style-type: none"> • <i>View_Path</i>\log\jpoovlink{1 2}.conf

Supplementary note

Logs are output to the default folder even when a cluster is used.

(2) Files and folders when JP1/AJS3 Console View is used

Table A–55: Files and folders for JP1/AJS3 Console View (when JP1/AJS3 - View and JP1/AJS3 Console View are used)

Item	File or folder name [#]
Folder storing Java class files for JP1/AJS3 Console View	<ul style="list-style-type: none"> • <i>View_Path</i>\classes
Folder storing images for JP1/AJS3 Console View	<ul style="list-style-type: none"> • <i>View_Path</i>\image\console
Folder storing background images for JP1/AJS3 Console View	<ul style="list-style-type: none"> • <i>View_Path</i>\image\console\background
Folder storing icon images for JP1/AJS3 Console View	<ul style="list-style-type: none"> • <i>View_Path</i>\image\console\icon

#

Folders are created in EVERYONE full control mode.

Table A–56: Files and folders for JP1/AJS3 Console View (when JP1/AJS3 - View and JP1/AJS3 Console View are used)

Item	File or folder name [#]
Executable file for starting JP1/AJS3 Console View	• <i>View_Path</i> \bin\ajscon.exe
Executable file for setting up JP1/AJS3 Console View	• <i>View_Path</i> \bin\ajscvsetup.exe
JP1/AJS3 Console View common settings file	• <i>View_Path</i> \conf\ajscon.conf
Model file for the JP1/AJS3 Console View common settings file	• <i>View_Path</i> \conf\ajscon.conf.model
Model file for the JP1/AJS3 Console View user settings file	• <i>View_Path</i> \conf\ajs2coview_opt.conf.model
System common settings file	• %ALLUSERSPROFILE% ^{#2} \Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf\ajs2coview_common.conf
Model file for the system common settings file	• <i>View_Path</i> \conf\ajs2coview_common.conf.model
JP1/AJS3 Console View log file	• %ALLUSERSPROFILE% ^{#2} \Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log\ajscon.log
JP1/AJS3 Console View execution log file	• %ALLUSERSPROFILE% ^{#2} \Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log\ajs2coview[#nnnn] ^{#3} {1 2} ^{#4} .log

#1

Folders are created in EVERYONE full control mode.

#2

The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.

#3

If a single instance of JP1/AJS3 Console View is started, the system omits #nnnn_. If multiple instances of JP1/AJS3 Console View are started concurrently, the system assigns a value from 0001 to 9999 to each instance of JP1/AJS3 Console View.

When multiple instances of JP1/AJS3 Console View are started concurrently, the log files are output as follows:

- ajs2coview1.log
- ajs2coview#0001_1.log
- ajs2coview#0002_1.log

#4

The value in {1|2} indicates the log file number, which is fixed at 2.

If the size of the file specified as 1 reaches the upper limit, log data is continuously output to the file specified as 2. If the size of the file specified as 2 also reaches the upper limit, the information in the file specified as 1 is deleted, after which log data is continuously output to this file.

A.4 JP1/AJS3 - Web Console files and directories

The following table lists the JP1/AJS3 - Web Console files and directories for each OS.

(1) In Windows

The following table lists the files and folders for the Windows version of JP1/AJS3 - Web Console according to their uses.

Supplementary note

For the tables listing log files and directories, see *1.2.4 List of log files and directories*.

How to read the tables

- The tables listing files and directories use the following abbreviations:

- *Web_Path*: JP1/AJS3 - Web Console installation folder

- *Web_Data_Path*: The value is different depending on the installation folder.

If the installation folder is the default installation folder or is in a folder protected by the system:

%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS3web

A *folder protected by the system* is the path to a folder in any of the following:

- *system-drive*\Windows

- *system-drive*\Program Files

If the installation folder is other than the above:

JP1/AJS3 - Web Console installation folder

- The default value for %ALLUSERSPROFILE% is *system-drive*\ProgramData.
- By default, *Web_Path* is *SystemDrive*\Program files\HITACHI\JP1AJS3WEB.
- An asterisk (*) indicates a string of one or more characters.

Table A–57: Files that the user can modify (JP1/AJS3 - Web Console for Windows)

Item	File name
Environment-settings file	• <i>Web_Path</i> \conf\ajs3web.conf
Communication -settings file	• <i>Web_Data_Path</i> \conf\ajscd_ajs3web.properties
File for specifying the names of the hosts that use non-encrypted communication [#]	• <i>Web_Data_Path</i> \conf\nosslhost.conf
HTTP server definition file	• <i>Web_Path</i> \uCPSB\httpsd\conf\httpsd.conf
User property file for J2EE server	• <i>Web_Path</i> \uCPSB\CC\server\usrconf\ejb\ajs3web\usrconf.properties
Display color settings file	• <i>Web_Path</i> \conf\ajs3web_color.conf
Option definition file for J2EE server	• <i>Web_Path</i> \uCPSB\CC\server\usrconf\ejb\ajs3web\usrconf.cfg

#

This file is created by a user if encryption of communication is to be used. For details about this file, see *21.4.6 Details on the settings in the unencrypted-communication host settings file (nosslhost.conf)* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table A–58: Files and folders that the user can reference (JP1/AJS3 - Web Console for Windows)

Item	File or folder name
Executable file storage folder	• <i>Web_Path</i> \bin\
Library file storage folder	• <i>Web_Path</i> \lib\
Environment-settings file storage folder	• <i>Web_Path</i> \conf\ • <i>Web_Data_Path</i> \conf\
Readme file	• <i>Web_Path</i> \Readme_ja.txt • <i>Web_Path</i> \Readme_en.txt
Version information file	• <i>Web_Path</i> \Version.txt
HTTP and Application server folder	• <i>Web_Path</i> \uCP SB\
Tool folder	• <i>Web_Path</i> \tools\

Table A–59: Files and folders that the user does not need to modify or reference (JP1/AJS3 - Web Console for Windows)

Item	File or folder name
System folder for Web Console server	• <i>Web_Path</i> \sys\
Application folder	• <i>Web_Path</i> \webapps\
Working folder for Web Console server	• <i>Web_Data_Path</i> \tmp\

(2) In Linux

The following table lists the files and directories for the Linux version of JP1/AJS3 - Web Console according to their uses.

Supplementary note

For the tables listing log files and directories, see [1.2.4 List of log files and directories](#).

How to read the tables

- An asterisk (*) indicates a string of one or more characters.

Table A–60: Files that the user can modify (JP1/AJS3 - Web Console for Linux)

Item	File name
Environment-settings file	• /etc/opt/jplajs3web/conf/ajs3web.conf
Communication -settings file	• /etc/opt/jplajs3web/conf/ajscd_ajs3web.properties
File for specifying the names of the hosts that use non-encrypted communication [#]	• /etc/opt/jplajs3web/conf/nosslhost.conf
HTTP server definition file	• /opt/jplajs3web/uCP SB/httpsd/conf/httpsd.conf
User property file for J2EE server	• /opt/jplajs3web/uCP SB/CC/server/usrconf/ejb/ajs3web/usrconf.properties
Display color settings file	• /etc/opt/jplajs3web/conf/ajs3web_color.conf
Option definition file for J2EE server	• /opt/jplajs3web/uCP SB/CC/server/usrconf/ejb/ajs3web/usrconf.cfg

#

This file is created by a user if encryption of communication is to be used. For details about this file, see 21.4.6 *Details on the settings in the unencrypted-communication host settings file (nosslhost.conf)* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table A–61: Files and directories that the user can reference (JP1/AJS3 - Web Console for Linux)

Item	File or directory name
Executable file storage directory	<ul style="list-style-type: none">• /opt/jp1ajs3web/bin/
Library file storage directory	<ul style="list-style-type: none">• /opt/jp1ajs3web/lib/
Message catalog	<ul style="list-style-type: none">• /opt/jp1ajs3web/lib/nls/\$LANG/
Environment settings file storage directory	<ul style="list-style-type: none">• /etc/opt/jp1ajs3web/conf/
HTTP and Application server folder	<ul style="list-style-type: none">• /opt/jp1ajs3web/uCPSB/
Tool folder	<ul style="list-style-type: none">• /opt/jp1ajs3web/tools/

Table A–62: Files and directories that the user does not need to modify or reference (JP1/AJS3 - Web Console for Linux)

Item	File or directory name
Working folder for Web Console server	<ul style="list-style-type: none">• /var/opt/jp1ajs3web/sys/
Application directory	<ul style="list-style-type: none">• /opt/jp1ajs3web/webapps/
Installation results storage directory	<ul style="list-style-type: none">• /opt/jp1ajs3web/sys
Working folder for Web Console server	<ul style="list-style-type: none">• /var/opt/jp1ajs3web/tmp/
Environment settings file storage directory	<ul style="list-style-type: none">• /var/opt/jp1ajs3web/conf

B. List of Processes

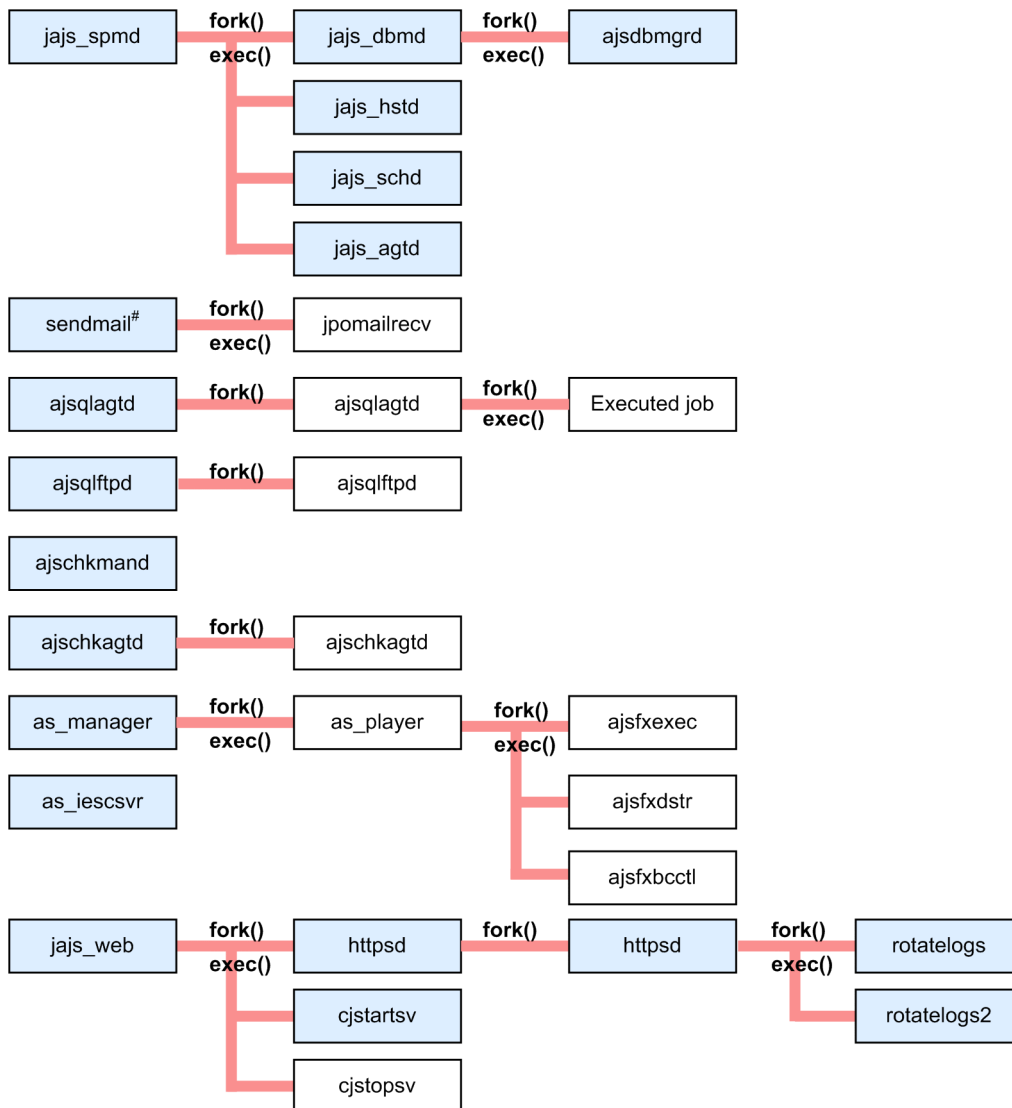
This appendix lists the JP1/AJS3 processes.

B.1 Configuration of processes

The figure below shows the configuration of JP1/AJS3 processes (UNIX). The figure illustrating the overall relationship between parent and child processes should be helpful in monitoring processes.

(1) Processes in the standard configuration (UNIX)

Figure B-1: JP1/AJS3 processes (UNIX) (parent and child processes)



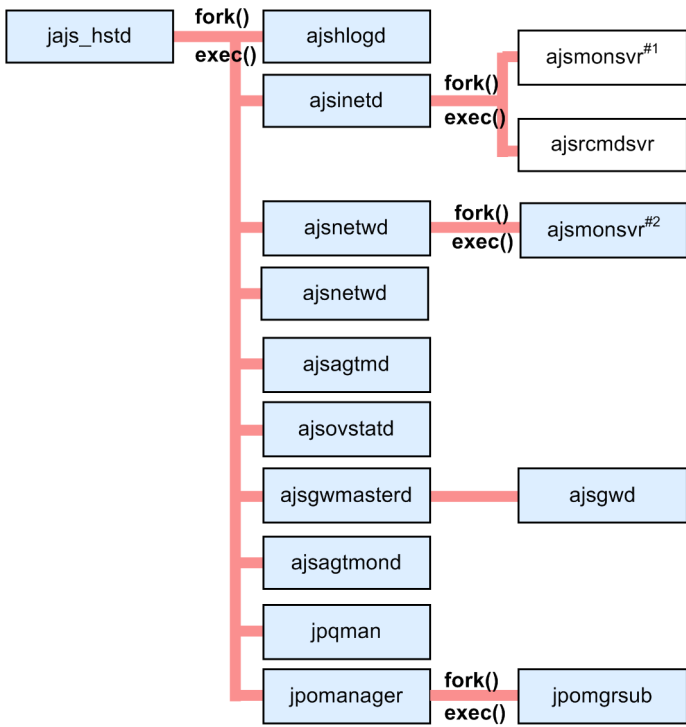
Legend:

Process name : Resident process

Process name : Non-resident process

OS function

Figure B–2: JP1/AJS3 processes (child and detail processes) (1/3)



Legend:

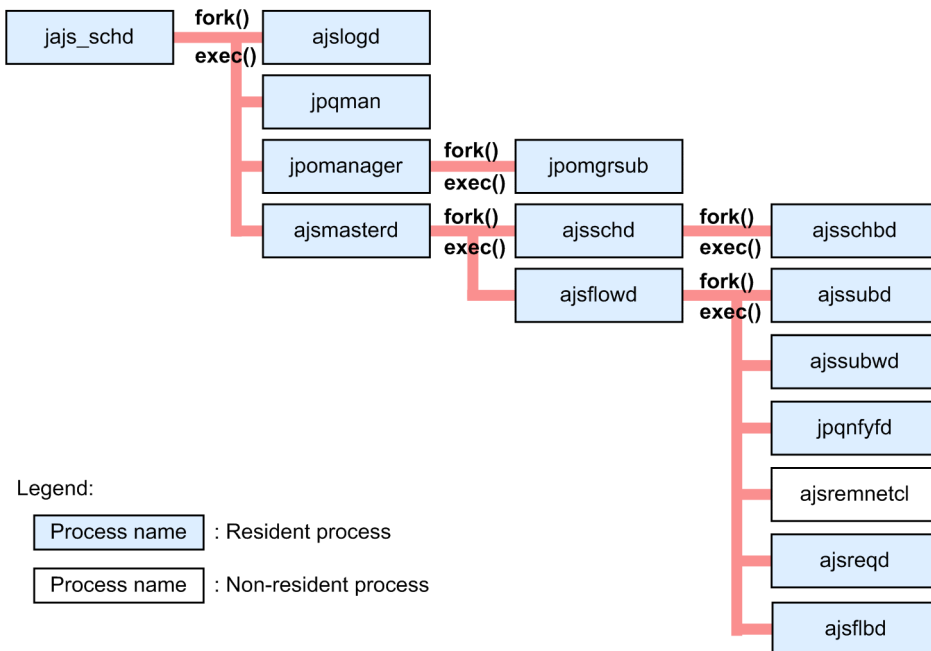
Process name : Resident process

Process name : Non-resident process

#1 Resident while JP1/AJS3 - View is connected.

#2 This process resides in memory only if the JP1/AJS3 startup process definition file has been updated after JP1/AJS3 - Manager was upgraded.

Figure B–3: JP1/AJS3 processes (child and detail processes) (2/3)

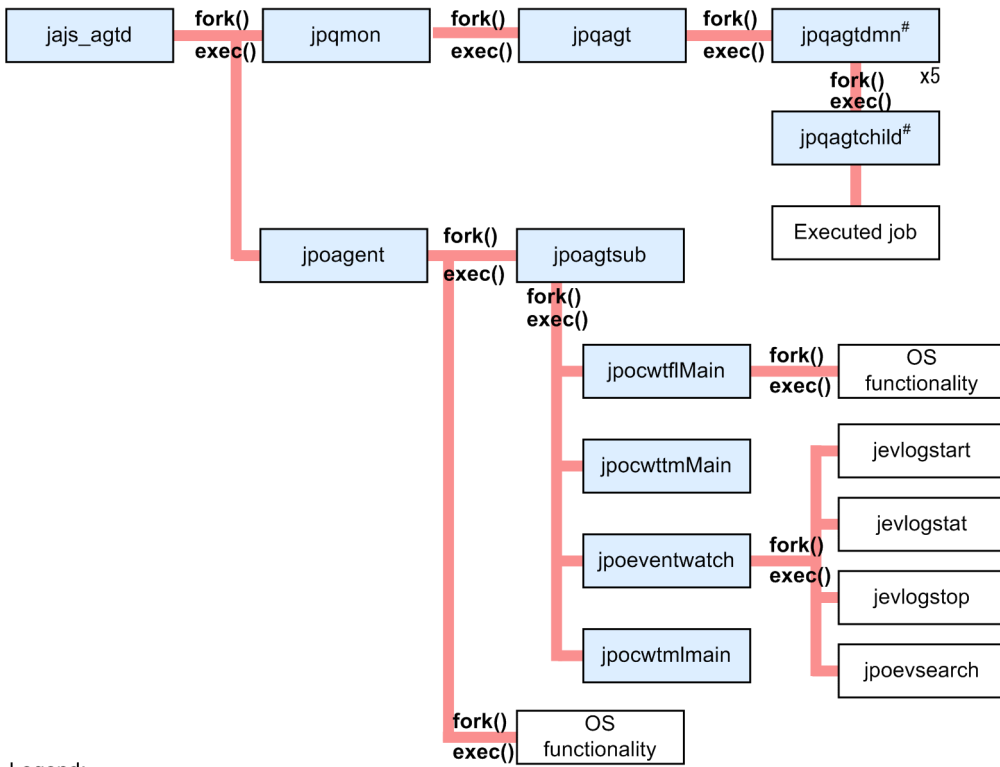


Legend:

Process name : Resident process

Process name : Non-resident process

Figure B-4: JP1/AJS3 processes (child and detail processes) (3/3)



Legend:

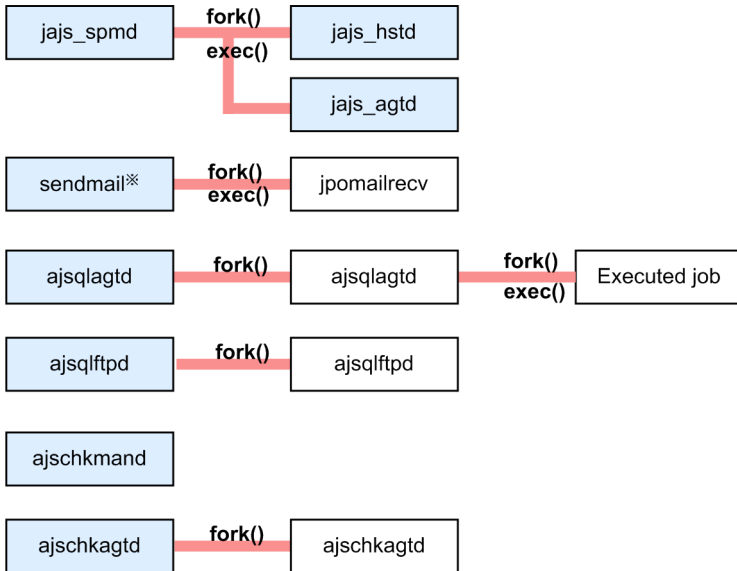
Process name : Resident process

Process name : Non-resident process

Five processes are executed in parallel.

(2) Processes in the compatible ISAM configuration (UNIX)

Figure B-5: JP1/AJS3 processes (parent and child processes)



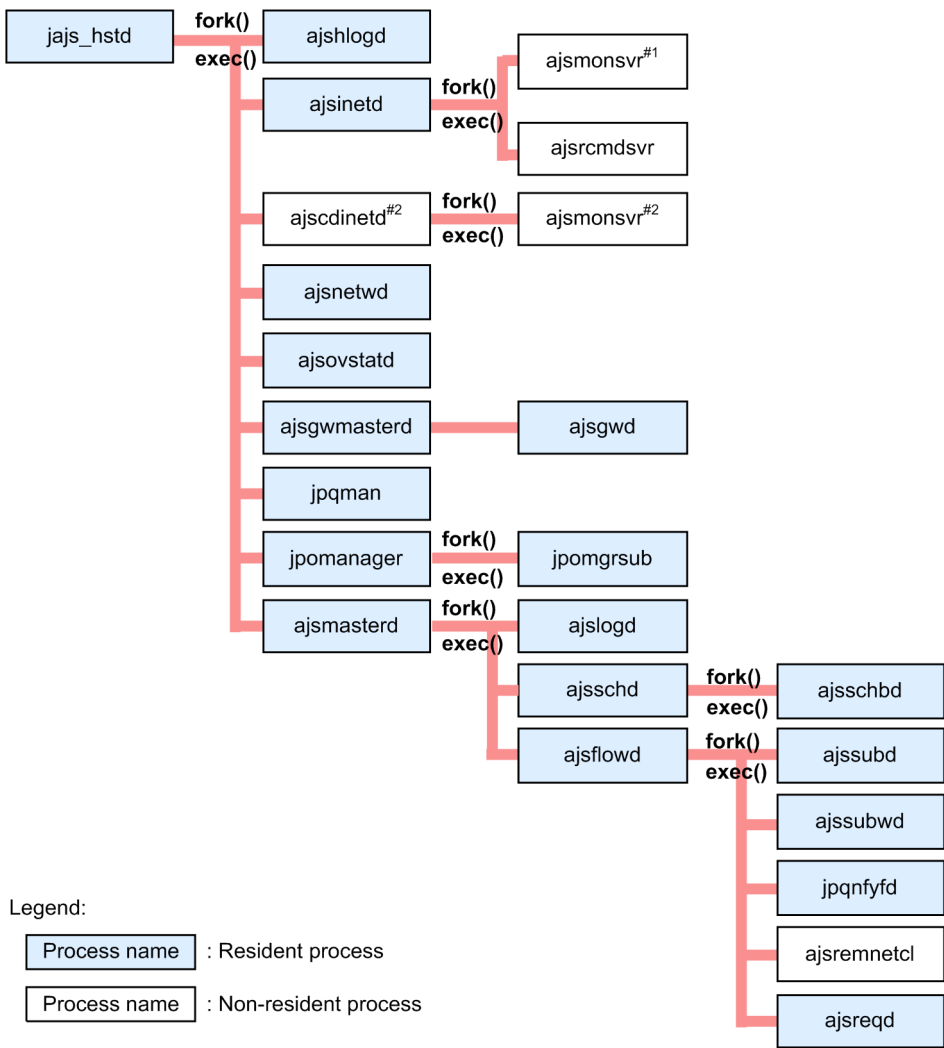
Legend:

Process name : Resident process

Process name : Non-resident process

OS function

Figure B–6: JP1/AJS3 processes (child and detail processes) (1/2)

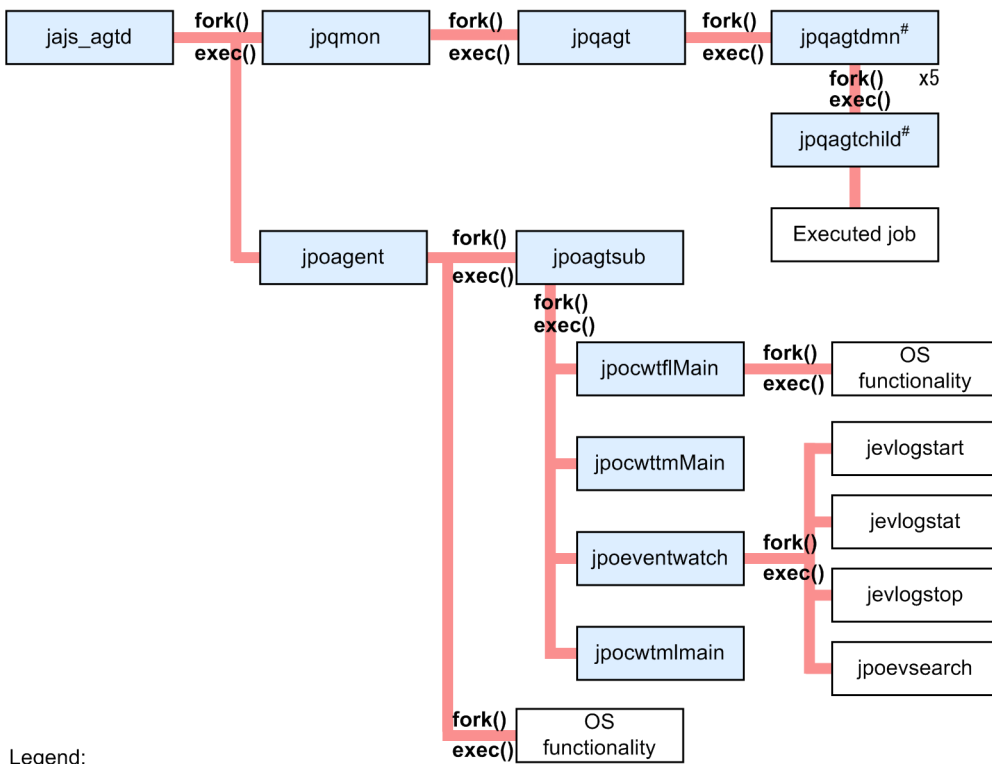


Legend:

- Process name : Resident process
- Process name : Non-resident process

#1 Resident while JP1/AJS3 - View is connected.
 #2 This process is used for JP1/AJS3 - Software Development Kit.
 This process resides in memory if the startup process definition file is updated during the setup of JP1/AJS3 - Software Development Kit.

Figure B–7: JP1/AJS3 processes (child and detail processes) (2/2)



Legend:

Process name : Resident process

Process name : Non-resident process

Five processes are executed in parallel.

B.2 Processes (for Windows)

The following table lists the processes of JP1/AJS3 programs and components for Windows.

(1) Processes of JP1/AJS3 - Manager for Windows

There are three kinds of processes of JP1/AJS3 - Manager for Windows:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail process

You can use the `jajs_spm�_status` command to check the status of the child processes of `jajs_spm�`. For details, see the description of `jajs_spm�_status` in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

You can check the status of parent, child, and detail processes on the **Processes** page in the Task Manager window.

(a) Standard configuration

Table B-1 lists the parent and child processes. Table B-2 lists the child and detail processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B-1: Parent and child processes of JP1/AJS3 - Manager for Windows

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spmd.exe(1) ^{#1}	JP1/AJS3 service	jajs_dbmd.exe(<i>number-of-embedded-databases</i>)	Database management This process manages embedded databases.
		jajs_hstd.exe(1)	Host service management
		jajs_schd.exe(<i>number-of-scheduler-services</i>)	Scheduler service management
		jajs_agtd.exe(1)	Agent service management
ajsqlagtd.exe(1) ^{#2}	JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts queueless job execution requests from JP1/AJS3 - Manager (scheduler service). This process is necessary when queueless jobs are executed on the local host.	- (<i>number-of-jobs-to-be-executed</i>) ^{#3}	Queueless job management thread. This thread executes queueless jobs. The threads are generated respectively for jobs to be executed. The threads are removed on completion of queueless job execution.
ajsqlftpd.exe(1) ^{#4}	JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process.	- (<i>number-of-file-transfer-requests</i>) ^{#3}	Queueless file transfer thread. This thread transfers transfer files, standard output files, and standard error output files. The threads are generated respectively for file transfer requests. The threads are removed on completion of file transfer.
jpomlsrv.exe	JP1/AJS3 Mail service Mail monitoring process when the mail system linkage function is used within the service	jpomlapisend.exe	Process for email transmission by linkage to a mail system. This process places new emails in the Outlook Outbox. The process starts each time a mail sending job is executed.
		jpomlapirec.exe	Process for email reception monitoring by linkage to a mail system. This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.
jpomldsk.exe	JP1/AJS3 email monitoring process Mail monitoring process when the mail system linkage function is used on the desktop	jpomlapisend2.exe	Process for email transmission by linkage to a mail system. This process places new emails in the Outlook Outbox. The process starts each time a mail sending job is executed.

Parent process (number of processes)	Description	Child process (number of processes)	Description
jpomldsk.exe	JP1/AJS3 email monitoring process Mail monitoring process when the mail system linkage function is used on the desktop	jpomlapirec2.exe	Process for email reception monitoring by linkage to a mail system. This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.
ajschkmansvc.exe (1)	JP1/AJS3 Check Manager service	ajschkmand.exe (1)	This process controls the definition pre-check (manager process).
ajschkagtsvc.exe (1)	JP1/AJS3 Check Agent service	ajschkagtd.exe (1)	This process controls the definition pre-check (agent process).
as_service.exe (1)	Flexible job execution process	as_manager.exe (1)	JP1/AJS3 Autonomous Agent service process
as_iescscm.exe (1)	Flexible job execution process	as_iescsvr.exe (1)	JP1/AJS3 Autonomous Agent Messenger service process

#1

jajs_service.exe is available as the management process.

