# Job Management Partner 1/Automatic Job Management System 3

# Troubleshooting

■ **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*.

For Windows Server 2008:

P-2A12-3K97  Job Management Partner 1/Automatic Job Management System 3 - Manager  version 09-00

P-2A12-3397  Job Management Partner 1/Automatic Job Management System 3 - Agent  version 09-00

P-2A2C-6L97  Job Management Partner 1/Base  version 09-00

For Windows 7, Windows Server 2008 and Windows Vista:

P-2A12-3497  Job Management Partner 1/Automatic Job Management System 3 - View  version 09-00

For Windows Server 2003 and Windows Server 2003(x64):

P-2412-3K97  Job Management Partner 1/Automatic Job Management System 3 - Manager  version 09-00

P-2412-3397  Job Management Partner 1/Automatic Job Management System 3 - Agent  version 09-00

P-242C-6L97  Job Management Partner 1/Base  version 09-00

For Windows Server 2003, Windows Server 2003(x64), and Windows XP Professional:

P-2412-3497  Job Management Partner 1/Automatic Job Management System 3 - View  version 09-00

For HP-UX(IPF):

P-1J12-2792  Job Management Partner 1/Automatic Job Management System 3 - Manager  version 09-00

P-1J12-2992  Job Management Partner 1/Automatic Job Management System 3 - Agent  version 09-00

P-1J2C-6L92  Job Management Partner 1/Base  version 09-00

For Solaris 9(SPARC), and Solaris 10(SPARC):

P-9312-2792  Job Management Partner 1/Automatic Job Management System 3 - Manager  version 09-00

P-9312-2992  Job Management Partner 1/Automatic Job Management System 3 - Agent  version 09-00

P-9D2C-6L92  Job Management Partner 1/Base  version 09-00

For AIX:

P-1M12-2792  Job Management Partner 1/Automatic Job Management System 3 - Manager  version 09-00

P-1M12-2992  Job Management Partner 1/Automatic Job Management System 3 - Agent  version 09-00

P-1M2C-6L92  Job Management Partner 1/Base  version 09-00

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■ **Restrictions**

■ **Edition history**

■ **Copyright**

# Summary of amendments

The following table lists changes in this manual (3020-3-S08-04(E)) and product changes related to this manual.

| Changes | Location |
|---|---|
| Descriptions have been changed. For details, see Appendix F. | *Appendix F* |

In addition to the above changes, minor editorial corrections have been 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.

## Related publications

This manual is part of a related set of manuals. The manuals in the set are listed below
(with the manual numbers):

### About JP1/AJS:

- *Job Management Partner 1/Automatic Job Management System 3 Overview*
  (3020-3-S02(E))

- *Job Management Partner 1/Automatic Job Management System 3 System Design
  (Configuration) Guide* (3020-3-S03(E))

- *Job Management Partner 1/Automatic Job Management System 3 System Design
  (Work Tasks) Guide* (3020-3-S04(E))

- *Job Management Partner 1/Automatic Job Management System 3 Configuration
  Guide 1* (3020-3-S05(E))

- *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2* (3020-3-S06(E))

- *Job Management Partner 1/Automatic Job Management System 3 Administration Guide* (3020-3-S07(E))

- *Job Management Partner 1/Automatic Job Management System 3 Operator's Guide* (3020-3-S09(E))

- *Job Management Partner 1/Automatic Job Management System 3 Command Reference* 1 (3020-3-S10(E))

- *Job Management Partner 1/Automatic Job Management System 3 Command Reference* 2 (3020-3-S11(E))

- *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide* (3020-3-S12(E))

- *Job Management Partner 1/Automatic Job Management System 3 Messages 1* (3020-3-S13(E))

- *Job Management Partner 1/Automatic Job Management System 3 Messages 2* (3020-3-S14(E))

- *Job Management Partner 1/Automatic Job Management System 3 - Definition Assistant Description, Operator's Guide and Reference* (3020-3-S17(E))

- *Job Management Partner 1/Automatic Job Management System 3 - Web Operation Assistant Description, Operator's Guide and Reference* (3020-3-S18(E))

- *Job Management Partner 1/Automatic Job Management System 3 for Enterprise Applications Description, User's Guide and Reference* (3020-3-S29(E))

- *Job Management Partner 1/Automatic Job Management System 2 for Oracle E-Business Suite Description, User's Guide and Reference* (3020-3-F27(E))

**About JP1:**

- *Job Management Partner 1/Base User's Guide* (3020-3-R71(E))

- *Job Management Partner 1/Base Messages* (3020-3-R72(E))

- *Job Management Partner 1/Base Function Reference* (3020-3-R73(E))

- *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide* (3020-3-R76(E))

- *Job Management Partner 1/Integrated Management - Manager Configuration Guide* (3020-3-R77(E))

- *Job Management Partner 1/Integrated Management - Manager Administration Guide* (3020-3-R78(E))

- *Job Management Partner 1/Integrated Management - Manager GUI Reference* (3020-3-R79(E))

- *Job Management Partner 1/Integrated Management - Manager Command and Definition File Reference* (3020-3-R80(E))

- *Job Management Partner 1/Integrated Management - Manager Messages* (3020-3-R81(E))

- *Job Management Partner 1/Script Description and Reference* (3020-3-K55(E)), for Windows systems

- *Job Management Partner 1/File Transmission Server/FTP Description, Reference, and Operator's Guide* (3020-3-S36(E)), for Windows systems

- *Job Management Partner 1/File Transmission Server/FTP Description, Reference, and Operator's Guide* (3020-3-S37(E)), for UNIX systems

- *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/NQSEXEC System Administrator's Guide* (3020-3-F30(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/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))

## Conventions: Abbreviations

This manual uses the following abbreviations for product names:

| Abbreviation | | Full name or meaning |
|---|---|---|
| JP1/AJS3 | JP1/AJS3 - Manager | Job Management Partner 1/Automatic Job Management System 3 - Manager |
| | JP1/AJS3 - Agent | Job Management Partner 1/Automatic Job Management System 3 - Agent |
| | JP1/AJS3 - View | Job Management Partner 1/Automatic Job Management System 3 - View |
| JP1/AJS2 | JP1/AJS2 - Manager | Job Management Partner 1/Automatic Job Management System 2 - Manager |
| | JP1/AJS2 - Agent | Job Management Partner 1/Automatic Job Management System 2 - Agent |
| | JP1/AJS2 - View | Job Management Partner 1/Automatic Job Management System 2 - View |
| JP1/AJS2 - Advanced Manager | | Job Management Partner 1/Automatic Job Management System 2 - Advanced Manager[#] |
| JP1/AJS2 - Client Toolkit | | Job Management Partner 1/Automatic Job Management System 2 - Client Toolkit[#] |
| JP1/AJS3 - Definition Assistant | | Job Management Partner 1/Automatic Job Management System 3 - Definition Assistant |
| JP1/AJS3 - Web Operation Assistant | | Job Management Partner 1/Automatic Job Management System 3 - Web Operation Assistant |
| JP1/AJS3 for Enterprise Applications | | Job Management Partner 1/Automatic Job Management System 3 for Enterprise Applications |

| Abbreviation | | Full name or meaning |
| --- | --- | --- |
| JP1/AJS2 for Oracle E-Business Suite | | Job Management Partner 1/Automatic Job Management System 2 for Oracle E-Business Suite |
| NNM | HP NNM | HP Network Node Manager Software version 7.5 or earlier |
| | | HP Network Node Manager Software Starter Edition version 7.5 or earlier |
| JP1/FTP | | Job Management Partner 1/File Transmission Server/FTP |
| JP1/IM | JP1/IM - Manager | Job Management Partner 1/Integrated Management - Manager |
| | JP1/IM - View | Job Management Partner 1/Integrated Management - View |
| | JP1/IM - Central Console | Job Management Partner 1/Integrated Manager - Central Console[#] |
| | JP1/IM - Central Scope | Job Management Partner 1/Integrated Manager - Central Scope[#] |
| JP1/OJE | | Job Management Partner 1/Open Job Entry |
| JP1/OJE for Midrange Computer | | Job Management Partner 1/Open Job Entry for Midrange Computer |
| JP1/SES | | Job Management Partner 1/System Event Service |
| JP1/OJE for VOS3 | | VOS3 Job Management Partner 1/Open Job Entry |
| MSCS | | Microsoft(R) Cluster Server |
| 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 | | Microsoft(R) Internet Explorer(R) |
| Microsoft Mail | | Microsoft(R) Mail |

| Abbreviation | | Full name or meaning |
|---|---|---|
| MSMQ | | Microsoft(R) Message Queue Server |
| Outlook | Outlook 2000 | Microsoft(R) Outlook(R) 2000 |
| | Outlook 2002 | Microsoft(R) Outlook(R) 2002 |
| | Outlook 2003 | Microsoft(R) Outlook(R) 2003 |
| | Outlook 2007 | Microsoft(R) Outlook(R) 2007 |
| | Outlook Express | Microsoft(R) Outlook(R) Express |
| Microsoft SQL Server | | Microsoft(R) SQL Server |
| | | Microsoft(R) SQL Server Enterprise Edition |
| Windows 7 | | Microsoft(R) Windows(R) 7 Enterprise |
| | | Microsoft(R) Windows(R) 7 Professional |
| | | Microsoft(R) Windows(R) 7 Ultimate |
| Windows Server 2003 | Windows Server 2003 | Microsoft(R) Windows Server(R) 2003, Enterprise Edition Operating System |
| | | Microsoft(R) Windows Server(R) 2003, Standard Edition Operating System |
| | Windows Server 2003 (x64) | Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition |
| | | Microsoft(R) Windows Server(R) 2003, Standard x64 Edition |
| Windows Server 2008 | | Microsoft(R) Windows Server(R) 2008 Datacenter |
| | | Microsoft(R) Windows Server(R) 2008 Enterprise |
| | | Microsoft(R) Windows Server(R) 2008 Standard |
| Windows Vista | | Microsoft(R) Windows Vista(R) Business |
| | | Microsoft(R) Windows Vista(R) Enterprise |
| | | Microsoft(R) Windows Vista(R) Ultimate |
| Windows XP Professional | | Microsoft(R) Windows(R) XP Professional Operating System |

| Abbreviation | | Full name or meaning |
|---|---|---|
| AIX | | AIX 5L 5.3 |
| | | AIX V6.1 |
| HP-UX | HP-UX (IPF) | HP-UX 11i V2(IPF) |
| | | HP-UX 11i V3(IPF) |
| Solaris | | Solaris 9(SPARC) |
| | | Solaris 10(SPARC) |
| SAP BW | | SAP Business Information Warehouse |
| SAP R/3 | | SAP R/3(R) |

#: Version 7

- In this manual, *JP1/AJS* is sometimes used generically, referring to JP1/AJS3 and JP1/AJS2.

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

- *UNIX* is sometimes used generically, referring to HP-UX, Solaris, and AIX.

This manual also uses the following abbreviations:

| Abbreviation | Full name or meaning |
|---|---|
| ACL | Access Control List |
| DB | Database |
| DBMS | Database Management System |
| DNS | Domain Name System |
| EUC | Extended UNIX Code |
| FQDN | Fully Qualified Domain Name |
| FTP | File Transfer Protocol |
| GUI | Graphical User Interface |
| IPF | Itanium(R) Processor Family |
| ISAM | Indexed Sequential Access Method |
| LAN | Local Area Network |

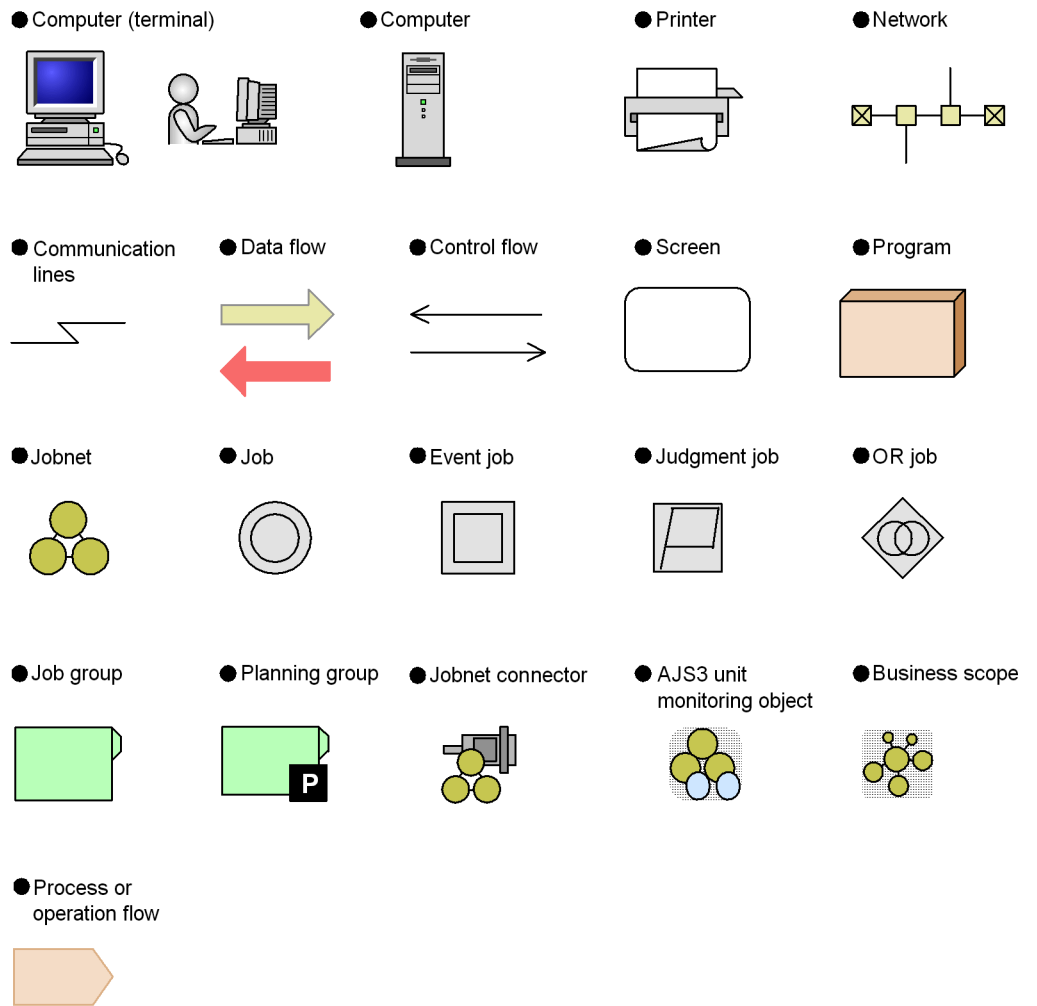| Abbreviation | Full name or meaning |
|---|---|
| MAPI | Messaging Application Programming Interface |
| MIB | Management Information Base |
| MIME | Multipurpose Internet Mail Extensions |
| NAT | Network Address Translator |
| NFS | Network File System |
| NIC | Network Interface Card |
| OS | Operating System |
| RDB | Relational Database |
| SNMP | Simple Network Management Protocol |
| SMTP | Simple Mail Transfer 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 |

## JP1 program reorganization in version 8

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

- JP1/AJS2 - Advanced Manager has been eliminated, and the database provided by JP1/AJS2 - Advanced Manager has been integrated into JP1/AJS2 - Manager in JP1 Version 8.