#2

ajsqlasvc.exe is available as the management process.

#3

Threads are spawned instead of child processes. The number of threads is indicated in parentheses.

#4

ajsqlfsvc.exe is available as the management process.

Table B–2: Child and detail processes of JP1/AJS3 - Manager for Windows

Child process name	Detail process name (number of processes)	Description
jajs_dbmd.exe	ajsdbmgrd.exe	Database operation control This process starts, stops, and monitors embedded databases.
jajs_hstd.exe	ajshlogd.exe	Host service-specific log management
	ajsinetd.exe	Network control process that controls access from other servers such as JP1/AJS3 - View
	ajscdinetd.exe ^{#1}	Network control process that controls access from JP1/AJS3 - Software Development Kit or JP1/AJS3 - Web Console
	ajsnetwd.exe	Communication control and management
	ajsagtmpd.exe	Agent management
	ajsovstatd.exe	This process monitors JP1/AJS3 from HP NNM when HP NNM is linked. The process has no detail process.
	ajsgwmasterd.exe	This process manages the scheduler service inter-communication control process when jobnet connectors are used to control the execution order of root jobnets between different scheduler services. The scheduler service inter-

Child process name	Detail process name (number of processes)	Description
jajs_hstd.exe	ajsgwmasterd.exe	communication control process enables communication between jobnet connectors and the jobnets to which they connect.
	ajsagtmnd.exe	Agent monitoring process This process conducts a communication status check and communication recovery check on execution agents. This process is generated only if the job distribution delay reduction function is enabled.
	jpqman.exe	Manager process for job execution control Main process for processing specific to job execution control, such as the reception of submit jobs
	jpomanager.exe	Event/action control manager process. This process manages event jobs.
	ajsqlcltd.exe(1)#2	This process automatically attaches a logical host to or detaches a logical host from the queueless cluster process when nodes are switched. The process has no detailed process.
jajs_schd.exe	ajslogd.exe	Scheduler log output process
	jpqman.exe	Job execution control manager process. Main process for the processing that is specific to job execution control, such as the reception of submit jobs.
	jpomanager.exe	Event/action control manager process. This process manages event jobs.
	ajsmasterd.exe	Scheduler. This process monitors all the processes of the scheduler service.
jajs_agtd.exe	jpqmon.exe(1)	Job execution control. This process monitors all the processes of job execution control.
	jpoagent.exe(1)	Event/action control agent process. This process monitors and controls the monitoring processes other than jpomanager.exe. jpoagent.exe also controls monitoring processes on JP1/AJS3 - Manager.
ajsinetd.exe	ajsmnsvr.exe#3	Process to be activated when connected to JP1/AJS3 - View
	ajsremdsvr.exe	Process to be activated when a remote jobnet is executed, when a command is executed remotely, or when a JP1/AJS3 command is executed from JP1/AJS3 - View.
ajscdinetd.exe#1	ajsmnsvr.exe#1,#4	Process that processes requests from JP1/AJS3 - Software Development Kit or JP1/AJS3 - Web Console
ajsgwmasterd.exe	ajsgwd.exe	This process manages the scheduler service inter-communication control process when jobnet connectors are used to control the execution order of root jobnets between different scheduler services. The scheduler service inter-communication control process enables communication between jobnet connectors and the jobnets to which they connect.
jpomanager.exe	jpomgrsub.exe	Event/action control submanager process

Child process name	Detail process name (number of processes)	Description
ajsmasterd.exe	ajsschd.exe	Schedule control process
	ajsschbd.exe ^{#5}	Generation management subprocess
	ajsflowd.exe	Flow control process
	ajssubd.exe	Job submit process
	ajssubwd.exe	Job completion wait process
	jpqnyfd.exe	Status reporting process for job execution control
	ajsremnetcl.exe	Process for requesting the registration of remote jobnets and the cancellation of the registration of remote jobnets
	ajsreqd.exe	Queueless job request process. A maximum of eight processes are started from ajsflowd.exe.
	ajsflbd.exe ^{#6}	Flow control subprocess
jpqmon.exe	jpqagt.exe	Agent process for job execution control This process activates jobs.
jpoagent.exe	jpoagsub.exe	Event/action control subagent process. This process mainly notifies the manager of information from the monitoring process.
	jpocwtflMain.exe	File monitoring process
	jpocwtmMain.exe	Execution interval control process
	jpoeventwatch.exe	Event (such as JP1 event or log trap) monitoring process
	jpoevsearch.exe	Event search process. This process starts to search for the specified event when a JP1 event reception monitoring job specified with a pre-execution event search is executed.
	jpocwtmlmain.exe ^{#7}	Process for mail monitoring communication by linkage to a mail system
	jpomlapisend.exe ^{#8}	Process for mail transmission by linkage to a mail system (when the mail system linkage function is used within the service)
	jpomlapisend2.exe ^{#8}	Process for mail transmission by linkage to a mail system (when the mail system linkage function is used on the desktop)
	jpomlapirec.exe ^{#9}	Process for mail reception by linkage to a mail system (when the mail system linkage function is used within the service)
	jpomlapirec2.exe ^{#9}	Process for mail reception by linkage to a mail system (when the mail system linkage function is used on the desktop)
as_manager.exe (1)	as_player.exe (number of jobs to be executed + 2)	Flexible job execution process
as_player.exe	ajsfexec.exe	Flexible job execution process
	ajsfxdstr.exe	Process for broadcast execution of flexible jobs
	ajsfxbctl.exe	Process that manages the destination agents for broadcast execution of flexible jobs

Note

When you execute a command, a process with the same name as the command is activated.

#1

In an environment in which JP1/AJS3 - Manager is installed as an upgrade installation and JP1/AJS3 - Software Development Kit is not used, this process is not started automatically by using the initial settings. If you want the process to be started automatically, you must edit the JP1/AJS3 startup process definition file (`jplajs_hstd.conf`).

For details, see *3.4.1 Setting up JP1/AJS3 - Manager* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for Windows) or *13.3.1 Setting up JP1/AJS3 - Manager* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for UNIX).

#2

Indicated as `qlcltd` by the `jajs_spmdd_status` command.

When queueless jobs are used, the `ajsqlcltd.exe` process is created only if the `jplajs_hstd.conf` file is edited to automatically attach and detach the logical host. For details, see *8.2.7 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#3

One process starts for the selected scheduler service when you select a scheduler service in the tree area in a JP1/AJS3 - View window.

The maximum number of processes that can start is *number-of-scheduler-services* x *number-of-connected-instances-of-JP1/AJS3 - View*.

#4

One process starts for the scheduler service that is referenced by JP1/AJS3 - Software Development Kit and JP1/AJS3 - Web Console.

The maximum number of processes that can start is *number-of-scheduler-services* x (*number-of-connected-instances-of-JP1/AJS3 - Software Development Kit* + *number-of-connected-instances-of-JP1/AJS3 - Web Console*).

#5

This process starts only when you specify the environment settings as described in *6.1.7 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#6

This process starts only when you specify the environment settings as described in *6.1.8 Settings for using wait conditions* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#7

This process does not start if the mail system linkage function is disabled. For details about how to set up the mail system linkage function, see *2.3.4 Setting up the environment for the mail system linkage* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

Note that you cannot start multiple instances of this process on the same PC.

#8

This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts each time a mail sending job is executed.

#9

This process checks the Outlook Inbox, and detects the reception of emails. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.

(b) Compatible ISAM configuration

Table B-3 lists the parent and child processes. Table B-4 lists the child and detail processes. A value in parentheses after a parent process name or a child process name in the tables indicates the number of processes that can start simultaneously.

Table B-3: Parent and child processes of JP1/AJS3 - Manager for Windows

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spmd.exe(1) ^{#1}	JP1/AJS3 service	jajs_hstd.exe(1)	Host service management
		jajs_agtd.exe(1)	Agent service management
ajsqlagtd.exe(1) ^{#2}	<p>JP1/AJS3 Queueless Agent service (queueless agent process)</p> <p>This process accepts execution requests for queueless jobs from JP1/AJS3 - Manager (scheduler service).</p> <p>The process is required to execute queueless jobs on a local host.</p>	- (number-of-jobs-to-be-executed) ^{#3}	<p>Queueless job management thread.</p> <p>This thread executes a queueless job.</p> <p>The thread is generated for each job that is to be executed.</p> <p>The thread disappears when execution of the queueless job ends.</p>
ajsqlftpd.exe(1) ^{#4}	<p>JP1/AJS3 Queueless File Transfer service (queueless file transfer process)</p> <p>This process accepts file transfer requests from the queueless job management process.</p>	- (number-of-file-transfer-requests) ^{#3}	<p>Queueless file transfer thread.</p> <p>This thread transfers data to a transfer file, the standard output file, and the standard error output file.</p> <p>The thread is generated for each file transfer request.</p> <p>The thread disappears when file transfer ends.</p>
jpomlsrv.exe	<p>JP1/AJS3 Mail service</p> <p>Mail monitoring process when the mail system linkage function is used within the service</p>	jpomlapisend.exe	<p>Process for email transmission by linkage to a mail system.</p> <p>This process places new emails in the Outlook Outbox.</p> <p>The process starts each time a mail sending job is executed.</p>
		jpomlapirec.exe	<p>Process for email reception monitoring by linkage to a mail system.</p> <p>This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox.</p> <p>The process starts at the specified monitoring interval when a mail reception monitoring job is executed.</p>
jpomldsk.exe	<p>JP1/AJS3 email monitoring process</p> <p>Mail monitoring process when the mail system</p>	jpomlapisend2.exe	<p>Process for email transmission by linkage to a mail system.</p> <p>This process places new emails in the Outlook Outbox.</p>

Parent process (number of processes)	Description	Child process (number of processes)	Description
jpomldsk.exe	linkage function is used on the desktop	jpomlapisend2.exe	The process starts each time a mail sending job is executed.
		jpomlapirec2.exe	Process for email reception monitoring by linkage to a mail system. This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.
ajschkmsvc.exe(1)	JP1/AJS3 Check Manager service	ajschkmand.exe(1)	This process controls definition pre-checks (manager process).
ajschkagtsvc.exe(1)	JP1/AJS3 Check Agent service	ajschkagtd.exe(1)	This process controls definition pre-checks (agent process).

#1

jajs_service.exe exists as the management process.

#2

ajsqslasvc.exe is available as the management process.

#3

A thread is generated instead of a child process. The value in parentheses indicates the number of threads.

#4

ajsqslfsvc.exe is available as the management process.

Table B–4: Child and detail processes of JP1/AJS3 - Manager for Windows

Child process name	Detail process name (number of processes)	Description
jajs_hstd.exe	ajshlogd.exe	Host-service-specific log management
	ajsinetd.exe	Network control process that controls access from other servers such as JP1/AJS3 - View
	ajscdinetd.exe	Network control process that controls access from JP1/AJS3 - Software Development Kit
	ajsnetwd.exe	Communication control and management
	ajssovstatd.exe	This process monitors JP1/AJS3 from HP NNM when HP NNM is linked. The process has no detail process.
	ajsgwmasterd.exe	This process manages the scheduler service inter-communication control process when jobnet connectors are used to control the execution order of root jobnets between different scheduler services. The scheduler service inter-communication control process enables communication

Child process name	Detail process name (number of processes)	Description
jajs_hstd.exe	ajsgwmasterd.exe	between jobnet connectors and the jobnets to which they connect.
	jpqman.exe	Job execution control manager process. Main process for the processing that is specific to job execution control, such as the reception of submit jobs.
	jpomanager.exe	Event/action control manager process. This process manages event jobs.
	ajsmasterd.exe	Scheduler. This process monitors all the processes of the scheduler service.
	ajsqlcltd.exe(1) ^{#1}	This process automatically attaches a logical host to or detaches a logical host from the queueless cluster process when nodes are switched. The process has no detailed process.
jajs_agtd.exe	jpqmon.exe	Job execution control. This process monitors all the processes of job execution control.
	jpoagent.exe	Event/action control agent process. This process monitors and controls the monitoring processes other than jpomanager.exe. jpoagent.exe also controls monitoring processes on JP1/AJS3 - Manager.
ajsinetd.exe	ajsmonsvr.exe ^{#2}	Process activated when JP1/AJS3 - View is connected
	ajsrcmdsvr.exe	Process activated when a remote jobnet is executed or a command is remotely executed
ajscdinetd.exe	ajsmonsvr.exe	Process that processes requests from JP1/AJS3 - Software Development Kit
ajsgwmasterd.exe	ajsgwd.exe	This process enables communication between jobnet connectors and the jobnets to which they connect when jobnet connectors are used to control the execution order of root jobnets between different scheduler services.
jpomanager.exe	jpomgrsub.exe	Event/action control submanager process
ajsmasterd.exe	ajslogd.exe	Process for recording scheduler information
	ajsschd.exe	Schedule control process
	ajsschbd.exe ^{#3}	Generation management subprocess
	ajsflowd.exe	Flow control process
	ajssubd.exe	Job submit process
	ajssubwd.exe	Job completion wait process
	jpqnfyfd.exe	Process for reporting the job execution control status
	ajsremnetcl.exe	Process for requesting the registration and the cancellation of registration of remote jobnets
ajsreqd.exe	Queueless job request process. A maximum of eight process instances start from ajsflowd.exe.	

Child process name	Detail process name (number of processes)	Description
jpqmon.exe	jpqagt.exe	Job execution control agent process. This process starts a job.
jpoagent.exe	jpoagtsub.exe	Event/action control subagent process. This process mainly reports information from monitoring processes to the manager.
	jpocwtflMain.exe	File monitoring process
	jpocwtmMain.exe	Execution interval control process
	jpoeventwatch.exe	Event (such as JP1 events and log traps) monitoring process
	jpoevsearch.exe	Event search process. This process starts and searches for events when the event reception monitoring job specified with pre-execution event search is executed.
	jpocwtlmain.exe ^{#4}	Process for mail monitoring communication by linkage to a mail system
	jpomlapisend.exe ^{#5}	Process for sending emails by linkage to a mail system (when the mail system linkage function is used within the service)
	jpomlapisend2.exe ^{#5}	Process for sending emails by linkage to a mail system (when the mail system linkage function is used on the desktop)
	jpomlapirec.exe ^{#6}	Process for receiving emails by linkage to a mail system (when the mail system linkage function is used within the service)
jpomlapirec2.exe ^{#6}	Process for receiving emails by linkage to a mail system (when the mail system linkage function is used on the desktop)	

Note

When a command is executed, a process with the command name starts.

#1

Indicated as `qlcltd` by the `jaajs_spm�_status` command.

When queueless jobs are used, the `ajsqlcltd.exe` process is created only if the `jp1ajs_hstd.conf` file is edited to automatically attach and detach the logical host. For details, see *8.2.7 Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#2

One process starts for the selected scheduler service when you select a scheduler service in the tree area in a JP1/AJS3 - View window.

The maximum number of processes that can start is *number-of-scheduler-services* x *number-of-connected-instances-of-JP1/AJS3 - View*.

#3

This process starts only when you specify the environment settings as described in *6.1.7 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#4

This process does not start if the mail system linkage function is disabled. For details about how to set up the mail system linkage function, see *2.3.4 Setting up the environment for the mail system linkage* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

Note that you cannot start multiple instances of this process on the same PC.

#5

This process places new emails in the Outlook Outbox. The process starts each time a mail sending job is executed.

#6

This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.

(2) Processes of JP1/AJS3 - Agent for Windows

There are three kinds of processes of JP1/AJS3 - Agent for Windows:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail process

You can use the `jajs_spmd_status` command to check the status of the child processes of `jajs_spmd`. For details, see the description of `jajs_spmd_status` in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

You can check the status of parent, child, and detail processes on the **Processes** page in the Task Manager window.

Table B-5 lists the parent and child processes. *Table B-6* lists the child and detail processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B-5: Parent and child processes of JP1/AJS3 - Agent for Windows

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spmd.exe (1) #1	JP1/AJS3 service	jpoagent.exe (1) #2	Even/action control agent process
		jqmon.exe (1) #3	Job execution control This process monitors all processes for job execution control.
		ajsqcltd.exe (1) #4	This process automatically attaches a logical host to or detaches a logical host from the queueless cluster process when nodes are switched. The process has no detail process.
ajsqtagtd.exe(1)#5	JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts queueless job execution requests from JP1/AJS3 - Manager (scheduler service).	- (number-of-jobs-to-be-executed) #6	Queueless job management thread This thread executes queueless jobs. The threads are generated respectively for jobs to be executed. The threads are removed on completion of queueless job execution.
jpomlsrv.exe	JP1/AJS3 Mail service Mail monitoring process when the mail system linkage function is used within the service	jpomlapisend.exe	Process for email transmission by linkage to a mail system. This process places new emails in the Outlook Outbox.

Parent process (number of processes)	Description	Child process (number of processes)	Description
jpomlsrv.exe	JP1/AJS3 Mail service Mail monitoring process when the mail system linkage function is used within the service	jpomlapisend.exe	The process starts each time a mail sending job is executed.
		jpomlapirec.exe	Process for email reception monitoring by linkage to a mail system. This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.
jpomldsk.exe	JP1/AJS3 email monitoring process Mail monitoring process when the mail system linkage function is used on the desktop	jpomlapisend2.exe	Process for email transmission by linkage to a mail system. This process places new emails in the Outlook Outbox. The process starts each time a mail sending job is executed.
		jpomlapirec2.exe	Process for email reception monitoring by linkage to a mail system. This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.
ajschkagtsvc.exe (1)	JP1/AJS3 Check Agent service	ajschkagtd.exe (1)	This process controls the definition pre-check (agent process).
as_service.exe (1)	Flexible job execution process	as_manager.exe (1)	JP1/AJS3 Autonomous Agent service process
as_iescscm.exe (1)	Flexible job execution process	as_iescsvr.exe (1)	JP1/AJS3 Autonomous Agent Messenger service process

#1

jaqs_service.exe is available as the management process.

#2

Indicated as evactiona by the jaqs_spmd_status command.

#3

Indicated as queue by the jaqs_spmd_status command.

#4

Indicated as qlcltd by the jaqs_spmd_status command.

When queueless jobs are used, the ajsqlcltd.exe process is created only if the jplajs_hstd.conf file is edited to automatically attach and detach the logical host. For details, see 8.2.7 *Setting up the queueless job execution environment* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#5

ajsqlassvc.exe is available as the management process.

#6

Threads are spawned instead of child processes. The number of threads is indicated in parentheses.

Table B–6: Child and detail processes of JP1/AJS3 - Agent for Windows

Child process name	Detail process name	Description
jpoagent.exe	jpoagtsub.exe	Event/action control subagent process. This process mainly notifies the manager of information from the monitoring process.
	jpocwtflMain.exe	File monitoring process
	jpocwtmMain.exe	Execution interval control process
	jpocwtmlmain.exe #1	Process for mail monitoring communication by linkage to a mail system
	jpoeventwatch.exe	Event (such as JP1 event or log trap) monitoring process
	jpomlapisend.exe #2	Process for mail transmission by linkage to a mail system (when the mail system linkage function is used within the service)
	jpomlapisend2.exe #2	Process for mail transmission by linkage to a mail system (when the mail system linkage function is used on the desktop)
	jpomlapirec.exe #3	Process for mail reception by linkage to a mail system (when the mail system linkage function is used within the service)
	jpomlapirec2.exe #3	Process for mail reception by linkage to a mail system (when the mail system linkage function is used on the desktop)
jpoevsearch.exe	jpoevsearch.exe	Event search process. This process starts to search for the specified event when a JP1 event reception monitoring job specified with a pre-execution event search is executed.
jpqmon.exe	jpqagt.exe	Agent process for job execution control This process activates jobs.
as_manager.exe (1)	as_player.exe	Flexible job execution process
as_player.exe	ajsfxexec.exe	Flexible job execution process
	ajsfxdstr.exe	Process for broadcast execution of flexible jobs
	ajsfxbctl.exe	Process that manages the destination agents for broadcast execution of flexible jobs

Note

When you execute a command, a process with the same name as the command is activated.

#1

This process does not start if the mail system linkage function is disabled. For details about how to set up the mail system linkage function, see *2.3.4 Setting up the environment for the mail system linkage* in the *JP1/Automatic Job Management System 3 Linkage Guide*.

Only one process can start on one machine.

#2

The process places new emails in the Outlook Outbox. The process starts each time a mail sending job is executed.

#3

This process determines whether the received email matches the conditions defined in the email reception monitoring job by referencing the Outlook Inbox. The process starts at the specified monitoring interval when a mail reception monitoring job is executed.

(3) Processes of JP1/AJS3 - View for Windows

You can check the processes of JP1/AJS3 - View for Windows, on the **Processes** page in the Task Manager window.

The following table lists the Processes of JP1/AJS3 - View for Windows.

Table B–7: Processes of JP1/AJS3 - View for Windows

Process name	Description
ajs.exe	Main process for JP1/AJS3 - View
java.exe	Java GUI process for JP1/AJS3 - View
ajs2java.exe	java.exe monitoring process

(4) Processes of JP1/AJS3 - Web Console for Windows

There are three kinds of processes of JP1/AJS3 - Web Console for Windows:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail process

You can check the status of parent, and child, and detail processes on the Processes page in the Task Manager window.

Table B-8 lists the parent and child processes. Table B-9 lists the child and detail processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B–8: Parent and child processes of JP1/AJS3 Web Console for Windows

Parent process (number of processes)	Description	Child process (number of processes)	Description
httpsd.exe(1)	JP1/AJS3 HTTP Server service	httpsd.exe(1)	Web service process
		rotatelog2.exe(3) [#]	Log splitting utility for web services
ajajs_web_service.exe(1)	JP1/AJS3 Web Application Server service	cjstartsv.exe(1)	J2EE Server process

#

When JP1/AJS3 Web Console communicates with the client host in SSL, the number of processes is 4.

Table B–9: Child and detail processes of JP1/AJS3 Web Console for Windows

Child process	Detail process (number of processes)	Description
httpsd.exe	rotatelog2.exe(3) [#]	Log splitting utility for web services

Note

When you execute a command, a process with the same name as the command is activated.

#

When JP1/AJS3 Web Console communicates with the client host in SSL, the number of processes is 4.

B.3 Processes (for UNIX)

The following table lists the processes of JP1/AJS3 programs and components for UNIX.

(1) Processes of JP1/AJS3 - Manager for UNIX

There are three kinds of processes of JP1/AJS3 - Manager for UNIX:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail process

You can use the `jajs_spm�_status` command to check the status of the child processes of `jajs_spm�`. For details, see the description of `jajs_spm�_status` in 3. *Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

To check the status of parent, child and detail processes, use the `ps` command.

(a) Standard configuration

Table B-10 lists the parent and child processes. *Table B-11* lists the child and detail processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B–10: Parent and child processes of JP1/AJS3 - Manager for UNIX

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spm� (1) ^{#1}	JP1/AJS3 service	jajs_dbmd_embedded-database-setup-ID(1) ^{#2}	Database management This process manages embedded databases.
		jajs_hstd(1)	Host service management
		jajs_schd_scheduler-service-name(1) ^{#3}	Scheduler service management
		jajs_agtd(1)	Agent service management
ajsqlagtd(1)	JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts queueless job execution requests from JP1/AJS3 - Manager (scheduler service).	ajsqlagtd (<i>number-of-jobs-to-be-executed</i>)	Queueless job management process This process executes queueless jobs. The same process names are generated from the JP1/AJS3 Queueless Agent service (queueless agent process) respectively for jobs to be executed. The process is removed on completion of queueless job execution. The process has no detail process. The process is necessary when the local host executes queueless jobs.

Parent process (number of processes)	Description	Child process (number of processes)	Description
ajsqftpd(1)	JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process.	ajsqftpd (<i>number-of-file-transfer-requests</i>)	Queueless file transfer worker process This process transfers transfer files, standard output files and standard error output files. The same process names are generated from the JP1/AJS3 Queueless File Transfer service (queueless file transfer process) respectively for file transfer requests. The process is removed on completion of file transfer. The process has no detail process.
ajschkmand(1)	JP1/AJS3 Check Manager service The process controls the definition pre-check (manager process).	--	--
ajschkagtd(1)	JP1/AJS3 Check Agent service	ajschkagtd(5)	The process controls the definition pre-check (agent process).
as_manager (1)	JP1/AJS3 Autonomous Agent service process	as_player (number of jobs to be executed + 1)	Flexible job execution process
as_iescsvr (1)	JP1/AJS3 Autonomous Agent Messenger service process	--	--

Legend:

--: Not applicable.

#1

By specifying logical host names on the command line, you can differentiate between processes for physical hosts and for logical hosts.

A process for a logical host is represented as *process-name -h logical-host-name*.

For example, when a logical host name is `hostA`, the `jajs_spm` process for `hostA` is represented as `jajs_spm -h hostA`.

#2

The process name is indicated as `jajs_dbmd_embedded-database-setup-ID`.

For example, if the embedded database setup ID is `_JF0`, the process name is `jajs_dbmd__JF0`. If multiple embedded databases are used, the number of processes that start equals the number of embedded databases.

#3

The process name is indicated as `jajs_schd_scheduler-service-name`.

For example, if the scheduler service name is `AJSROOT1`, the process name is `jajs_schd_AJSROOT1`. If multiple scheduler services are running, the number of processes that start equals the number of scheduler services.

Table B–11: Child and detail processes of JP1/AJS3 - Manager for UNIX

Child process name	Detail process name	Description
<code>jajs_dbmd_embedded-database-setup-identifier</code>	<code>ajsdbmgrd</code>	Database operation control This process starts, stops, and monitors embedded databases.
<code>jajs_hstd</code>	<code>ajshlogd</code>	Host-service-specific log management

Child process name	Detail process name	Description
jajs_hstd	ajsinetd	Network control process that controls access from other servers
	ajscdinetd ^{#1}	Network control process that controls access from JP1/AJS3 - Software Development Kit or JP1/AJS3 - Web Console
	ajsnetwd	Communication control and management
	ajsagtmp	Agent management
	ajsovsatd	This process monitors JP1/AJS3 from HP NNM when HP NNM is linked. The process has no detail process.
	ajsgwmasterd	This process manages the scheduler service inter-communication control process when jobnet connectors are used to control the execution order of root jobnets between different scheduler services. The scheduler service inter-communication control process enables communication between jobnet connectors and the jobnets to which they connect.
	ajsagtmpd	Agent monitoring process This process conducts a communication status check and communication recovery check on execution agents. This process is generated only if the job distribution delay reduction function is enabled.
	jpqman ^{#2, #3}	Job execution control manager process. Main process for the processing that is specific to job execution control, such as the reception of submit jobs.
	jpomanager	Event/action control manager process. This process manages event jobs.
jajs_schd	ajslogd	Process for recording scheduler information
	jpqman ^{#2}	Job execution control manager process. Main process for the processing that is specific to job execution control, such as the reception of submit jobs.
	jpomanager	Event/action control manager process. This process manages event jobs.
	ajsmasterd	Scheduler. This process monitors all the processes of the scheduler service.
jajs_agtd	jpqmon	Job execution control. This process monitors all the processes of job execution control.
	jpoagent	Event/action control agent process. This process monitors and controls the monitoring processes other than jpomanager. jpoagent also controls monitoring processes on JP1/AJS3 - Manager.
ajsinetd	ajsmonsvr ^{#4}	Process activated when JP1/AJS3 - View is connected. This process has no detail process.
	ajsrmcdsvr	Process to be activated when a remote jobnet is executed, when a command is executed remotely, or when a JP1/AJS3 command is executed from JP1/AJS3 - View.
ajscdinetd ^{#1}	ajsmonsvr ^{#1, #5}	Process that processes requests from JP1/AJS3 - Software Development Kit or JP1/AJS3 - Web Console

Child process name	Detail process name	Description
ajsgwmasterd#2	ajsgwd#6	Scheduler service inter-communication control process. This process enables communication between jobnet connectors and their connection target jobnets when jobnet connectors are used to control the execution order of root jobnets between different scheduler services.
jpomanager#2	jpomgrsub#2	Event/action control submanager process
ajsmasterd	ajsschd#6	Schedule control process
	ajsschbd#6, #7	Generation management subprocess
	ajsflowd#6	Flow control process
	ajssubd#6	Job submit process
	ajssubwd#6	Job completion wait process
	jpqnyfyd#2	Process for reporting the job execution control status
	ajsremnetcl#6	Process for requesting the registration and the cancellation of registration of remote jobnets
	ajsreqd#6	Queueless job request process. A maximum of eight process instances start from ajsflowd.
jpqmon#2	ajsfld#6, #8	Flow control subprocess
	jpqagt#2	Agent process for job execution control This process activates jobs.
	jpqagtdmn#2	Job monitoring process activating process for job execution control Process for activating the job monitoring process Five processes are always activated. In a cluster system, five processes are activated for each logical host.
jpoagent#2	jpqagtchild#2	Job monitoring process for job execution control Process for monitoring job process execution Five processes are activated in the initial status. Also, one process is activated for each execution job. In a cluster system, five processes are activated for each logical host.
	jpoagsub#2	Event/action control subagent process. This process mainly notifies the manager of information from the monitoring process.
	jpocwtflMain#2	File monitoring process
	jpocwtmMain#2	Execution interval control process
	jpoeventwatch#2	Event (such as JP1 event or log trap) monitoring process
as_player	jpoevsearch#2	Event search process. This process starts to search for the specified event when a JP1 event reception monitoring job specified with a pre-execution event search is executed.
	jpocwtlmain#2	Mail monitoring communication process
as_player	ajsfxexec	Flexible job execution process
	ajsfxdst	Process for broadcast execution of flexible jobs

Child process name	Detail process name	Description
as_player	ajsfxbctl	Process that manages the destination agents for broadcast execution of flexible jobs

Note

When you execute a command, a process with the same name as the command is activated.

#1

In an environment in which JP1/AJS3 - Manager is installed as an upgrade installation and JP1/AJS3 - Software Development Kit is not used, this process is not started automatically by using the initial settings. If you want the process to be started automatically, you must edit the JP1/AJS3 startup process definition file (`jp1ajs_hstd.conf`).