- JP1/AJS2 - Client Toolkit has been eliminated.

- JP1/AJS2 - View is provided only in the Windows version.

## Conventions: Diagrams

This manual uses the following conventions in diagrams:

● Computer (terminal)  ● Computer  ● Printer  ● Network

● Communication lines  ● Data flow  ● Control flow  ● Screen  ● Program

● Jobnet  ● Job  ● Event job  ● Judgment job  ● OR job

● Job group  ● Planning group  ● Jobnet connector  ● AJS3 unit monitoring object  ● Business scope

● Process or operation flow

## Conventions: Fonts and symbols

Font and symbol conventions are classified as:

- General font conventions
- Conventions in syntax explanations

These conventions are described below.

**General font conventions**

The following table lists the general font conventions:

| Font | Convention |
|------|------------|
| **Bold** | Bold type indicates text on a window, other than the window title. Such text includes menus, menu options, buttons, radio box options, or explanatory labels. For example, bold is used in sentences such as the following:<br>• From the **File** menu, choose **Open**.<br>• Click the **Cancel** button.<br>• In the **Enter name** entry box, type your name. |
| *Italics* | Italics are used to indicate a placeholder for some actual text provided by the user or system. Italics are also used for emphasis. For example:<br>• Write the command as follows:<br>  copy *source-file target-file*<br>• Do *not* delete the configuration file. |
| Code font | A code font indicates text that the user enters without change, or text (such as messages) output by the system. For example:<br>• At the prompt, enter dir.<br>• Use the send command to send mail.<br>• The following message is displayed:<br>  The password is incorrect. |

Examples of coding and messages appear as follows (although there may be some exceptions, such as when coding is included in a diagram):

```
MakeDatabase
...
StoreDatabase temp DB32
```

In examples of coding, an ellipsis (...) indicates that one or more lines of coding are not shown for purposes of brevity.

**Conventions in syntax explanations**

Syntax definitions appear as follows:

**S**tore**D**atabase [temp|<u>perm</u>] (*database-name ...*)

The following table lists the conventions used in syntax explanations:

| Example font or symbol | Convention |
|------------------------|------------|
| StoreDatabase | Code-font characters must be entered exactly as shown. |
| *database-name* | This font style marks a placeholder that indicates where appropriate characters are to be entered in an actual command. |
| **SD** | Bold code-font characters indicate the abbreviation for a command. |
| <u>Perm</u> | Underlined characters indicate the default value. |
| [ ] | Square brackets enclose an item or set of items whose specification is optional. |

| Example font or symbol | Convention |
|---|---|
| \| | Only one of the options separated by a vertical bar can be specified at the same time. |
| . . . | An ellipsis (...) indicates that the item or items enclosed in ( ) or [ ] immediately preceding the ellipsis may be specified as many times as necessary. |
| () | Parentheses indicate the range of items to which the vertical bar (\|) or ellipsis (...) is applicable. |

### Conventions for mathematical expressions

This manual uses the following symbols in mathematical expressions:

| Symbol | Meaning |
|---|---|
| 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.<br><characters><br>　One or more Kanji characters, katakana characters, upper-case alphabetic characters, lower-case alphabetic characters, or numeric characters<br><numeric><br>　0, 1, 2, 3, 4, 5, 6, 7, 8, or 9<br><alphabetic character><br>　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 @<br><alphanumeric character><br>　Alphabetic or numeric character<br><symbolic name><br>　No more than eight alphanumeric characters beginning with an alphabetic character<br><unsigned integer><br>　One or more numeric characters<br><hexadecimal character><br>　0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, or F<br><file name><br>　A system-determined name assigned to a file<br><path><br>　The directories contained in the path, with each name separated by a forward slash (/) or backslash (\). The path notation is OS-dependent. |

| Symbol | Meaning |
|---|---|
| (( )) (double parentheses) | Indicates the range of specifiable values. |
| << >> (double angle brackets) | Indicates the default assumed by the system when a value is unspecified. Example: If you do not specify *days-to-keep-form* ~<numeric> ((0 to 365)) <<365>>, 365 is assumed as the number of days to keep the form. |
| MAX | Choose the largest of the calculation results. Example: The result of MAX (3 x 6, 4 + 7) is 18. |

## Conventions: KB, MB, GB, and TB

This manual uses the following conventions:

- 1 KB (kilobyte) is 1,024 bytes.

- 1 MB (megabyte) is $1,024^2$ bytes.

- 1 GB (gigabyte) is $1,024^3$ bytes.

- 1 TB (terabyte) is $1,024^4$ bytes.

## 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.

## Conventions: Meaning of "member of the Administrators group"

The term *member of the Administrators group* in this manual refers to a user who is a member of the Administrators group on the local PC only. The privileges of local users, domain users, and Active Directory users are no different as long as these users are members of the Administrators group on the local PC.

## 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*.

## 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`[#1]`\HITACHI\JP1AJS2`
>
> and
>
> *system-drive*`\Program Files`[#1]`\HITACHI\JP1AJS2CM`

Default installation folder of JP1/AJS3 - Agent:

> *system-drive*`\Program Files`[#1]`\HITACHI\JP1AJS2`

Default installation folder of JP1/AJS3 - View:

> *system-drive*`\Program Files`[#2]`\HITACHI\JP1AJS2V`

#1

> For 64-bit versions of Windows Server 2008 and Windows Server 2003 (x64), replace `Program Files` with `Program Files (x86)`.

#2

> For 64-bit versions of Windows 7, Windows Server 2008, Windows Vista, and Windows Server 2003 (x64), replace `Program Files` with `Program Files (x86)`.

## Online manual

JP1/AJS3 - View comes with an online manual that you can read in either of the following browsers:

- Microsoft Internet Explorer version 6.0 or later
- Windows Internet Explorer Version 7.0 or later

The online manual has the same contents as the following manuals:

- *Job Management Partner 1/Automatic Job Management System 3 Overview*
- *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*
- *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*
- *Job Management Partner 1/Automatic Job Management System 3 Configuration*

*Guide 1*

- *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*

- *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*

- *Job Management Partner 1/Automatic Job Management System 3 Troubleshooting*

- *Job Management Partner 1/Automatic Job Management System 3 Operator's Guide*

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

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

- *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*

- *Job Management Partner 1/Automatic Job Management System 3 Messages 1*

- *Job Management Partner 1/Automatic Job Management System 3 Messages 2*

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.

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

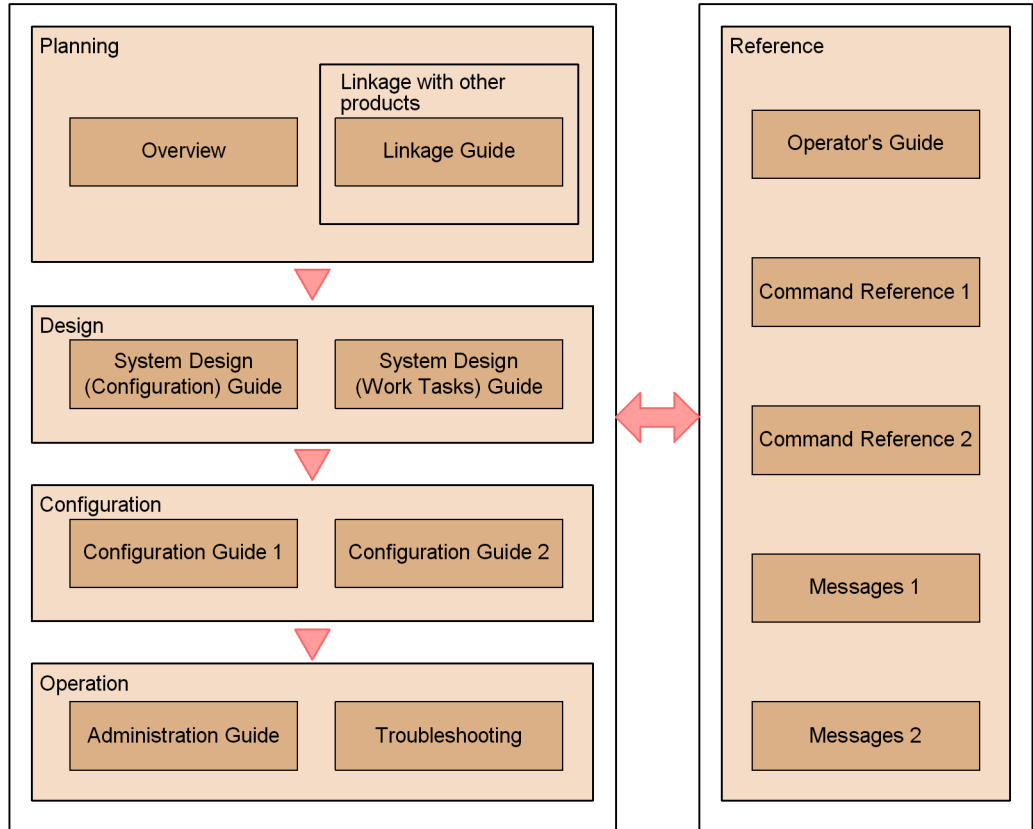There are fourteen JP1/AJS3 manuals. The following table summarizes their contents.

Note that *Job Management Partner 1/Automatic Job Management System 3* is not listed in the table.

| No. | Manual | Contents |
|-----|--------|----------|
| 1 | *Overview*<br>(3020-3-S02(E)) | • JP1/AJS3 features<br>• Description of functions |
| 2 | *System Design (Configuration) Guide*<br>(3020-3-S03(E)) | • Information that must be considered when designing a system<br>• Cautionary notes on designing a system |

| No. | Manual | Contents |
|-----|--------|----------|
| 3 | *System Design (Work Tasks) Guide* (3020-3-S04(E)) | • Information that must be considered when constructing jobs and jobnets<br>• Cautionary notes on designing jobs and jobnets |
| 4 | *Configuration Guide 1* (3020-3-S05(E)) | • Installation and setup procedures<br>• Environment setup procedure by operation type |
| 5 | *Configuration Guide 2* (3020-3-S06(E)) | • Description of environment setting parameters |
| 6 | *Administration Guide* (3020-3-S07(E)) | • Information required to operate a system<br>• Know-how useful for JP1/AJS3 operation |
| 7 | *Troubleshooting* (3020-3-S08(E)) | • How to troubleshoot errors<br>• Data required when an error occurs |
| 8 | *Operator's Guide* (3020-3-S09(E)) | • How to operate JP1/AJS3 - View<br>• How to operate JP1/AJS3 Console View<br>• Description of windows and dialog boxes |
| 9 | *Command Reference 1* (3020-3-S10(E)) | • Command syntax |
| 10 | *Command Reference 2* (3020-3-S11(E)) | • Syntax of commands used for setup and special operations<br>• Syntax and coding examples of information definition files |
| 11 | *Linkage Guide* (3020-3-S12(E)) | • Description of functions that can be used when linked with other products and the setup method |
| 12 | *Messages 1* (3020-3-S13(E)) | • Messages output by JP1/AJS3 (messages beginning with KAVC to KAVT) |
| 13 | *Messages 2* (3020-3-S14(E)) | • Messages output by JP1/AJS3 (messages beginning with KAVU to KNAD) |

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

Organization of JP1/AJS3 manuals

| Purpose | Required reading | Read as necessary |
|---|---|---|
| To learn about JP1/AJS3's functionalities | • *Overview* (3020-3-S02(E)) | • *Linkage Guide* (3020-3-S12(E)) |
| To configure a system (including installation and setup) that automatically runs jobs | • *System Design (Configuration) Guide* (3020-3-S03(E))<br>• *Configuration Guide 1* (3020-3-S05(E)) | • *Configuration Guide 2* (3020-3-S06(E))<br>• *Linkage Guide* (3020-3-S12(E)) |
| To design work tasks that will be automated (including job definitions and schedule definitions) | • *System Design (Work Tasks) Guide* (3020-3-S04(E)) | • *Operator's Guide* (3020-3-S09(E)) |

| Purpose | Required reading | Read as necessary |
|---------|------------------|-------------------|
| To learn about monitoring and maintaining a running system. | • *Administration Guide* (3020-3-S07(E)) | • *Troubleshooting* (3020-3-S08(E))<br>• *Messages 1* (3020-3-S13(E))<br>• *Messages 2* (3020-3-S14(E)) |
| To learn about what action to take for problems that occur during operation. | • *Troubleshooting* (3020-3-S08(E)) | • *Messages 1* (3020-3-S13(E))<br>• *Messages 2* (3020-3-S14(E)) |
| To learn about operating JP1/AJS3 | • *Operator's Guide* (3020-3-S09(E)) | • *Command Reference 1* (3020-3-S10(E))<br>• *Command Reference 2* (3020-3-S11(E)) |

## Regular expressions available in JP1/AJS3

Regular expressions can be used in some items in dialog boxes and commands. For details about regular expressions in Windows, see the *Job Management Partner 1/ Base User's Guide*. For details about regular expressions in UNIX, see your UNIX documentation.

The regular expressions that you can use when executing an event job on a Windows host depend on the JP1/Base settings. For details on setting regular expressions for event job execution, see the explanation about extending the available regular expressions in the *Job Management Partner 1/Base User's Guide*.

Searching may take a long time if you often use the regular expression .* (which means match any character or characters). In long messages, use .* only where necessary. In UNIX, you can use [^ ]* (repeat characters other than space characters) instead of .* when you want to find a match other than space characters. Using [^ ]* reduces the search time.

## 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

# Contents

**Chapter**

# 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
1.2 Types of log information and storage locations
1.3 Data to be collected when a problem occurs
1.4 Collecting data for troubleshooting

## 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 *2. Messages* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 1* or *1. Messages* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 2*. For details about the information that is logged by JP1/AJS3 and JP1/AJS3 Console, 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 information
2. Scheduler information
3. Trace information

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

*Figure  1-1:*  Storage locations for log information
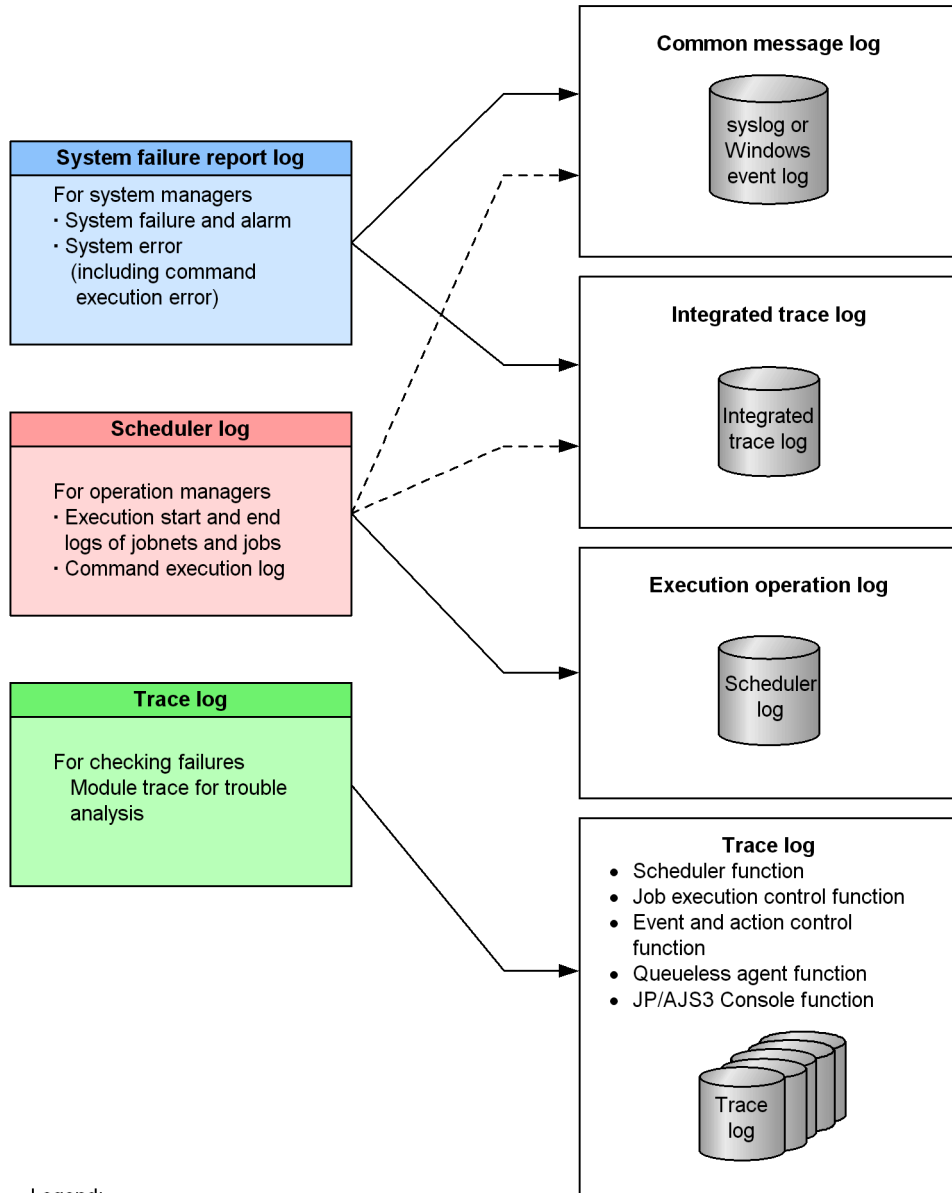
## 1.2.1 System failure information

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

System failure information 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 *Job Management Partner 1/Base User's Guide*.

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

In Windows:

> *system-drive*\Program
> Files\Hitachi\HNTRLib2\spool\hntr2{1|2|3|4}.log

In UNIX:

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

In UNIX, you can specify the type of system failure information 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.

For JP1/AJS3 Console, specify the type of information to be logged in the `HNTRLOGLEVEL` environment setting parameter in the environment settings files (`ajs2cm.conf`, `ajs2ca.conf`). For details about `HNTRLOGLEVEL`, see *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

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
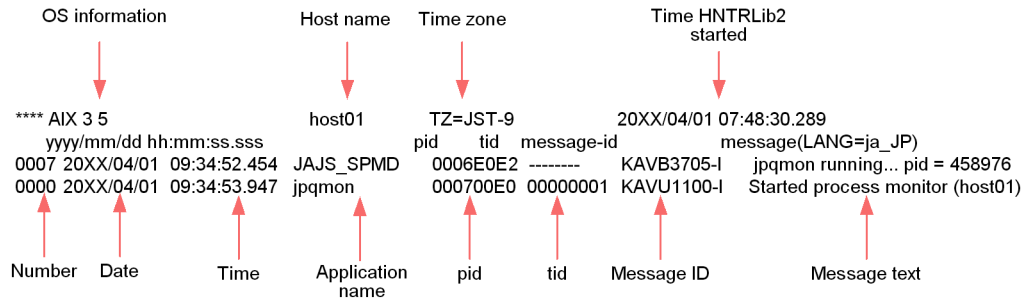


The following tables describe the headers and output items in the integrated trace log file.

*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:<br>    The time zone set for the OS.<br>In UNIX:<br>    The value of the TZ environment variable for the integrated trace log.<br>    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.<br>A number is assigned for each process for which information is logged. |
| Date (10 bytes) | The date the trace was collected: $yyyy/mm/dd$ (year/month/day) |
| Time (12 bytes) | The local time the trace was collected: $hh:mm:ss.sss$<br>(hour:minutes:seconds.milliseconds) |

| Output item | Explanation |
|---|---|
| Application name (16 bytes or less) | The name of an application (application identification name).<br>JP1/AJS3 generally outputs the following application names:<br>1. The JP1/AJS3 service: JAJS_SPMD<br>2. The scheduler process: ajsmasterd<br>3. The flow control process: ajsflowd (ajsflowd.exe for Windows)<br>4. The job submit process: ajssubd (ajssubd.exe for Windows)<br>5. The job completion wait process: ajssubwd (ajssubwd.exe for Windows)<br>6. The job execution control status notification process: jpqnfyfd (jpqnfyfd.exe for Windows)<br>7. The schedule control process: ajsschd<br>8. The event/action control manager process: jpomanager<br>9. The event/action control agent process: jpoagent<br>10. The execution interval control process: jpocwttmMain<br>11. The event (JP1 events, log traps, etc.) monitoring process: jpoeventwatch<br>12. The event job reception process: jpomgrsub<br>13. The job execution control process: jpqmon<br>14. The job execution control manager process: jpqman<br>15. The job execution control agent process: jpqagt<br>16. The network control process: ajsinetd<br>17. The process that starts when a user logs in to JP1/AJS3 - View: ajsmonsvr<br>18. The JP1/AJS3 - Queueless Agent service (queueless agent process): ajsqlagtd<br>19. The JP1/AJS3 - Queueless File Transfer service (queueless file transfer process): ajsqlftpd<br>20. The JP1/AJS3 Check Manager service: ajschkmand (ajschkmand.exe for Windows)<br>21. The JP1/AJS3 Check Agent service: ajschkagtd<br>22. The JP1/AJS3 Console Manager service: ajscminetd<br>23. The JP1/AJS3 Console Agent service: ajscainetd<br>24. Other processes and commands: The process or command name |
| pid | The process ID assigned by the OS.<br>A pid is output as a hexadecimal number. |
| tid | The thread ID that identifies a thread.<br>A tid is output as a hexadecimal number. |
| Message ID | A message ID appearing in *1.2.1 Format of output messages* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 1*. 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. |

*Note:*

> 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 information

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

The JP1/AJS3 scheduler information 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 information is recorded separately for each scheduler service.

■ Logging scheduler information for each scheduler service

Scheduler information 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:

In Windows Server 2008:

> `%ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\log\s`
> `chedule\`*scheduler-service-name*`\ajs-log1.log` or
> `%ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\log\s`
> `chedule\`*scheduler-service-name*`\ajs-log2.log`
>
> (The default value for `%ALLUSERSPROFILE%` is
> *system-drive*`\ProgramData`.)

In Windows Server 2003:

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

In UNIX:

> `/var/opt/jp1ajs2/log/schedule/` *scheduler-service-name*`/`
> `ajs-log1.log` or `/var/opt/jp1ajs2/log/schedule/`
> *scheduler-service-name*`/ajs-log2.log`

■ Logging scheduler information for the entire host

Scheduler information is logged for the entire host when `host` is specified in the `AJSLOGOUTPUTDEST` environment setting parameter. In this case, the scheduler information 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:

In Windows Server 2008:

> `%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`.)

In Windows Server 2003:

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

In UNIX:

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

- ■ Logging format for scheduler information

  The logging format for scheduler information is as follows:

  *log-type* △ *date* △ *time* △ *additional-information*

  Legend:

  > △ : 1-byte space character

  For details about scheduler information, 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

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. However, you can change the size of a trace log file by using the `ajstrsetsz` command. For details about this command, see *ajstrsetsz* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

### (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 *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

### (5) Other traces

- Each JP1/AJS3 Console Manager and JP1/AJS3 Console Agent uses 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. For JP1/AJS3 Console Manager, you can change the size of the trace log file by using the `ajscmtrsetsz` command. For JP1/AJS3 Console Agent, you can change the size of the trace log file by using the `ajscatrsetsz` command. For details about these commands, see *ajscmtrsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2* and *ajscatrsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

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

- A JP1/AJS3 - Manager host or a JP1/AJS3 - Agent host logs trace information
  related to process 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 size
  of each file is 384 kilobytes. You cannot change the file size. 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

Tables 1-4 to 1-6 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* (for Windows Server 2008):
   `%ALLUSERSPROFILE%`#`\HITACHI\JP1\JP1_DEFAULT\JP1AJS2`

2. *Mgr_Path* (for Windows Server 2003): *JP1/AJS3 - Manager-installation-folder*

   The default path is *system-drive*`\Program Files\Hitachi\jp1ajs2`.

3. *Agt_Path* (for Windows Server 2008):
   `%ALLUSERSPROFILE%`#`\HITACHI\JP1\JP1_DEFAULT\JP1AJS2`

4. *Agt_Path* (for Windows Server 2003): *JP1/AJS3 - Agent-installation-folder*

   The default path is *system-drive*`\Program Files\Hitachi\jp1ajs2`.

5. *View_Path* (for Windows 7, Windows Server 2008, and Windows Vista):
   `%ALLUSERSPROFILE%`#`\HITACHI\JP1\JP1_DEFAULT\JP1AJS2V`

6. *View_Path* (for Windows Server 2003 and Windows XP Professional): *JP1/AJS3
   - View-installation-folder*

   The default path is *system-drive*`\Program Files\Hitachi\jp1ajs2v`.

7. *Base_Path*: *JP1/Base-installation-folder*

   The default path is *system-drive*`\Program Files\Hitachi\jp1base`.

8. *CM_Path* (for Windows Server 2008):
   `%ALLUSERSPROFILE%`#`\HITACHI\JP1\JP1_DEFAULT\JP1AJS2CM`

9. *CM_Path* (for Windows Server 2003): *JP1/AJS3 Console-installation-folder*

The default path is *system-drive*\Program Files\Hitachi\jp1ajs2cm.

\#

The default value for %ALLUSERSPROFILE% is as follows:

For *View_Path*:

> *system-drive*\ProgramData

For *Mgr_Path*, *Agt_Path*, and *CM_Path*:

- When the installation folder is the default folder or a folder located under a folder protected by the system:

  *system-drive*\ProgramData

- When the installation folder is any other kind of folder:

  *installation-folder-of-product*

*Folder protected by the system* indicates the following path:

- For 32-bit Windows

  Under the *system-drive*\Program Files folder

- For 64-bit Windows

  Under the *system-drive*\Program Files (x86) folder

- When both the 32-bit and 64-bit versions of Windows are used

  Under the *system-drive*\Windows folder

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 1-6 | Log output folder in a cluster system |
|---|---|
| *Mgr_Path* | *shared-disk-name*\jp1ajs2 |
| *Agt_Path* | *shared-disk-name*\jp1ajs2 |
| *Base_Path* | *shared-disk-name*\jp1base |

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 | *Mgr_Path*\log\JAJS_SPMD{1\|2\|3}.log | Trace information related to starting, stopping, and checking the status of the JP1/AJS3 service[3] | 384 | 384 | 128 |
| | *Mgr_Path*\log\JAJS_SPMD_COMMAND{1\|2\|3}.log | | 384 | 384 | 128 |
| | *Mgr_Path*\log\JAJS_SERVICE{1\|2\|3}.log | | 384 | 384 | 128 |
| Scheduler information log[4] | *Mgr_Path*\log\schedule\*scheduler-service-name*\ajs-log{1\|2}.log | Operating information related to jobnets, jobs, and scheduler services (when scheduler information is logged separately for each scheduler service) | 20,480 | 4,000,000 | Size of the scheduler information log file specified in the environment settings (10,240) |