For details, see *3.4.1 Setting up JP1/AJS3 - Manager* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for Windows) or *13.3.1 Setting up JP1/AJS3 - Manager* in the *JP1/Automatic Job Management System 3 Configuration Guide* (for UNIX).

#2

A process name for a logical host is indicated as *process-name logical-host-name*. For example, when the logical host name is `hostA`, the `ajsmasterd` process for `hostA` is `ajsmasterd hostA`.

#3

In the case of HP-UX, AIX, and Linux, the detailed process name is `jpqman32`.

#4

One process starts for the selected scheduler service when you select a scheduler service in the tree area in a JP1/AJS3 - View window.

The maximum number of processes that can start is *number-of-scheduler-services x number-of-connected-instances-of-JP1/AJS3 - View*.

#5

One process starts for the scheduler service that is referenced by JP1/AJS3 - Software Development Kit and JP1/AJS3 - Web Console.

The maximum number of processes that can start is *number-of-scheduler-services x (number-of-connected-instances-of-JP1/AJS3 - Software Development Kit + number-of-connected-instances-of-JP1/AJS3 - Web Console)*.

#6

You can differentiate between a process for a physical host and a process for a logical host. A process name for a logical host is indicated as *process-name_ logical-host-name*.

For example, when the logical host name is `hostA`, the `ajsschd` process for `hostA` is indicated as `ajsschd_hostA`.

#7

This process starts only when you specify the environment settings as described in *15.1.7 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

#8

This process starts only when you specify the environment settings as described in *15.1.8 Settings for using wait conditions* in the *JP1/Automatic Job Management System 3 Configuration Guide*.

(b) Compatible ISAM configuration

Table B-12 lists the parent and child processes. *Table B-13* lists the child and detail processes. A value in parentheses after a parent process name or a child process name in the tables indicates the number of processes that can start simultaneously.

Table B–12: Parent and child processes of JP1/AJS3 - Manager for UNIX

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spmc (1)#	JP1/AJS3 service	jajs_hstd (1)	Host service management
		jajs_agtd (1)	Agent service management
ajsqlagtd (1)	JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts execution requests for queueless jobs from JP1/AJS3 - Manager (scheduler service).	ajsqtagtd (<i>number-of-jobs-to-be-executed</i>)	Queueless job management process. This process executes queueless jobs. The process is generated by the JP1/AJS3 Queueless Agent service (queueless agent process) for each job to be executed. The parent process and the child process have the same name. The process disappears when execution of a queueless job ends. This process has no detail process. The process is required when you execute queueless jobs on a local host.
ajsqftpd (1)	JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process.	ajsqftpd (<i>number-of-file-transfer-requests</i>)	Queueless file transfer worker process. This process transfers data to a transfer file, the standard output file, and the standard error output file. The process is generated by the JP1/AJS3 Queueless File Transfer service (queueless file transfer process) for each file transfer request. The parent process and the child process have the same name. The process disappears when file transfer ends. This process has no detail process.
ajschkmand (1)	JP1/AJS3 Check Manager service The process controls definition pre-checks (manager process).	--	--
ajschkagtd (1)	JP1/AJS3 Check Agent service	ajschkagtd (5)	The process controls definition pre-checks (agent process).

Legend:

--: Not applicable.

#

When you specify a logical host name on the command line, you can differentiate between a process for a physical host and a process for a logical host.

A process name for a logical host is indicated as *process-name -h logical-host-name*.

For example, when the logical host name is `hostA`, the `jajs_spmc` process for `hostA` is `jajs_spmc -h hostA`.

Table B–13: Child and detail processes of JP1/AJS3 - Manager for UNIX

Child process name	Detail process name	Description
jajs_hstd	ajshlogd	Host-service-specific log management
	ajsinetd	Network control process that controls access from other servers

Child process name	Detail process name	Description
jajs_hstd	ajscdinetd	Network control process that controls access from JP1/AJS3 - Software Development Kit
	ajsnetwd	Communication control and management
	ajsovstatd	This process monitors JP1/AJS3 from HP NNM when HP NNM is linked. The process has no detail process.
	ajsgwmasterd	This process manages the scheduler service inter-communication control process when jobnet connectors are used to control the execution order of root jobnets between different scheduler services. The scheduler service inter-communication control process enables communication between jobnet connectors and the jobnets to which they connect.
	jpqman ^{#1}	Job execution control manager process. Main process for the processing that is specific to job execution control, such as the reception of submit jobs.
	jpomanager	Event/action control manager process. This process manages event jobs.
	ajsmasterd	Scheduler. This process monitors all the processes of the scheduler service.
jajs_agtd	jpqmon	Job execution control. This process monitors all the processes of job execution control.
	jpoagent	Event/action control agent process. This process monitors and controls the monitoring processes other than jpomanager. jpoagent also controls monitoring processes on JP1/AJS3 - Manager.
ajsinetd	ajsmoansvr ^{#2}	Process activated when JP1/AJS3 - View is connected. This process has no detail process.
	ajsrcmdsvr	Process activated when a remote jobnet is executed or a command is remotely executed
ajscdinetd	ajsmoansvr	Process that processes requests from JP1/AJS3 - Software Development Kit
ajsgwmasterd ^{#1}	ajsgwd ^{#3}	Scheduler service inter-communication control process. This process enables communication between jobnet connectors and the jobnet to which they connect when jobnet connectors are used to control the execution order of root jobnets between different scheduler services.
jpomanager ^{#1}	jpomgrsub ^{#1}	Event/action control submanager process
ajsmasterd	ajsslogd ^{#3}	Process for recording scheduler information
	ajsschd ^{#3}	Schedule control process
	ajsschbd ^{#3, #4}	Generation management subprocess
	ajssflowd ^{#3}	Flow control process
	ajssubd ^{#3}	Job submit process
	ajssubwd ^{#3}	Job completion wait process

Child process name	Detail process name	Description
ajsmasterd	jpqnfyfd ^{#1}	Process for reporting the job execution control status
	ajsremnetcl ^{#3}	Process for requesting the registration and the cancellation of registration of remote jobnets
	ajsreqd ^{#3}	Queueless job request process. A maximum of eight process instances start from ajsflowd.
jpqmon ^{#1}	jpqagt ^{#1}	Job execution control agent process. This process starts a job.
	jpqagtdmn ^{#1}	Process for starting the process that monitors the job execution control job. This process starts a job monitoring process. Five instances of this process are always active. In a cluster system, five processes are active on each logical host.
	jpqagtchild ^{#1}	Process for monitoring a job execution control job. This process monitors the execution of a job process. Initially, five instances of this process are active. In addition to these five instances, one instance starts for each executed job. In a cluster system, five instances are active on each logical host.
jpoagent ^{#1}	jpoagsub ^{#1}	Event/action control subagent process. This process mainly reports the information from monitoring processes to the manager.
	jpocwtflMain ^{#1}	File monitoring process
	jpocwtmMain ^{#1}	Execution interval control process
	jpoeventwatch ^{#1}	Event (such as JP1 events and log traps) monitoring process
	jpoevsearch ^{#1}	Event search process. This process starts and searches for events when the event reception monitoring job specified with pre-execution event search is executed.
	jpocwtlmain ^{#1}	Email monitoring communication process

Note

When you execute a command, a process with the command name starts.

#1

A process name for a logical host is indicated as *process-name logical-host-name*. For example, when the logical host name is hostA, the ajsmasterd process for hostA is ajsmasterd hostA.

#2

One process starts for the selected scheduler service when you select a scheduler service in the tree area in a JP1/AJS3 - View window.

The maximum number of processes that can start is *number-of-scheduler-services x number-of-connected-instances-of-JP1/AJS3 - View*.

#3

You can differentiate between a process for a physical host and a process for a logical host. A process name for a logical host is indicated as *process-name _logical-host-name*.

For example, when the logical host name is hostA, the ajsschd process for hostA is ajsschd _hostA.

This process starts only when you specify the environment settings as described in *15.1.7 Changing the mode in which unregistration or generation management deletes the generations of a jobnet in the JP1/Automatic Job Management System 3 Configuration Guide*.

(2) Processes of JP1/AJS3 - Agent for UNIX

There are three kinds of processes of JP1/AJS3 - Agent for UNIX:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail process

You can use the `jajs_spmd_status` command to check the status of the child processes of `jajs_spmd`. For details, see the description of `jajs_spmd_status` in *3. Commands Used for Normal Operations* in the manual *JP1/Automatic Job Management System 3 Command Reference*.

To check the status of parent, child and detail processes, use the `ps` command.

Table B-14 lists the parent and child processes. *Table B-15* lists the child and detail processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B–14: Parent and child processes of JP1/AJS3 - Agent for UNIX

Parent process (number of processes)	Description	Child process (number of processes)	Description
jajs_spmd (1)#	JP1/AJS3 service	jpoagent (1)	Event/action control agent process
		jqmon (1)	Job execution control This process monitors all processes for job execution control.
ajsqlagtd (1)	JP1/AJS3 Queueless Agent service (queueless agent process) JP1/AJS3 - Manager This process accepts queueless job execution requests from JP1/AJS3 - Manager (scheduler service).	ajsqlagtd (<i>number-of-jobs-to-be-executed</i>)	Queueless job management process This process executes queueless jobs. The same process names are generated from the JP1/AJS3 Queueless Agent service (queueless agent process) respectively for jobs to be executed. The process is removed on completion of queueless job execution. The process has no detail process.
ajschkagtd (1)	JP1/AJS3 Check Agent service	ajschkagtd (5)	This process controls the definition pre-check (agent process).
as_manager (1)	JP1/AJS3 Autonomous Agent service process	as_player (number of jobs to be executed + 1)	Flexible job execution process
as_iescsvr (1)	JP1/AJS3 Autonomous Agent Messenger service process	--	--

#

By specifying logical host names on the command line, you can differentiate between processes for physical hosts and for logical hosts.

A process for a logical host is represented as *process-name -h logical-host-name*. For example, when a logical host name is `hostA`, the `jajs_spm` process for `hostA` is represented as `jajs_spm -h hostA`.

Table B–15: Child and detail processes of JP1/AJS3 - Agent for UNIX

Child process name	Detail process name	Description
jpoagent [#]	jpoagtsub [#]	Event/action control subagent process This process mainly notifies the manager of information from the monitoring process.
	jpocwtflMain [#]	File monitoring process
	jpocwttmMain [#]	Execution interval control process
	jpocwtmlmain [#]	Mail monitoring communication process
	jpoeventwatch [#]	Event (such as JP1 event or log trap) monitoring process
	jpoevseach [#]	Event search process. This process starts to search for the specified event when a JP1 event reception monitoring job specified with a pre-execution event search is executed.
jppqmon [#]	jpqagt [#]	Agent process for job execution control This process activates jobs.
	jpqagtdmn [#]	Job monitoring process activating process for job execution control Process for activating the job monitoring process Five processes are always activated. In a cluster system, five processes are activated for each logical host.
	jpqagtchild [#]	Job monitoring process for job execution control Process for monitoring job process execution Five processes are activated in the initial status. Also, one process is activated for each execution job. In a cluster system, five processes are activated for each logical host.
as_player	ajsfxexec	Flexible job execution process
	ajsfxdstr	Process for broadcast execution of flexible jobs
	ajsfxbctl	Process that manages the destination agents for broadcast execution of flexible jobs

Note

When you execute a command, a process with the same name as the command is activated.

#

You can differentiate between processes for physical hosts and for logical hosts.

A process for a logical host is represented as *process-name logical-host-name*.

For example, when a logical host name is `hostA`, the `jpoagent` process for `hostA` is represented as `jpoagent hostA`.

(3) Processes of JP1/AJS3 - Web Console for Linux

There are two kinds of processes of JP1/AJS3 - Web Console for Linux:

- Parent process
A parent process consists of several child processes.
- Child process
A child process consists of several detail processes.
- Detail processes

To check the status of parent, child and detail processes, use the `ps` command.

Table B-16 lists the parent and child processes. The number following a parent or child process name indicates the maximum number of processes you can activate concurrently.

Table B-16: Parent and child processes of JP1/AJS3 Web Console for Linux

Parent process (number of processes)	Description	Child process (number of processes)	Description
httpsd(1)	JP1/AJS3 HTTP Server service	httpsd(5 to 150)	Web service process The number of processes varies according to the number processed of HTTP requests to JP1/AJS3 - Web Console.
		rotatelogs2(3) [#]	Log splitting utility for web services
cjstartsv (1)	JP1/AJS3 Web Application Server service	--	--

Note

When you execute a command, a process with the same name as the command is activated.

#

When JP1/AJS3 Web Console communicates with the client host in SSL, the number of processes is 4.

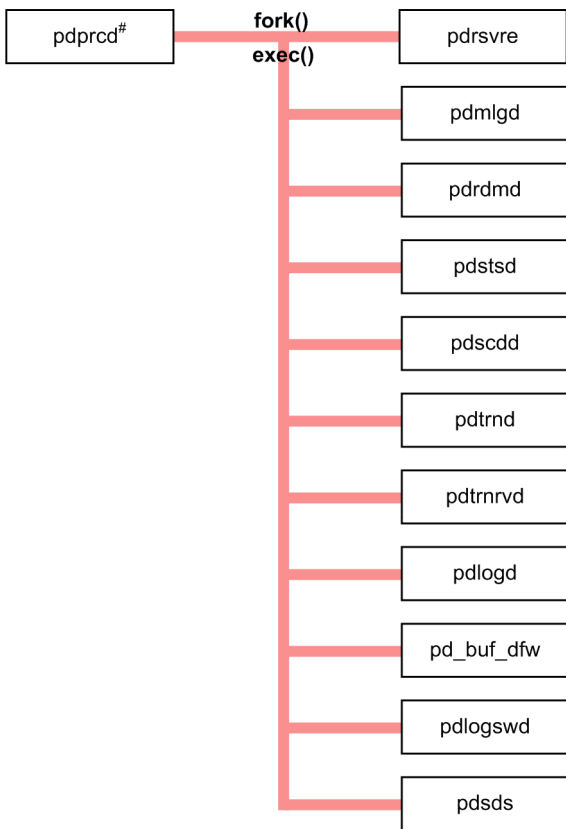
B.4 Embedded database processes

This appendix explains the embedded database processes generated when the embedded database is used as the scheduler database of JP1/AJS3 - Manager.

(1) Process configuration

The following figure shows the configuration of the embedded database processes generated when the embedded database is used as the scheduler database of JP1/AJS3 - Manager in UNIX. This figure is useful for monitoring processes because it shows the parent-child relationship of the processes of the entire embedded database.

Figure B–8: Configuration of embedded database processes in UNIX



Legend:

process-name : Process generated by the embedded database

Activated by the pdmgrd process.

(2) Processes in Windows

The following explains the embedded database processes in Windows.

The Windows version of the embedded database consists of the following two types of processes:

- Parent process
A parent process consists of at least one child process.
- Child process

The status of parent and child processes can be checked on the **Processes** page in the Task Manager window.

The following table lists the parent and child processes. In the table, the number in parentheses following a process name indicates the number of instances that are activated concurrently.

Table B–17: List of parent and child processes for the Windows version of the embedded database

Parent process (instances)	Explanation	Child process (instances)	Explanation
pdservice.exe (1)	JP1/AJS3 Database service process	pdprcd.exe (1)	Windows service control

Parent process (instances)	Explanation	Child process (instances)	Explanation
pdprcd.exe (1)	Process server process, which manages the processes related to the embedded database	pdrsvre.exe (3) ^{#1}	Cleanup process, which performs cleanup processing after an embedded database process has terminated abnormally
		pdmlgd.exe (1)	Message log server process, which controls message output
		pdrdmd.exe (1)	System manager process, which controls the starting and stopping of units and manages users who want to connect
		pdstds.exe (1)	Status server process, which controls input and output for the status file for units
		pdsdcd.exe (1)	Scheduler process, which assigns a transaction to the single server process
		pdtrnd.exe (1)	Transaction server process, which controls transactions
		pdtrnrvd.exe (1 to 128) ^{#2, #3}	Transaction restoration process, which controls committing and restoration of transactions
		pdlogd.exe (1)	Log server process, which controls the acquisition of system log data and log-related processes
		pd_buf_dfw.exe (1)	Deferred write process, which controls background writing to the database storage disk
		pdlogswd.exe (1)	Log swapper process, which allocates and de-allocates files related to the system log, manages input and output, and acquires synchronization point dumps
		pdsds.exe (16 to 128) ^{#3, #4}	Single server process, which processes the SQL
pdsha.exe (1) ^{#5}	JP1/AJS3 Database ClusterService service process	--	Embedded database service for clusters

#1

When the version of the embedded database is 07-03 or earlier, two instances of this process are activated.

#2

Initially, only one instance is activated. Thereafter, each time a pdsds.exe process terminates abnormally, the number of instances temporarily increases.

#3

If the value of the `pd_max_users` operand in the system common definition file (`pdsys`) is changed, the new value becomes the maximum number of instances that can be activated.

#4

Initially, 16 instances are activated. Thereafter, the number of activated instances can increase to a maximum of 128 in response to the number of access requests for the embedded database.

#5

This process is activated if the version of the embedded database is earlier than 10-00.

(3) Processes in UNIX

The following explains the embedded database processes in UNIX.

The UNIX version of the embedded database consists of the following two types of processes:

- Parent process
A parent process consists of at least one child process.
- Child process

The status of parent and child processes can be checked by using the `ps` command.

The following table lists the parent and child processes. In the table, the number in parentheses following a process name indicates the number of instances that are activated concurrently.

Table B–18: List of parent and child processes for the UNIX version of the embedded database

Parent process (instances)	Explanation	Child process (instances)	Explanation
pdmgrd (1)	Process server management process	pdprcd (1)	This process manages starting and stopping of the process server process.
pdprcd (1)	Process server process, which manages the processes related to the embedded database	pdsvre (3) ^{#1}	Cleanup process, which performs cleanup processing after an embedded database process has terminated abnormally
		pdmlgd (1)	Message log server process, which controls message output
		pdrdmd (1)	System manager process, which controls the starting and stopping of units and manages users who want to connect
		pdstd (1)	Status server process, which controls input and output for the status file for units
		pdscdd (1)	Scheduler process, which assigns a transaction to the single server process
		pdtrnd (1)	Transaction server process, which controls transactions
		pdtrnrvd (1 to 128) ^{#2, #3}	Transaction restoration process, which controls the

Parent process (instances)	Explanation	Child process (instances)	Explanation
pdprcd (1)	Process server process, which manages the processes related to the embedded database	pdtrnrvd (1 to 128) ^{#2, #3}	committing and restoration of transactions
		pdlogd (1)	Log server process, which controls the acquisition of system log data and log-related processes
		pd_buf_dfw (1)	Deferred write process, which controls background writing to the database storage disk
		pdlogswd (1)	Log swapper process, which allocates and deallocates files related to the system log, manages input and output, and acquires synchronization point dumps
		pdsds (16 to 128) ^{#3, #4}	Single server process, which processes the SQL

#1

When the version of the embedded database is 07-03 or earlier, two instances of this process are activated.

#2

Initially, only one instance is activated. Thereafter, each time a pdsds process terminates abnormally, the number of instances temporarily increases.

#3

If the value of the `pd_max_users` operand in the system common definition file (`pdsys`) is changed, the new value becomes the maximum number of instances that can be activated.

#4

Initially, 16 instances are activated. The number of activated instances can increase to a maximum of 128 in response to the number of access requests for the embedded database.

C. Log Information

This appendix describes the log information output by JP1/AJS3 and how that information is formatted.

C.1 Log entries output by the scheduler services

The following table lists the types of logs output to the scheduler information log files of JP1/AJS3.

Table C–1: Scheduler information log entries

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
A001	Scheduler service started	KAVS0200-I	00004100	ajsstart jajs_spmd	--	--
A002	Scheduler service terminated	KAVS0201-I	00004101	ajsstop jajs_spmd_s top	--	--
A003	Scheduler service process terminated abnormally	KAVS0204-E	00004130	--	--	--
A007	JP1/AJS3 - View connection	KAVS0534-I	None	--	Connecting to a scheduler service	--
A008	JP1/AJS3 - View disconnection ended	KAVS0535-I	None	--	Disconnecting from a scheduler service	--
A011	Scheduler information logging started	KAVS0220-I	None	jajs_spmd	--	--
A012	Scheduler information logging terminated	KAVS0221-I	None	jajs_spmd_s top	--	--
A013	Authentication denied	KAVS1009-W	None	--	Connecting to a scheduler service	login
A016	Connection rejected by manager connection source restriction	KAVS8040-E	None	--	--	--
A017	JP1/AJS3 - Web Console connection	KAVS0570-I	None	--	--	Connecting to a scheduler service
A018	JP1/AJS3 - Web Console disconnection ended	KAVS0571-I	None	--	--	Disconnecting from a scheduler service
N001	Jobnet started	KAVS0260-I	00004102	--	--	--
N002	Jobnet ended normally	KAVS0261-I	00004103	--	--	--
N003	Jobnet ended abnormally	KAVS0262-E	00004104	--	--	--
N004	Jobnet ended with warning	KAVS0268-W	00004108	--	--	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
N005	Jobnet on hold	KAVS0270-I	00004120	--	--	--
N006	Jobnet shut down	KAVS0272-E	00004131	--	--	--
N007		KAVS0273-E				
N008	Jobnet start delayed	KAVS0275-I	00004122	--	--	--
N009	Jobnet end delayed	KAVS0276-I	00004123	--	--	--
N010	Next schedule queuing	KAVS0277-I	00004124	--	--	--
N011	Jobnet start condition monitoring started	KAVS0240-I	00004140	--	--	--
N012	Jobnet start condition monitoring terminated	KAVS0241-I	00004141	--	--	--
N013	Jobnet skipped so not executed	KAVS0279-E	00004142	--	--	--
N014	All jobnet registrations canceled	KAVS0267-I	None	ajsstart -c jajs_spmd -cold	--	--
N015	Start condition monitoring waiting to terminate	KAVS1420-I	00004145	--	--	--
N016	Waiting in accordance with the jobnet wait condition started	KAVS4950-I	00004146	--	--	--
N017	Jobnet wait condition in effect	KAVS4955-I	00004147	--	--	--
N018	Waiting in accordance with the jobnet wait condition endless	KAVS4957-E	00004148	--	--	--
J001	Job started	KAVS0263-I	00004105	--	--	--
J002	Job ended normally	KAVS0264-I	00004106	--	--	--
J003	Job ended abnormally	KAVS0265-E	00004107	--	--	--
J004	Job ended with warning	KAVS0269-W	00004109	--	--	--
J005	Job on hold	KAVS0271-I	00004121	--	--	--
J006	Job submission started	KAVS0278-I	00004125	--	--	--
J007	Event job execution request started	KAVS0242-I	00004126	--	--	--
J008	Job end delayed	KAVS0248-I	00004127	--	--	--
J009	Job queuing canceled	KAVS0266-I	0000410A	--	--	--
J010	Waiting in accordance with the job wait condition started	KAVS4951-I	0000414A	--	--	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
J011	Job wait condition in effect	KAVS4956-I	0000414B	--	--	--
J012	Waiting in accordance with the job wait condition endless	KAVS4971-E	0000414C	--	--	--
J013	Waiting for the automatic retry interval started	KAVS4675-I	00004155	--	--	--
J014	Automatic retry execution started	KAVS4676-I	00004156	--	--	--
J015	Error that disables retry execution occurred during automatic retry	KAVS4677-E	00004157	--	--	--
J016	Job submission by automatic retry started	KAVS4678-I	00004158	--	--	--
C001	Scheduler service operation environment temporarily changed	None	None	ajsalter	--	--
C002	Scheduler service stopped	None	None	ajsstop	--	--
C003	Scheduler service started	None	None	ajsstart	--	--
C101	Jobnet registered	None	None	ajsentry	Register for Execution , or in the Daily Schedule or Monthly Schedule window, specifying a root jobnet and adding a jobnet by clicking Add	Register for execution Register an execution schedule for a specified root jobnet
C102	Registered jobnet canceled	None	None	ajsleave	Cancel Registration used	Cancel registration
C103	Jobnet temporarily changed	None	None	ajsplan	Change Plan , Change Hold Attribute , Change Delay Monitor , Change Priority , or in the Daily Schedule or Monthly Schedule window, specifying a	Change plan, Change hold attribute, Change delay monitor Change the execution schedule for a specified jobnet

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
C103	Jobnet temporarily changed	None	None	ajsplan	nested jobnet and adding a jobnet by clicking Add	Change plan, Change hold attribute, Change delay monitor Change the execution schedule for a specified jobnet
C104	Jobnet execution interrupted	None	None	ajsintrpt	Interrupt	Interrupt
C105	Jobnet rerun	None	None	ajsrerun	Rerun	Rerun
C106	Jobnet suspended/ released from suspension	None	None	ajssuspend	Suspension	--
C107	Jobnet registration for execution information imported	None	None	ajsgimport	--	--
C108	Jobnet registered by import of jobnet registration for execution information	None	None	ajsgimport	--	--
C201	Jobnet/job forcibly ended	None	None	ajskill	Kill	Kill
C202	Job status changed	None	None	ajschgstat	Change Job Status	Change job status
C301	Unit definitions changed	None	None	ajschange ajschgjob ajschgnet	Changing a definition	Changing a definition
C302	Unit deleted	None	None	ajsdelete	Delete	--
C303	Unit restored	None	None	ajsrestore	Restore	--
C304	Unit created	None	None	ajsdefine	New	--
C305	Unit copied or moved	None	None	ajscopy	Paste	--
C306	Unit imported	None	None	ajsimport	--	--
C307	Jobnet released	None	None	ajsrelease - a or ajsrelease - c	Release Entry, Release Cancel	--
C401	Calendar changed	None	None	ajscalendar	Changing a calendar	--
C502	Unit status displayed	None	None	ajsshow	--	--
C503	Unit definitions output	None	None	ajsprint	--	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
C504	Unit definitions backed up	None	None	ajsbackup	Backup	--
C506	Root jobnet schedule information output	None	None	ajsschedule	--	--
C507	Unit name output	None	None	ajsname	--	--
C508	Unit definitions exported	None	None	ajsexport	Package	--
C509	Unit status displayed (abnormal end)	None	None	ajsshow	--	--
C510	Unit definitions output (abnormal end)	None	None	ajsprint	--	--
C511	Unit definitions backed up (abnormal end)	None	None	ajsbackup	Backup	--
C512	Unit name output (abnormal end)	None	None	ajsname	--	--
C513	Jobnet registration for execution information exported	None	None	ajsrgexport	--	--
C514	Jobnet information output by export of jobnet registration for execution information	None	None	ajsrgexport	--	--
C515	Jobnet release information referenced	None	None	ajsrelease -i	--	--
C516	Calendar calculation	None	None	ajscalutil	--	--
I001	Command processing started	None	None	ajsalter ajscalutil ajsimport ajsname ajsprint ajsschedule ajsshow ajsstart ajsstop	--	--
				ajsbackup	Backup	--
				ajscalendar	Changing a calendar	--
				ajschange ajschgjob ajschgnet	Changing a definition	Changing a definition
				ajschgstat	Change Job Status	Change job status
				ajscopy	Paste	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
I001	Command processing started	None	None	ajsdefine	New	--
				ajsdelete	Delete	--
				ajsentry	Register for Execution , or in the Daily Schedule or Monthly Schedule window, specifying a root jobnet and adding a jobnet by clicking Add	Register for execution Register an execution schedule for a specified root jobnet
				ajsexport	Package	--
				ajsintrpt	Interrupt	Interrupt
				ajskill	Kill	Kill
				ajsleave	Cancel Registration	Cancel registration
				ajsplan	Change Plan , Change Hold Attribute , Change Delay Monitor , or Change Priority , or in the Daily Schedule or Monthly Schedule window, specifying a nested jobnet and adding a jobnet by clicking Add	Change plan, Change hold attribute, Change delay monitor Change the execution schedul for a specified jobnet
				ajsrelease	Release Entry , Release Cancel , or viewing release information (by selecting the jobnet related to the release in the list area)	--
				ajsrerun	Rerun	Rerun
ajsrestore	Restore	--				
ajsgexport	--	--				
ajsgimport	--	--				

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	Operation from JP1/AJS3 - Web Console (or API executed)
I001	Command processing started	None	None	ajssuspend	Suspension	--
I002	Command-to-scheduler service processing request started	None	None	ajschgstat	Change Job Status	Change job status
				ajsentry	Register for Execution , or in the Daily Schedule or Monthly Schedule window, specifying a root jobnet and adding a jobnet by clicking Add	Register for execution Register an execution schedule for a specified root jobnet
				ajsintrpt	Interrupt	Interrupt
				ajskill	Kill	Kill
				ajsleave	Cancel Registration	Cancel registration
				ajsplan	Change Plan , Change Hold Attribute , Change Delay Monitor , or Change Priority , or in the Daily Schedule or Monthly Schedule window, specifying a nested jobnet and adding a jobnet by clicking Add	Change plan, Change hold attribute, Change delay monitor Change the execution schedule for a specified jobnet
				ajsrerun	Rerun	Rerun
ajssuspend	Suspension	--				

Legend:

--: Not applicable.

The formats and the items output are described below for each log entry. A Δ in the format of a log entry indicates a one-byte space.

(1) Formats common to all log entries

The formats described below are common to all entries in the scheduler service logs.

You can select whether to include a process ID in the log information as follows.

Make the selection by using the `jajs_config` command to set the `LOGHEADER` or `HOSTLOGHEADER` environment setting parameter. If you do not want to include a process ID, specify `none`. If you want to include a process ID, specify `PID`.

For details about these environment setting parameters, see 20.4.2(70) `LOGHEADER` and 20.3.2(13) `HOSTLOGHEADER` in the *JP1/Automatic Job Management System 3 Configuration Guide*.

Table C–2: Log entry formats with and without a process ID

Process ID setting	Log entry format
If you do not want to include a process ID, specify <code>none</code> in the <code>LOGHEADER</code> or <code>HOSTLOGHEADER</code> environment setting parameter.	<code>log-numberΔdateΔtimeΔadditional-informationΔ</code>
To include a process ID, specify <code>PID</code> in the <code>LOGHEADER</code> or <code>HOSTLOGHEADER</code> environment setting parameter.	<code>log-numberΔdateΔtimeΔ[process-ID]Δadditional-informationΔ</code>

The following table provides the details about each item in the formats.