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| Log name | Log file and folder names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| | *Mgr_Path*\log\ajs-host -log{1\|2}.log | Operating information related to jobnets, jobs, and scheduler services (when scheduler information is logged for the entire host) | 20,480 | 4,000,000 | Size of the scheduler information log file for the host specified in the environment settings (10,240) |
| ajsinetd internal log[5, 23] | *Mgr_Path*\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) |
| Trace log[5, 6] | *Mgr_Path*\log\tracelog | Trace information and information about operations related to scheduler services and jobnets[3, 8] | 20,480 | 2,097,151 | Wraparound |
| Job execution manager log[10] | *Mgr_Path*\log\schedule \*scheduler-service-name*\j pqmanexec{1\|2\|3\|4\|5\|6 \|7\|8\|9\|10\|11\|12\|13\|14 \|15}.log[9] | Trace information 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) |
| | *Mgr_Path*\log\jpqmanex ec{1\|2\|3\|4\|5\|6\|7\|8\|9\| 10\|11\|12\|13\|14\|15}.lo g[9] | | | | |

| 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[#10] | *Mgr_Path*\log\jpqagtexec{1\|2\|3\|4\|5\|6\|7\|8}.log[#18] | Trace information related to the job execution control agent process when a job is executed[#3] | 15,360 | 524,288 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqagtexecmon{1\|2\|3\|4\|5\|6\|7\|8}.log[#19] | | 15,360 | 524,288 | |
| Job execution client log[#10] | *Mgr_Path*\log\jpqcliexec{1\|2}.log[#20] | Execution trace information related to jpq*xxxx* commands and Jpq*xxxx*API functions[#3] | 1,024 | 524,288 | Log size specified during log setup (512) |
| Job execution status report log[#10] | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpqnfyexec{1\|2}.log[#21] | Trace information 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] | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpomanager{1\|2\|3\|4\|5\|6}.log[#24] | Trace information related to the event/action control manager when an event job is executed[#3] | 12,288 | 16,777,216 (16 gigabytes) | Log size specified during log setup (2,048) |
| | *Mgr_Path*\log\jpomanager{1\|2\|3\|4\|5\|6}.log[#25] | | | | |
| | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpomgrsub{1\|2\|3\|4\|5\|6\|7\|8}.log[#24] | | 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] |
|---|---|---|---|---|---|
| | *Mgr_Path*\log\jpomgrsub{1\|2\|3\|4\|5\|6\|7\|8}.log[25] | | | | |
| Event/action control agent log[7] | *Mgr_Path*\log\jpoagent{1\|2\|3\|4\|5\|6\|7\|8}.log[25] | Trace information 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) |
| | *Mgr_Path*\log\jpoagtsub{1\|2\|3\|4\|5\|6\|7\|8}.log[25] | | 8,192 | 16,777,216 (16 gigabytes) | Log size specified during log setup (1,024) |
| Event monitoring log[7] | *Mgr_Path*\log\jpoeventwatch{1\|2\|3\|4\|5\|6\|7\|8}.log[25] | Execution trace information related to the JP1 event 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[7] | *Mgr_Path*\log\jpoevsearch{1\|2}.log[25] | Trace information 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] | *Mgr_Path*\log\jpocwtflMain{1\|2\|3\|4\|5\|6}.log[25] | Execution trace information related to the file monitoring job[3] | 12,288 | 16,777,216 (16 gigabytes) | Log size specified during log setup (2,048) |

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| Log name | Log file and folder names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Execution interval control log[#7] | *Mgr_Path*\log\jpocwttm Main{1|2|3|4|5|6}.log [#25] | Execution trace information 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] | *Mgr_Path*\log\jpocwtml main{1|2}.log[#25] | Execution trace information related to the mail reception monitoring job and mail transmission job when the mail linkage function is used[#3] | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| | *Mgr_Path*\log\jpomlapi send{1|2}.log[#5] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| | *Mgr_Path*\log\jpomlapi rec{1|2}.log[#5] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| | *Mgr_Path*\log\jpomlapi send2{1|2}.log[#5] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| | *Mgr_Path*\log\jpomlapi rec2{1|2}.log[#5] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |

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| 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 (when mail linkage is performed on the desktop)[#7] | *Mgr_Path*\log\jpomldsk {1\|2}.log[#5] | Execution trace information related to the mail reception monitoring job and mail transmission job when the mail linkage function is used[#3] | 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] | *Mgr_Path*\log\jpomlsrv {1\|2}.log[#5] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| NNM linkage log | *Mgr_Path*\log\jpoovlin k{1\|2}.log[#5] | Trace information related to monitoring HP NNM is used[#3] | 512 | 512 | 256 |
| Job execution internal log[#10] | *Mgr_Path*\log\jpqagent \jpqagt_{00\|01\|02\|03\| 04\|05\|06\|07}.log | --[#8] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqagent \jpqmon_{00\|01\|02\|03\| 04\|05\|06\|07}.log | --[#8] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqagent \jpqnjpagt_{00\|01\|02\| 03\|04\|05\|06\|07}.log | --[#8] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqagent \jpqnjpdata_{00\|01}.l og | --[#8] | 1,024 | 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[#10] | *Mgr_Path*\log\jpqclient\jpqclient_{00\|01\|02\|03\|04\|05\|06\|07\|08\|09}.log | --[#8] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | *Mgr_Path*\log\jpqclient\jpqclientnjp_{00\|01\|02\|03\|04\|05\|06\|07\|08\|09}.log | --[#8] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | *Mgr_Path*\log\jpqclient\jpqnjpdata_{00\|01}.log | --[#8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution internal log[#10] | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpqmanager\jpqman_{00\|01\|02\|03}.log | --[#8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqmanager\jpqman_{00\|01\|02\|03}.log | | | | |
| | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpqmanager\jpqmandb_{00\|01\|02\|03}.log | --[#8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqmanager\jpqmandb_{00\|01\|02\|03}.log | | | | |
| | *Mgr_Path*\log\schedule\*scheduler-service-name*\jpqmanager\jpqmannjp_{00\|01\|02\|03}.log | --[#8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqmanager\jpqmannjp_{00\|01\|02\|03}.log | | | | |

| Log name | Log file and folder names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| | *Mgr_Path*\log\schedule \*scheduler-service-name*\j pqmanager\jpqnjpdata_ {00\|01}.log | --[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\jpqmanag er\jpqnjpdata_{00\|01} .log | | | | |
| Job execution internal log[10] | *Mgr_Path*\log\schedule \*scheduler-service-name*\j pqnotify\jpqnotify_{0 0\|01}.log | --[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\schedule \*scheduler-service-name*\j pqnotify\jpqnotifynjp _{00\|01}.log | --[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| | *Mgr_Path*\log\schedule \*scheduler-service-name*\j pqnotify\jpqnjpdata_{ 00\|01}.log | --[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution environment database reorganization log | *Mgr_Path*\database\que ue\CONDENSE{1\|2}.log | -- | 1,024 | 1,024 | 512 |
| Scheduler database reorganization log | *Mgr_Path*\database\sch edule\*scheduler-service-n ame*\CONDENSE{1\|2}.log | -- | 1,024 | 1,024 | 512 |
| Event/action common log[5, #7] | *Base_Path*\log\jpocommo nerr{1\|2}.log | --[3] | 2,048 | 2,097,152 (2 gigabytes ) | Log size specified during log setup (1,024) |
| Event/action common error log[5] | *Base_Path*\log\jpoprocc omerr{1\|2}.log | --[3] | 256 | 256 | 128 |

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| Log name | Log file and folder names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| `jajs_migrate` command trace log | *Mgr_Path*\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[28] | Trace information related to the command that changes the system environment from JP1/AJS2 to JP1/AJS3 | 10 | 200 | When the `jajs_migrate` command is executed |
| `jajs_setup` command trace log[3, 5] | *Mgr_Path*\log\jajs_setup_{01\|02\|03\|04\|05\|06\|07\|08\|09\|10\|11\|12\|13\|14\|15\|16\|17\|18\|19\|20}.log | Trace information related to the command that specifies environment settings | 200 | 200 | When the `jajs_setup` command is executed |
| `jajs_config` command trace log | *Mgr_Path*\log\jajs_config_{1\|2}.log | Trace information related to the command that specifies an environment setting parameter | 1 | 256 | 128 |
| `jajs_setup_cluster` command trace log[3, 5] | *Mgr_Path*\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[28] | Trace information related to the command that configures a cluster environment | 200 | 200 | When the `jajs_setup_cluster` command is executed |
| Queueless log[16] | *Mgr_Path*\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) |

| Log name | Log file and folder names | Logged information | Default disk space[#1] | Maximu m disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Queueless trace log[#5, #17] | *Mgr_Path*\log\tracelog.ql | Execution trace information 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[#26] | *Mgr_Path*\log\ajsqlexe clog[#27] | Execution trace information related to queueless jobs[#3, #8] | 24,576 | 2,097,151 | Wraparound |
| | *Mgr_Path*\log\ajsqlexe clog_ftpd | | 10,240 | 2,097,151 | Wraparound |
| JP1/AJS3 Console Manager trace log[#5, #11] | *CM_Path*\log\tracelog.cm | --[#8] | 3,072 | 2,097,151 | Wraparound |
| JP1/AJS3 Console Agent trace log[#5, #12] | *Mgr_Path*\log\tracelog.ca | --[#8] | 3,072 | 2,097,151 | Wraparound |
| Maintenance log[#5] | *Mgr_Path*\log\jajs_mai ntain_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 |
| | *Mgr_Path*\log\jajs_mai ntain_[*scheduler-service-name*]{1\|2\|3\|4}.log[#13] | | 1,484 | 1,484 | When maintenance is performed |

| Log name | Log file and folder names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Automatic reorganization log[#5] | *Mgr_Path*\log\jpqautocond{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 |
| | *Mgr_Path*\log\ajsautocond{1\|2\|3\|4}.log[#14] | | 764 | 764 | When automatic reorganization is performed |
| Definition check log[#22] | *Mgr_Path*\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 |
| Definition check trace log[#15] | *Mgr_Path*\log\tracelog.ch | Trace information related to definition pre-checks[#8] | 3,072 | 2,097,151 | Wraparound |
| Execution log for embedded database operation commands | *Mgr_Path*\log\embdb\ajsembdboplog[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | Information related to execution of commands manipulate the embedded database | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\ajsembdbrorg[*host-name*][*scheduler-service-name*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\ajsembdbreclaim[*host-name*][*scheduler-service-name*]{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] |
|---|---|---|---|---|---|
| | *Mgr_Path*\log\embdb\aj sembdbaddarea[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbaddlog[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbstop[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbstart[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbcancel[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbunset[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbbuild[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbsetup[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbstatus[*embedded-database-setup-ID*]{1\|2\|3\|4}.log | | 4,096 | 4,096 | 1,024 |
| | *Mgr_Path*\log\embdb\aj sembdbinstl{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] |
|---|---|---|---|---|---|
| | *Mgr_Path*\log\embdb\aj sembdbuninstl{1\|2\|3\|4 }.log | | 4,096 | 4,096 | 1,024 |
| Agent management trace log[#5] | *Mgr_Path*\log\ajsagttr ace | --[#3, #8] | 20,480 | 20,480 | Wraparound |
| Agent management log | *Mgr_Path*\log\ajsagtmd {1\|2}.log | Agent information for agent management control | 8,192 | 8,192 | 4,096 |
| Communicati on control trace log | *Mgr_Path*\log\tracelog -nw | --[#3, #8] | 20,480 | 20,480 | Wraparound |

#1

The unit is kilobytes. 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 `jajs_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 *Job Management Partner 1/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.

25

#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 *Job Management Partner 1/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 are different:
`jpqExecLog_man{1|2|3|4|5|6|7|8|9|10|11|12}.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 *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#11

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

#12

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

#13

In a cluster system, the file names are different:

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

In a cluster system, the file names are different:

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

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

#15

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.

#16

You can change the disk space size. To do so, use the `jbssetcnf` 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 *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#17

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

#18

In a cluster system, the file names are different:
`jpqExecLog_agt{1|2|3|4|5|6|7|8}.log`

#19

In a cluster system, the file names are different:
`jpqExecLog_agtmon{1|2|3|4|5|6|7|8}.log`

#20

In a cluster system, the file names are different:
`jpqExecLog_cli{1|2}.log`

#21

In a cluster system, the file names are different:
`jpqExecLog_nfy{1|2}.log`

#22

You can change the disk space size. To do so, see *2.5 Setting for the JP1/AJS3 definition pre-check function* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#23

You can change the disk space size. To do so, see *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#24

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.

#25

You can change the *Mgr_Path* part differs depending on the value specified in the `WaitInfFileOutDir` environment setting parameter for the [{`JP1_DEFAULT`|*logical-host-name*}`\JP1AOM\MANAGER`] and [{`JP1_DEFAULT`|*logical-host-name*}`\JP1AOMAGENT`] definition keys.

#26

You can change the disk space size by using the `ajsqlexecsetsz` command. For details about this command, see *ajsqlexecsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

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

#27

The file name is different in a cluster system:
   *Mgr_Path*`\log\ajsqlexeclog-`[*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.

#28

The value *n* starts at 1 and is then incremented. The file with the largest number contains the latest execution result.

*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 | *Agt_Path*`\log\JAJS_SPMD{`<br>`1\|2\|3}.log` | Trace information related to starting, stopping, and checking the status of the JP1/AJS3 service[#3] | 384 | 384 | 128 |
| | *Agt_Path*`\log\JAJS_SPMD_`<br>`COMMAND{1\|2\|3}.log` | | 384 | 384 | 128 |

| Log name | Log file and folder names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| | *Agt_Path*\log\JAJS_SERVICE{1\|2\|3}.log | | 384 | 384 | 128 |
| Job execution agent log[10] | *Agt_Path*\log\jpqagtexec{1\|2\|3\|4\|5\|6\|7\|8}.log[11] | Trace information related to the job execution control agent process when a job is executed[3] | 15,360 | 524,288 | Log size specified during log setup (512) |
| | *Agt_Path*\log\jpqagtexecmon{1\|2\|3\|4\|5\|6\|7\|8}.log[12] | | 15,360 | 524,288 | Log size specified during log setup (512) |
| Job execution client log[10] | *Agt_Path*\log\jpqcliexec{1\|2}.log[13] | Execution trace information related to jpq*xxxx* commands and Jpq*xxxx*API functions[3] | 1,024 | 524,288 | Log size specified during log setup (512) |
| Event/action control agent log[4] | *Agt_Path*\log\jpoagent{1\|2\|3\|4\|5\|6\|7\|8}.log[16] | Trace information 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) |
| | *Agt_Path*\log\jpoagtsub{1\|2\|3\|4\|5\|6\|7\|8}.log[16] | | 8,192 | 16,777,216 (16 gigabytes) | Log size specified during log setup (1,024) |

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| 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[#4] | *Agt_Path*\log\jpoeventwatch{1\|2\|3\|4\|5\|6\|7\|8}.log[#16] | Execution trace information related to the JP1 event 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] | *Agt_Path*\log\jpoevsearch{1\|2}.log[#16] | Trace information 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] | *Agt_Path*\log\jpocwtflMain{1\|2\|3\|4\|5\|6}.log[#16] | Execution trace information related to the file monitoring job[#3] | 12,288 | 16,777,216 (16 gigabytes) | Log size specified during log setup (2,048) |
| Execution interval control log[#4] | *Agt_Path*\log\jpocwttmMain{1\|2\|3\|4\|5\|6}.log[#16] | Execution trace information 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 folder names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Mail monitoring log (common)[#4] | *Agt_Path*\log\jpocwtmlmain{1\|2}.log[#16] | Execution trace information related to the mail reception monitoring job and mail transmission job when the mail linkage function is used[#3] | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
|  | *Agt_Path*\log\jpomlapisend{1\|2}.log[#6] |  | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
|  | *Agt_Path*\log\jpomlapirec{1\|2}.log[#6] |  | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
|  | *Agt_Path*\log\jpomlapisend2{1\|2}.log[#6] |  | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
|  | *Agt_Path*\log\jpomlapirec2{1\|2}.log[#6] |  | 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] | *Agt_Path*\log\jpomldsk{1\|2}.log[#6] |  | 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] |
|---|---|---|---|---|---|
| Mail monitoring log (when mail linkage is performed in the service)[#4] | *Agt_Path*\log\jpomlsrv{1\|2}.log[#6] | | 256 | 16,777,216 (16 gigabytes) | Log size specified during log setup (128) |
| NNM linkage log | *Agt_Path*\log\jpoovlink{1\|2}.log[#6] | Trace information related to monitoring when HP NNM is used[#3] | 512 | 512 | 256 |
| Job execution internal log[#7] | *Agt_Path*\log\jpqagent\jpqagt_{00\|01\|02\|03\|04\|05\|06\|07}.log | --[#5] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Agt_Path*\log\jpqagent\jpqmon_{00\|01\|02\|03\|04\|05\|06\|07}.log | --[#5] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Agt_Path*\log\jpqagent\jpqnjpagt_{00\|01\|02\|03\|04\|05\|06\|07}.log | --[#5] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | *Agt_Path*\log\jpqagent\jpqnjpdata_{00\|01}.log | --[#5] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution internal log[#7] | *Agt_Path*\log\jpqclient\jpqclient_{00\|01\|02\|03\|04\|05\|06\|07\|08\|09}.log | --[#5] | 10,240 | 1,048,576 | 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] |
|---|---|---|---|---|---|
| | *Agt_Path*\log\jpqclient\ jpqclientnjp_{00\|01\|02 \|03\|04\|05\|06\|07\|08\|09} .log | --[5] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | *Agt_Path*\log\jpqclient\ jpqnjpdata_{00\|01}.log | --[5] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Event/action common log[4, 6] | *Base_Path*\log\jpocommon err{1\|2}.log | --[3] | 2,048 | 2,097,152 (2 gigabytes ) | Log size specified during log setup (1,024) |
| Event/action common error log[6] | *Base_Path*\log\jpoprocco merr{1\|2}.log | --[3] | 256 | 256 | 128 |
| jajs_config command trace log | *Mgr_Path*\log\jajs_conf ig_{1\|2}.log | Trace information related to the command that specifies an environment setting parameter | 1 | 256 | 128 |
| jajs_setup _cluster command trace log[3, 6] | *Mgr_Path*\log\jajs_setu p_cluster_{01\|02\|03\|04 \|05\|06\|07\|08\|09\|10\|11\| 12\|13\|14\|15\|16\|17\|18\|1 9\|20}.log[28] | Trace information related to the command that configures a cluster environment | 200 | 200 | When the jajs_setu p_cluster command is executed |
| Queueless log[9] | *Agt_Path*\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) |

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| Log name | Log file and folder names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Queueless trace log[#6, #10] | *Agt_Path*\log\tracelog.ql | Execution trace information 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[#17] | *Agt_Path*\log\ajsqlexeclog[#18] | Execution trace information related to queueless jobs[#3, #5] | 24,576 | 2,097,151 | Wraparound |
| Definition check log[#15] | *Agt_Path*\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 |
| Definition check trace log[#8] | *Agt_Path*\log\tracelog.ch | Trace information related to definition pre-checks[#5] | 3,072 | 2,097,151 | 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, see *3.4.3 Estimating the size of the log information output by event jobs* in the *Job Management Partner 1/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 *7.1.4 Estimating the size of the logs output by the execution environment for QUEUE jobs and submit jobs* in the *Job Management Partner 1/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 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 *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#10

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

#11

The file names are different in a cluster system:
`jpqExecLog_agt{1|2|3|4|5|6|7|8}.log`

#12

The file names are different in a cluster system:
`jpqExecLog_agtmon{1|2|3|4|5|6|7|8}.log`

#13

The file names are different in a cluster system:
`jpqExecLog_cli{1|2}.log`

#14

The file names are different in a cluster system:
jpqExecLog_nfy{1|2}.log

#15

You can change the disk space size. To do so, see *2.5 Setting for the JP1/AJS3 definition pre-check function* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#16

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.

#17

You can change the disk space size by using the ajsqlexecsetsz command. For details about this command, see *ajsqlexecsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

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

#18

The file name is different in a cluster system:
    *Agt_Path*\log\ajsqlexeclog-[*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.

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

| Log name | Log file and folder names | Logged information | Default value[1] | Maximum value[1] | Timing for switching files |
|---|---|---|---|---|---|
| JP1/AJS3 - View log | *View_Path*\log\ajs.log | --[2] | -- | 1,024 | When JP1/AJS3 - View terminates |

| Log name | Log file and folder names | Logged information | Default value[1] | Maximum value[1] | Timing for switching files |
|---|---|---|---|---|---|
| JP1/AJS3 - View information log[3] | *View_Path*\log\ajs2view#n*nnn*_{1\|2}.log | --[2] | 1,024 | 524,288 | Maximum log file size specified in the Preferences dialog box |
| JP1/AJS3 Console View log | *View_Path*\log\ajscon. | --[2] | -- | 1,024 | When JP1/AJS3 Console View terminates |
| JP1/AJS3 Console View information log[3] | *View_Path*\log\ajs2coview#*nnnn*_{1\|2}.log | --[2] | 1,024 | 524,288 | Maximum log file size specified in the Preferences dialog box |
| NNM linkage log | *View_Path*\log\jpoovlink{1\|2}.log (only for Windows Server 2003 and Windows XP Professional) | Trace information related to monitoring when HP NNM is used[2] | 512 | 512 | 256 |

#1

The unit is kilobytes.

#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 *nnnn* of #*nnnn*_. When only one unit is started, #*nnnn*_ is omitted.

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.

For JP1/AJS3 Console View, use the same procedure in the Preferences dialog box of JP1/AJS3 Console View.

### *(2)* *Log files and directories in UNIX*

Table 1-8 and Table 1-9 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 1-7:* Log output directories in a cluster system

| Value in Table 1-8 and Table 1-9 | Log output directory in a cluster system |
|---|---|
| /var/opt/jp1ajs2/ | *shared-disk-name*/jp1ajs2 |
| /var/opt/jp1base/ | *shared-disk-name*/jp1base |

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 1-8:* 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 | `/var/opt/jp1ajs2/log/ JAJS_SPMD{1|2|3}.log` | Trace information related to starting, stopping, and checking the status of the JP1/AJS3 service[#3] | 384 | 384 | 128 |
| | `/var/opt/jp1ajs2/log/ JAJS_SPMD_COMMAND{1|2| 3}.log` | | 384 | 384 | 128 |
| Scheduler information log[#4] | `/var/opt/jp1ajs2/log/ schedule/ scheduler-service-name/ ajs-log{1|2}.log`[#21] | Operating information related to jobnets, jobs, and scheduler services (when scheduler information is logged separately for each scheduler service) | 20,480 | 4,000,000 | Size of the scheduler information 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 information is logged for the entire host) | 20,480 | 4,000,000 | Size of the scheduler information log for the host specified in the environment settings (10,240) |
| ajsinetd internal log[#5, #19] | `/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) |

| Log name | Log file and directory names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| Trace log[5, 6] | `/var/opt/jp1ajs2/log/tracelog` | Trace information and information about operations related to scheduler services and jobnets[3, 8] | 20,480 | 2,097,151 | Wraparound |
| Job execution manager log[11] | `/var/opt/jp1ajs2/log/schedule/`*scheduler-service-name*`/jpqmanexec{1│2│3│4│5│6│7│8│9│10│11│12│13│14│15}.log` | Trace information 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/jp1ajs2/log/jpqmanexec{1│2│3│4│5│6│7│8│9│10│11│12│13│14│15}.log` | | | | |
| Job execution agent log[11] | `/var/opt/jp1ajs2/log/jpqagtexec{1│2│3│4│5│6│7│8}.log` | Trace information 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/jpqagtexeccld{1│2│3│4│5│6│7│8}.log` | | 4,096 | 524,288 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/jpqagtexecdmn{1│2│3│4│5│6│7│8}.log` | | 4,096 | 524,288 | 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] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/ jpqagtexecmon{1|2|3|4| 5|6|7|8}.log` | | 4,096 | 524,288 | Log size specified during log setup (512) |
| Job execution client log[11] | `/var/opt/jp1ajs2/log/ jpqcliexec{1|2}.log` | Execution trace information related to `jpqxxxx` commands and `JpqxxxxAPI` functions[3] | 1,024 | 524,288 | Log size specified during log setup (512) |
| Job execution status report log[11] | `/var/opt/jp1ajs2/log/ schedule/ scheduler-service-name/ jpqnfyexec{1|2}.log` | Trace information related to job execution control communicatio n 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/jp1ajs2/log/ schedule/ scheduler-service-name/ jpomanager{1|2|3|4|5|6 }.log` | Trace information related to the event/action control manager when an event job is executed[3] | 12,288 | 16,777,21 6 (16 gigabytes ) | Log size specified during log setup (2,048) |
| | `/var/opt/jp1ajs2/log/ jpomanager{1|2|3|4|5|6 }.log` | | | | |
| | `/var/opt/jp1ajs2/log/ schedule/ scheduler-service-name/ jpomgrsub{1|2|3|4|5|6| 7|8}.log` | | 8,192 | 16,777,21 6 (16 gigabytes ) | Log size specified during log setup (1,024) |
| | `/var/opt/jp1ajs2/log/ jpomgrsub{1|2|3|4|5|6| 7|8}.log` | | | | |

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| 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 agent log[#7] | `/var/opt/jp1ajs2/log/` `jpoagent{1|2|3|4|5|6|7` `|8}.log` | Trace information 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}.log` | | 8,192 | 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 information related to the JP1 event 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 information 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/` `jpocwtflMain{1|2|3|4|5` `|6}.log` | Execution trace information related to the file monitoring job[#3] | 12,288 | 16,777,216 (16 gigabytes) | Log size specified during log setup (2,048) |

| Log name | Log file and directory names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Execution interval control log[#7] | `/var/opt/jp1ajs2/log/`<br>`jpocwttmMain{1|2|3|4|5`<br>`|6}.log` | Execution trace information 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/`<br>`jpocwtmlmain{1|2}.log` | Execution trace information 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/`<br>`jpomailrecv{1|2}.log` | Execution trace information 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/`<br>`jpoovlink{1|2}.log`[#5] | Trace information related to monitoring when HP NNM is used[#3] | 512 | 512 | 256 |
| Job execution internal log[#11] | `/var/opt/jp1ajs2/log/`<br>`jpqagent/`<br>`jpqagt_{00|01|02|03|04`<br>`|05|06|07}.log` | --[#8] | 4,096 | 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] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/`<br>`jpqagent/`<br>`jpqmon_{00|01|02|03|04`<br>`|05|06|07}.log` | --[#8] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/`<br>`jpqagent/`<br>`jpqnjpagt_{00|01|02|03`<br>`|04|05|06|07}.log` | --[#8] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/`<br>`jpqagent/`<br>`jpqnjpdata_{00|01}.log` | --[#8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution internal log[#11] | `/var/opt/jp1ajs2/log/`<br>`jpqclient/`<br>`jpqclient_{00|01|02|03`<br>`|04|05|06|07|08|09}.lo`<br>`g` | --[#8] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | `/var/opt/jp1ajs2/log/`<br>`jpqclient/`<br>`jpqclientnjp_{00|01|02`<br>`|03|04|05|06|07|08|09}`<br>`.log` | --[#8] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | `/var/opt/jp1ajs2/log/`<br>`jpqclient/`<br>`jpqnjpdata_{00|01}.log` | --[#8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution internal log[#11] | `/var/opt/jp1ajs2/log/`<br>`schedule/`<br>*scheduler-service-name*`/`<br>`jpqmanager/`<br>`jpqman_{00|01|02|03}.l`<br>`og` | --[#8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/`<br>`jpqmanager/`<br>`jpqman_{00|01|02|03}.l`<br>`og` | | | | |

| Log name | Log file and directory names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/ schedule/ `*scheduler-service-name*`/ jpqmanager/ jpqmandb_{00\|01\|02\|03} .log` | _[8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqmanager/ jpqmandb_{00\|01\|02\|03} .log` | | | | |
| | `/var/opt/jp1ajs2/log/ schedule/ `*scheduler-service-name*`/ jpqmanager/ jpqmannjp_{00\|01\|02\|03 }.log` | _[8] | 2,048 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqmanager/ jpqmannjp_{00\|01\|02\|03 }.log` | | | | |
| | `/var/opt/jp1ajs2/log/ schedule/ `*scheduler-service-name*`/ jpqmanager/ jpqnjpdata_{00\|01}.log` | _[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqmanager/ jpqnjpdata_{00\|01}.log` | | | | |
| Job execution internal log[11] | `/var/opt/jp1ajs2/log/ schedule/ `*scheduler-service-name*`/ jpqnotify/ jpqnotify_{00\|01}.log` | _[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ schedule/ `*scheduler-service-name*`/ jpqnotify/ jpqnotifynjp_{00\|01}.l og` | _[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |

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| Log name | Log file and directory names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/` `schedule/` *scheduler-service-name*`/` `jpqnotify/` `jpqnjpdata_{00\|01}.log` | --[8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Job execution environment database reorganization log | `/var/opt/jp1ajs2/` `database/queue/` `CONDENSE{1\|2}.log` | -- | 1,024 | 1,024 | 512 |
| Scheduler database reorganization log | `/var/opt/jp1ajs2/` `database/schedule/` *scheduler-service-name*`/` `CONDENSE{1\|2}.log` | -- | 1,024 | 1,024 | 512 |
| Event/action common log[5], [7] | `/var/opt/jp1base/log/` `jpocommonerr{1\|2}.log` | --[3] | 2,048 | 2,097,152 (2 gigabytes) | Log size specified during log setup 1,024 |
| Event/action common error log[5] | `/var/opt/jp1base/log/` `jpoproccomerr{1\|2}.log` | --[3] | 256 | 256 | 128 |
| `jajs_migrate` command trace log | `/var/opt/jp1ajs2/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 information related to the command that changes the system environment from JP1/AJS2 to JP1/AJS3 | 10 | 200 | When the `jajs_migrate` command is executed |
| `jajs_setup` command trace log[3], [5] | `/var/opt/jp1ajs2/log/` `jajs_setup_{01\|02\|03\|0` `4\|05\|06\|07\|08\|09\|10\|11` `\|12\|13\|14\|15\|16\|17\|18\|` `19\|20}.log` | Trace information related to the command that specifies environment settings | 200 | 200 | When the `jajs_setup` 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_config` command trace log | `/var/opt/jp1ajs2/log/` `jajs_config_{1\|2}.log` | Trace information related to the command that specifies an environment setting parameter | 1 | 256 | 128 |
| `jajs_setup_cluster` command trace log[3], [5] | `/var/opt/jp1ajs2/log/` `jajs_setup_cluster_{01` `\|02\|03\|04\|05\|06\|07\|08\|` `09\|10\|11\|12\|13\|14\|15\|1` `6\|17\|18\|19\|20}.log`[28] | Trace information related to the command that configures a cluster environment | 200 | 200 | When the `jajs_setup_cluster` command is executed |
| `jp1ajs2_setup_cluster` command trace log[9] | `/var/opt/jp1ajs2/log/` `JAJS_SETUP/` *logical-host-name*`/` `jajs_setup.log`[10] | Trace information related to the command that sets up a logical host[3] | 10 | 100 | None |
| `jajs_killall.cluster` command trace log | *shared-dircetory*`/jp1ajs2/` `log/` `jajs_killall.cluster_`*lo* `gical-host-name`.`{1\|2\|3\|4\|` `5}.log` | Trace information related to the command that kills a process associated with a logical host[3] | 50 | 50 | When the `jajs_killall.cluster` command is executed |
| Queueless log[17] | `/var/opt/jp1ajs2/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) |