Table C–3: Format items common to the entries in the scheduler information logs

Item	Description	Length (bytes)
<code>log-type</code>	A log type (for example, <code>A001</code>) is output.	4
<code>date</code>	The date that the entry was output to the log. The month and the day are delimited by either one or two one-byte space characters. Examples: - December 1: <code>DecΔ Δ1</code> or <code>DecΔ01#</code> - December 10: <code>DecΔ10</code> If <code>yes</code> is specified in the <code>AJSLOGOUTPUTYEAR</code> or <code>HOSTLOGOUTPUTYEAR</code> environment setting parameter, the date is expressed in <code>YYYY/MM/DD</code> format. Example: December 7, 2009: <code>2009/12/07</code>	6 or 11
<code>time</code>	The time that the entry was output to the log. Hours, minutes, and seconds are delimited by one-byte colons (:). A single-digit is prefixed with 0. Example: Five minutes and 0 seconds after 11 p.m.: <code>23:05:00</code>	8
<code>[process-ID]</code>	The process ID of a command or a scheduler service. A process ID is included if <code>PID</code> is specified in the <code>LOGHEADER</code> or <code>HOSTLOGHEADER</code> environment setting parameter. A process ID is not included if <code>none</code> is specified in the <code>LOGHEADER</code> or <code>HOSTLOGHEADER</code> environment setting parameter. The value enclosed in square brackets is the process ID.	0 or 3 to 12
<code>additional-information</code>	Detailed log information.	The limit on length varies according to the log entry.

#

Whether the month and the day are separated by one space or two spaces depends on the character string generated by the `ctime()` function of the OS.

Cautionary notes

- Each entry in the scheduler information log consists of one record and the length of one record is 2,048 bytes (includes two bytes for a linefeed). Therefore, if the length of the log information exceeds 2,048 bytes, only 2,048 bytes are output. The 2,049th subsequent bytes are not output.
- When you perform an operation in JP1/AJS3 - View, multiple entries in the scheduler information log might be created for that one operation. For example, if you create a unit, the DEFINE (C304) and CHANGE (C301) log entries are output.
- If you perform the operations described below in JP1/AJS3 - View, the CHANGE (C301) log entry is output. In this case, the difference between the previous definition and the new definition is not output to the log, and only spaces (Δ) are output.
 - You define a job by using a program other than JP1/AJS3 - View, you open the job in the Define Details dialog box, but change no settings, and then you click the **OK** button.
 - You open the Schedule Settings dialog box for a jobnet, but change no settings, and then you click the **OK** button.
- If you perform the operations described below in JP1/AJS3 - Web Console, the CHANGE (C301) log entry is output. In this case, the difference between the previous definition and the new definition is not output to the log, and only spaces (Δ) are output.
 - You define a job by using a program other than JP1/AJS3 - Web Console, you open the job in the Define Details dialog box, but change no settings, and then you click the **OK** button.

(2) Formats of the Scheduler Service Started log entry

The following are the formats of the Scheduler Service Started log entry.

When no process ID is to be included in the log information:

A001ΔdateΔtimeΔKAVS0200-IΔscheduler-service-name

When a process ID is to be included in the log information:

A001ΔdateΔtimeΔ[process-ID]ΔKAVS0200-IΔscheduler-service-name

Example of a log entry:

A001 Dec 15 10:40:43 KAVS0200-I AJSROOT1

The following table describes the item that is specific to these formats.

Table C-4: Item specific to the Scheduler Service Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30

(3) Formats of the Scheduler Service Terminated log entry

The following are the formats of the Scheduler Service Terminated log entry.

When no process ID is to be included in the log information:

A002ΔdateΔtimeΔKAVS0201-IΔscheduler-service-name

When a process ID is to be included in the log information:

A002ΔdateΔtimeΔ[process-ID]ΔKAVS0201-IΔscheduler-service-name

Example of a log entry:

```
A002 Dec 12 09:14:22 KAVS0201-I AJSROOT1
```

The following table describes the item that is specific to these formats.

Table C–5: Item specific to the Scheduler Service Terminated log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30

(4) Formats of the Scheduler Service Process Terminated Abnormally log entry

The following are the formats of the Scheduler Service Process Terminated Abnormally log entry.

When no process ID is to be included in the log information:

```
A003ΔdateΔtimeΔKAVS0204-EΔscheduler-service-nameΔprocess-nameΔreturn-code
```

When a process ID is to be included in the log information:

```
A003ΔdateΔtimeΔ[process-ID]ΔKAVS0204-EΔscheduler-service-nameΔprocess-nameΔreturn-code
```

Example of a log entry:

```
A003 Dec 12 09:14:22 KAVS0204-E AJSROOT1 ajsschd 4
```

The following table describes the items that are specific to these formats.

Table C–6: Items specific to the Scheduler Service Process Terminated Abnormally log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>process-name</i>	One of the following is output: - ajssflowd - ajsschd - ajsslogd	1 to 30
<i>return-code</i>	A return code is recorded.	1 to 10

(5) Formats of the JP1/AJS3 - View Connection log entry

The following are the formats of a JP1/AJS3 - View Connection log entry.

When no process ID is to be included in the log information:

```
A007ΔdateΔtimeΔKAVS0534-IΔhost-nameΔ;CONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-address, requesting-source-identification]Δscheduler-service-name
```

When a process ID is to be included in the log information:

```
A007ΔdateΔtimeΔ[process-ID]ΔKAVS0534-IΔhost-nameΔ;CONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-address, requesting-source-identification]Δscheduler-service-name
```

Logging conditions:

A log entry is output only if `all` is specified in the `MONLOG` environment setting parameter. Logging begins when:

- You log in to JP1/AJS3 - Manager from JP1/AJS3 - View.

- You select a scheduler service in the tree area in a JP1/AJS3 - View window.
- JP1/AJS3 - View is automatically reconnected to JP1/AJS3 - Manager.

Example of a log entry:

```
A007 Aug 05 17:14:01 KAVS0534-I hostA ;CONNECT jpladmin [ADMIN]
[10.210.38.11,JP1/AJS2-View] AJSROOT1
```

The following table describes the items that are specific to these formats.

Table C–7: Items specific to the JP1/AJS3 - View Connection log entry (scheduler information log)

Item	Description	Length (bytes)
<i>host-name</i>	The host name of the host that was connected is output.	1 to 255
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host requested to perform the operation is output.	7 to 15
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. (JP1/AJS2-View)	13
<i>scheduler-service-name</i>	The name of the scheduler service connected from JP1/AJS3 - View is output.	1 to 30

(6) Formats of the JP1/AJS3 - View Disconnection log entry

The following are the formats of the JP1/AJS3 - View Disconnection log entry.

When no process ID is to be included in the log information:

```
A008ΔdateΔtimeΔKAVS0535-IΔhost-nameΔ;DISCONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-
address, requesting-source-identification] Δscheduler-service-name
```

When a process ID is to be included in the log information:

```
A008ΔdateΔtimeΔ[process-ID]ΔKAVS0535-IΔhost-nameΔ;DISCONNECTΔuser-nameΔ[user-
type]Δ[requesting-host-IP-address, requesting-source-identification] Δscheduler-service-name
```

Logging conditions:

A log entry is output only if all is specified in the MONLOG environment setting parameter. Logging begins when:

- You exit JP1/AJS3 - View (log out from JP1/AJS3 - Manager).
- You are unable to connect from JP1/AJS3 - View and the ajsmonsvr process terminates.
- The length of time specified in the SESSIONTIMEOUT environment setting parameter has passed since communication with JP1/AJS3 - View was disconnected.

Example of a log entry:

```
A008 Dec 15 17:14:01 KAVS0535-I hostA ;DISCONNECT jpladmin [ADMIN]
[10.210.38.11,JP1/AJS2-View] AJSROOT1
```

The following table describes the items that are specific to these formats.

Table C–8: Items specific to the JP1/AJS3 - View Disconnection log entry (scheduler information log)

Item	Description	Length (bytes)
<i>host-name</i>	The host name of the host that was disconnected is output.	1 to 255
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The information for identifying the source requesting the operation is output.	7 to 15
<i>requesting-source-identification</i>	The name of the product used to perform the operation is output (JP1/AJS2-View).	13
<i>scheduler-service-name</i>	The name of the scheduler service that was disconnected is output.	1 to 30

(7) Formats of the Scheduler Information Logging Started log entry

The following are the formats of the Scheduler Information Logging Started log entry.

When no process ID is to be included in the log information:

```
A011ΔdateΔtimeΔKAVS0220-I
```

When a process ID is to be included in the log information:

```
A011ΔdateΔtimeΔ[process-ID]ΔKAVS0220-I
```

Logging conditions:

An entry is output to the log only if `a11` is specified in the LOGDLOG and HLOGDLOG environment setting parameter.

Example of a log entry:

```
A011 Dec 15 10:51:18 KAVS0220-I
```

(8) Formats of the Scheduler Information Logging Terminated log entry

The following are the formats of the Scheduler Information Logging Terminated log entry.

When no process ID is to be included in the log information:

```
A012ΔdateΔtimeΔKAVS0221-I
```

When a process ID is to be included in the log information:

```
A012ΔdateΔtimeΔ[process-ID]ΔKAVS0221-I
```

Logging conditions:

An entry is output to the log only if `a11` is specified in the LOGDLOG and HLOGDLOG environment setting parameter.

Example of a log entry:

```
A012 Dec 15 10:51:18 KAVS0221-I
```

(9) Formats of the Authentication (Login or User Mapping) Denied log entry

The following are the formats of the Authentication (Login or User Mapping) Denied log entry.

When no process ID is to be included in the log information:

```
A013ΔdateΔtimeΔKAVS1009-WΔrequesting-host-IP-addressΔuser-nameΔhost-name
```

When a process ID is to be included in the log information:

```
A013ΔdateΔtimeΔ[process-ID]ΔKAVS1009-WΔrequesting-host-IP-addressΔuser-nameΔhost-name
```

Logging conditions:

An entry is output to the log only if `all` is specified in the `AUTHLOG` environment setting parameter.

Logging for each host is output to the scheduler information log, and begins when user authentication or user mapping on JP1/Base fails during a connection with one of the following clients:

- JP1/AJS3 - View
- JP1/AJS3 - Web Console
- JP1/AJS3 - Definition Assistant
- JP1/AJS3 - Manager (when a command is executed remotely or a remote jobnet is executed)

Example of a log entry:

```
A013 Dec 15 17:14:01 KAVS1009-W 10.210.38.11 jpladmin hostA
```

The following table describes the items that are specific to these formats.

Table C–9: Items specific to an Authentication (Login or User Mapping) Denied log entry (scheduler information log)

Item	Description	Length (bytes)
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output.	7 to 15
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>host-name</i>	The host name of the host that accepted the request is output.	1 to 255

(10) Formats of the Connection Rejected by Manager Connection Source Restriction log entry

The following are the formats of the Connection Rejected by Manager Connection Source Restriction log entry:

When no process ID is to be included in the log information:

```
A016ΔdateΔtimeΔKAVS8040-EΔrequesting-host-IP-addressΔuser-nameΔhost-name
```

When a process ID is to be included in the log information:

```
A016ΔdateΔtimeΔ[process-ID]ΔKAVS8040-EΔrequesting-host-IP-addressΔuser-nameΔhost-name
```

Logging conditions:

A log entry is output only if `all` is specified in the `CONRESTRICTLOG` environment setting parameter.

This log entry is output to the scheduler log for each host when a connection is rejected because restricting of connection sources is in effect for the manager.

Example of a log entry:

```
A016 Feb 28 17:14:01 KAVS8040-E 10.210.38.11 jpladmin hostA
```

The following table describes the items that are specific to these formats.

Table C–10: Items specific to the Connection Rejected by Manager Connection Source Restriction log entry (scheduler information log)

Item	Description	Length (bytes)
<i>requesting-host-IP-address</i>	The IP address of the host that requested the operation is output.	3 to 39
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>host-name</i>	The name of the host that received the request is output.	1 to 255

(11) Formats of the JP1/AJS3 - Web Console Connection log entry

The following are the formats of a JP1/AJS3 - Web Console Connection log entry.

When no process ID is to be included in the log information:

```
A017ΔdateΔtimeΔKAVS0570-IΔhost-nameΔ;CONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-address, requesting-source-identification]Δscheduler-service-name
```

When a process ID is to be included in the log information:

```
A017ΔdateΔtimeΔ[process-ID]ΔKAVS0570-IΔhost-nameΔ;CONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-address, requesting-source-identification]Δscheduler-service-name
```

Logging conditions:

A log entry is output only if `all` is specified in the `MONLOG` environment setting parameter. Logging begins when:

- You log in to JP1/AJS3 - Manager from the Web GUI of JP1/AJS3 - Web Console.
- You select a scheduler service in the tree area in the Web GUI of JP1/AJS3 - Web Console.
- JP1/AJS3 - Web Console is automatically reconnected to JP1/AJS3 - Manager.
- You execute an API of the JP1/AJS3 - Web Console.

Example of a log entry:

```
A017 Aug 05 17:14:01 KAVS0570-I hostA ;CONNECT jpladmin [ADMIN]
[10.210.38.11, JP1/AJS3-WEB] AJSROOT1
```

The following table describes the items that are specific to these formats.

Table C–11: Items specific to the JP1/AJS3 - Web Console Connection log entry (scheduler information log)

Item	Description	Length (bytes)
<i>host-name</i>	The host name of the host that was connected is output.	1 to 255
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host requested to perform the operation is output.	3 to 39

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. (JP1/AJS3-WEB)	11
<i>scheduler-service-name</i>	The name of the scheduler service connected from JP1/AJS3 - View is output.	1 to 30

(12) Formats of the JP1/AJS3 - Web Console Disconnection log entry

The following are the formats of the JP1/AJS3 - Web Console Disconnection log entry.

When no process ID is to be included in the log information:

```
A018ΔdateΔtimeΔKAVS0571-IΔhost-nameΔ;DISCONNECTΔuser-nameΔ[user-type]Δ[requesting-host-IP-address, requesting-source-identification] Δscheduler-service-name
```

When a process ID is to be included in the log information:

```
A018ΔdateΔtimeΔ[process-ID] ΔKAVS0571-IΔhost-nameΔ;DISCONNECTΔuser-nameΔ[user-type] Δ[requesting-host-IP-address, requesting-source-identification] Δscheduler-service-name
```

Logging conditions:

A log entry is output only if `all` is specified in the `MONLOG` environment setting parameter. Logging begins when:

- You exit JP1/AJS3 - Web Console (log out from JP1/AJS3 - Manager).
- You are unable to connect from JP1/AJS3 - Web Console and the `ajsmonsvr` process terminates.
- The length of time specified in the `CDESSIONTIMEOUT` environment setting parameter has passed since communication with JP1/AJS3 - Web Console was disconnected.
- A log entry is output if the `ajscdinetd` process stops during connection to JP1/AJS3 - Web Console.

Example of a log entry:

```
A018 Dec 15 17:14:01 KAVS0571-I hostA ;DISCONNECT jpladmin [ADMIN]
[10.210.38.11,JP1/AJS3-WEB] AJSROOT1
```

The following table describes the items that are specific to these formats.

Table C–12: Items specific to the JP1/AJS3 - Web Console Disconnection log entry (scheduler information log)

Item	Description	Length (bytes)
<i>host-name</i>	The host name of the host that was disconnected is output.	1 to 255
<i>user-name</i>	The name of the JP1 user who performed the operation is output.	0 to 20
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN a user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The information for identifying the source requesting the operation is output.	3 to 39
<i>requesting-source-identification</i>	The name of the product used to perform the operation is output (JP1/AJS3-WEB).	11
<i>scheduler-service-name</i>	The name of the scheduler service that was disconnected is output.	1 to 30

(13) Formats of the Jobnet Started log entry

The following are the formats of the Jobnet Started log entry.

When no process ID is to be included in the log information:

```
N001ΔdateΔtimeΔKAVS0260-IΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N001ΔdateΔtimeΔ[process-ID]ΔKAVS0260-IΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N001 Dec 15 17:14:01 KAVS0260-I AJSROOT1:/group/net1:@A100
```

The following table describes the items that are specific to these formats.

Table C–13: Items specific to a Jobnet Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector that started is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector that started is output in <code>@alphanumeric-character</code> format.	1 to 10

(14) Formats of the Jobnet Ended Normally log entry

The following are the formats of the Jobnet Ended Normally log entry.

When no process ID is to be included in the log information:

```
N002ΔdateΔtimeΔKAVS0261-IΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N002ΔdateΔtimeΔ[process-ID]ΔKAVS0261-IΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N002 Dec 15 17:14:44 KAVS0261-I AJSROOT1:/group/net1:@A100
```

The following table describes the items that are specific to these formats.

Table C–14: Items specific to the Jobnet Ended Normally log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector that ended is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector that ended is output in <code>@alphanumeric-character</code> format.	1 to 10

(15) Formats of the Jobnet Ended Abnormally log entry

The following are the formats of the Jobnet Ended Abnormally log entry.

When no process ID is to be included in the log information:

```
N003ΔdateΔtimeΔKAVS0262-EΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N003ΔdateΔtimeΔ[process-ID]ΔKAVS0262-EΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N003 Dec 01 14:05:46 KAVS0262-E AJSROOT1:/net1/nestnet1:@A111
```

The following table describes the items that are specific to these formats.

Table C–15: Items specific to the Jobnet Ended Abnormally log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector that ended abnormally is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector that ended abnormally is output in <i>@alphanumeric-character</i> format.	1 to 10

(16) Formats of the Jobnet Ended with Warning log entry

The following are the formats of the Jobnet Ended with Warning log entry.

When no process ID is to be included in the log information:

```
N004ΔdateΔtimeΔKAVS0268-WΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N004ΔdateΔtimeΔ[process-ID]ΔKAVS0268-WΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N004 Dec 01 14:05:46 KAVS0268-W AJSROOT1:/net1/nestnet1:@A111
```

The following table describes the items that are specific to these formats.

Table C–16: Items specific to the Jobnet Ended with Warning log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector that ended with a warning is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector that ended with a warning is output in <i>@alphanumeric-character</i> format.	1 to 10

(17) Formats of the Jobnet on Hold log entry

The following are the formats of the Jobnet on Hold log entry.

When no process ID is to be included in the log information:

```
N005ΔdateΔtimeΔKAVS0270-IΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N005ΔdateΔtimeΔ[process-ID]ΔKAVS0270-IΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N005 Dec 01 14:05:46 KAVS0270-I AJSROOT1:/net1/nestnet1:@A111
```

The following table describes the items that are specific to these formats.

Table C–17: Items specific to the Jobnet on Hold log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet on hold is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet on hold is output in @ <i>alphanumeric-character</i> format.	1 to 10

(18) Formats of the Jobnet Shut Down log entry (N006)

The following are the formats of the Jobnet Shut Down log entry (N006).

When no process ID is to be included in the log information:

```
N006ΔdateΔtimeΔKAVS0272-EΔscheduler-service-name:jobnet-name:execution-ID#Δmaintenance-information
```

When a process ID is to be included in the log information:

```
N006ΔdateΔtimeΔ[process-ID]ΔKAVS0272-EΔscheduler-service-name:jobnet-name:execution-ID#Δmaintenance-information
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N006 Dec 15 09:31:39 KAVS0272-E AJSROOT1:/net1:@A100 082b4be5
```

The following table describes the items that are specific to these formats.

Table C–18: Items specific to the Jobnet Shut Down log entry (N006) (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the shut-down jobnet is output.	1 to 930
<i>execution-ID</i>	The execution ID of the shut-down jobnet is output in @ <i>alphanumeric-character</i> format.	1 to 10

Item	Description	Length (bytes)
<i>maintenance-information</i>	Maintenance information is output.	8

(19) Formats of the Jobnet Shut Down log entry (N007)

The following are the formats of the Jobnet Shut Down log entry (N007).

When no process ID is to be included in the log information:

```
N007ΔdateΔtimeΔKAVS0273-EΔscheduler-service-name:jobnet-name:execution-ID#Δmaintenance-information
```

When a process ID is to be included in the log information:

```
N007ΔdateΔtimeΔ[process-ID]ΔKAVS0273-EΔscheduler-service-name:jobnet-name:execution-ID#Δmaintenance-information
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N007 Dec 15 09:31:39 KAVS0273-E AJSROOT1:/net1:@A100 082b4be5
```

The following table describes the items that are specific to these formats.

Table C–19: Items specific to the Jobnet Shut Down log entry (N007) (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the shut-down jobnet is output.	1 to 930
<i>execution-ID</i>	The execution ID of the shut-down jobnet is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>maintenance-information</i>	Maintenance information is output.	8

(20) Formats of the Jobnet Start Delayed log entry

The following are the formats of the Jobnet Start Delayed log entry.

When no process ID is to be included in the log information:

```
N008ΔdateΔtimeΔKAVS0275-IΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N008ΔdateΔtimeΔ[process-ID]ΔKAVS0275-IΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N008 Dec 01 16:36:37 KAVS0275-I AJSROOT1:/group/net1:@A106
```

The following table describes the items that are specific to these formats.

Table C–20: Items specific to the Jobnet Start Delayed log entry(scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet whose startup was delayed is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet whose startup was delayed is output in @ <i>alphanumeric-character</i> format.	1 to 10

(21) Formats of the Jobnet End Delayed log entry

The following are the formats of the Jobnet End Delayed log entry.

When no process ID is to be included in the log information:

`N009ΔdateΔtimeΔKAVS0276-IΔscheduler-service-name:jobnet-name:execution-ID#`

When a process ID is to be included in the log information:

`N009ΔdateΔtimeΔ[process-ID]ΔKAVS0276-IΔscheduler-service-name:jobnet-name:execution-ID#`

#

: *execution-ID* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

`N009 Dec 01 16:36:37 KAVS0276-I AJSROOT1:/group/net1:@A106`

The following table describes the items that are specific to these formats.

Table C–21: Items specific to the Jobnet End Delayed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet whose end was delayed is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet whose end was delayed is output in @ <i>alphanumeric-character</i> format.	1 to 10

(22) Formats of the Next Schedule Queuing log entry

The following are the formats of the Next Schedule Queuing log entry.

When no process ID is to be included in the log information:

`N010ΔdateΔtimeΔKAVS0277-IΔscheduler-service-name:jobnet-name:execution-ID#`

When a process ID is to be included in the log information:

`N010ΔdateΔtimeΔ[process-ID]ΔKAVS0277-IΔscheduler-service-name:jobnet-name:execution-ID#`

#

: *execution-ID* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

`N010 Dec 01 16:39:37 KAVS0277-I AJSROOT1:/group/net1:@A108`

The following table describes the items that are specific to these formats.

Table C–22: Items specific to the Next Schedule Queuing log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The applicable jobnet name is output.	1 to 930
<i>execution-ID</i>	The applicable execution ID is output in @ <i>alphanumeric-character</i> format.	1 to 10

(23) Formats of the Jobnet Start Condition Monitoring Started log entry

The following are the formats of the Jobnet Start Condition Monitoring Started log entry.

When no process ID is to be included in the log information:

`N011ΔdateΔtimeΔKAVS0240-IΔscheduler-service-name:jobnet-name:execution-ID#`

When a process ID is to be included in the log information:

`N011ΔdateΔtimeΔ[process-ID]ΔKAVS0240-IΔscheduler-service-name:jobnet-name:execution-ID#`

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

`N011 Dec 15 10:43:09 KAVS0240-I AJSROOT1:/group/net1:@A101`

The following table describes the items that are specific to these formats.

Table C–23: Items specific to the Jobnet Start Condition Monitoring Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet for which start condition monitoring started is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet for which start condition monitoring started is output in @ <i>alphanumeric-character</i> format.	1 to 10

(24) Formats of the Jobnet Start Condition Monitoring Terminated log entry

The following are the formats of the Jobnet Start Condition Monitoring Terminated log entry.

When no process ID is to be included in the log information:

`N012ΔdateΔtimeΔKAVS0241-IΔscheduler-service-name:jobnet-name:execution-ID#Δend-status`

When a process ID is to be included in the log information:

`N012ΔdateΔtimeΔ[process-ID]ΔKAVS0241-IΔscheduler-service-name:jobnet-name:execution-ID#Δend-status`

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
N012 Dec 01 16:36:38 KAVS0241-I AJSROOT1:/group/net1:@A101 u
```

The following table describes the items that are specific to these formats.

Table C–24: Items specific to the Jobnet Start Condition Monitoring Terminated log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet for which start condition monitoring terminated is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet for which start condition monitoring terminated is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>end-status</i>	One of the following is output: u:Unmonitored + Ended c:Monitor terminated i:Interrupted monitoring n:Monitor-end normal	1

(25) Formats of the Jobnet Skipped So Not Executed log entry

The following are the formats of the Jobnet Skipped So Not Executed log entry.

When no process ID is to be included in the log information:

```
N013ΔdateΔtimeΔKAVS0279-EΔscheduler-service-name:jobnet-name:execution-ID#
```

When a process ID is to be included in the log information:

```
N013ΔdateΔtimeΔ[process-ID]ΔKAVS0279-EΔscheduler-service-name:jobnet-name:execution-ID#
```

#

: *execution-ID* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
N013 Dec 01 16:36:38 KAVS0279-E AJSROOT1:/group/net1:@A101
```

The following table describes the items that are specific to these formats.

Table C–25: Items specific to the Jobnet Skipped So Not Executed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of root jobnet name of the jobnet whose status became <code>Skipped so not exe.</code> is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet whose status became <code>Skipped so not exe.</code> is output in <i>@alphanumeric-character</i> format.	1 to 10

(26) Formats of the All Jobnet Registrations Canceled log entry

The following are the formats of the All Jobnet Registrations Canceled log entry.

When no process ID is to be included in the log information:

N014ΔdateΔtimeΔKAVS0267-IΔscheduler-service-name

When a process ID is to be included in the log information:

N014ΔdateΔtimeΔ[process-ID] ΔKAVS0267-IΔscheduler-service-name

Example of a log entry:

N014 Dec 01 16:36:38 KAVS0267-I AJSROOT1

The following table describes the item that is specific to these formats.

Table C–26: Item specific to the All Jobnet Registrations Canceled log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30

(27) Formats of the Start Condition Monitoring Waiting to Terminate log entry

The following are the formats of the Start Condition Monitoring Waiting to Terminate log entry.

When no process ID is to be included in the log information:

N015ΔdateΔtimeΔKAVS1420-IΔscheduler-service-name :jobnet-name : execution-ID-of-new-generationΔexecution-ID-of-previous-generation

When a process ID is to be included in the log information:

N015ΔdateΔtimeΔ[process-ID] ΔKAVS1420-IΔscheduler-service-name :jobnet-name : execution-ID-of-new-generationΔexecution-ID-of-previous-generation

Example of a log entry:

N015 Dec 15 14:48:54 KAVS1420-I AJSROOT1:/group/net1:@A109 @A108

The following table describes the items that are specific to these formats.

Table C–27: Items specific to the Start Condition Monitoring Waiting to Terminate log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The applicable jobnet name is output.	1 to 930
<i>execution-ID-of-new-generation</i>	The execution ID of the new generation is output in @alphanumeric-character format.	1 to 10
<i>execution-ID-of-previous-generation</i>	The execution ID of the previous generation is output in @alphanumeric-character format.	1 to 10

(28) Formats of the Waiting in Accordance with the Jobnet Wait Condition Started log entry

The following are the formats of the Waiting in Accordance with the Jobnet Wait Condition Started log entry.

When no process ID is to be included in the log information:

`N016ΔdateΔtimeΔKAVS4950-IΔscheduler-service-name:jobnet-name:execution-ID#`

When a process ID is to be included in the log information:

`N016ΔdateΔtimeΔ[process-ID]ΔKAVS4950-IΔscheduler-service-name:jobnet-name:execution-ID#`

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

`N016 Feb 28 17:48:54 KAVS4950-I AJSROOT1:/group/net1:@A100`

The following table describes the items that are specific to these formats.

Table C–28: Items specific to the Waiting in Accordance with the Jobnet Wait Condition Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector with the wait condition that started waiting is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector with the wait condition that started waiting is output in <i>@alphanumeric-character</i> format.	1 to 10

(29) Formats of the Jobnet Wait Condition in Effect log entry

The following are the formats of the Jobnet Wait Condition in Effect log entry.

When no process ID is to be included in the log information:

`N017ΔdateΔtimeΔKAVS4955-IΔscheduler-service-name:jobnet-name:execution-ID#Δfactor-establishing-wait-condition`

When a process ID is to be included in the log information:

`N017ΔdateΔtimeΔ[process-ID]ΔKAVS4955-IΔscheduler-service-name:jobnet-name:execution-ID#Δfactor-establishing-wait-condition`

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

`N017 Feb 26 18:48:54 KAVS4955-I AJSROOT1:/group/net1:@A101 2`

The following table describes the items that are specific to these formats.

Table C–29: Items specific to the Jobnet Wait Condition in Effect log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector with a wait condition that took effect is output.	1 to 930

Item	Description	Length (bytes)
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector with a wait condition that took effect is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>factor-establishing-wait-condition</i>	The value of the factor establishing the wait condition is output.	1 to 4

(30) Formats of the Waiting in Accordance with the Jobnet Wait Condition Endless log entry

The following are the formats of the Waiting in Accordance with the Jobnet Wait Condition Endless log entry.

When no process ID is to be included in the log information:

N018ΔdateΔtimeΔKAVS4957-EΔname-of-unit-whose-end-is-being-waited-for : execution-IDΔscheduler-service-name : jobnet-nameexecution-ID#Δwait-retention-reason

When a process ID is to be included in the log information:

N018ΔdateΔtimeΔ [process-ID] ΔKAVS4957-EΔname-of-unit-whose-end-is-being-waited-for : execution-IDΔscheduler-service-name : jobnet-name : execution-ID#Δwait-retention-reason

#

: execution-ID for *scheduler-service-name : jobnet-name* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

N018 Feb 26 18:48:54 KAVS4957-E /a:@A200 AJSROOT1:/group/net1:@A101 1

The following table describes the items that are specific to these formats.