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| Log name | Log file and directory names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Queueless trace log[#5, #18] | `/var/opt/jp1ajs2/log/tracelog.ql` | Execution trace information 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[#22] | `/var/opt/jp1ajs2/log/ajsqlexeclog`[#23] | Execution trace information related to queueless jobs[#3, #8] | 24,576 | 2,097,151 | Wraparound |
|  | `/var/opt/jp1ajs2/log/ajsqlexeclog_ftpd` |  | 10,240 | 2,097,151 | Wraparound |
| JP1/AJS3 Console Manager trace log[#5, #12] | `/var/opt/jp1ajs2cm/log/tracelog.cm` | --[#8] | 3,072 | 2,097,151 | Wraparound |
| JP1/AJS3 Console Agent trace log[#5, #13] | `/var/opt/jp1ajs2/log/tracelog.ca` | --[#8] | 3,072 | 2,097,151 | Wraparound |
| Maintenance log[#5] | `/var/opt/jp1ajs2/log/jajs_maintain_manager{1|2|3|4}.log`[#14] | Information related to database reorganization that is executed during maintenance[#3] | 1,484 | 1,484 | When maintenance is performed |
|  | `/var/opt/jp1ajs2/log/jajs_maintain_[scheduler-service-name]{1|2|3|4}.log`[#14] |  | 1,484 | 1,484 | When maintenance is performed |

| Log name | Log file and directory names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| Automatic reorganization log[5] | `/var/opt/jp1ajs2/log/jpqautocond{1|2|3|4}.log`[15] | Information related to database reorganization that is executed during automatic reorganization [3] | 764 | 764 | When automatic reorganization is performed |
| | `/var/opt/jp1ajs2/log/ajsautocond{1|2|3|4}.log`[15] | | 764 | 764 | When automatic reorganization is performed |
| Definition check log[20] | `/var/opt/jp1ajs2/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 |
| Definition check trace log[16] | `/var/opt/jp1ajs2/log/tracelog.ch` | Trace information related to definition pre-checks[8] | 3,072 | 2,097,151 | Wraparound |
| Execution log for embedded database operation commands | `/var/opt/jp1ajs2/log/embdb/ajsembdboplog[`*embedded-database-setup-ID*`]{1|2|3|4}.log` | Information related to the execution of commands for manipulating the embedded database | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbrorg[`*host-name*`][`*scheduler-service-name*`]{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] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbreclaim`[*host-name*] [*scheduler-service-name*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbaddarea`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbaddlog`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbstop`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbstart`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbcancel`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbunset`[*embedded-database-setup-ID*]`{1|2|3|4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/embdb/ajsembdbbuild`[*embedded-database-setup-ID*]`{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] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/`<br>`embdb/`<br>`ajsembdbsetup[`*embedded-database-setup-ID*`]{1|2|3|`<br>`4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/`<br>`embdb/`<br>`ajsembdbstatus[`*embedded-database-setup-ID*`]{1|2|3|`<br>`4}.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/`<br>`embdb/`<br>`ajsembdbinstl{1|2|3|4}`<br>`.log` | | 4,096 | 4,096 | 1,024 |
| | `/var/opt/jp1ajs2/log/`<br>`embdb/`<br>`ajsembdbuninstl{1|2|3|`<br>`4}.log` | | 4,096 | 4,096 | 1,024 |
| Agent management trace log[#5] | `/var/opt/jp1ajs2/log/`<br>`ajsagttrace` | --[#3, #8] | 20,480 | 20,480 | Wraparound |
| Agent management log | `/var/opt/jp1ajs2/log/`<br>`ajsagtmd{1|2}.log` | Agent information for agent management control | 8,192 | 8,192 | 4,096 |
| Communication control trace log | `/var/opt/jp1ajs2/log/`<br>`tracelog-nw` | --[#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

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

#12

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

#13

You can change the disk space size by using the `ajscatrsetsz` command. If you

do not use the JP1/AJS3 Console Agent function, no trace log file is created.

#14

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`

#15

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`

#16

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.

#17

You can change the disk space size. To do so, change the value specified 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 *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*.

#18

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

#19

You can change the disk space size. To do so, see *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#20

You can change the disk space size. To do so, see *2.5 Setting for the JP1/AJS3 definition pre-check function* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#21

The file names are different in a cluster system:
   *shared-disk-name*`/jp1ajs2/log/schedule/`
`ajs[`*scheduler-service-ID-number*`]-log{1|2}.log`

#22

You can change the disk space size by using the `ajsqlexecsetsz` command. For details about this command, see *ajsqlexecsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

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

#23

The file name is different in a cluster system:
`/var/opt/jp1ajs2/log/ajsqlexeclog-[`*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.

#24

The value *n* starts at 1 and is then incremented. The file with the largest number contains the latest execution result.

*Table 1-9:* 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 | `/var/opt/jp1ajs2/log/ JAJS_SPMD{1\|2\|3}.log` | Trace information related to starting, stopping, and checking the status of the JP1/AJS3 service[#3] | 384 | 384 | 128 |
| | `/var/opt/jp1ajs2/log/ JAJS_SPMD_COMMAND{1\|2\| 3}.log` | | 384 | 384 | 128 |

| 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/ jpqagtexec{1|2|3|4|5|6 |7|8}.log` | Trace information 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/ jpqagtexeccld{1|2|3|4| 5|6|7|8}.log` | | 4,096 | 524,288 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqagtexecdmn{1|2|3|4| 5|6|7|8}.log` | | 4,096 | 524,288 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqagtexecmon{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/ jpqcliexec{1|2}.log` | Execution trace information related to `jpq`*xxxx* commands and `Jpq`*xxxx*`API` 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 information 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) |

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| Log name | Log file and directory names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/` `jpoagtsub{1\|2\|3\|4\|5\|6\|7\|8}.log` | | 8,192 | 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 information related to the JP1 event 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 information 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/` `jpocwtflMain{1\|2\|3\|4\|5\|6}.log` | Execution trace information related to the file monitoring job[#3] | 12,288 | 16,777,216 (16 gigabytes) | Log size specified during log setup (2,048) |
| Execution interval control log[#4] | `/var/opt/jp1ajs2/log/` `jpocwttmMain{1\|2\|3\|4\|5\|6}.log` | Execution trace information 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 information 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 information 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/jpoovlink{1|2}.log`[6] | Trace information 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` | --[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` | --[5] | 4,096 | 1,048,576 | Log size specified during log setup (512) |

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| Log name | Log file and directory names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| | `/var/opt/jp1ajs2/log/ jpqagent/ jpqnjpagt_{00|01|02|03 |04|05|06|07}.log` | --[#5] | 4,096 | 1,048,576 | Log size specified during log setup (512) |
| | `/var/opt/jp1ajs2/log/ jpqagent/ jpqnjpdata_{00|01}.log` | --[#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}.lo g` | --[#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` | --[#5] | 10,240 | 1,048,576 | Log size specified during log setup (1,024) |
| | `/var/opt/jp1ajs2/log/ jpqclient/ jpqnjpdata_{00|01}.log` | --[#5, #8] | 1,024 | 1,048,576 | Log size specified during log setup (512) |
| Event/action common log[#4, #6] | `/var/opt/jp1base/log/ jpocommonerr{1|2}.log` | --[#3] | 2,048 | 2,097,152 (2 gigabytes ) | Log size specified during log setup (1,024) |
| Event/action common error log[#6] | `/var/opt/jp1base/log/ jpoproccomerr{1|2}.log` | --[#3] | 256 | 256 | 128 |
| `jajs_confi g` command trace log | `/var/opt/jp1ajs2/log/ jajs_config_{1|2}.log` | Trace information related to the command that specifies an environment setting parameter | 1 | 256 | 128 |

| Log name | Log file and directory names | Logged information | Default disk space[1] | Maximum disk space[1] | Timing for switching files[2] |
|---|---|---|---|---|---|
| `jajs_setup _cluster` command trace log[3, 6] | `/var/opt/jp1ajs2/log/ jajs_setup_cluster_{01 |02|03|04|05|06|07|08| 09|10|11|12|13|14|15|1 6|17|18|19|20}.log`[28] | Trace information related to the command that configures a cluster environment | 200 | 200 | When the `jajs_setu p_cluster` command is executed |
| `jp1ajs2_se tup_cluste r` command trace log[7] | `/var/opt/jp1ajs2/log/ JAJS_SETUP/` *logical-host-name*`/ jajs_setup.log`[8] | Trace information related to the command that sets up a logical host[3] | 10 | 100 | None |
| `jajs_killa ll.cluster` command trace log | *shared-directory*`/jp1ajs2/ log/ jajs_killall.cluster_lo gical-host-name.{1|2|3|4| 5}.log` | Trace information related to the command that kills a process associated with a logical host[3] | 50 | 50 | When `jajs_kill all.clust er` is executed |
| Queueless log[11] | `/var/opt/jp1ajs2/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 the environment settings (8,192) |
| Queueless trace log[6, 12] | `/var/opt/jp1ajs2/log/ tracelog.ql` | Execution trace information 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 directory names | Logged information | Default disk space[#1] | Maximum disk space[#1] | Timing for switching files[#2] |
|---|---|---|---|---|---|
| Queueless job execution internal log[#14] | `/var/opt/jp1ajs2/log/ajsqlexeclog`[#15] | Execution trace information related to queueless jobs[#3, #5] | 24,576 | 2,097,151 | Wraparound |
| Definition check log[#13] | `/var/opt/jp1ajs2/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 |
| Definition check trace log[#10] | `/var/opt/jp1ajs2/log/tracelog.ch` | Trace information related to definition pre-checks[#8] | 3,072 | 2,097,151 | 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, see *3.4.3 Estimating the size of the log information output by event jobs* in the *Job Management Partner 1/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 *Job Management Partner 1/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 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 *Job Management Partner 1/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 *2.5 Setting for the JP1/AJS3 definition pre-check function* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

#14

You can change the disk space size by using the `ajsqlexecsetsz` command. For details about this command, see *ajsqlexecsetsz* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

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

#15

The file name is different in a cluster system:
`/var/opt/jp1ajs2/log/ajsqlexeclog-`[*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.

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## 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 a *data collection tool* for the batch collection of the required data. In the tables above, the data that can be collected when the initial settings of the data collection tool are used indicated.

### 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 1-10:* 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. *system-folder*`\system32\drivers\etc\hosts` <br> 2. *system-folder*`\system32\drivers\etc\services` | Y |
| Dr. Watson log file[#1, #2] | *system-drive*`\Documents and Settings\All Users\Application Data\Microsoft\Dr Watson\drwtsn32.log`[#1] (for Windows Server 2003 and Windows XP Professional) | Y |
| Machine configuration[#3] | -- | Y |
| List of program products with running services[#3] | -- | Y |
| Network configuration[#3] | -- | Y |
| Memory dump[#1] | -- | Y[#4] |
| Crash dump[#1] | -- | Y[#4] |

Legend:

Y: The data collection tool can collect this data.

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

#1

Collect the Dr. Watson log file, memory dump, and crash dump from the respective folders. If another folder has been specified for the Dr. Watson log file, you must reconfigure the data collection tool.

#2

Windows 7, Windows Server 2008, and Windows Vista do not provide Dr. Watson log files.

#3

In Windows 7, Windows Server 2008, and Windows Vista, 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.

#4

In Windows 7, Windows Server 2008, and Windows Vista, you cannot use the data collection tool to collect memory dumps and crash dumps. If you need these dumps, you must collect them manually when a problem occurs. For details about how to collect these dumps, see *1.4.1(3) 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 1-11:* JP1 information to be collected for a problem occurring in JP1/AJS3

| Type of information | Default storage location for files | Collecti on by the tool |
|---|---|---|
| Log files<br>Work files<br>Definition files | 1. *JP1/Base-installation-folder*\log | Y |
| | 2. *JP1/Base-installation-folder*\conf\user_acl | |
| | 3. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\log[#2] | |
| | 4. *JP1/AJS3 - Manager-installation-folder*\log[#3] | |
| | 5. *JP1/AJS3 - Manager-installation-folder*\conf | |
| | 6. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\sys[#2] | |
| | 7. *JP1/AJS3 - Manager-installation-folder*\sys[#3] | |
| | 8. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\database[#2] | |
| | 9. *JP1/AJS3 - Manager-installation-folder*\database[#3] | |
| | 10. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\jobinf[#2] | |
| | 11. *JP1/AJS3 - Manager-installation-folder*\jobinf[#3] | |
| | 12. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2\tmp\schedule[#2] | |
| | 13. *JP1/AJS3 - Manager-installation-folder*\tmp\schedule[#3] | |
| | 14. *JP1/AJS3 - Manager-installation-folder*\PATCHLOG.txt | |
| | 15. *JP1/AJS3 - View-installation-folder*\PATCHLOG.txt | |
| | 16. *JP1/AJS3 - View-installation-folder*\resource | |
| | 17. %ALLUSERSPROFILE%[#1]<br>\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log[#2, #4] | |
| | 18. *JP1/AJS3 - View-installation-folder*\log[#3, #5] | |
| | 19. *JP1/AJS3 - View-installation-folder*\conf[#3, #5] | |
| | 20. %ALLUSERSPROFILE%[#1]<br>\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\conf[#4] | |
| | 21. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2CM\log[#2] | |
| | 22. *JP1/AJS3 Console-installation-folder*\log[#3] | |
| | 23. %ALLUSERSPROFILE%[#1]<br>\HITACHI\JP1\JP1_DEFAULT\JP1AJS2CM\database[#2] | |
| | 24. *JP1/AJS3 Console-installation-folder*\database[#3] | |
| | 25. *JP1/AJS3 Console-installation-folder*\conf | |
| | 26. *JP1/AJS3 Console-installation-folder*\PATCHLOG.txt | |

| Type of information | Default storage location for files | Collection by the tool |
|---|---|---|
| | In a cluster system, you also need to obtain the following files:<br>1. *shared-folder*\JP1BASE\log<br>2. *shared-folder*\JP1BASE\conf<br>3. *shared-folder*\JP1AJS2<br>4. *shared-folder*\JP1AJS2CM | |
| Integrated trace log folder | *system-drive*\Program files\hitachi\HNTRLib2\spool | 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 tool can collect this data.