Table C–30: Items specific to the Waiting in Accordance with the Jobnet Wait Condition Endless log entry (scheduler information log)

Item	Description	Length (bytes)
<i>name-of-unit-whose-end-is-being-waited-for</i>	The name of the unit whose end is being waited for, specified in the wait condition, is output. If the wait method is set to <code>OR</code> , three asterisks (***) are output.	1 to 930
<i>execution-ID-of-unit-whose-end-is-being-waited-for</i>	The execution ID of the unit whose end is being waited for is output in <i>@alphanumeric-character</i> format. If the execution ID of the unit whose end is being waited for cannot be obtained, three asterisks (***) are output.	1 to 10
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>jobnet-name</i>	The name of the jobnet or jobnet connector with a wait condition that took effect is output.	1 to 930
<i>execution-ID</i>	The execution ID of the jobnet or jobnet connector with a wait condition that took effect is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>wait-retention-reason</i>	The value for the factor indicating why waiting in accordance with the wait condition could not end is output.	1 to 4

(31) Formats of the Job Started log entry

The following are the formats of the Job Started log entry.

When no process ID is to be included in the log information:

```
J001ΔdateΔtimeΔKAVS0263-IΔscheduler-service-name:job-name:execution-ID#Δexecution-host-
name#Δjob-number#
```

When a process ID is to be included in the log information:

```
J001ΔdateΔtimeΔ[process-ID]ΔKAVS0263-IΔscheduler-service-name:job-name:execution-ID#Δexecution-
host-name#Δjob-number#
```

#

: *execution-ID*Δ*execution-host-name* Δ*job-number* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J001 Dec 15 17:14:07 KAVS0263-I AJSROOT1:/group/net1/job1:@A100 hostA 1
```

The following table describes the items that are specific to these formats.

Table C–31: Items specific to the Job Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that started is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that started is output in @ <i>alphanumeric-character</i> format.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job that started is output.	1 to 255
<i>job-number</i>	The job number of the job that started is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmm0nnnn</i> format (<i>mmm</i> is the machine ID and <i>nnnn</i> is the job number).	1 to 10

(32) Formats of the Job Ended Normally log entry

The following are the formats of the Job Ended Normally log entry.

When no process ID is to be included in the log information:

```
J002ΔdateΔtimeΔKAVS0264-IΔscheduler-service-name:job-name:execution-ID#Δexecution-host-
name#Δreturn-value#Δjob-number#
```

When a process ID is to be included in the log information:

```
J002ΔdateΔtimeΔ[process-ID]ΔKAVS0264-IΔscheduler-service-name:job-name:execution-ID#Δexecution-
host-name#Δreturn-value#Δjob-number#
```

#

: *execution-ID*Δ*execution-host-name* Δ*return-value*Δ*job-number* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J002 Dec 15 17:14:44 KAVS0264-I AJSROOT1:/group/net1/job1:@A100 hostA 0 1
```

The following table describes the items that are specific to these formats.

Table C–32: Items specific to the Job Ended Normally log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that ended is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that ended is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job that ended is output.	1 to 255
<i>return-value</i>	The return value of the job that ended is output as a decimal number.	1 to 10
<i>job-number</i>	The job number of the job that ended is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmm0nnnn</i> format (<i>mmm</i> is a machine ID and <i>nnnn</i> is a job number).	1 to 10

(33) Formats of the Job Ended Abnormally log entry

The following are the formats of the Job Ended Abnormally log entry.

When no process ID is to be included in the log information:

```
J003ΔdateΔtimeΔKAVS0265-EΔscheduler-service-name:job-name:execution-ID#Δend-statusΔreturn-valueΔexecution-host-name#Δjob-number#
```

When a process ID is to be included in the log information:

```
J003ΔdateΔtimeΔ[process-ID]ΔKAVS0265-EΔscheduler-service-name:job-name:execution-ID#Δend-statusΔreturn-valueΔexecution-host-name#Δjob-number#
```

#

: *execution-ID* and *Δexecution-host-name Δjob-number* are output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J003 Dec 01 14:05:45 KAVS0265-E AJSROOT1:/net1/nestnet1/job1:@A111 a 99
hostA 5
```

The following table describes the items that are specific to these formats.

Table C–33: Items specific to the Job Ended Abnormally log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that ended abnormally is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that ended abnormally is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>end-status</i>	One of the following is output:	1

Item	Description	Length (bytes)
<i>end-status</i>	- a: Ended abnormally - f: Failed to start - c: Killed - ?: Unknown end status	1
<i>return-value</i>	The return value of the job that ended abnormally is output as a decimal number.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job that ended abnormally is output.	1 to 255
<i>job-number</i>	The job number of the job that ended abnormally is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmmm0nnnnn</i> format (<i>mmmm</i> is a machine ID and <i>nnnnn</i> is a job number). If the job could not be started because submission of the job failed, the job number is blank.	1 to 10

(34) Formats of the Job Ended with Warning log entry

The following are the formats of the Job Ended with Warning log entry.

When no process ID is to be included in the log information:

```
J004ΔdateΔtimeΔKAVS0269-WΔscheduler-service-name:job-name:execution-ID#Δreturn-valueΔexecution-host-name#Δjob-number#
```

When a process ID is to be included in the log information:

```
J004ΔdateΔtimeΔ[process-ID]ΔKAVS0269-WΔscheduler-service-name:job-name:execution-ID#Δreturn-valueΔexecution-host-name#Δjob-number#
```

#

: *execution-ID* and *Δexecution-host-name Δjob-number* are output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J004 Dec 01 14:05:45 KAVS0269-W AJSROOT1:/net1/nestnet1/job1:@A111 99 hostA5
```

The following table describes the items that are specific to these formats.

Table C–34: Items specific to the Job Ended with Warning log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that ended with a warning is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that ended with a warning is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>return-value</i>	The return value of the job that ended with a warning is output as a decimal number.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job that ended with a warning is output.	1 to 255

Item	Description	Length (bytes)
<i>job-number</i>	The job number of the job that ended with a warning is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmm0nnnn</i> format (<i>mmm</i> is a machine ID and <i>nnnn</i> is a job number).	1 to 10

(35) Formats of the Job on Hold log entry

The following are the formats of the Job on Hold log entry.

When no process ID is to be included in the log information:

```
J005ΔdateΔtimeΔKAVS0271-IΔscheduler-service-name:job-name:execution-ID#
```

When a process ID is to be included in the log information:

```
J005ΔdateΔtimeΔ[process-ID]ΔKAVS0271-IΔscheduler-service-name:job-name:execution-ID#
```

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J005 Dec 01 14:05:45 KAVS0271-I AJSROOT1:/net1/nestnet1/job1:@A111
```

The following table describes the items that are specific to these formats.

Table C–35: Items specific to the Job on Hold log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job on hold is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job on hold is output in <i>@alphanumeric-character</i> format.	1 to 10

(36) Formats of the Job Submission Started log entry

The following are the formats of the Job Submission Started log entry.

When no process ID is to be included in the log information:

```
J006ΔdateΔtimeΔKAVS0278-IΔscheduler-service-name:job-name:execution-ID#
```

When a process ID is to be included in the log information:

```
J006ΔdateΔtimeΔ[process-ID]ΔKAVS0278-IΔscheduler-service-name:job-name:execution-ID#
```

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J006 Dec 15 17:14:01 KAVS0278-I AJSROOT1:/group/net1/job1:@A100
```

The following table describes the items that are specific to these formats.

Table C–36: Items specific to the Job Submission Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the submitted job is output.	1 to 930
<i>execution-ID</i>	The execution ID of the submitted job is output in @alphanumeric-character format.	1 to 10

(37) Formats of the Event Job Execution Request Started log entry

The following are the formats of the Event Job Execution Request Started log entry.

When no process ID is to be included in the log information:

J007ΔdateΔtimeΔKAVS0242-IΔscheduler-service-name : event-job-name : execution-ID#

When a process ID is to be included in the log information:

J007ΔdateΔtimeΔ [process-ID] ΔKAVS0242-IΔscheduler-service-name : event-job-name : execution-ID#

#

: execution-ID is output if yes is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

J007 Dec 15 17:14:01 KAVS0242-I AJSROOT1:/group/net1/evjob1:@A100

The following table describes the items that are specific to these formats.

Table C–37: Items specific to the Event Job Execution Request Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>event-job-name</i>	The applicable event job name is output.	1 to 930
<i>execution-ID</i>	The execution ID of the event job is output in @alphanumeric-character format.	1 to 10

(38) Formats of the Job End Delayed log entry

The following are the formats of the Job End Delayed log entry.

When no process ID is to be included in the log information:

J008ΔdateΔtimeΔKAVS0248-IΔscheduler-service-name : job-name : execution-ID#

When a process ID is to be included in the log information:

J008ΔdateΔtimeΔ [process-ID] ΔKAVS0248-IΔscheduler-service-name : job-name : execution-ID#

#

: execution-ID is output if yes is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

J008 Dec 01 16:36:37 KAVS0248-I AJSROOT1:/group/net1/job1:@A106

The following table describes the items that are specific to these formats.

Table C–38: Items specific to the Job End Delayed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job whose end was delayed is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job whose end was delayed is output in @ <i>alphanumeric-character</i> format.	1 to 10

(39) Formats of the Job Queuing Canceled log entry

The following are the formats of the Job Queuing Canceled log entry.

When no process ID is to be included in the log information:

J009Δ*date*Δ*time*ΔKAVS0266-IΔ*scheduler-service-name*:*job-name*:*execution-ID*#Δ*job-number*#

When a process ID is to be included in the log information:

J009Δ*date*Δ*time*Δ [*process-ID*] ΔKAVS0266-IΔ*scheduler-service-name*:*job-name*:*execution-ID*#Δ*job-number*#

#

: *execution-ID*Δ*job-number* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

J009 Dec 01 16:36:37 KAVS0266-I AJSROOT1:/group/net1/job1:@A100 1

The following table describes the items that are specific to these formats.

Table C–39: Items specific to the Job Queuing Canceled log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that ended is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that ended is output in @ <i>alphanumeric-character</i> format.	1 to 10
<i>job-number</i>	The job number of the job that ended is output as a decimal number.	1 to 10

(40) Formats of the Waiting in Accordance with the Job Wait Condition Started log entry

The following are the formats of the Waiting in Accordance with the Job Wait Condition Started log entry.

When no process ID is to be included in the log information:

J010Δ*date*Δ*time*ΔKAVS4951-IΔ*scheduler-service-name*:*job-name*:*execution-ID*#

When a process ID is to be included in the log information:

J010Δ*date*Δ*time*Δ [*process-ID*] ΔKAVS4951-IΔ*scheduler-service-name*:*job-name*:*execution-ID*#

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J010 Mar 28 14:48:54 KAVS4951-I AJSROOT1:/group/net1/job1:@A111
```

The following table describes the items that are specific to these formats.

Table C–40: Items specific to the Waiting in Accordance with the Job Wait Condition Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job with a wait condition that started waiting is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job with a wait condition that started waiting is output in @alphanumeric-character format.	1 to 10

(41) Formats of the Job Wait Condition in Effect log entry

The following are the formats of the Job Wait Condition in Effect log entry.

When no process ID is to be included in the log information:

```
ΔdateΔtimeΔKAVS4956-IΔscheduler-service-name:job-name:execution-ID#Δfactor-establishing-wait-condition
```

When a process ID is to be included in the log information:

```
J011ΔdateΔtimeΔ[process-ID]ΔKAVS4956-IΔscheduler-service-name:job-name:execution-ID#Δfactor-establishing-wait-condition
```

#

: *execution-ID* is output if `yes` is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J011 Mar 26 18:48:54 KAVS4956-I AJSROOT1:/group/net1/job1:@A111 2
```

The following table describes the items that are specific to these formats.

Table C–41: Items specific to the Job Wait Condition in Effect log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job with a wait condition that took effect is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job with a wait condition that took effect is output in @alphanumeric-character format.	1 to 10
<i>factor-establishing-wait-condition</i>	The value of the factor establishing the wait condition is output.	1 to 4

(42) Formats of the Waiting in Accordance with the Job Wait Condition Endless log entry

The following are the formats of the Waiting in Accordance with the Job Wait Condition Endless log entry.

When no process ID is to be included in the log information:

```
J012ΔdateΔtimeΔKAVS4971-EΔname-of-unit-whose-end-is-being-waited-for : execution-IDΔscheduler-
service-name : job-name : execution-ID#Δwait-retention-reason
```

When a process ID is to be included in the log information:

```
J012ΔdateΔtimeΔ [process-ID] ΔKAVS4971-EΔname-of-unit-whose-end-is-being-waited-for : execution-
IDΔscheduler-service-name : job-name : execution-ID#Δwait-retention-reason
```

#

: *execution-ID* for *scheduler-service-name : job-name* is output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J012 Mar 26 18:48:54 KAVS4971-E /a:@A200 AJSROOT1:/group/net1/job1:@A111 2
```

The following table describes the items that are specific to these formats.

Table C–42: Items specific to the Waiting in Accordance with the Job Wait Condition Endless log entry (scheduler information log)

Item	Description	Length (bytes)
<i>name-of-unit-whose-end-is-being-waited-for</i>	The name of the unit whose end is being waited for specified in the wait condition is output. If the wait method is set to <code>OR</code> , three asterisks (***) are output.	1 to 930
<i>execution-ID-of-unit-whose-end-is-being-waited-for</i>	The execution ID of the unit whose end is being waited for is output in <i>@alphanumeric-character</i> format. If the execution ID of the unit whose end is being waited for cannot be obtained, three asterisks (***) are output.	1 to 10
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job with a wait condition that took effect is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job with a wait condition that took effect is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>wait-retention-reason</i>	The value for the factor indicating why waiting in accordance with the wait condition could not end is output.	1 to 4

(43) Formats of the Waiting for Automatic Retry Interval Started log entry

The following are the formats of the Waiting for the Automatic Retry Interval Started log entry.

When no process ID is to be included in the log information:

```
J013ΔdateΔtimeΔKAVS4675-IΔscheduler-service-name : job-name : execution-ID#Δreturn-valueΔexecution-
host-name#Δjob-number#Δnumber-of-retry-executions
```

When a process ID is to be included in the log information:

```
J013ΔdateΔtimeΔ [process-ID] ΔKAVS4675-IΔscheduler-service-name : job-name : execution-ID#Δreturn-
valueΔexecution-host-name#Δjob-number#Δnumber-of-retry-executions
```

#

: *execution-ID* and Δ *execution-host-name* Δ *job-number* are output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J013 Mar 03 14:05:45 KAVS4675-I AJSROOT1:/net1/nestnet1/job1:@A111 99 hostA
5 3
```

The following table describes the items that are specific to these formats.

Table C–43: Items specific to the Waiting for the Automatic Retry Interval Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job that starts waiting for the retry interval is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job that starts waiting for the retry interval is output in @ <i>alphanumeric-character</i> format.	1 to 10
<i>return-value</i>	The return value of the job that starts waiting for the retry interval is output as a decimal number.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job that starts waiting for the retry interval is output.	1 to 255
<i>job-number</i>	The job number of the job that starts waiting for the retry interval is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmmm0nnnnn</i> format (<i>mmmm</i> is a machine ID and <i>nnnnn</i> is a job number). If the job could not be started because submission of the job failed, the job number is blank.	1 to 10
<i>number-of-retry-executions</i>	The number of retry executions for the job that starts waiting for the retry interval is output as a decimal number.	1 to 2

(44) Formats of the Automatic Retry Execution Started log entry

The following are the formats of the Automatic Retry Execution Started log entry.

When no process ID is to be included in the log information:

```
J014 $\Delta$ date $\Delta$ time $\Delta$ KAVS4676-I $\Delta$ scheduler-service-name:job-name:execution-ID $\Delta$ execution-host-
name $\Delta$ job-number $\Delta$ number-of-retry-executions
```

When a process ID is to be included in the log information:

```
J014 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ KAVS4676-I $\Delta$ scheduler-service-name:job-name:execution-ID $\Delta$ execution-
host-name $\Delta$ job-number $\Delta$ number-of-retry-executions
```

#

: *execution-ID* Δ *execution-host-name* Δ *job-number* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J014 Feb 28 17:14:07 KAVS4676-I AJSROOT1:/group/net1/job1:@A100 hostA 1 3
```

The following table describes the items that are specific to these formats.

Table C–44: Items specific to the Automatic Retry Execution Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job whose execution is started by automatic retry is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job whose execution is started by automatic retry is output in <i>@alphanumeric-character</i> format.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job whose execution is started by automatic retry is output.	1 to 255
<i>job-number</i>	The job number of the job whose execution is started by automatic retry is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmm0nnnn</i> format (<i>mmm</i> is a machine ID and <i>nnnn</i> is a job number).	1 to 10
<i>number-of-retry-executions</i>	The number of retry executions for the job whose execution is started by automatic retry is output as a decimal number.	1 to 2

(45) Formats of the Error That Disables Retry Execution Occurring During Automatic Retry log entry

The following are the formats of the Error That Disables Retry Execution Occurring During Automatic Retry log entry.

When no process ID is to be included in the log information:

```
J015ΔdateΔtimeΔKAVS4677-EΔscheduler-service-name : job-name : execution-ID#Δreturn-valueΔexecution-host-name#Δjob-number#Δnumber-of-retry-executionsΔreason-code
```

When a process ID is to be included in the log information:

```
J015ΔdateΔtimeΔ [process-ID] ΔKAVS4677-EΔscheduler-service-name : job-name : execution-ID#Δreturn-valueΔexecution-host-name#Δjob-number#Δnumber-of-retry-executionsΔreason-code
```

#

: *execution-ID* and *Δexecution-host-name Δjob-number* are output if *yes* is specified in the `LOGINFOALL` environment setting parameter.

Example of a log entry:

```
J015 Mar 03 14:05:45 KAVS4677-E AJSROOT1:/net1/nestnet1/job1:@A111 99 hostA
5 3 FATALERR
```

The following table describes the items that are specific to these formats.

Table C–45: Items specific to the Error That Disables Retry Execution Occurring During Automatic Retry log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30

Item	Description	Length (bytes)
<i>job-name</i>	The name of the job for which automatic retry ended due to an error that disables retry execution is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job for which automatic retry ended due to an error that disables retry execution is output in @alphanumeric-character format.	1 to 10
<i>return-value</i>	The return value of the job for which automatic retry ended due to an error that disables retry execution is output as a decimal number.	1 to 10
<i>execution-host-name</i>	The name of the execution host of the job for which automatic retry ended due to an error that disables retry execution is output.	1 to 255
<i>job-number</i>	The job number of the job for which automatic retry ended due to an error that disables retry execution is output as a decimal number. If JP1/NQSEEXEC is linked, and the machine ID specified by JP1/NQSEEXEC is a value other than 0, the job number is output in <i>mmm0nnnn</i> format (<i>mmm</i> is a machine ID and <i>nnnn</i> is a job number). If the job could not be started because submission of the job failed, the job number is blank.	1 to 10
<i>number-of-retry-executions</i>	The number of retry executions for the job for which automatic retry ended due to an error that disables retry execution is output as a decimal number.	1 to 2
<i>reason-code</i>	The reason for ending automatic retry is output. <ul style="list-style-type: none"> FATALERR The job ended in an end status that does not allow a retry. ERRCODE The executable file or script file ended with a return code that is outside the scope of automatic retry. RETRYNUM The number of retry executions reached the maximum number of retry executions. 	7 or 8

(46) Formats of the Job Submission by Automatic Retry Started log entry

The following are the formats of the Job Submission by Automatic Retry Started log entry.

When no process ID is to be included in the log information:

```
J016ΔdateΔtimeΔKAVS4678-IΔscheduler-service-name:job-name:execution-ID#Δnumber-of-retry-executions
```

When a process ID is to be included in the log information:

```
J016ΔdateΔtimeΔ[process-ID]ΔKAVS4678-IΔscheduler-service-name:job-name:execution-ID#Δnumber-of-retry-executions
```

#

: *execution-ID* is output if *yes* is specified in the LOGINFOALL environment setting parameter.

Example of a log entry:

```
J016 Feb 28 17:14:01 KAVS4678-I AJSROOT1:/group/net1/job1:@A100 3
```

The following table describes the items that are specific to these formats.

Table C–46: Items specific to the Job Submission by Automatic Retry Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>scheduler-service-name</i>	The applicable scheduler service name is output.	1 to 30
<i>job-name</i>	The name of the job submitted by automatic retry is output.	1 to 930
<i>execution-ID</i>	The execution ID of the job submitted by automatic retry is output in @ <i>alphanumeric-character</i> format.	1 to 10
<i>number-of-retry-executions</i>	The number of retry executions for the job submitted by automatic retry is output as a decimal number.	1 to 2

(47) Formats of the Scheduler Service Operation Environment Temporarily Changed log entry

The following are the formats of the Scheduler Service Operation Environment Temporarily Changed log entry.

When no process ID is to be included in the log information:

C001ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; ALTERΔoption

When a process ID is to be included in the log information:

C001ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; ALTERΔoption

Logging conditions:

An entry is output to the log only if `all` or `alter` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

`C001 Dec 15 09:51:41 jpladmin 0 JP1_DEFAULT ;ALTER -F AJSROOT1 -c COPY`

The following table describes the items that are specific to these formats.

Table C–47: Items specific to the Scheduler Service Operation Environment Temporarily Changed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsalter</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>option</i>	The options specified in the executed <code>ajsalter</code> command are output.	1 or more

(48) Formats of the Scheduler Service Stopped log entry

The following are the formats of the Scheduler Service Stopped log entry.

When no process ID is to be included in the log information:

C002ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; STOPΔoption

When a process ID is to be included in the log information:

C002ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; STOPΔoption

Logging conditions:

An entry is output to the log only if `all` or `stop` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C002 Dec 15 09:53:08 jp1admin 0 JP1_DEFAULT ;STOP -F AJSROOT1 -w -c
```

The following table describes the items that are specific to these formats.

Table C–48: Items specific to the Scheduler Service Stopped log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsstop</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>option</i>	The options specified in the executed <code>ajsstop</code> command are output.	1 or more

(49) Formats of the Scheduler Service Started log entry

The following are the formats of the Scheduler Service Started log entry.

When no process ID is to be included in the log information:

```
C003ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ;STARTΔoption
```

When a process ID is to be included in the log information:

```
C003ΔdateΔtimeΔ[process-ID]Δuser-nameΔmessage-IDΔhost-nameΔ;STARTΔoption
```

Logging conditions:

An entry is output to the log only if `all` or `start` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C003 Dec 07 19:26:59 jp1admin 0 JP1_DEFAULT ;START -F AJSROOT1 -w -o
```

The following table describes the items that are specific to these formats.

Table C–49: Items specific to the Scheduler Service Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsstart</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>option</i>	The options specified in the executed <code>ajsstart</code> command are output.	1 to 500

(50) Formats of the Jobnet Registered log entry

The following are the formats of the Jobnet Registered log entry.

When no process ID is to be included in the log information:

```
C101ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ;ENTRYΔ[user-type]#Δ[requesting-host-IP-
address, requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C101ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ;ENTRYΔ[user-type]#Δ[requesting-
host-IP-address, requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ[user-type] Δ[requesting-host-IP-address, requesting-source-identification] is output if yes is specified in the AJSLOGOUTPUTEXTEND environment setting parameter.

Logging conditions:

An entry is output to the log only if all or entry is specified in the OPELOG environment setting parameter.

Example of a log entry:

```
C101 Dec 15 10:51:18 jpladmin KAVS0681-E JP1_DEFAULT ;ENTRY -F AJSROOT1 -s /
group/net1
```

The following table describes the items that are specific to these formats.

Table C–50: Items specific to the Jobnet Registered log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsentry</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS3-WEB 	1 to 100

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<p>Indicates that the operation was performed from JP1/AJS3 - Web Console.</p> <ul style="list-style-type: none"> JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) <p>Indicates that the operation was performed from JP1/AJS3 - Definition Assistant.</p> <ul style="list-style-type: none"> REMOTE <p>Indicates that the user remotely executed the command or that a remote jobnet executed the command.</p> <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> [#]	<p>The options specified in the executed <code>ajsentry</code> command are output.</p> <p>If the <code>yes</code> is specified for the <code>AJSLOGOUTPUTEXTEND</code> environment setting parameter, the value of the <code>-c</code> option is output.</p>	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsentry</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(51) Formats of the Registered Jobnet Canceled log entry

The following are the formats of the Registered Jobnet Canceled log entry.

When no process ID is to be included in the log information:

```
C102 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; LEAVE $\Delta$ [user-type]# $\Delta$ [requesting-host-IP-address, requesting-source-identification]# $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C102 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; LEAVE $\Delta$ [user-type]# $\Delta$ [requesting-host-IP-address, requesting-source-identification]# $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `leave` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C102 Dec 01 14:03:14 jp1admin 0 JP1_DEFAULT ;LEAVE -F AJSROOT1 -B all /net1
```

The following table describes the items that are specific to these formats.

Table C–51: Items specific to the Registered Jobnet Canceled log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsleave</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option[#]</i>	The options specified in the executed <code>ajsleave</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsleave</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(52) Formats of the Jobnet Temporarily Changed log entry

The following are the formats of the Jobnet Temporarily Changed log entry.

When no process ID is to be included in the log information:

```
C103ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; PLANΔ [user-type] #Δ [requesting-host-IP-
address , requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C103ΔdateΔtimeΔ [process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; PLANΔ [user-type] #Δ [requesting-
host-IP-address , requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address , requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `plan` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C103 Dec 15 09:55:10 jp1admin 0 JP1_DEFAULT ;PLAN -F AJSROOT1 -r -X auto /
net1
```

The following table describes the items that are specific to these formats.

Table C–52: Items specific to the Jobnet Temporarily Changed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsplan</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Web Console JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS3-WEB 	1 to 100

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<p>Indicates that the operation was performed from JP1/AJS3 - Web Console.</p> <ul style="list-style-type: none"> JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) <p>Indicates that the operation was performed from JP1/AJS3 - Definition Assistant.</p> <ul style="list-style-type: none"> REMOTE <p>Indicates that the user remotely executed the command or that a remote jobnet executed the command.</p> <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> #	The options specified in the executed <code>ajsplan</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsplan</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(53) Formats of the Jobnet Execution Interrupted log entry

The following are the formats of the Jobnet Execution Interrupted log entry.

When no process ID is to be included in the log information:

```
C104 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;INTRPT $\Delta$ [user-type]# $\Delta$ [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C104 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;INTRPT $\Delta$ [user-type] # $\Delta$ [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `intrpt` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C104 Dec 15 09:56:36 jp1admin 0 JP1_DEFAULT ;INTRPT -F AJSROOT1 -X auto / net1
```

The following table describes the items that are specific to these formats.

Table C–53: Items specific to the Jobnet Execution Interrupted log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsintrpt</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20

Item	Description	Length (bytes)
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Web Console JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option#</i>	The options specified in the executed <code>ajsintrpt</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsintrpt</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(54) Formats of the Jobnet Rerun log entry

The following are the formats of the Jobnet Rerun log entry.

When no process ID is to be included in the log information:

```
C105ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; RERUNΔ[user-type]#Δ[requesting-host-IP-
address, requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C105ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ;RERUNΔ[user-type] #Δ[requesting-
host-IP-address, requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ[user-type] Δ[requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `rerun` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C105 Dec 07 16:36:47 jp1admin KAVS0141-E JP1_DEFAULT ;RERUN -F AJSROOT1 -t -
X no /group/net1:@A118
```

The following table describes the items that are specific to these formats.

Table C–54: Items specific to the Jobnet Rerun log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrerun</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. 	1 to 100

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<ul style="list-style-type: none"> REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. If the length of the information exceeds 100 bytes, only 100 bytes are output.	1 to 100
<i>option</i> [#]	The options specified in the executed <code>ajsrerun</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsrerun</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(55) Formats of the Jobnet Suspended/Released from Suspension log entry

The following are the formats of the Jobnet Suspended/Released from Suspension log entry.

When no process ID is to be included in the log information:

```
C106 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SUSPEND $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C106 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SUSPEND $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `suspend` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C106 Dec 07 16:36:14 jpladmin 0 JP1_DEFAULT ;SUSPEND -F AJSROOT1 -C -r /group/net1
```

The following table describes the items that are specific to these formats.

Table C–55: Items specific to the Jobnet Suspended/Released from Suspension log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajssuspend</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20

Item	Description	Length (bytes)
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. If the length of the information exceeds 100 bytes, only 100 bytes are output.	1 to 100
<i>option#</i>	The options specified in the executed <code>ajssuspend</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajssuspend</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(56) Formats of the Jobnet Registration for Execution Information Imported log entry

The following are the formats of the Jobnet Registration for Execution Information Imported log entry.

When no process ID is to be included in the log information:

`C107 Δ date Δ time Δ user-name Δ message-ID Δ host-name Δ ; RGIMP Δ [user-type] # Δ option`

When a process ID is to be included in the log information:

`C107 Δ date Δ time Δ [process-ID] Δ user-name Δ message-ID Δ host-name Δ ; RGIMP Δ [user-type] # Δ option`

#

Δ [*user-type*] is output if *yes* is specified in the AJSLOGOUTPUTTEXTEND environment setting parameter.

Logging conditions:

An entry is output to the log only if *all* or *rgimport* is specified in the OPELOG environment setting parameter.

Example of a log entry:

```
C107 Dec 07 19:14:15 jpladmin KAVS0681-E JP1_DEFAULT ;RGIMP -F AJSROOT1 -i
c:\temp\entry_info.txt
```

The following table describes the items that are specific to these formats.

Table C–56: Items specific to the Jobnet Registration for Execution Information Imported log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrimport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none">• ADMIN A user with administrator privileges or superuser privileges• USER A general user	4 or 5
<i>option</i> [#]	The options specified in the executed <code>ajsrimport</code> command are output.	1 to 500

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(57) Formats of the Jobnet Registered by Import of Jobnet Registration for Execution Information log entry

The following are the formats of the Jobnet Registered by Import of Jobnet Registration for Execution Information log entry.