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

#1

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

#2

For Windows Server 2008

#3

For Windows Server 2003

#4

For Windows 7 and Windows Vista

#5

Windows XP Professional

### (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, and JP1/AJS3 Console Manager and JP1/AJS3 Console Agent configuration)

4.  Whether the problem is reproducible

5.  Name of the user who logged in from JP1/AJS3 - View or JP1/AJS3 Console View (if there is one)

### (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 1-12:* 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 | *embedded-database-practical-directory*\conf | Y |
| Failure information | *embedded-database-practical-directory*\spool | Y |
| Database information | Unload file that is obtained by specifying the -k unld option in the ajsembdbrorg command | Y |

Legend:

Y: The data collection tool can collect this data.

### (7) Other information

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

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1. Contents of **System Log** and **Application Log** of the Windows Event Viewer window

2. Contents of the Help and Support Center window, and the System Information window (for Windows Server 2003 and Windows XP Professional)

   For Windows 7, Windows 2008, and Windows Vista, you can use the data collection tool to collect this information as described in *(1) Log information about the OS*.

3. 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 1-13:* 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) 2. `/var/adm/messages` (for Solaris) 3. `/var/adm/syslog/` or `/var/adm/syslog/*` (for AIX) | 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 |

| Type of information | Default file name or default storage location for files | Collection by the tool |
|---|---|---|
| core file | 1. `core` under `/opt/jp1ajs2`<br>2. `core` under `/var/opt/jp1ajs2`<br>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)<br>4. `core` under `/opt/jp1ajs2cm`<br>5. `core` under `/var/opt/jp1ajs2cm`<br>6. `core` under `/opt/jp1base`<br>7. `core` under `/var/opt/jp1base/log`<br>You also need to collect the following file in a cluster system:<br>1. `/`*shared-directory*`/jp1ajs2/database/core` | Y[#3] |
| Error log information[#2] | -- | Y |
| Network configuration | -- | Y |
| Information about installed Hitachi products | `/etc/.hitachi/pplistd/pplistd` | Y |

Legend:

Y: The data collection tool can collect this 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

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 1-14:* JP1 information to be collected for a problem occurring in JP1/AJS3

| Type of information | Default storage location for files | Collection by the tool |
|---|---|---|
| Log files<br>Work files<br>Definition files | 1. `/var/opt/jp1ajs2/log`<br>2. `/var/opt/jp1base/log`<br>3. `/etc/opt/jp1base/conf/user_acl`<br>4. `/etc/opt/jp1ajs2/conf`<br>5. `/var/opt/jp1ajs2/database`<br>6. `/var/opt/jp1ajs2/sys`<br>7. `/var/opt/jp1ajs2/jobinf`<br>8. `/var/opt/jp1ajs2/tmp/schedule`<br>9. `/opt/jp1ajs2/PatchHistory`<br>10. `/opt/jp1ajs2/PatchLog`<br>11. `/var/opt/jp1ajs2cm/log`<br>12. `/etc/opt/jp1ajs2cm/conf`<br>13. `/opt/jp1ajs2cm/PatchHistory`<br>14. `/opt/jp1ajs2cm/PatchLog`<br>15. `/var/opt/jp1ajs2cm/database`<br>In a cluster system, you also need to obtain the following files:<br>1. */shared-directory*`/jp1ajs2`<br>2. */shared-directory*`/jp1base/log`<br>3. */shared-directory*`/jp1base/conf`<br>4. */shared-directory*`/jp1ajs2cm` | 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 `core` file | -- | Y |

Legend:

Y: The data collection tool can collect this data.

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

*Note:*

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, and JP1/AJS3 Console Manager and JP1/AJS3 Console Agent configuration)

4. Whether the problem is reproducible

5. Name of the user who logged in from JP1/AJS3 - View or JP1/AJS3 Console View (if there is one)

### (5) Information about the embedded database

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

*Table 1-15:* 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 | *embedded-database-practical-directory*/`conf` | Y |
| Failure information | *embedded-database-practical-directory*/`spool` | Y |
| Database information | Unload file that is obtained by specifying the `-k unld` option in the `ajsembdbrorg` command | Y |

Legend:

Y: The data collection tool can collect this data.

### (6) Other information

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

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## 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

The following describes the procedure for executing the data collection tool and the data that the tool collects.

#### (a) Procedure for executing the data collection tool

Execute the data collection tool as shown below. For details about how to set up the data collection tool, see *7. Collecting Log Data* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 1*.

The following shows an example of executing the data collection tool:

```
c:\>c:\usertools\_04.bat
```

By default, the results of executing the data collection tool are output to the following folders under `%TEMP%\jp1ajs2\backlog`. Back up these folders.

For physical hosts:

1. `JP1_DEFAULT\JP1_DEFAULT_1st`

   The data for the first reports is output.

2. `JP1_DEFAULT\JP1_DEFAULT_2nd`

   All other data is output.

For logical hosts:

1. *logical-host-name*\*logical-host-name*`_1st`

   The data for the first reports is output.

2. *logical-host-name*\*logical-host-name*`_2nd`

   All other data is output.

When you use the data collection tool in a cluster system, you can collect data by specifying a logical host name. The data collection tool also provides options for limiting the amount of data that is collected. This following describes the syntax of the

data collection tool:

Format

```
_04.bat
        [-h logical-host-name]
        [-s]
        [-t]
        [-u]
```

Description

The data collection tool obtains maintenance information, such as the JP1/AJS3 logs and information about the OS.

Execution permission

Administrators

Arguments

-h *logical-host-name*

Specify the name of the target logical host.

The data collection tool collects the data on the physical host in addition to the data on the specified logical host.

If you do not specify a name, the data collection tool obtains the physical host logs.

-s

Specify this option if you do not want to collect information about the database used by JP1/AJS3 or information about the database used by JP1/AJS3 Console.

If you do not specify this option, the data collection tool collects information about these databases.

-t

Specify this option if you do not want to obtain the `hosts` and `services` files.

-u

Specify this option if you do not want to obtain user dumps.

You cannot obtain user dumps for Windows 7, Windows Server 2008, and Windows Vista.

Cautionary notes

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1. If you execute the data collection tool without the -s option specified during startup of the JP1/AJS3 service, the job might end abnormally. In such a case, JP1/AJS3 does not collect information about the ISAM database.

2. To collect data about a logical host in a cluster system, execute the data collection tool on the host on which the logical host runs.

3. The data collection tool does not compress the data if collects. To compress the data, use a data compression tool.

4. If you have already created a file containing the execution results of batch files, JP1/AJS3 outputs a message asking for permission to overwrite the file. To overwrite the file, specify y. If you do not want to overwrite the file, specify n.

5. While a batch file is being executed, JP1/AJS3 might display an error message reporting that a sharing violation has occurred for a file in the *JP1/AJS3 - Manager-or-JP1/AJS3 - Agent-installation-folder*\sys folder. This is not a problem.

6. If you perform an operation on the collected data such as, moving it or deleting it immediately after the execution of the data collection tool has finished, a message reporting that the process cannot access a file because another process is currently using the file might appear. This message appears because a process that collects OS information internally is still being executed despite termination of the tool. If this message appears, wait a while and then retry the operation.

7. If you execute the data collection tool while using Outlook, the following message might appear:

```
The program is attempting to access email addresses in
Outlook. Is this all right?
```

The program indicated in this message is the machine configuration collection program (msinfo32) executed internally by the data collection tool. This program does not affect the operation of the data collection tool or Outlook.

The data collection tool does not collect email addresses. If this message appears, click the **No** button.

8. When you execute the data collection tool in Windows 7, Windows Server 2008, and Windows Vista, you must open the Command Prompt window as an administrator. To open the Command Prompt window in Windows, click **Start**, **All Programs**, and **Accessories**. Right-click **Command Prompt** and then click **Run as administrator**.

If you execute the data collection tool without the Administrators permission, UAC in Windows 7, Windows Server 2008, and Windows Vista

repeatedly displays a confirmation dialog box while you are running the data collection tool.

If you turn UAC off, you will not need to open the Command Prompt window as an administrator.

Return values

| 0 | Normal end |
|---|---|
| Value other than 0 | Abnormal end |

Output destination

```
%TEMP%\jp1ajs2\backlog
```

You can change the output destination during the setup of the data collection tool.

Messages

| Message | Description | Action |
|---|---|---|
| `Finished. Press any key.` | The process ended normally. Press any key. | Wait for a user response. |
| `Failed. Press any key.` | The process did not end normally. Press any key.<br>See the output OS messages, remove the cause of the error, and then re-execute the process. | Wait for a user response. |
| `File ` *file-name* ` is exist. Delete to continue? (y/n)` | A file created the last time this process was executed exists. Press y to delete the file and continue processing, or press n to stop processing. | Wait for a user response. |
| `Directory ` *directory-name* ` is exist. Delete to continue? (y/n)` | A directory created the last time this process was executed exists. Press y to delete the directory and continue processing, or press n to stop processing. | Wait for a user response. |
| `Error exist in option.` | An option is specified incorrectly. Specify the option correctly, and then re-execute the process. | Complete the process. |
| `The following logical hosts exist, other than the specified logical host. : ` *logical-host-name* | A logical host environment other than the one specified for the -h option exists. If necessary, re-execute the process. | After this message, the following message is output:<br>`Finished. Press any key.` |

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Example 1

The following command collects physical host materials:

```
_04.bat
```

Example 2

The following command collects physical host materials when the JP1/AJS3 service is running:

```
_04.bat -s
```

Example 3

The following command collects data about a logical host (`cluster`):

```
_04.bat -h cluster
```

## (b) Data that can be collected by using the data collection tool

You can use the data collection tool (`_04.bat`) to collect the following types of data.

For physical hosts:

- The data for first reports
  (`%TEMP%\jp1ajs2\backlog\JP1_DEFAULT\JP1_DEFAULT_1st`)

| Name of folder or file containing collected data | Description |
|---|---|
| `\FILELIST.txt` | List of files under the JP1/AJS3 installation folder |
| `\GETERROR.log` | Log information that is output by the data collection tool (`_04.bat`) |
| `\HOSTS` | `hosts` file |
| `\services` | `services` file |

| Name of folder or file containing collected data | Description |
|---|---|
| 1. \JP1AJS2.DAT<br>2. \JP1AJS2C.DAT<br>3. \JP1AJS2CONSOLE.DAT<br>4. \JP1AJS2DA.DAT<br>5. \JP1AJS2SE.DAT<br>6. \JP1AJS2V.DAT<br>7. \JP1AJS2WOA.DAT<br>8. \JP1BASE.DAT | Registry information about each product |
| \REGDATA.DAT | JP1 registry information |
| \WIN.DAT | Windows registry information |
| \jpomanevshow.txt | Execution result of jpomanevshow.exe |
| \ajsqlstatus.txt | Execution result of ajsqlstatus.exe |
| \ajsagtshow.txt | Execution result of ajsagtshow.exe |
| \jajs_status.txt | Execution result of jajs_status.exe |
| \OSINFO.txt | OS version, Windows environment variables, IP configuration, network configuration, statistics |
| \PERMISSIONINFO.TXT | Access permissions for JP1/AJS3 folders |
| \WINMSD.TXT | Information, such as a system overview, collected by using the msinfo32 command and the tasks and services being executed. For Windows 7, Windows Server 2008, and Windows Vista, all system information that is collected by using the msinfo32 command |
| 1. \ALLUSERSPROFILE\conf\JP1AJS2 (for Windows Server 2008)<br>2. \conf\JP1AJS2 (for Windows Server 2003)<br>3. \conf\jp1ajs2cm<br>4. \conf\JP1AJS2DA<br>5. \conf\JP1AJS2V (for Windows Server 2003 and Windows XP Professional)<br>6. \ALLUSERSPROFILE\conf\JP1AJS2V (for Windows 7, Windows Server 2008, and Windows Vista)<br>7. \conf\JP1AJS2WOA | Folders containing the environment settings files |
| \drwtsn\Windows2003\drwtsn32.log (for Windows Server 2003) | Dr. Watson logs[1] |
| \EMBDB\_JF*[2]\conf | Embedded database definition file |

| Name of folder or file containing collected data | Description |
|---|---|
| `\EMBDB\_JF`*#2`\spool` | Embedded database failure investigation file |
| `\EMBDB\_JF`*#2`\etc` | Other information related to the embedded database that is needed for investigation |
| `\HNTRLib2\spool` | Integrated trace log |
| 1. `\ALLUSERSPROFILE\jobinf` (for Windows Server 2008)<br>2. `\jobinf` (for Windows Server 2003) | Folders containing information about jobs |
| 1. `\ALLUSERSPROFILE\JP1AJS2` (for Windows Server 2008)<br>2. `\JP1AJS2` (for Windows Server 2003)<br>3. `\JP1AJS2C`<br>4. `\jp1ajs2cm`<br>5. `\JP1AJS2DA` (for Windows Server 2003 and Windows XP Professional)<br>6. `\ALLUSERSPROFILE\JP1AJS2DA` (for Windows 7, Windows Server 2008, and Windows Vista)<br>7. `\JP1AJS2HC`<br>8. `\JP1AJS2V` (for Windows Server 2003 and Windows XP Professional)<br>9. `\ALLUSERSPROFILE\JP1AJS2V` (for Windows 7, Windows Server 2008, and Windows Vista)<br>10. `\JP1BASE` | Folders containing log files |
| 1. `\PATCHLOG\JP1JAJS2\PATCHLOG.txt`<br>2. `\PATCHLOG\JP1JAJS2C\PATCHLOG.txt`<br>3. `\PATCHLOG\JP1JAJS2console\PATCHLOG.txt`<br>4. `\PATCHLOG\JP1JAJS2DA\PATCHLOG.txt`<br>5. `\PATCHLOG\JP1JAJS2V\PATCHLOG.txt`<br>6. `\PATCHLOG\JP1JAJS2WOA\PATCHLOG.txt` | Patch log files |
| `\resource\JP1AJS2V` | Folder containing resource files |
| 1. `\ALLUSERSPROFILE\sys\JP1AJS2` (for Windows Server 2008)<br>2. `\sys\JP1AJS2` (for Windows Server 2003)<br>3. `\sys\JP1AJS2WOA`<br>4. `\sys\JP1AJS2V` (for Windows Server 2003 and Windows XP Professional)<br>5. `\ALLUSERSPROFILE\sys\JP1AJS2V` (for Windows 7, Windows Server 2008, and Windows Vista) | Folders containing the system files |
| 1. `\tmp\JP1AJS2DA` (for Windows Server 2003 and Windows XP Professional)<br>2. `\ALLUSERSPROFILE\tmp\JP1AJS2DA` (for Windows 7, Windows Server 2008, and Windows Vista) | Folders containing temporary files for execution |

| Name of folder or file containing collected data | Description |
|---|---|
| 1. `\ALLUSERSPROFILE\tmp\schedule\pd*.trc` (for Windows Server 2008) <br> 2. `\tmp\schedule\pd*.trc` (for Windows Server 2003) | Embedded database trace logs |
| `\user_acl` | Folder containing user mapping and authentication settings files |

#1

This data cannot be collected for Windows 7, Windows Server 2008, and Windows Vista.