When no process ID is to be included in the log information:

```
C108 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RGIMP $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C108 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RGIMP $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

#

Δ [*user-type*] is output if *yes* is specified in the AJSLOGOUTPUTTEXTEND environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `rgimport` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C108 Dec 07 19:14:15 jp1admin KAVS4832-E JP1_DEFAULT ;RGIMP -F AJSROOT1 /
group/net1
```

The following table describes the items that are specific to these formats.

Table C–57: Items specific to the Jobnet Registered by Import of Jobnet Registration for Execution Information log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrimport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options that are output are the ones specified in the <code>ajsrimport</code> command when the command was used to register the jobnet.	1 to 500
<i>unit-name</i>	The root jobnet name that is output is name actually registered by using the <code>ajsrimport</code> command.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(58) Formats of the Jobnet/Job Forcibly Ended log entry

The following are the formats of the Jobnet/Job Forcibly Ended log entry.

When no process ID is to be included in the log information:

```
C201 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;KILL $\Delta$ [user-type]# $\Delta$ [requesting-host-IP-
address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C201 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;KILL $\Delta$ [user-type]# $\Delta$ [requesting-
host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `kill` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C201 Dec 07 19:14:15 jp1admin KAVS0129-E JP1_DEFAULT ;KILL -F AJSROOT1 -X
no /group/net1:@A137
```

The following table describes the items that are specific to these formats.

Table C–58: Items specific to the Jobnet/Job Forcibly Ended log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajskill</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option[#]</i>	The options specified in the executed <code>ajskill</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajskill</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(59) Formats of the Job Status Changed log entry

The following are the formats of the Job Status Changed log entry.

When no process ID is to be included in the log information:

```
C202 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;CHGSTAT $\Delta$ [user-type] $\Delta$ [requesting-host-IP-address,requesting-source-identification] $\Delta$ # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C202 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;CHGSTAT $\Delta$ [user-type] $\Delta$ [requesting-host-IP-address,requesting-source-identification] $\Delta$ # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address,requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `chgst` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C202 Dec 15 09:58:13 jpladmin 0 JP1_DEFAULT ;CHGSTAT -F AJSROOT1 -t normal -X auto /net1/job
```

The following table describes the items that are specific to these formats.

Table C–59: Items specific to the Job Status Changed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajschgstat</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none">ADMIN A user with administrator privileges or superuser privilegesUSER A general user	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none">JP1/AJS3 - ViewJP1/AJS3 - Web ConsoleJP1/AJS3 - Definition Assistant	IPv4: 7 to 15 IPv6: 3 to 39

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<p>The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed.</p> <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> #	The options specified in the executed <code>ajschgstat</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajschgstat</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(60) Formats of the Unit Definitions Changed log entry

The following are the formats of the Unit Definitions Changed log entry.

When no process ID is to be included in the log information:

```
C301 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CHANGE $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C301 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CHANGE $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] Δ option is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `change` is specified in the `OPELOG` environment setting parameter.

Logging example for commands:

When `Monthly Jobnet` is specified as the comment and `10` is specified as the number of saved generations:

```
C301 Dec 07 13:59:30 jpladmin 0 JP1_DEFAULT ;CHANGE [ADMIN] [CHANGE] -F
AJSROOT1 -C "Monthly Jobnet" -l "10" /net
```

Logging examples for JP1/AJS3 - View:

When `c:\user\pgm.exe` is specified as the execution file name and 1 is specified as the execution priority:

```
C301 Mar 05 13:59:30 jpladmin 0 JP1_DEFAULT ;CHANGE [ADMIN] [127.0.0.1,
JP1/AJS2-View] [VIEW] pr=1; sc="c:\user\pgm.exe"; AJSROOT1:/net/job
```

When the execution file name is blank and None (default) is specified as the execution priority:

```
C301 Mar 05 13:59:30 jpladmin 0 JP1_DEFAULT ;CHANGE [ADMIN] [127.0.0.1,
JP1/AJS2-View] [VIEW] pr=; sc=; AJSROOT1:/net/job
```

When schedule rule 1 is copied to create schedule rule 2:

```
C301 Dec 07 13:59:30 jpladmin 0 JP1_DEFAULT ; CHANGE [ADMIN] [127.0.0.1,
JP1/AJS2-View] [VIEW] sd; st; cy; sh; shd; AJSROOT1:/net
```

For the parameters listed below, the difference between the new and previous definitions cannot be extracted because the number of parameters that can be specified and parameter lengths are variable. Accordingly, only the names of the applicable parameters are recorded in the log entry.

`sd, st, sy, ey, ln, cy, sh, shd, wt, wc, cftd, el, ar, env, evwfr, jpoif, mladr, mlsubj, mltxt, mlatf, lftpd, lffnm, lfmks, hlsh, hleh`

Note that if only the sequence of the parameters is changed (the definitions of the parameters do not change), the difference in the sequence is not output, although the Unit Definitions Changed log entry is still output to the file.

Logging examples for JP1/AJS3 - Web Console:

When `c:\user\pgm.exe` is specified as the execution file name and 1 is specified as the execution priority:

```
C301 Mar 05 13:59:30 jpladmin 0 JP1_DEFAULT ;CHANGE [ADMIN] [127.0.0.1,
JP1/AJS3-WEB] [WEB] pr=1; sc="c:\user\pgm.exe"; AJSROOT1:/net/job
```

When the execution file name is blank and None (default) is specified as the execution priority:

```
C301 Mar 05 13:59:30 jpladmin 0 JP1_DEFAULT ;CHANGE [ADMIN] [127.0.0.1,
JP1/AJS3-WEB] [WEB] pr=; sc=; AJSROOT1:/net/job
```

For the parameter listed below, the difference between the new and previous definitions cannot be extracted because the number of parameters that can be specified and parameter lengths are variable. Accordingly, only the names of the applicable a parameter are recorded in the log entry.

`env`

Note that if only the sequence of the parameters is changed (the definitions of the parameters do not change), the difference in the sequence is not output, although the Unit Definitions Changed log entry is still output to the file.

The following table describes the items that are specific to these formats.

Table C–60: Items specific to the Unit Definitions Changed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajschange</code> , <code>ajschgjob</code> , or <code>ajschgnet</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none">ADMIN A user with administrator privileges or superuser privileges	4 or 5

Item	Description	Length (bytes)
<i>user-type</i>	<ul style="list-style-type: none"> • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	<p>The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed.</p> <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	<p>The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed.</p> <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option#</i>	<p>The options specified in the executed <code>ajschange</code>, <code>ajschgnet</code>, or <code>ajschgjob</code> command, or the changes made by a user from JP1/AJS3 - View or JP1/AJS3 - Web Console are output.</p> <p>For 08-00 or earlier, command options are not output.</p> <p>For 08-10 or later, command options or the changes made by the user from JP1/AJS3 - View are output if <code>yes</code> is specified in <code>AJSLOGOUTPUTTEXTEND</code>.</p> <p>In <i>option</i>, the type of the definition change operation and then the options of the applicable command or the changes made by the user from JP1/AJS3 - View are output.</p> <p>The definition change operation types are as follows:</p> <ul style="list-style-type: none"> • For <code>ajschange</code>: CHANGE • For <code>ajschgnet</code>: CHGNET • For <code>ajschgjob</code>: CHGJOB • For JP1/AJS3 - View: VIEW • For JP1/AJS3 - Web Console: WEB 	1 to 510
<i>unit-name</i>	<p>The unit name specified in the executed <code>ajschange</code>, <code>ajschgnet</code>, or <code>ajschgjob</code> command, or the name of the unit for which operations were performed from JP1/AJS3 - View or JP1/AJS3 - Web Console is output.</p> <p>For the <code>ajschange</code>, <code>ajschgnet</code>, and <code>ajschgjob</code> commands, unit names do not include scheduler service names. However, if the target is a scheduler service, the indication in <i>option</i> is <code>-f scheduler-service-name</code>.</p> <p>For JP1/AJS3 - View or JP1/AJS3 - Web Console, unit names include scheduler service names.</p>	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) or the value of the parameter to be changed (the part that is not the parameter name and the subsequent one-byte equal sign ($=$)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options or parameters exceeds 500 bytes, only 500 bytes are output. Note that the 500-byte limit is exceeded before an option name or a parameter name is complete, that option or parameter is not output.

(61) Formats of the Unit Deleted log entry

The following are the formats of the Unit Deleted log entry.

When no process ID is to be included in the log information:

```
C302 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; DELETE $\Delta$ [user-type] $\Delta$ [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C302 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; DELETE $\Delta$ [user-type] # $\Delta$ [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `delete` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C302 Dec 07 12:25:43 jpladmin 0 JP1_DEFAULT ;DELETE -F AJSROOT1 -S /group/net1
```

The following table describes the items that are specific to these formats.

Table C–61: Items specific to the Unit Deleted log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsdelete</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none">• <code>ADMIN</code> A user with administrator privileges or superuser privileges• <code>USER</code> A general user	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none">• JP1/AJS3 - View• JP1/AJS3 - Definition Assistant	IPv4: 7 to 15 IPv6: 3 to 39

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<p>The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed.</p> <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> #	The options specified in the executed <code>ajsdelete</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsdelete</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(62) Formats of the Unit Restored log entry

The following are the formats of the Unit Restored log entry.

When no process ID is to be included in the log information:

```
C303 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; RESTORE $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C303 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; RESTORE $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `restore` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C303 Dec 07 10:00:22 jp1admin 0 JP1_DEFAULT ;RESTORE -F AJSROOT1 -e -n box
```

The following table describes the items that are specific to these formats.

Table C–62: Items specific to the Unit Restored log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrestore</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> [#]	The options specified in the executed <code>ajsrestore</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsrestore</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(63) Formats of the Unit Created log entry

The following are the formats of the Unit Created log entry.

When no process ID is to be included in the log information:

```
C304ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; DEFINEΔ [user-type] #Δ [requesting-host-IP-
address, requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C304ΔdateΔtimeΔ [process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; DEFINEΔ [user-type] #Δ [requesting-
host-IP-address, requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `define` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C304 Dec 07 14:00:46 jp1admin 0 JP1_DEFAULT ;DEFINE -F AJSROOT1 /net1
```

The following table describes the items that are specific to these formats.

Table C–63: Items specific to the Unit Created log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsdefine</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. 	1 to 100

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	If the length of the information exceeds 100 bytes, only 100 bytes are output.	1 to 100
<i>option</i> #	The options specified in the executed <code>ajsdefine</code> command are output only for an abnormal termination.	1 to 500
<i>unit-name</i> or definition file name	The unit name or the definition file name specified in the executed <code>ajsdefine</code> command is output. The unit name is output for a normal termination. The definition file name is output for an abnormal termination.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(64) Formats of the Unit Copied or Moved log entry

The following are the formats of the Unit Copied or Moved log entry.

When no process ID is to be included in the log information:

```
C305 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; COPY $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C305 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; COPY $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `copy` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C305 Dec 15 11:21:57 jp1admin 0 JP1_DEFAULT ;COPY -F AJSROOT1 -c -o /group/net1/job11 /group/net1/job1
```

The following table describes the items that are specific to these formats.

Table C–64: Items specific to the Unit Copied or Moved log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajscopy</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255

Item	Description	Length (bytes)
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option#</i>	The options specified in the executed <code>ajscopy</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajscopy</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(65) Formats of the Unit Imported log entry

The following are the formats of the Unit Imported log entry.

When no process ID is to be included in the log information:

```
C306ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; IMPORTΔ[user-type]#Δoption
```

When a process ID is to be included in the log information:

```
C306ΔdateΔtimeΔ[process-ID]Δuser-nameΔmessage-IDΔhost-nameΔ; IMPORTΔ[user-type]#Δoption
```

#

$\Delta[user-type]$ is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `import` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C306 Dec 15 09:14:22 jp1admin 0 JP1_DEFAULT ;IMPORT -i c:\temp\file
AJSROOT1:/group/net
```

The following table describes the items that are specific to these formats.

Table C–65: Items specific to the Unit Imported log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsimport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the executed <code>ajsimport</code> command are output.	1 to 500

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(66) Formats of the Jobnet Released log entry

The following are the formats of the Jobnet Released log entry.

When no process ID is to be included in the log information:

```
C307 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RELEASEOPE $\Delta$ [user-type]# $\Delta$ [requesting-host-IP-
address, requesting-source-identification] # $\Delta$ option
```

When a process ID is to be included in the log information:

```
C307 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RELEASEOPE $\Delta$ [user-
type]# $\Delta$ [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `release` is specified in the `OPELOG` environment setting parameter.

Example of a log entry:

```
C307 Dec 15 13:28:49 jp1admin 0 JP1_DEFAULT ;RELEASEOPE -F AJSROOT1 -a /
Production Environment/unit001 -rid 001 -rcm 2009/12/07 Release Definition -
rdy 2009/12/07 -rti 20:00 -ru /Test Environment/Rel001
```

The following table describes the items that are specific to these formats.

Table C–66: Items specific to the Jobnet Released log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrelease</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View.	7 to 15
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. JP1/AJS2-View is displayed only when the operation was performed from JP1/AJS3 - View. If the length of the information exceeds 100 bytes, only 100 bytes are output.	1 to 100
<i>option</i> [#]	The options specified in the executed <code>ajsrelease</code> command are output.	1 to 500

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(67) Formats of the Calendar Changed log entry

The following are the formats of the Calendar Changed log entry.

When no process ID is to be included in the log information:

```
C401 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CALENDAR $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C401 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CALENDAR $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

- An entry is output to the log only if `all` or `calendar` is specified in the `OPELOG` environment setting parameter.
- If you used JP1/AJS3 - View to change a calendar when `yes` was specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter, the changes are not output in the Command Processing Started log entry corresponding to the Calendar Changed log entry.

Example of a log entry:

```
C401 Dec 15 10:49:45 jpladmin 0 JP1_DEFAULT ;CALENDAR -F AJSROOT1 mo we /
```

The following table describes the items that are specific to these formats.

Table C–67: Items specific to the Calendar Changed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajscalendar</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • <code>REMOTE</code> Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> [#]	The options specified in the executed <code>ajscalendar</code> command or the changes made by the user from JP1/AJS3 - View are output. If <code>no</code> is specified in the <code>AJSLOGOUTPUTTEXTEND</code> environment setting parameter, one of the following values is output for <i>option</i> to indicate the type of change:	1 to 500

Item	Description	Length (bytes)
<i>option</i> #	<ul style="list-style-type: none"> When a calendar is changed: <i>mo</i> When a standard week value is changed: <i>we</i> When a base date is changed: <i>sd</i> When a base time is changed: <i>st</i> <p>If <i>yes</i> is specified in the <code>AJSLOGOUTPUTEXTEND</code> environment setting parameter, the options specified in the executed <code>ajscalendar</code> command or the name of the definition parameter changed by the user from JP1/AJS3 - View is output for <i>option</i>.</p> <p>The name of the definition parameter to be output is as follows when JP1/AJS3 - View is used to change the parameter:</p> <ul style="list-style-type: none"> When an open day is added or deleted: <i>op</i> When a closed day is added or deleted: <i>cl</i> When a base date is changed: <i>sdd</i> When a base month for the calendar is changed: <i>md</i> When a base time is changed: <i>stt</i> 	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajscalendar</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(68) Formats of the Unit Status Displayed log entry

The following are the formats of the Unit Status Displayed log entry.

When no process ID is to be included in the log information:

```
C502 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SHOW $\Delta$  [user-type]# $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C502 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SHOW $\Delta$  [user-type]# $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if *yes* is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if *all* or *show* is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C502 Dec 07 09:14:22 jpladmin 0 JP1_DEFAULT ;SHOW -F AJSROOT1 -l -g 1 -X auto /group/*
```

The following table describes the items that are specific to these formats.

Table C–68: Items specific to the Unit Status Displayed log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsshows</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	Always 0.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> [#]	The options specified in the executed <code>ajsshows</code> command are output. Note that the value specified for the <code>-f</code> , <code>-t</code> , or <code>-i</code> option is always enclosed in double quotation marks ("").	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsshows</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(69) Formats of the Unit Definitions Output log entry

The following are the formats of the Unit Definitions Output log entry.

When no process ID is to be included in the log information:

```
C503ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; PRINTΔ [user-type] #Δ [requesting-host-IP-
address , requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C503ΔdateΔtimeΔ [process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; PRINTΔ [user-type] #Δ [requesting-
host-IP-address , requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address , requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `print` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C503 Dec 07 09:14:22 jpladmin 0 JP1_DEFAULT ;PRINT -F AJSROOT1 -a /group/*
```

The following table describes the items that are specific to these formats.

Table C–69: Items specific to the Unit Definitions Output log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsprint</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	Always 0.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE 	1 to 100

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	Indicates that the user remotely executed the command or that a remote jobnet executed the command. If the length of the information exceeds 100 bytes, only 100 bytes are output.	1 to 100
<i>option</i> #	The options specified in the executed <code>ajsprint</code> command are output. Note that the value specified for the <code>-f</code> or <code>-t</code> option is always enclosed in double quotation marks ("").	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsprint</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(70) Formats of the Unit Definitions Backed Up log entry

The following are the formats of the Unit Definitions Backed Up log entry.

When no process ID is to be included in the log information:

```
C504 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; BACKUP $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C504 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; BACKUP $\Delta$  [user-type] # $\Delta$  [requesting-host-IP-address, requesting-source-identification] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `backup` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C504 Dec 07 09:14:22 jpladmin 0 JP1_DEFAULT ;BACKUP -F AJSROOT1 -b c:\tmp \backup -e -a -n BOX /group
```

The following table describes the items that are specific to these formats.

Table C–70: Items specific to the Unit Definitions Backed Up log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsbackup</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	Always 0.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255

Item	Description	Length (bytes)
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option#</i>	The options specified in the executed <code>ajsbackup</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsbackup</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(71) Formats of the Root Jobnet Schedule Information Output log entry

The following are the formats of the Root Jobnet Schedule Information Output log entry.

When no process ID is to be included in the log information:

```
C506 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SCHEDULE $\Delta$  [user-type] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C506 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SCHEDULE $\Delta$  [user-type] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `schedule` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C506 Dec 07 09:14:22 jp1admin 0 JP1_DEFAULT ;SCHEDULE -F AJSROOT1 -b
2009/12/8 -e 2009/12/8 /group/net
```

The following table describes the items that are specific to these formats.

Table C–71: Items specific to the Root Jobnet Schedule Information Output log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsschedule</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 to 5
<i>option</i> [#]	The options specified in the executed <code>ajsschedule</code> command are output.	1 to 500
<i>unit-name</i>	The root jobnet name specified in the executed <code>ajsschedule</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(72) Formats of the Unit Name Output log entry

The following are the formats of the Unit Name Output log entry.

When no process ID is to be included in the log information:

```
C507 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;NAME $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C507 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;NAME $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `name` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C507 Dec 15 09:14:22 jp1admin 0 JP1_DEFAULT ;NAME -F AJSROOT1 /group/*
```

The following table describes the items that are specific to these formats.

Table C–72: Items specific to the Unit Name Output log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsname</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	Always 0.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the executed <code>ajsname</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsname</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(73) Formats of the Unit Definitions Exported log entry

The following are the formats of the Unit Definitions Exported log entry.

When no process ID is to be included in the log information:

```
C508 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;EXPORT $\Delta$ [user-type]# $\Delta$ option
```

When a process ID is to be included in the log information:

```
C508 $\Delta$ date $\Delta$ time $\Delta$ [process-ID] $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;EXPORT $\Delta$ [user-type]# $\Delta$ option
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `export` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C508 Dec 15 09:14:22 jpladmin 0 JP1_DEFAULT ;EXPORT -o c:\temp\file
AJSROOT1:/group/net
```

The following table describes the items that are specific to these formats.

Table C–73: Items specific to the Unit Definitions Exported log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsexport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option#</i>	The options specified in the executed <code>ajsexport</code> command are output.	1 to 500

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(74) Formats of the Unit Status Displayed (Abnormal End) log entry

The following are the formats of the Unit Status Displayed (Abnormal End) log entry.

When no process ID is to be included in the log information:

```
C509 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SHOW $\Delta$  [user-type]  $\Delta$  [requesting-host-IP-address, requesting-source-identification]  $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C509 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; SHOW $\Delta$  [user-type]  $\Delta$  [requesting-host-IP-address, requesting-source-identification]  $\Delta$ option $\Delta$ unit-name
```

Logging conditions:

An entry is output to the log only if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter, and `all` or `show` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C509 Mar 05 12:18:06 [2688] jpladmin KAVS0161-I JP1_DEFAULT ;SHOW [ADMIN] -F  
AJSROOT1 -l -g 1 -X auto /net
```

The following table describes the items that are specific to these formats.

Table C–74: Items specific to the Unit Status Displayed (Abnormal End) log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsshow</code> command is output. If a JP1 user without the execution permission for the	0 to 20

Item	Description	Length (bytes)
<i>user-name</i>	command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output.	10
<i>host-name</i>	The name of the logical host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> ADMIN A user with administrator privileges or superuser privileges USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i> [#]	The options specified in the <code>ajsshows</code> command are output. Note that the value specified for the <code>-f</code> , <code>-t</code> , or <code>-i</code> option is always enclosed in double quotation marks (" ").	1 to 500
<i>unit-name</i>	The unit name specified in the <code>ajsshows</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(75) Formats of the Unit Definitions Output (Abnormal End) log entry

The following are the formats of the Unit Definitions Output (Abnormal End) log entry.

When no process ID is to be included in the log information:

```
C510ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ; PRINTΔ [user-type] Δ [requesting-host-IP-
address, requesting-source-identification] ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C510ΔdateΔtimeΔ [process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ; PRINTΔ [user-type] Δ [requesting-
host-IP-address, requesting-source-identification] ΔoptionΔunit-name
```

Logging conditions:

An entry is output to the log only if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment parameter, and `all` or `print` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C510 Mar 05 12:20:56 [2552] jpladmin KAVS0161-I JP1_DEFAULT ;PRINT [ADMIN] -
F AJSROOT1 -a /net
```

The following table describes the items that are specific to these formats.

Table C–75: Items specific to the Unit Definitions Output (Abnormal End) log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsprint</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output.	10
<i>host-name</i>	The name of the logical host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. • JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. • <code>REMOTE</code> Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100

Item	Description	Length (bytes)
<i>option#</i>	The options specified in the <code>ajsprint</code> command are output. Note that the value specified for the <code>-f</code> or <code>-t</code> option is always enclosed in double quotation marks ("").	1 to 500
<i>unit-name</i>	The unit name specified in the <code>ajsprint</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(76) Formats of the Unit Definitions Backed Up (Abnormal End) log entry

The following are the formats of the Unit Definitions Backed Up (Abnormal End) log entry.

When no process ID is to be included in the log information:

```
C511 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; BACKUP $\Delta$  [user-type]  $\Delta$  [requesting-host-IP-address, requesting-source-identification]  $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C511 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; BACKUP $\Delta$  [user-type]  $\Delta$  [requesting-host-IP-address, requesting-source-identification]  $\Delta$ option $\Delta$ unit-name
```

Logging conditions:

An entry is output to the log if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter, and `all` or `backup` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C511 Mar 05 12:21:49 [1196] jpladmin KAVS0161-I JP1_DEFAULT ;BACKUP [ADMIN]
-F AJSROOT1 -e -m -n box1 /net
```

The following table describes the items that are specific to these formats.

Table C–76: Items specific to the Unit Definitions Backed Up (Abnormal End) log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsbackup</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output.	10
<i>host-name</i>	The name of the logical host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output.	IPv4: 7 to 15 IPv6: 3 to 39

Item	Description	Length (bytes)
<i>requesting-host-IP-address</i>	This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS3 - View JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or when the command was remotely executed. <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option#</i>	The options specified in the <code>ajsbackup</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the <code>ajsbackup</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(77) Formats of the Unit Name Output (Abnormal End) log entry

The following are the formats of the Unit Name Output (Abnormal End) log entry.

When no process ID is to be included in the log information:

```
C512 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; NAME $\Delta$  [user-type]  $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C512 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; NAME $\Delta$  [user-type]  $\Delta$ option $\Delta$ unit-name
```

Logging conditions:

An entry is output to the log only if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter, and `all` or `name` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C512 Mar 05 12:22:13 [2540] jpladmin KAVS0161-I JP1_DEFAULT ;NAME [ADMIN] -F  
AJSROOT1 /net
```

The following table describes the items that are specific to these formats.

Table C–77: Items specific to the Unit Name Output (Abnormal End) log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsname</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output.	10
<i>host-name</i>	The name of the logical host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the <code>ajsname</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the <code>ajsname</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(78) Formats of the Jobnet Registration for Execution Information Exported log entry

The following are the formats of the Jobnet Registration for Execution Information Exported log entry.

When no process ID is to be included in the log information:

```
C513 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RGEXP $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C513 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ;RGEXP $\Delta$ [user-type]# $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `rgexport` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C513 Dec 07 19:14:15 jp1admin 0 JP1_DEFAULT ;RGEXP -F AJSROOT1 -e f /group/*
```

The following table describes the items that are specific to these formats.

Table C–78: Items specific to the Jobnet Registration for Execution Information Exported log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrgexport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the executed <code>ajsrgexport</code> command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsrgexport</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(79) Formats of the Jobnet Information Output by Export of Jobnet Registration for Execution Information log entry

The following are the formats of the Jobnet Information Output by Export of Jobnet Registration for Execution Information log entry.

When no process ID is to be included in the log information:

```
C514ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ;RGEXPΔ[user-type]#ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
C514ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ;RGEXPΔ[user-type]#ΔoptionΔunit-name
```

#

Δ[user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `rgexport` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C514 Dec 07 19:14:15 jpladmin 0 JP1_DEFAULT ;RGEXP -F AJSROOT1 -e f /group/rootnet1
```

The following table describes the items that are specific to these formats.

Table C–79: Items specific to the Jobnet Information Output by Export of Jobnet Registration for Execution Information log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrgeexport</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the executed <code>ajsrgeexport</code> command are output.	1 to 500
<i>unit-name</i>	The jobnet name specified in the <code>ajsrgeexport</code> command is output. The command exported the information about the jobnet registration for execution for the specified jobnet.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(80) Formats of the Jobnet Release Information Referenced log entry

The following are the formats of the Jobnet Release Information Referenced log entry.

When no process ID is to be included in the log information:

```
C515 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; RELEASEREF $\Delta$  [user-type] # $\Delta$ option $\Delta$ unit-name
```

When a process ID is to be included in the log information:

```
C515 $\Delta$ date $\Delta$ time $\Delta$  [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; RELEASEREF $\Delta$  [user-type] # $\Delta$ option $\Delta$ unit-name
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `release` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C515 Dec 07 19:14:15 jpladmin 0 JP1_DEFAULT ;RELEASEREF -F AJSROOT1 -i /group/releaset
```

The following table describes the items that are specific to these formats.

Table C–80: Items specific to the Jobnet Release Information Referenced log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajsrelease</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option</i> [#]	The options specified in the <code>ajsrelease</code> command are output. These options were specified when the command was used to output release information.	1 to 500
<i>unit-name</i>	The unit name specified in the executed <code>ajsrelease</code> command is output.	1 to 930

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 64 bytes, only 64 bytes are output.

If the size of all options exceeds 500 bytes, only 500 bytes are output. Note that if the 500-byte limit is exceeded before an option name is complete, that option is not output.

(81) Formats of the Calendar Calculation log entry

The following are the formats of the Calendar Calculation log entry.

When no process ID is to be included in the log information:

```
C516 $\Delta$ date $\Delta$ time $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CALUTIL $\Delta$ [user-type]# $\Delta$ option
```

When a process ID is to be included in the log information:

```
C516 $\Delta$ date $\Delta$ time $\Delta$ [process-ID]  $\Delta$ user-name $\Delta$ message-ID $\Delta$ host-name $\Delta$ ; CALUTIL $\Delta$ [user-type]# $\Delta$ option
```

#

Δ [user-type] is output if `yes` is specified in the `AJSLOGOUTPUTTEXTEND` environment setting parameter.

Logging conditions:

An entry is output to the log only if `all` or `calutil` is specified in the `REFLOG` environment setting parameter.

Example of a log entry:

```
C516 Apr 15 15:32:49 jp1admin 0 JP1_DEFAULT ;CALUTIL -F AJSROOT1 -b 2016/5/1
-e 2016/5/31 -o -g /CAL/CAL1 -g /CAL/CAL2
```

The following table describes the items that are specific to these formats.

Table C–81: Items specific to the Calendar Calculation log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the <code>ajscalutil</code> command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output.	1 or 10
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>user-type</i>	The type of the user (ADMIN or USER) who performed the operation is output. <ul style="list-style-type: none"> • ADMIN A user with administrator privileges or superuser privileges • USER A general user 	4 or 5
<i>option#</i>	The options specified in the executed <code>ajscalutil</code> command are output.	1 to 1110

#

If the value of an option (the part that is not the option name and the subsequent space (Δ)) exceeds 128 bytes, only 128 bytes are output.

(82) Formats of the Command Processing Started log entry

The following are the formats of the Command Processing Started log entry.

When no process ID is to be included in the log information:

`I001 Δ date Δ time Δ user-name Δ message-ID Δ host-name Δ ; START Δ command-name Δ [user-type]# Δ [requesting-host-IP-address, requesting-source-identification]# Δ option Δ unit-name`

When a process ID is to be included in the log information:

`I001 Δ date Δ time Δ [process-ID] Δ user-name Δ message-ID Δ host-name Δ ; START Δ command-name Δ [user-type]# Δ [requesting-host-IP-address, requesting-source-identification]# Δ option Δ unit-name`

#

Δ [user-type] Δ [requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Example of a log entry:

```
I001 Dec 15 09:14:22 jpladmin - JP1_DEFAULT ;START ENTRY -F AJSROOT1 -n /
group/net
```

The following table describes the items that are specific to these formats.

Table C–82: Items specific to the Command Processing Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the applicable command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20

Item	Description	Length (bytes)
<i>message-ID</i>	Always a hyphen (-).	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>command-name</i>	The applicable command name is output in upper-case alphabetic characters. Example: For the <code>ajsentry</code> command, the prefix (<code>ajs</code>) is removed and the remainder of the name is output in upper case (<code>ENTRY</code>).	7 to 11
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • <code>JP1/AJS3 - View</code> • <code>JP1/AJS3 - Web Console</code> • <code>JP1/AJS3 - Definition Assistant</code> 	IPv4: 7 to 15 IPv6: 3 to 39
<i>requesting-source-identification</i>	The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from <code>JP1/AJS3 - View</code> , <code>JP1/AJS3 - Web Console</code> or <code>JP1/AJS3 - Definition Assistant</code> , or when the command was remotely executed. <ul style="list-style-type: none"> • <code>JP1/AJS2-View</code> Indicates that the operation was performed from <code>JP1/AJS3 - View</code>. • <code>JP1/AJS3-WEB</code> Indicates that the operation was performed from <code>JP1/AJS3 - Web Console</code>. • <code>JP1/AJS2-DA (IN = export-source-file-name, OUT = export-execution-result-file-name)</code> Indicates that the operation was performed from <code>JP1/AJS3 - Definition Assistant</code>. • <code>REMOTE</code> Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i>	The options specified in the executed command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed command is output.	1 to 930

Note

The Command Processing Started log entry might not be output if an incorrectly specified option value results in an error or a non-existing unit name is specified. The log entry also might not be output if, while `JP1/AJS3 - View` is being used, an error occurs before definitions are updated or the existing definitions are not changed.

(83) Formats of the Command-to-Scheduler Service Processing Request Started log entry

The following are the formats of the Command-to-Scheduler Service Processing Request Started log entry.

When no process ID is to be included in the log information:

```
I002ΔdateΔtimeΔuser-nameΔmessage-IDΔhost-nameΔ;REQUESTΔcommand-nameΔ[user-type]#Δ[requesting-host-IP-address, requesting-source-identification] #ΔoptionΔunit-name
```

When a process ID is to be included in the log information:

```
I002ΔdateΔtimeΔ[process-ID] Δuser-nameΔmessage-IDΔhost-nameΔ;REQUESTΔcommand-nameΔ[user-type]#Δ[requesting-host-IP-address, requesting-source-identification] #ΔoptionΔunit-name
```

#

Δ[user-type] Δ[requesting-host-IP-address, requesting-source-identification] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Example of a log entry:

```
I002 Dec 15 09:14:22 jpladmin - JP1_DEFAULT ;REQUEST ENTRY -F AJSROOT1 -n /group/net
```

The following table describes the items that are specific to these formats.

Table C–83: Items specific to the Command-to-Scheduler Service Processing Request Started log entry (scheduler information log)

Item	Description	Length (bytes)
<i>user-name</i>	The name of the JP1 user who executed the applicable command is output. If a JP1 user without the execution permission for the command attempted to execute the command, a NULL character string is output.	0 to 20
<i>message-ID</i>	Always a hyphen (-).	1
<i>host-name</i>	The name of the host requested to perform the operation is output.	1 to 255
<i>command-name</i>	The applicable command name is output in upper-case alphabetic characters. Example: For the <code>ajsentry</code> command, the prefix (<code>ajs</code>) is removed and the remainder of the name is recorded in upper case (<code>ENTRY</code>).	7 to 11
<i>user-type</i>	The type of the user (<code>ADMIN</code> or <code>USER</code>) who performed the operation is output. <ul style="list-style-type: none"> • <code>ADMIN</code> A user with administrator privileges or superuser privileges • <code>USER</code> A general user 	4 or 5
<i>requesting-host-IP-address</i>	The IP address of the host used to perform the operation is output. This item is output only when the operation was performed from one of the following programs or when the command was remotely executed. <ul style="list-style-type: none"> • JP1/AJS3 - View • JP1/AJS3 - Web Console • JP1/AJS3 - Definition Assistant 	IPv4: 7 to 15 IPv6: 3 to 39

Item	Description	Length (bytes)
<i>requesting-source-identification</i>	<p>The information for identifying the source requesting the operation is output. This item is output only when the operation was performed from JP1/AJS3 - View, JP1/AJS3 - Web Console or JP1/AJS3 - Definition Assistant, or when the command was remotely executed.</p> <ul style="list-style-type: none"> JP1/AJS2-View Indicates that the operation was performed from JP1/AJS3 - View. JP1/AJS3-WEB Indicates that the operation was performed from JP1/AJS3 - Web Console. JP1/AJS2-DA (IN = <i>export-source-file-name</i>, OUT = <i>export-execution-result-file-name</i>) Indicates that the operation was performed from JP1/AJS3 - Definition Assistant. REMOTE Indicates that the user remotely executed the command or that a remote jobnet executed the command. <p>If the length of the information exceeds 100 bytes, only 100 bytes are output.</p>	1 to 100
<i>option</i>	The options specified in the executed command are output.	1 to 500
<i>unit-name</i>	The unit name specified in the executed command is output.	1 to 930

Note

The Command-to-Scheduler Service Processing Request Started log entry is not output if an error occurs before a processing request is issued to the scheduler service (for example, an incorrectly specified option value results in an error or a non-existing unit name is specified).

In the following cases, the log entry is output twice for a single execution of the command:

- The `-C` option is specified in the `ajssuspend` command.
- The `-a` or `-c` option is specified in the `ajsrelease` command.

C.2 Log entries output by the queueless agent service

The following table lists the types of log entries output to the queueless log files of JP1/AJS3.

Table C-84: Queueless agent service log entries

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	API
A101	Queueless agent service started	KAVS1801-I	None	--	--	--
A102	Queueless agent service stopped	KAVS1802-I	None	--	--	--
C901	Command request received	None	None	--	--	--
J101	Queueless job started	KAVS0251-I	None	--	--	--
J102	Queueless job ended normally	KAVS0252-I	None	--	--	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	API
J103	Queueless job ended abnormally	KAVS0253-E	None	--	--	--
J104	Queueless job ended with warning	KAVS0254-W	None	--	--	--
J106	Submission request accepted	KAVS1984-I	None	--	--	--

Legend:

--: Not applicable.

The log format and the items output are described below for each log entry. For details about the formats for the items common to all logs, see [C.1\(1\) Formats common to all log entries](#).

A Δ in a log format indicated a one-byte space.

(1) Format of the Queueless Agent Service Started log

The following is the format of the Queueless Agent Service Started log.

A101ΔdateΔtimeΔKAVS1801-IΔhost-name

Example of a log entry:

A101 Dec 15 12:30:59 KAVS1801-I hostA

The following table describes the item that is specific to this format.

Table C–85: Item specific to the Queueless Agent Service Started log entry (queueless log)

Item	Description	Length (bytes)
host-name	The name of the host on which the queueless agent service started is output.	1 to 255

(2) Format of the Queueless Agent Service Stopped log entry

The following is the format of the Queueless Agent Service Stopped log entry.

A102ΔdateΔtimeΔKAVS1802-IΔhost-name

Example of a log entry:

A102 Dec 15 12:30:06 KAVS1802-I hostA

The following table describes the item that is specific to this format.

Table C–86: Item specific to the Queueless Agent Service Stopped log entry (queueless log)

Item	Description	Length (bytes)
host-name	The name of the host on which the queueless agent service started is output.	1 to 255

(3) Formats of the Command Request Received log entry

The following are the formats of the Command Request Received log entry.

(a) ajsqlalter

C901ΔdateΔtimeΔajsqlalterΔmaximum-number-of-concurrently-executable-jobsΔmaximum-number-of-waiting-jobsΔuser-mapping-cache-clear-optionΔclass-nameΔlogical-host-name

(b) ajsqlattach

C901ΔdateΔtimeΔajsqlattachΔlogical-host-name

(c) ajsqldetach

C901ΔdateΔtimeΔajsqldetachΔlogical-host-nameΔforced-termination-specification

(d) ajsqlstop

C901ΔdateΔtimeΔajsqlstopΔend-mode

Logging examples:

```
ajsqlalter
C901 Dec 15 12:07:41 ajsqlalter -1 -1 0
ajsqlattach
C901 Dec 15 18:08:46 ajsqlattach
ajsqldetach
C901 Dec 15 18:08:08 ajsqldetach 0
ajsqlstop
C901 Dec 15 18:06:14 ajsqlstop 0
```

The following table describes the items that are specific to these formats.

Table C–87: Items specific to the Command Request Received log entry (queueless log)

Item	Description	Length (bytes)
<i>logical-host-name</i>	The logical host name specified in the <code>-h</code> option is output. If the <code>-h</code> option is not specified in the command, a logical host name is not output.	0 to 255
<i>maximum-number-of-concurrently-executable-jobs</i>	The new maximum number of concurrently executable jobs is output as a decimal number. If no value is specified in the command, <code>-1</code> is output.	1 to 4
<i>maximum-number-of-waiting-jobs</i>	The new maximum number of waiting jobs is output as a decimal number. If no value is specified in the command, <code>-1</code> is recorded.	1 to 6
<i>user-mapping-cache-clear-option</i>	0 or 1 is output. 0: Clearing the cache is not specified. 1: Clearing the cache is specified.	1
<i>class-name</i>	The target class name is output. If no class name is specified in the command, a name is not output.	0 to 63
<i>forced-termination-specification</i>	0 or 1 is output. 0: Forced termination is not specified.	1

Item	Description	Length (bytes)
<i>forced-termination-specification</i>	1: Forced termination is specified.	1
<i>end-mode</i>	0 or 1 is output. 0: There is a wait for the job to end. 1: There is no wait for the job to end.	1

(4) Format of the Queueless Job Started log entry

The following is the format of the Queueless Job Started log entry.

J101ΔdateΔtimeΔKA VS0251-IΔmanager-host-nameΔscheduler-service-name:job-name:execution-IDΔagent-host-name

Example of a log entry:

J101 Dec 15 17:14:01 KAVS0251-I hostA AJSROOT1:/group/net1/job1:@A100 hostB

The following table describes the items that are specific to this format.

Table C–88: Items specific to the Queueless Job Started log entry (queueless log)

Item	Description	Length (bytes)
<i>manager-host-name</i>	The name of the manager host that requested execution of the queueless job is output.	1 to 255
<i>job-name</i>	The name of the queueless job that started is output in <i>scheduler-service-name:job-name:execution-ID</i> format.	1 to 969
<i>agent-host-name</i>	The name of the agent host on which the queueless job was executed is output.	1 to 255

(5) Format of the Queueless Job Ended Normally log entry

The following is the format of the Queueless Job Ended Normally log entry.

J102ΔdateΔtimeΔKA VS0252-IΔmanager-host-nameΔscheduler-service-name:job-name:execution-IDΔagent-host-nameΔreturn-value

Example of a log entry:

J102 Dec 15 17:14:01 KAVS0252-I hostA AJSROOT1:/group/net1/job1:@A100 hostB
0

The following table describes the items that are specific to this format.

Table C–89: Items specific to the Queueless Job Ended Normally log entry (queueless log)

Item	Description	Length (bytes)
<i>manager-host-name</i>	The name of the manager host that requested execution of the queueless job is output.	1 to 255
<i>job-name</i>	The name of the queueless job that ended normally is output in <i>scheduler-service-name:job-name:execution-ID</i> format.	1 to 969
<i>agent-host-name</i>	The name of the agent host on which the queueless job ended normally is output.	1 to 255

Item	Description	Length (bytes)
<i>return-value</i>	The return value of the queueless job that ended normally is output as a decimal number.	1 to 10

(6) Format of the Queueless Job Ended Abnormally log entry

The following is the format of the Queueless Job Ended Abnormally log entry.

J103ΔdateΔtimeΔKAVS0253-EΔmanager-host-nameΔscheduler-service-name : job-name : execution-IDΔagent-host-nameΔend-statusΔreturn-value

Example of a log entry:

```
J103 Dec 15 17:14:01 KAVS0253-E hostA AJSROOT1:/group/net1/job1:@A100 hostB
a 0
```

The following table describes the items that are specific to this format.

Table C–90: Items specific to the Queueless Job Ended Abnormally log entry (queueless log)

Item	Description	Length (bytes)
<i>manager-host-name</i>	The name of the manager host that requested execution of the queueless job is output.	1 to 255
<i>job-name</i>	The name of the queueless job that ended abnormally is output in <i>scheduler-service-name : job-name : execution-ID</i> format.	1 to 969
<i>agent-host-name</i>	The name of the agent host on which the queueless job ended abnormally is output.	1 to 255
<i>end-status</i>	One of the following is output: a: Ended abnormally f: Failed to start c: Killed ?: Unknown end status	1
<i>return-value</i>	The return value of the queueless job that ended abnormally is output as a decimal number.	1 to 10

(7) Format of the Queueless Job Ended with Warning log entry

The following is the format of the Queueless Job Ended with Warning log entry.

J104ΔdateΔtimeΔKAVS0254-WΔmanager-host-nameΔscheduler-service-name : job-name : execution-IDΔagent-host-nameΔreturn-value

Example of a log entry:

```
J104 Dec 15 17:14:01 KAVS0254-W hostA AJSROOT1:/group/net1/job1:@A100 hostB
0
```

The following table describes the items that are specific to this format.

Table C–91: Items specific to the Queueless Job Ended with Warning log entry (queueless log)

Item	Description	Length (bytes)
<i>manager-host-name</i>	The name of the manager host that requested execution of the queueless job is output.	1 to 255
<i>job-name</i>	The name of the queueless job that ended with a warning is output in <i>scheduler-service-name:job-name:execution-ID</i> format.	1 to 969
<i>agent-host-name</i>	The name of the agent host on which the queueless job ended with a warning is output.	1 to 255
<i>return-value</i>	The return value of the queueless job that ended with a warning is output as a decimal number.	1 to 10

(8) Format of the Submission Request Accepted log entry

The following is the format of the Submission Request Accepted log entry.

J106ΔdateΔtimeΔKAVS1984-IΔmanager-host-nameΔscheduler-service-name:job-name:execution-IDΔagent-host-name

Example of a log entry:

J106 Dec 15 12:21:03 KAVS1984-I hostA AJSROOT1:/group/net1/job1:@A100 hostB

The following table describes the items that are specific to this format.

Table C–92: Items specific to the Submission Request Accepted log entry (queueless log)

Item	Description	Length (bytes)
<i>manager-host-name</i>	The name of the manager host that requested execution of the queueless job is output.	1 to 255
<i>job-name</i>	The name of the queueless job for which a submission request was accepted is output in <i>scheduler-service-name:job-name:execution-ID</i> format.	1 to 969
<i>agent-host-name</i>	The host name specified as the execution agent host name is output.	1 to 255

C.3 Log entries recorded when definition pre-checks are performed

The following table lists the log entries that are output to the definition check log files when definition pre-checks are performed.

Table C–93: Log entries output when definition pre-checks are performed

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	API
A201	JP1/AJS3 Check Manager service started	KAVS3402-I	None	<i>ajschkstart</i>	--	--
A202	JP1/AJS3 Check Manager service stopped	KAVS3403-I	None	<i>ajschkstop</i>	--	--
C901	Command request received	--	None	<i>ajschkdef</i>	--	--

Log entry type	Log entry name	Associated message ID	Associated JP1 event	Command name	Operation from JP1/AJS3 - View	API
A203	JP1/AJS3 Check Agent service started	KAVS3406-I	None	ajschkstart	--	--
A204	JP1/AJS3 Check Agent service stopped	KAVS3407-I	None	ajschkstop	--	--

Legend:

--: Not applicable.

The format and the items output are described below for each log entry. For details about the formats common to all logs, see *C.1(1) Formats common to all log entries*.

(1) Format of the JP1/AJS3 Check Manager Service Started log entry

The following is the format of the JP1/AJS3 Check Manager Service Started log entry.

A201ΔdateΔtimeΔKAVS3402-IΔname-of-host-on-which-service-started

Example of a log entry:

A201 Dec 15 09:14:22 KAVS3402-I host1

The following table describes the item that is specific to this format.

Table C–94: Item specific to the JP1/AJS3 Check Manager Service Started log entry

Item	Description	Length (bytes)
<i>name-of-host-on-which-service-started</i>	The name of the host on which the service started is output.	1 to 255

(2) Format of the JP1/AJS3 Check Manager Service Stopped log entry

The following is the format of the JP1/AJS3 Check Manager Service Stopped log entry.

A202ΔdateΔtimeΔKAVS3403-IΔname-of-host-on-which-service-stopped

Example of a log entry:

A202 Dec 15 17:15:20 KAVS3403-I host1

The following table describes the item that is specific to this format.

Table C–95: Item specific to the JP1/AJS3 Check Manager Service Stopped log entry

Item	Description	Length (bytes)
<i>name-of-host-on-which-service-stopped</i>	The name of the host on which the service stopped is output.	1 to 255

(3) Format of the Command Request Received log entry

The following is the format of the Command Request Received log entry.

C901ΔdateΔtimeΔcommand-execution-typeΔcheck-itemΔexecution-agent-profile-name^{#1}Δregistered-user-nameΔunit-attribute-profile-name^{#2}Δoutput-file-nameΔfull-unit-name

#1

Item Δ execution-agent-profile-name is output only if the -p option is specified in the ajschkdef command. This item is not output if the -p option is omitted.

#2

Item Δ unit-attribute-profile-name is output only if the -e option is specified in the ajschkdef command. This item is not output if the -e option is omitted.

Example of a log entry:

```
C901 Dec 15 13:30:18 START O jpladmin C:\Program Files\HITACHI\JP1AJS2\log
\ajscheckfile.txt net1
```

The following table describes the items that are specific to this format.

Table C-96: Items specific to the Command Request Received log entry

Item	Description	Length (bytes)
<i>command-execution-type</i>	The execution type of the command is output. START: A definition pre-check was started. STATUS: The execution status of a definition pre-check was displayed.	1 to 6
<i>check-item</i>	The check item options specified in the command are output (the options are O, M, C, P, H, U, D, and A).	1 to 7
<i>execution-agent-profile-name</i>	The execution agent profile name specified in the -p option is output.	1 to 255
<i>registered-user-name</i>	The registered user name specified in the -u option is output.	1 to 31
<i>unit-attribute-profile-name</i>	The unit attribute profile name specified in the -e option is output.	1 to 255
<i>output-file-name</i>	The output file name specified in the -o option is output.	1 to 255
<i>full-unit-name</i>	The full unit name specified in the command is output.	1 to 961

(4) Format of the JP1/AJS3 Check Agent Service Started log entry

The following is the format of the JP1/AJS3 Check Agent Service Started log entry.

A203 Δ date Δ time Δ KAVS3406-I Δ name-of-host-on-which-service-started

Example of a log entry:

```
A203 Dec 15 09:14:22 KAVS3406-I host1
```

The following table describes the item that is specific to this format.

Table C-97: Item specific to the JP1/AJS3 Check Agent Service Started log entry

Item	Description	Length (bytes)
<i>name-of-host-on-which-service-started</i>	The name of the host on which the service started is output.	1 to 255

(5) Format of the JP1/AJS3 Check Agent Service Stopped log entry

The following is the format of the JP1/AJS3 Check Agent Service Stopped log entry.

A204 Δ date Δ time Δ KAVS3407-I Δ name-of-host-on-which-service-stopped

Example of a log entry:

```
A204 Dec 15 17:15:20 KAVS3407-I host1
```

The following table describes the item that is specific to this format.

Table C–98: Item specific to the JP1/AJS3 Check Agent Service Stopped log entry

Item	Description	Length (bytes)
<i>name-of-host-on-which-service-stopped</i>	The name of the host on which the service stopped is output.	1 to 255

C.4 Log entries output when flexible jobs are executed

The following table lists the messages that are output to the log files on the host requesting a flexible job and the host executing a flexible job.

Table C–99: Log entries output when flexible jobs are executed

Message ID	Log file on the host requesting a flexible job	Log file on the host executing a flexible job	Broadcast agent log file	Log file for the broadcast agent and broadcast-execution destination agents
KAVS8100	Y	Y	Y	--
KAVS8101	Y	--	Y	--
KAVS8102	--	Y	--	--
KAVS8106	Y	Y	Y	--
KAVS8108	--	Y	--	--
KAVS8109	--	Y	--	--
KAVS8110	Y	Y	Y	--
KAVS8115	Y	--	Y	--
KAVS8116	Y	--	Y	--
KAVS8130	--	Y	--	--
KAVS8133 to KAVS8136	--	Y	--	--
KAVS8137	Y	--	Y	--
KAVS8138	Y	--	Y	--
KAVS8139 to KAVS8141	--	Y	--	--
KAVS8142	Y	--	--	--
KAVS8143	--	Y	--	--
KAVS8144	--	--	--	Y
KAVS8145	--	--	Y	--
KAVS8146	--	--	--	Y

Message ID	Log file on the host requesting a flexible job	Log file on the host executing a flexible job	Broadcast agent log file	Log file for the broadcast agent and broadcast-execution destination agents
KAVS8147	--	--	--	Y
KAVS8148	--	--	Y	--
KAVS8149	--	--	Y	--
KAVS8158	--	--	Y	--
KAVS8159	--	--	Y	--
KAVS8160	--	--	--	Y
KAVS8162	--	--	Y	--
KAVS8163	--	--	--	Y
KAVS8164	--	--	--	Y

Legend:

Y: Is output.

--: Is not output.

D. How the Embedded Database Operates

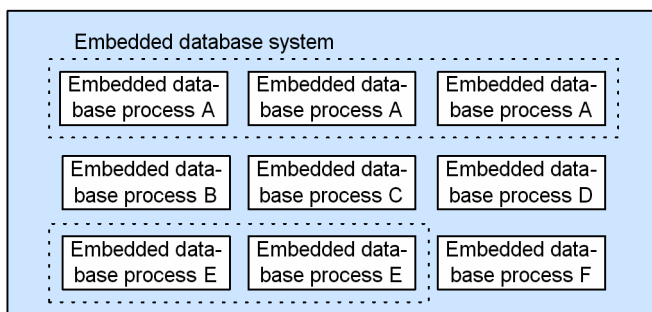
This section explains what designers and operators of the embedded database need to know about embedded database operation.

D.1 The embedded database system and processes

Multiple processes run collaboratively on the OS to manage access to the embedded database. This management framework is called the *embedded database system*, and each process in the framework is called an *embedded database process*.

As shown in the figure below, the embedded database system uses several embedded database processes. In the embedded database system, some embedded database processes operate together with other embedded database processes, and some embedded database processes operate independently. For details about the process configuration for the embedded database and the number of processes, see *B.4 Embedded database processes*.

Figure D–1: Embedded database system and processes



In this manual, the *embedded database system* might also be called *embedded database server* or, simply, *embedded database*. When a single embedded database process is explained, the term *embedded database process* is used to clarify that a process is meant.

D.2 Embedded database processes

(1) Types of embedded database processes

The following explains the types of embedded database processes.

(a) Process that manages embedded database processes (pdprcd process)

In Windows, the pdprcd process is generated when the embedded database service is started, and disappears when the service is stopped. If the `ajsembdbstop` command is used to stop the embedded database system, the pdprcd process remains resident on the OS. It does not disappear.

In UNIX, the pdprcd process is generated when the embedded database is started by the `ajsembdbstart` command, and disappears when the embedded database system is stopped by the `ajsembdbstop` command.

(b) Processes existing on the OS while the embedded database system is operating

When the embedded database system is started, the pdprod process generates child processes. These processes reside on the OS to control database access while the embedded database system is operating. When the embedded database is stopped, these processes disappear from the OS.

(c) Processes for the embedded database operation commands

Every time an embedded database operation command is executed, processes for executing necessary processing are generated. These processes disappear immediately after the processing terminates.

Some embedded database operation commands can only be executed while the embedded database system is operating, and the other embedded database operation commands can be executed anytime, regardless of the operating status of the embedded database system.

(2) Status transitions of the embedded database processes

The following figure shows how the status of an embedded database process changes according to the operating status of the embedded database system.

Figure D–2: Operating status of the embedded database system and the operating status of each embedded database process

Process name ^{#1}	Process operation								
pdstds	○ → –	○ → ▼	○ → ▼	○ → –					
pdlogswd	○ → –	○ → ▼	○ → ▼	○ → –					
pd_buf_dfw	○ → –	○ → ▼	○ → ▼	○ → –					
pdlogd	○ → –	○ → ▼	○ → ▼	○ → –					
pdtrnrvd	○ → –	○ → ▼	○ → ▼	○ → –					
pdtrnd	○ → –	○ → ▼	○ → ▼	○ → –					
pdscdd	○ → –	○ → ▼	○ → ▼	○ → –					
pdstd	○ → –	○ → ▼	○ → ×	○ → –					
pdrdmd	○ → –	○ → ▼	○ → ▼	○ → –					
pdmlgd	○ → –	○ → ▼	○ → ▼	○ → –					
pdrsvre	○ → –	○ → ▼	○ → ▼	○ → –					
pdprcd (Windows) ^{#2}	○ → –	○ → ▼	○ → ▼	○ → –					
pdprcd (UNIX)	○ → –	○ → ▼	○ → ▼	○ → –					
Embedded database system operation	Environment setup	Normal stop	Normal start	Forced stop	Restart	Abnormal termination ^{#3}	Restart	Normal stop	Environment removal

Legend:

- : Generated
- : Normal termination
- ▼: Forced termination
- ×: Abnormal termination

#1:

Because the pdprcd process operates differently in UNIX and Windows, an explanation is provided for each case. The operation of the other processes is the same in UNIX and Windows.

#2:

The explanation assumes that the embedded database system is started and stopped by starting and stopping the embedded database service, not by executing the `ajsembdbstart` and `ajsembdbstop` commands. If these commands are used, the pdprcd process remains resident on the OS until the embedded database service stops.

#3:

The explanation assumes that the pdstd process terminates abnormally and then the embedded database system terminates abnormally as a result of the abnormal termination of the process.

The following explains the operating statuses of embedded database processes.

(a) Generation

In UNIX, the pdprcd process is generated by the `ajsembdbstart` command.

In Windows, the pdprcd process is generated by the embedded database service.

Processes other than the pdprcd process are generated by the pdprcd process or embedded database operation commands that are executed.

(b) Normal termination

When an embedded database process no longer has a reason to exist, it performs cleanup processing such as releasing or deleting resources (such as memory, or files), and then disappears from the OS. The status that results is called *normal termination*.

Normal termination is sometimes called *normal stop* in this manual.

(c) Forced termination

Before an embedded database process can terminate normally, it might have to be terminated immediately in order to fulfill a request. In this case, the pdprcd process sends an immediate termination request to the embedded database process. Upon receiving the request, the embedded database process terminates immediately without performing any cleanup processing. The resulting status in this case is called *forced termination*.

When an embedded database process is forcibly terminated, an embedded database process that performs cleanup processing in place of the forcibly terminated process is started.

Forced termination occurs in the following cases:

- When the embedded database system is forcibly terminated (`ajsembddbstop` command `-f` option)
- When execution of an embedded database operation command is canceled (`ajsembdbcancel` command)

Forced termination is sometimes called *forced stop* in this manual.

(d) Abnormal termination

If an error prevents an embedded database process from continuing operation, the process disappears from the OS without performing any cleanup processing. The resulting status in this case is called *abnormal termination*.

When an embedded database process is abnormally terminated, an embedded database process that performs cleanup processing in place of the abnormally terminated process is started. If the situation in which abnormal termination occurred is judged too serious for operation of the entire embedded database system to continue, the cleanup process abnormally terminates the embedded database system.

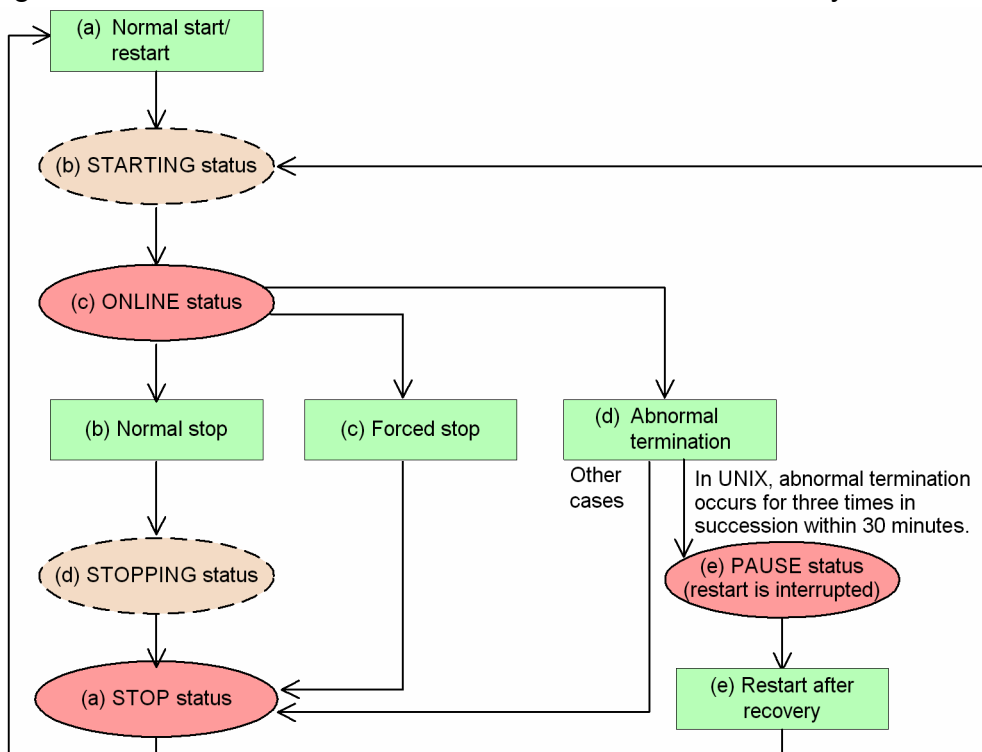
Abnormal termination occurs in the following cases:

- When a system log file that can be overwritten does not exist
- When the system cannot continue operation due to insufficient memory or disk space
- When a contradiction resulting from damage to memory or a similar cause is detected

D.3 Embedded database system

The following figure shows the status transitions of the embedded database system.

Figure D-3: Status transitions of the embedded database system



Legend:

- : Permanent status
- : Transitional status
- : Event
- : Status transition

For details about the permanent and transitional statuses of the embedded database system in the figure, see (1) *Embedded database system statuses*. For details about the events that occur in the embedded database system in the figure, see (2) *Events that occur in the embedded database system*.

(1) Embedded database system statuses

The following describes the permanent and transitional statuses shown in *Figure D-3*.

To check the status of the embedded database system, execute the `ajsembdbstatus` command with the `-s` option specified. Character strings enclosed in parentheses in a permanent or transitional status in *Figure D-3* correspond to the values in the `UNIT-STAT` column that appear when you execute the `ajsembdbstatus` command with the `-s` option specified.

(a) STOP status

STOP status refers to the status in which the only running embedded database process is the `pdprcd` process. Note that, in Windows, even the `pdprcd` process does not exist if the embedded database service has not been started.

When the embedded database system is in the *STOP* status, the scheduler database cannot be accessed.

(b) STARTING status

STARTING status refers to the status that occurs between the STOP and ONLINE statuses. In this status, the embedded database processes are in the midst of starting and preparing for operation. Because the STARTING status is a transitional status, the embedded database system never remains in this status.

When the embedded database system is in the STARTING status, the scheduler database cannot be accessed.

(c) ONLINE status

ONLINE status refers to the status in which all child processes of the pdprcd process have been started and initialized, and the embedded database can be accessed.

The scheduler database can be accessed only when the embedded database system is in the ONLINE status.

(d) STOPPING status

STOPPING status refers to the status that occurs between the ONLINE and STOP statuses when the embedded database system terminates normally. In this status, embedded database processes are in the midst of being sequentially stopped and preparation for termination is performed. Because the STOPPING status is a transitional status, the embedded database system never remains in this status. Note that the embedded database system does not enter this status if the system terminates abnormally or is forcibly stopped.

When the embedded database system is in the STOPPING status, the scheduler database cannot be accessed.

(e) PAUSE status

The embedded database system is placed in the PAUSE status only when an error has occurred.

In UNIX, if an error occurs frequently (three times[#] in succession within 30 minutes[#]) in the embedded database system, the system is placed in the *PAUSE status*. If this same situation occurs in Windows, the embedded database system is placed in the STOP status.

When the embedded database system is in the PAUSE status, as in the STOP status, the only embedded database process residing on the OS is the pdprcd process.

The embedded database system in the PAUSE status cannot be started until the embedded database system administrator corrects the error and executes the `ajsembdbstart` command with the `-R` option. The `-R` option explicitly indicates that the system has been recovered.

When the embedded database system in the PAUSE status, the scheduler database cannot be accessed.

The number of times and the number of minutes are fixed and cannot be changed.

(2) Events that occur in the embedded database system

The status transitions of the embedded database system are triggered by events that occur when embedded database operation commands are executed by the embedded database system administrator and events that the embedded database system automatically generates.

The following explains the events shown in *Figure D-3*.

(a) Normal start/restart

When an attempt is made to start the embedded database system that is in the STOP status, the system first enters the STARTING status, and then enters the ONLINE status.

Startup of the embedded database system immediately after the environment is set up or after the system has terminated normally is called a *normal start*.

Startup of the embedded database system after it has been forcibly stopped or after it has abnormally terminated is called a *restart*.

(b) Normal stop

When a normal stop operation is performed for the embedded database system that is in the ONLINE status, the system first enters the STOPPING status, and then enters the STOP status.

Normal stop is sometimes called *normal termination* in this manual.

(c) Forced stop

When a forced stop operation is performed for the embedded database system that is in ONLINE status, the system bypasses the STOPPING status and directly enters the STOP status.

Forced stop is sometimes called *forced termination* in this manual.

(d) Abnormal termination

If an error occurs in the embedded database system in the ONLINE status, the system enters the STOP or PAUSE status to limit any effects from the error. This event is called an *abnormal termination*.

Specifically, the pdpred process forcibly terminates all other embedded database processes. Usually, a database process that is terminated abnormally enters the STOP status. However, if an error occurs three times[#] in succession within 30 minutes[#], the process enters the PAUSE status.

The number of times and the number of minutes are fixed and cannot be changed.

Generally, the abnormal termination event occurs in the following cases:

- When no system log file can be overwritten
- When the system cannot continue operation due to insufficient memory or disk space
- When damage to a system area on the disk is detected

(e) Restart after recovery

After the error in the embedded database system that has been placed in the PAUSE status has been corrected, execute the `ajsembdbstart` command with the `-R` option specified so that the embedded database system first enters the STARTING status, and then enters the ONLINE status. This operation is available in UNIX only.

E. Version Revisions

This appendix lists the changes in each version of the JP1/AJS series programs.

E.1 Revisions in 11-50

The following lists the revisions in 11-50 for each program.

(1) JP1/AJS3 - Manager

- The Web GUI now support the following functions:
 - Viewing monthly schedules
 - Adding execution schedules
 - Change plan (change time)
 - Change plan (execute immediately)
 - Change plan (execution prohibited)
 - Change plan (release change)
 - Change delay monitor
- The API now supports the function to acquire unit information.
- The maximum size of the Java heap on the Web Console server can now be changed, and the default value was changed from 512 MB to 2,048 MB.
- A function was added to enable you to change the colors indicating unit statuses displayed in the windows and dialog boxes of the Web GUI.
- The map area in the Monitor dialog box and the Monitor screen of the Web GUI can now switch between displaying unit names and comments.
- The following functions were added to improve job throughput when multiple scheduler services are active:
 - Function to reduce the number of ports that are used during job execution
 - Function to output trace logs for each scheduler service

In addition to the changes to internal processing, the JP1/AJS3 performance processing that runs when multiple root jobnets start at the same time was improved. As a result, job throughput when a single scheduler service is active was also improved.

- The maximum number of execution agents that can be registered on one manager host can now be increased to 2,048.
- To enable the comments on units to be viewed in JP1/IM windows, commenting on units was added as an extended attribute (specific information) of a JP1 event whose OBJECT_TYPE is JOBNET or JOB.
- Commands to specify settings of environment setting parameters were integrated into the `jajs_config` command.
- When the scheduler service is restarted, a job that meets specific conditions now transitions to *Wait for prev. to end* or to *Not executed + Ended* status (and *not to Unknown end status*). This enables you to determine, from the job status after the restart of the scheduler service, whether a user program has started.

(2) JP1/AJS3 - Agent

- Commands to specify settings of environment setting parameters were integrated into the `jajs_config` command.

(3) JP1/AJS3 - Agent Minimal Edition

- Descriptions were added concerning JP1/AJS3 - Agent Minimal Edition, which limits the number of jobs that can be executed per day to 10.

E.2 Revisions in 11-10

The following lists the revisions in 11-10 for each program.

(1) JP1/AJS3 - Manager

- The Web GUI and API now support the following functions:

Web GUI

- Check execution schedule
- Interrupt
- Kill
- Rerun
- Change job status
- Change detailed definitions for PC jobs and Unix jobs
- Filter monitoring targets by execution status

API

- Fixed execution registration (specifying a specific date and time)
 - Change plan (change time)
 - Change plan (execute immediately)
 - Change plan (execution prohibited)
 - Change plan (release change)
 - Change hold attribute
 - Interrupt
 - Kill
 - Rerun
 - Change delay monitor
 - Change job status
 - Obtain execution result details for units
 - Obtain the protocol version of JP1/AJS3 - Manager
- JP1/IM and JP1/AJS3 - Web Console can now be linked so that the Web GUI can be displayed from an email sent by an automated action of JP1/IM - View or JP1/IM.

- JP1/PFM and JP1/AJS3 - Web Console can now be linked so that PFM - Web Console can be launched from the Web GUI.
- The `ajscalutil` command was added. This command calculates multiple calendars and outputs the results.
- A function was added to set a hold attribute for the first execution generation created by registering a jobnet for planned execution or fixed execution.
- The job distribution delay reduction function was added. (When a job is to be executed concurrently on multiple execution agents, if a communication failure occurs on some execution agents, this function reduces the delay in job distribution to the normally operating execution agents.)
- In HP-UX, AIX, and Linux, the architecture of most JP1/AJS3 - Manager processes was changed to 64-bit architecture. Note that the following processes were not changed to 64-bit architecture: `jpqman32`, `jpqimport`, `jpqexport`, `jpqdbcond`, `jajs_maintain`, and `jajs_migrate`.
- The broadcast function was added. This function distributes a job to multiple execution agents by using a flexible job.
- When the `ajswbsetup` command is run with the `-s` option (option for setting up the standby system) specified, the command now ends normally even if no shared disk is mounted.

(2) JP1/AJS3 - Agent

- In HP-UX, AIX, and Linux, the architecture of most JP1/AJS3 - Agent processes was changed to 64-bit architecture.
- The broadcast function was added. This function distributes a job to multiple execution agents by using a flexible job.

(3) JP1/AJS3 - View

- A function was added to set a hold attribute for the first execution generation created by registering a jobnet for planned execution or fixed execution.
- The broadcast function was added. This function distributes a job to multiple execution agents by using a flexible job.
- The multiuser remote desktop connection function was added. This function allows multiple users to use JP1/AJS3 - View via remote desktop connections.
- A function was added that allows each JP1 user to use different custom jobs in JP1/AJS3 - View.

E.3 Revisions in 11-00

The following lists the revisions in 11-00 for each program.

(1) JP1/AJS3 - Manager

- The supported language types were changed. The specific combinations of languages that are supported when using JP1/AJS3 in multi-language environments was also changed.
- JP1/AJS3 - Web Console was added as a component of JP1/AJS3 - Manager. JP1/AJS3 - Web Console allows you to monitor units over the Internet from a web browser, and develop custom programs that use APIs to perform operations on units.
- JP1/AJS3 - Print Option was incorporated into JP1/AJS3 - Manager. You can use JP1/AJS3 - Print Option to display and print unit information with a customized layout.
- Messages between hosts such as agent hosts and JP1/AJS3 - View hosts can now be encrypted using SSL.

- A *flexible job* was added as a job type. This job allows processing to be executed on an agent host that cannot be managed directly from the manager host. For example, you might use a flexible job with an execution agent in an auto-scaling environment. Although the definition of a flexible job is not OS-dependent, flexible jobs can only be executed in Windows and Linux environments.
- An *HTTP connection job* was added as a job type. This job can send requests to HTTP interfaces such as web APIs provided by cloud environments and web servers. Although the definition of an HTTP connection job is not OS-dependent, HTTP connection jobs can only be executed in Windows and Linux environments.
- The initial values of the following environment setting parameters were changed to reflect the recommended values:
 - UNITDEFDIVIDEUPDATE
 - AJSPRINTSORTUNITINF
 - ReceiveFileSizeStatus
 - LoadUserProfile
 - IsAccessTokenCache
 - MergeEnvMode
 - NotifyJobStateCount
 - PassingInfoUsePreRc
 - FileWriteMode
 - ResolveAgentInfo
 - RetryAgtStartNotification
- The environment setting parameters that require assessment in the design stage of JP1/AJS3 were reviewed, and corresponding improvements were made to the manual.
- An option was added that causes JP1/AJS3 - Manager to continue waiting when the status of a unit whose end is being waited for changes after re-execution of its succeeding unit. The behavior of JP1/AJS3 - Manager when waiting is enabled after a new installation of JP1/AJS3 was also changed.
- The following OS is supported:
 - CentOS 6(x64)
 - CentOS 7
 - Linux 6.1(x64)
 - Linux 7.1
 - Oracle Linux 6(x64)
 - Oracle Linux 7
 - SUSE Linux 12
- The following OS is no longer supported:
 - Windows Server 2008 (excluding Windows Server 2008 R2)
 - Windows Server 2003
 - Windows Server 2003(x64)
 - Linux 6.1(x86) or later
 - Linux 5.1(x86) or later
 - Linux 5.1(AMD/Intel 64) or later

- Support for Outlook 2003 linkage was eliminated. JP1/AJS3 - Manager now supports linkage with Outlook 2013 (32 bit) and Outlook 2010 (32 bit).
- JP1/AJS3 Console is now compatible with earlier versions.

(2) JP1/AJS3 - Agent

- The supported language types were changed. The specific combinations of languages that are supported when using JP1/AJS3 in multi-language environments was also changed.
- Messages exchanged with JP1/AJS3 - Manager can now be encrypted using SSL.
- Flexible jobs can now be executed (Windows and Linux only).
- HTTP connection jobs can now be executed (Windows and Linux only).
- The initial values of the following environment setting parameters were changed to reflect the recommended values:
 - LoadUserProfile
 - IsAccessTokenCache
 - MergeEnvMode
 - NotifyJobStateCount
 - FileWriteMode
 - ResolveAgentInfo
 - RetryAgtStartNotification
- The environment setting parameters that require assessment in the design stage of JP1/AJS3 were reviewed, and corresponding improvements were made to the manual.
- The following OS is supported:
 - CentOS 6(x64)
 - CentOS 7
 - Linux 6.1(x64)
 - Linux 7.1
 - Oracle Linux 6(x64)
 - Oracle Linux 7
 - SUSE Linux 12
- The following OS is no longer supported:
 - Windows Server 2008 (excluding Windows Server 2008 R2)
 - Windows Server 2003
 - Windows Server 2003(x64)
 - Linux 6.1(x86) or later
 - Linux 5.1(x86) or later
 - Linux 5.1(AMD/Intel 64) or later
- Support for Outlook 2003 linkage was eliminated. JP1/AJS3 - Manager now supports linkage with Outlook 2013 (32 bit) and Outlook 2010 (32 bit).

(3) JP1/AJS3 - View

- The supported language types were changed. The specific combinations of languages that are supported when using JP1/AJS3 in multi-language environments was also changed.
- Messages exchanged with JP1/AJS3 - Manager can now be encrypted using SSL.
- Flexible jobs can now be defined in the Define Details dialog box.
- HTTP connection jobs can now be defined in the Define Details dialog box.
- The paste commands in the menu of the Jobnet Editor window were replaced with two new commands. One is the **Paste (Units and relations)** command, which pastes icons, the coordinates of the icons, and the relation lines between icons. The other is the **Paste (Units only)** command which pastes icons and their coordinates.
- An option was added that allows you to set the display order of items in the tree area and list area of the JP1/AJS3 - View window (Main window).
- An option was added that allows you to change where the current day is positioned in the Time area and Schedule area of the Monthly Schedule window.
- The settings below now apply as the default settings for all windows. You can customize these settings in JP1/AJS3 - View.
 - A question mark (?) is used as the icon for unregistered custom jobs.
 - Units in the tree area are displayed in the same order as the list area.
- The settings below now apply as the default settings in JP1/AJS3 - View windows. You can customize these settings in JP1/AJS3 - View.
 - Job groups and planning groups are selected in the list area when the JP1/AJS3 - View window (Main window) is displayed
 - The same units remain selected and the scroll position is maintained when you refresh the window contents or specify list filtering
 - A confirmation message is displayed before deleting a defined schedule rule for a nested jobnet for which the **Depends on upper-level jobnet** check box is selected
 - Jobnets that have been registered for execution appear in the list area when **Jobnet Definition** is selected in **Function Menu**
- The following settings now apply as the default settings in the Jobnet Editor window. You can customize these settings in JP1/AJS3 - View.
 - Nested jobnets and nested remote jobnets are selected in the map area when the Jobnet Editor window is displayed
 - Users are prevented from opening multiple Jobnet Editor windows
- The following settings now apply as the default settings in the Jobnet Monitor window. You can customize these settings in JP1/AJS3 - View.
 - The contents of the Execution Result Details dialog box are not automatically refreshed
 - The Execution Result Details dialog box is displayed in large size
 - Users are prevented from opening multiple Jobnet Monitor windows
 - Jobs are displayed directly in the map area when displaying the Jobnet Monitor window from JP1/IM - View
- Color images are now used to represent the execution status, execution results, and delays in **Status** and **Result** in the list area and **Status** in the detailed information area of the JP1/AJS3 - View window (Main window).
- The following units are now hidden by default in the icon list in the Jobnet Editor window:
 - Remote jobnet

- Receive MQ Message job
- Receive MSMQ Message job
- Send MQ Message job
- Send MSMQ Message job
- Support for Windows 10 has been added.
- The following OS is no longer supported:
 - Windows Server 2008 (excluding Windows Server 2008 R2)
 - Windows Vista
 - Windows Server 2003
 - Windows Server 2003(x64)
 - Windows XP Professional

E.4 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 `jaajs_log.bat` and `jaajs_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 `ajsp rint` 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 `jaajs_killall.cluster` was increased.

(2) JP1/AJS3 - Agent

- The files `jaajs_log.bat` and `jaajs_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.

E.5 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.

E.6 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 `aj_sentry` command is used to register a jobnet for fixed execution.
- Options that can be specified when the `jaajs_setup` or `jaajs_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.

E.7 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 (jpm) and event/action control manager process (jpac) 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 `ajsshows` command for outputting the standard output file name.
- The Manager Environment Settings dialog box is no longer provided. Instead, you can use the `jaajs_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 `ajsslogprint` 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 `jaajs_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.

F. Reference Material for This Manual

This appendix provides reference information, including various conventions, for this manual.

F.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:

- *JP1 Version 11 Job Management: Getting Started (Job Scheduler)* (3021-3-B11(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Overview* (3021-3-B12(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 System Design (Configuration) Guide* (3021-3-B13(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 System Design (Work Tasks) Guide* (3021-3-B14(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Configuration Guide* (3021-3-B15(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Administration Guide* (3021-3-B16(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Operator's Guide* (3021-3-B18(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Command Reference* (3021-3-B19(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Linkage Guide* (3021-3-B20(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 Messages* (3021-3-B21(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 - Print Option* (3021-3-B26(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 - Definition Assistant* (3021-3-B25(E))
- *JP1 Version 11 JP1/Automatic Job Management System 3 for Enterprise Applications Description, User's Guide and Reference* (3021-3-B27(E))
- *Job Management Partner 1 Version 10 Job Management Partner 1/Automatic Job Management System 3 - Web Operation Assistant Description, Operator's Guide and Reference* (3020-3-S18(E))

About JP1:

- *JP1 Version 11 JP1/Base User's Guide* (3021-3-A01(E))
- *JP1 Version 11 JP1/Base Messages* (3021-3-A02(E))
- *JP1 Version 11 JP1/Base Function Reference* (3021-3-A03(E))
- *JP1 Version 11 Integrated Management: Getting Started (Integrated Console)* (3021-3-A06(E))
- *JP1 Version 11 JP1/Integrated Management - Manager Overview and System Design Guide* (3021-3-A07(E))
- *JP1 Version 11 JP1/Integrated Management - Manager Configuration Guide* (3021-3-A08(E))
- *JP1 Version 11 JP1/Integrated Management - Manager Administration Guide* (3021-3-A09(E))
- *JP1 Version 11 JP1/Integrated Management - Manager GUI Reference* (3021-3-A10(E))
- *JP1 Version 11 JP1/Integrated Management - Manager Command and Definition File Reference* (3021-3-A11(E))
- *JP1 Version 11 JP1/Integrated Management - Manager Messages* (3021-3-A12(E))
- *JP1 Version 11 JP1/Performance Management Planning and Configuration Guide* (3021-3-A37(E))
- *JP1 Version 11 JP1/Performance Management User's Guide* (3021-3-A38(E))

- *JP1 Version 11 JP1/Performance Management Reference* (3021-3-A39(E))
- *JP1 Version 11 Job Management: Getting Started (Scripting Language)* (3021-3-B31(E))
- *JP1 Version 11 JP1/Advanced Shell* (3021-3-B32(E))
- *Job Management Partner 1 Version 10 Job Management Partner 1/Script Description and Reference* (3021-3-135(E)), for Windows Systems
- *JP1 Version 11 JP1/File Transmission Server/FTP Description, Reference, and Operator's Guide* (3021-3-B36(E)), for Windows systems
- *JP1 Version 11 JP1/File Transmission Server/FTP Description, Reference, and Operator's Guide* (3021-3-B37(E)), for UNIX systems
- *JP1 Version 11 Job Management: Getting Started (High-speed Transfer of Huge Amounts of File)* (3021-3-B41(E))
- *JP1 Version 11 JP1/Data Highway - Automatic Job Executor Operation manual* (3021-3-B46(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))

F.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	JP1/Automatic Job Management System 3 - Manager
	JP1/AJS3 - Agent	JP1/Automatic Job Management System 3 - Agent
	JP1/AJS3 - View	JP1/Automatic Job Management System 3 - View
JP1/AJS3 - Web Console		JP1/Automatic Job Management System 3 - Web Console
JP1/AJS3 - Print Option	JP1/AJS3 - Print Option Manager	JP1/Automatic Job Management System 3 - Print Option Manager
	JP1/AJS3 - Print Option	JP1/Automatic Job Management System 3 - Print Option
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/AJS3 - Definition Assistant		JP1/Automatic Job Management System 3 - Definition Assistant
JP1/AJS3 - Web Operation Assistant		Job Management Partner 1/Automatic Job Management System 3 - Web Operation Assistant
JP1/AJS3 for Enterprise Applications		JP1/Automatic Job Management System 3 for Enterprise Applications
JP1/DH - AJE		JP1/Data Highway - Automatic Job Executor
JP1/DH - Server		JP1/Data Highway - Server
JP1/FTP		JP1/File Transmission Server/FTP
JP1/IM	JP1/IM - Manager	JP1/Integrated Management - Manager
	JP1/IM - View	JP1/Integrated Management - View
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		JP1/Open Job Entry for VOS3
JP1/PFM	PFM - Manager	JP1/Performance Management - Manager
	PFM - Base	JP1/Performance Management - Base
	PFM - Web Console	JP1/Performance Management - Web Console
	PFM - Agent Option for Platform	JP1/Performance Management - Agent Option for Platform(For UNIX Systems)
JP1/Performance Management - Agent Option for Platform(For Windows Systems)		
JP1/SES		Job Management Partner 1/System Event Service
NNM	HP NNM	HP Network Node Manager Software version 7.5 or earlier

Abbreviation		Full name or meaning
NNM	HP NNM	HP Network Node Manager Software Starter Edition version 7.5 or earlier
AIX		AIX V6.1
		AIX V7.1
Firefox	Firefox ESR	Mozilla(R) Firefox(R) Extended Support Release
HP-UX	HP-UX (IPF)	HP-UX 11i V3(IPF)
Linux		CentOS 6(x64)
		CentOS 7
		Linux 6.1(x64)
		Linux 7.1
		Oracle Linux 6(x64)
		Oracle Linux 7
		SUSE Linux 12
SAP BW		SAP Business Information Warehouse
SAP R/3		SAP R/3(R)
Solaris		Solaris 10(SPARC)
		Solaris 11(SPARC)

- 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.

F.3 Conventions: Acronyms

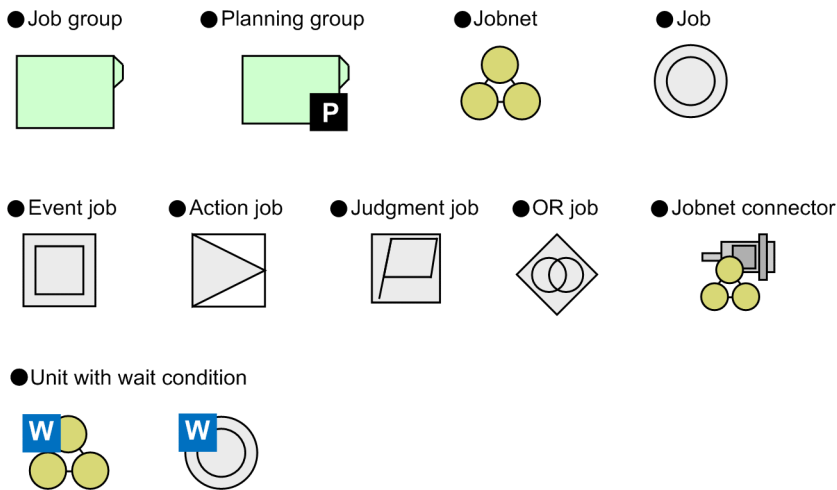
This manual also uses the following acronyms:

Acronym	Full name or meaning
ACL	Access Control List
API	Application Programming Interface
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
HTTP	Hyper Text Transfer Protocol

Acronym	Full name or meaning
HTTPS	Hyper Text Transfer Protocol Security
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
REST	Representational State Transfer
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
WSDL	Web Services Description Language

F.4 Conventions: Diagrams

This manual uses the following conventions in diagrams:



F.5 Conventions: Fonts and symbols

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

Text formatting	Convention
Bold	<p>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:</p> <ul style="list-style-type: none"> From the File menu, choose Open. Click the Cancel button. In the Enter name entry box, type your name.
<i>Italic</i>	<p>Italic characters indicate a placeholder for some actual text to be provided by the user or system. For example:</p> <ul style="list-style-type: none"> Write the command as follows: <code>copy source-file target-file</code> The following message appears: A file was not found. (file = <i>file-name</i>) <p>Italic characters are also used for emphasis. For example:</p> <ul style="list-style-type: none"> Do <i>not</i> delete the configuration file.
Monospace	<p>Monospace characters indicate text that the user enters without change, or text (such as messages) output by the system. For example:</p> <ul style="list-style-type: none"> At the prompt, enter <code>dir</code>. Use the <code>send</code> command to send mail. The following message is displayed: <code>The password is incorrect.</code>

The following table explains the symbols used in this manual:

Symbol	Convention
	<p>In syntax explanations, a vertical bar separates multiple items, and has the meaning of OR. For example: <code>A B C</code> means A, or B, or C.</p>
{ }	<p>In syntax explanations, curly brackets indicate that only one of the enclosed items is to be selected. For example: <code>{A B C}</code> means only one of A, or B, or C.</p>

Symbol	Convention
[]	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 <i>days-to-keep-form</i> ~<numeric> ((0 to 365)) <<365>>, 365 is assumed as the number of days to keep the form.
MAX	Choose the largest of the calculation results. Example: The result of MAX (3 x 6, 4 + 7) is 18.

F.6 Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1,024 bytes.
- 1 MB (megabyte) is 1,024² bytes.
- 1 GB (gigabyte) is 1,024³ bytes.
- 1 TB (terabyte) is 1,024⁴ bytes.

F.7 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.

F.8 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*.

F.9 About administrator privileges

In this manual, the term "administrator privileges" refers to the execution privileges of the built-in administrator account for a local PC.

If a user has administrator privileges for the local PC, operations do not vary in local user, domain user, and Active Directory environments.

F.10 About the Start menu in Windows

If you are using Windows Server 2016, Windows 8.1, Windows 8, or Windows Server 2012, instead of using the **Start** menu, perform the operations as described below.

In Windows Server 2016, Windows 8.1 or Windows Server 2012 R2:

Click the down-pointing arrow icon to display the Apps screen.

In Windows 8 or Windows Server 2012 (except Windows Server 2012 R2):

Right-click on the Start screen to display the All Apps screen.

F.11 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 (x86)\HITACHI\JP1AJS2`

The default installation folders of JP1/AJS3 Web Console are as follows:

`system-drive\Program Files\HITACHI\JP1AJS3WEB`

Default installation folder of JP1/AJS3 - Agent:

`system-drive\Program Files (x86)\HITACHI\JP1AJS2`

Default installation folder of JP1/AJS3 - View:

`system-drive\Program Files (x86)#\HITACHI\JP1AJS2V`

#

For 32-bit versions of Windows, replace `Program Files (x86)` with `Program Files`.

F.12 Online manual

JP1/AJS3 - View comes with an online manual that you can read in browsers.

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.

F.13 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 *JP1/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 *JP1/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.

F.14 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.

F.15 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

G. 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 *JP1/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.

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.

broadcast agent

An agent that broadcasts a job to multiple destination agents for broadcast execution. The broadcast agent automatically manages the destination agents to which a job is to be broadcast. For example, in an environment in which the number of execution agents is increased or decreased by automatic scaling, the broadcast agent automatically expands or reduces the job distribution range. Therefore, in such an environment, you do not need to modify the job definition, or add or delete jobs manually.

broadcast execution

To broadcast a flexible job to multiple execution agents where the flexible job is to be executed. Use a broadcast execution if you want multiple execution agents to run the same processing.

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 encoding 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.

destination agent

An agent that executes a flexible job. A destination agent might be an execution agent in an auto-scaling environment.

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 `ajsembddb`.

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.

flexible job

A standard job that executes processing on an agent host that is not managed directly by the manager host.

Because flexible jobs allow you to execute jobs in an environment where processing is distributed by a load balancer, you can use them to execute processing via an execution agent in a cloud environment (auto-scaling environment).

HP NNM

A suite of integrated network management tools from Hewlett-Packard Co. for managing network configuration, performance, and failures.

HTTP connection job

A job that uses the HTTP protocol to send requests and receive responses. By using a HTTP connection job, you can request processing by an API with an HTTP interface, such as the REST API. This allows you to integrate a business system based on JP1/AJS3 with other web-based business systems.

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 - Agent Minimal Edition

A program that can execute a maximum of 10 jobs per day by request from JP1/AJS3 - Manager. JP1/AJS3 - Agent Minimal Edition has the same functionality as JP1/AJS3 - Agent, except for some limitations. JP1/AJS3 - Agent Minimal Edition is suitable for use on a computer that executes only a few jobs per day.

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

A component of JP1/AJS3 - Manager.

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 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/PFM

A program that collects operating information from numerous monitoring targets throughout the system for more stable system operation.

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 ?AJS2xxxx? 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.

relay agent

An agent that relays the execution requests associated with a flexible job. The execution requests relayed by the relay agent are executed by the destination agent of the flexible job.

By using relay agents, you can execute jobs defined for local execution in a cloud environment.

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 `jpqjobs` command.

If descriptions in this manual do not explicitly distinguish between QUEUE jobs and submit jobs, descriptions for submit jobs also apply to QUEUE jobs.

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.

Web Console server

A host on which JP1/AJS3 - Web Console is installed.

A Web Console server operates as a web server and a web application server, and controls HTTP communication and the behavior of web applications. It also acquires unit information from JP1/AJS3 - Manager in response to client requests, and sends the information as a response to the client.

The Web Console server also provides an API that can be used to perform operations in JP1/AJS3. You can use this API to develop custom applications that interact with JP1/AJS3.

Web GUI

An interface used on a client terminal to monitor units defined on the manager host. The Web GUI is displayed in a web browser, and connects to a Web Console server from a client terminal.

You can use the Web GUI to perform various tasks over the Internet, such as monitoring the execution status and progress of units and executing jobnets.

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.

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