#2

`_JF*` indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A folder is created for each identifier.

- The data for second reports (`%TEMP%\jp1ajs2\backlog\JP1_DEFAULT\JP1_DEFAULT_2nd`)

| Name of folder or file containing collected data | Description |
|---|---|
| `\ADD` | Folder for additional collected data |
| 1. `\cmdatabase` <br> 2. `\database` <br> 3. `\embdatabase\_JF*`[#1] | Database storage folders |
| `\eventlog\AppEvent(Backup).env` | Application event log |
| `\eventlog\SysEvent(Backup).env` | System event log |
| 1. `\SHMDUMP\coreinfo-ISAM.shmdump` <br> 2. `\SHMDUMP\coreinfo-Scheduler.shmdump` <br> 3. `\SHMDUMP\ProgMon.shmdump` <br> 4. `\SHMDUMP\coreinfo-host.shmdump` | Shared memory information |
| 1. `\USERDUMP\*.dmp` <br> 2. `\WTSNDUMP\*.dmp` | User dumps[#2] |

#1

`_JF*` indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A folder is created for each identifier.

#2

The data collection tool cannot collect this data for Windows 7, Windows Server

2008, and Windows Vista.

For logical hosts:

- The data for first reports
  (`%TEMP%\jp1ajs2\backlog\`*logical-host-name*`\`*logical-host-name*`_1st`)

| Name of folder or file containing collected data | Description |
|---|---|
| `\jpomanevshow.txt` | Execution result of `jpomanevshow.exe` |
| `\ajsqlstatus.txt` | Execution result of `ajsqlstatus.exe` |
| `\ajsagtshow.txt` | Execution result of `ajsagtshow.exe` |
| `\jajs_status.txt` | Execution result of `jajs_status.exe` |
| `\jobinf` | Folder containing information about jobs |
| `\JP1AJS2_LOGICAL` | Folder containing log files |
| `\JP1BASE` | Folder containing JP1/Base log files |
| `\EMBDB\_JF*`[#]`\conf` | Embedded database definition file |
| `\EMBDB\_JF*`[#]`\spool` | Embedded database failure investigation file |
| `\EMBDB\_JF*`[#]`\etc` | Other information related to the embedded database that is needed for investigation |
| `\sys\JP1AJS2` | System folder |
| `\tmp\schedule\pd*.trc` | Embedded database trace log |
| `\user_acl` | Folder containing user mapping and authentication settings files |

#

`_JF*` indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A folder is created for each identifier.

- The data for second reports
  (`%TEMP%\jp1ajs2\backlog\`*logical-host-name*`\`*logical-host-name*`_2nd`)

| Name of folder or file containing collected data | Description |
|---|---|
| 1.  `\cmdatabase`<br>2.  `\database`<br>3.  `\embdatabase\_JF*`[#] | Database storage folders |
| `\SHMDUMP\ProgMon.shmdump` | Information about the shared memory for monitoring processing status |
| `\SHMDUMP\coreinfo-host.shmdump` | Information about the shared memory for the system management function |

#

_JF* indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A folder is created for each identifier.

## (2)  Obtain a dump file

If a STOP error occurs in Windows, the contents of memory are dumped to a file. Obtain this dump file.

If a problem occurs, a crash dump is output. You can use the data collection tool to obtain the crash dump file.

To have a memory dump file and a crash dump file created when a problem occurs, you must specify settings for each file. For details about the settings for collecting log information, see *7. Collecting Log Data* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*. If the appropriate settings are specified, dump files are output to the specified paths.

## (3)  Obtain a dump file

If a problem occurs, you must obtain a memory dump file and a crash dump file. The procedure for doing so varies according to the OS.

### ■ In Windows 7, Windows Server 2008, and Windows Vista

If a STOP error occurs in Windows, a memory dump is output. Obtain this dump file. To ensure that a memory dump is output when a problem occurs, you must specify settings. For details about the settings, see *7.1(3) Procedure for setting the outputting of a dump file* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*. If the appropriate settings are specified, a memory dump is output to the specified path.

When a problem occurs, a crash dump is also output. However, because Windows 7, Windows Server 2008, and Windows Vista do not provide Dr. Watson log files, you cannot use the data collection tool to collect the crash dump. To obtain information equivalent to the crash dump, collect user dumps and problem reports by performing the procedure described below.

Collecting a user dump

When a JP1/AJS3 process stops due to an application error, perform the operations below while the error dialog box is displayed.

Cautionary note

If you close the error dialog box, dumps will not be collected correctly and user dumps cannot be collected. If you accidentally close the error dialog box before you collect a dump (for example, by clicking the **OK** button), reproduce the problem to display the dialog box, and then perform the following procedure.

To collect a user dump:

1. Start Task Manager.

   Use either of the following steps to start Task Manager:

   - Right-click open space on the taskbar, and then click **Task Manager**.

   - Hold down the **CTRL** and **SHIFT** keys, and then press the **ESC** key.

2. In the Task Manager dialog box, click the **Processes** page.

3. Right-click the name of the JP1/AJS3 process that stopped because of an application error and click **Create Dump File**.

4. When a dialog box displaying the output destination path for the user dump appears, collect the user dump from the displayed location.

Obtaining a problem report

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

To obtain a problem report:

1. In Windows, open the Run dialog box, enter `wercon` in the text box, and click the **OK** button.

   The Problem Reports and Solutions dialog box appears.

2. In the left pane, click **View problem history**.

   A list of problems appears.

3. Double-click the applicable problem.

   The contents of the problem report appear.

4. Click **Copy to clipboard**.

5. Copy the text into a text editor, and save the file.

Use the problem report text file as data for investigating the failure.

■ **In Windows Server 2003 and Windows XP Professional**

If a STOP error occurs in Windows, a memory dump is output. Obtain this dump file.

When a problem occurs, a crash dump is also output. You can use the data collection tool to obtain the dump file.

To ensure that a memory dump and a crash dump are output when a problem occurs, you must specify certain settings. For details about the settings for collecting dump files, see *7.1(3) Procedure for setting the outputting of a dump file* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*. If the appropriate settings are specified, dump files are output to the specified paths.

### (4)  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)*.

### (5)  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, and JP1/AJS3 Console Manager and JP1/AJS3 Console Agent configuration)

    For Windows Server 2003, you can use **System Information** to check the machine configuration.

4.  Whether the problem is reproducible

5.  Name of the user, if any, who logged in from JP1/AJS3 - View or JP1/AJS3 Console View

### (6)  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**.

### *(7)  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 1-16:* 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: <br> • *embedded-database-practical-directory*\spool <br> • *embedded-database-practical-directory*\tmp <br> 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 |

| No. | Component | Information to be collected | Collection method | Performance | No response | Abnormal end |
|---|---|---|---|---|---|---|
| 4 | | | Error log file<br>The error log is output to a file under *embedded-database-practical-directory*`\spool\errlog`. | 2 | 2 | 2 |
| 5 | | | Command log file<br>The command log is output to a file under *embedded-database-practical-directory*`\spool\cmdlog`. | 2 | 2 | 2 |
| 6 | | | Remote command information files<br>The information about remote commands is output to *embedded-database-practical-directory*`\spool\pdrshs1` and `pdrshs2`. | 2 | 2 | 2 |
| 7 | | | Node switching function information files<br>Information about the node switching function is output to *embedded-database-practical-directory*`\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 *embedded-database-practical-directory*`\UXPLDIR\SPOOL\uxpllog1` and `uxpllog2`. | 2 | 2 | 2 |

| No. | Component | Information to be collected | Collection method | Performance | No response | Abnormal end |
|---|---|---|---|---|---|---|
| 9 | | Embedded database system definitions | Obtain the files under *embedded-database-practical-directory*\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 pdsql. | -- | 6 | 5 |
| 11 | | System log file | Use the ajsembdboplog 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 ajsembdbrorg 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 `ajsembdbrorg` 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 `ajsembdbrorg` command and a description of the command, see *10.2.2 Reorganizing a database* in the *Job Management Partner 1/ Automatic Job Management System 3 Administration Guide*.

## 1.4.2 Collecting data for troubleshooting in UNIX

### *(1) Execute the data collection tool*

The following describes the procedure for executing the data collection tool and the data that the tool collects.

#### (a) Procedure for executing the data collection tool

Execute the data collection tool as shown below. For details about how to set up the data collection tool, see *15. Collecting Log Data* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 1*.

The following shows an example of executing the data collection tool:

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

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

For physical hosts:

1. `JP1_DEFAULT_1st.tar.z`

   The data for the first reports is output.

2. `JP1_DEFAULT_2nd.tar.z`

   All the other data is output.

For logical hosts:

1. *logical-host-name*`_1st.tar.z`

   The data for the first reports is output.

2. *logical-host-name*`_2nd.tar.z`

   All the other data is output.

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When you use the data collection tool in a cluster system, you can collect data by specifying a logical host name. The data collection tool also provides options for limiting the amount of data that is collected. The following describes the syntax of the data collection tool:

Format

```
_04
        [-h logical-host-name]
        [-f storage-directory]
        [-s]
        [-t]
        [-u]
        [additional-file]
```

Description

The data collection tool obtains maintenance information, such as the JP1/AJS3 definitions, operating information, and information about the OS.

Execution permission

Superuser

Arguments

-h *logical-host-name*

Specify the name of the target logical host.

The data collection tool collects the data on the physical host in addition to the data on the specified logical host.

If you do not specify a name, the data collection tool obtains the physical host logs.

-f *storage-directory*

Use a full path without space characters to specify the directory used to store the collected information. If the specified directory name contains a space character, the system assumes that the character string before the space is the storage directory name and treats the characters after the space as other arguments.

When you use a relative path to specify a storage directory, the specified path is created under the root directory and the collected data is stored there.

If you omit this option, the collected data is output to /tmp/jp1ajs2/ trouble/.

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-s

> Specify this option if you do not want to collect information about the database used by JP1/AJS3.
>
> If you do not specify this option, the data collection tool collects information about the database.

-t

> Specify this option if you do not want to obtain the `hosts`, `services`, and `passwd` files.

-u

> Specify this option if you do not want to obtain the core file.
>
> Although you specify this option, the back trace information is collected.

*additional-file*

> Use a full path without space characters to specify a file that is not usually obtained by using the data collection tool, such as the core file of the JP1/AJS3 commands. If the specified file name contains a space character, the system assumes that the character string before the space is an additional file name and treats the characters after the space as other arguments.
>
> Using this argument, you can collect information that is not automatically collected by the data collection tool.
>
> If the core file is specified as an additional file, the core file is collected even if you specify the `-u` option.
>
> You can specify a directory name for *additional-file*. If you specify a directory, all the data in the specified directory is collected.

Cautionary notes

1. If you collect data about a logical host in a cluster system, you must mount the shared disk for the logical host.

2. The data collection tool compresses the collected data as follows for each OS.

   For UNIX

   The data collection tool uses the `compress` command to compress the data. If the `compress` command is not installed in the environment in which the data collection tool is executed, the tool uses the `gzip` command instead. If neither the `compress` command nor the `gzip` command is available, the data collection tool uses the `tar` command to archive and output the data. If the `tar` command is not installed, the data collection tool terminates abnormally, and processing ends.

3. Because the user might not have reference permission for a file contained in the script, the superuser must execute the script.

4. If you have already created a file containing the results of executing the script, JP1/AJS3 outputs a message asking for permission to overwrite the file. Enter `y` to overwrite the file. If you do not want to overwrite the file, enter `n`.

5. If no core dump file is output, a message (`Status of tar: core? is unknown. The file is not dumped.`) appears. This is not a problem.

6. If the target product is not installed or is being used by another process, or a file that cannot be accessed because of its file attribute is detected, a message reporting that there is no applicable directory or file or that the target file cannot be accessed might appear during the collection of data. This is not a problem.

7. Because the `ajs2collectcore` command is executed internally while the data collection tool is being executed, some data cannot be collected, depending on the OS. For details, see *ajs2collectcore (UNIX only)* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

Return values

| 0 | Normal end |
|---|---|
| Value other than 0 | Abnormal end |

Messages

| Message | System action | Meaning and user action |
|---|---|---|
| `Directory` *directory-name* `is created` | Continues processing. | The indicated directory has been created. |
| `Overwrite file` (*file-name*) `ok?` | Waits for a response from the user. | The system is asking whether it is all right to overwrite the indicated file. To continue the processing, enter `y`. To cancel the processing, enter `n`. |

| Message | System action | Meaning and user action |
|---|---|---|
| [CAUTION]<br>When a target program is not installed, or when file access fails because some other process is using the file or because a necessary file-access permission is lacking, a message might be output that states that file access failed or a directory or file does not exist. Such a message does not indicate a problem. | Continues processing. | A warning message. This message might be output during the collection of data that indicates that the file is being used or that the file does not exist. This is not a problem. |
| Output file name :(*file-name*) | Ends processing. | The indicated file has been created. |
| Write permission error (*directory-name*) | Terminates the processing. | This message reports that the user does not have write permission. Possible reasons are as follows:<br>• The user does not have permission to create directories.<br>• The directory is being used by another process.<br>Correct the error, and then re-execute the data collection tool. |
| Make directory (*directory-name*) is unsuccessful | Terminates the processing. | This message reports that the indicated directory could not be created. Possible reasons are as follows:<br>• The user does not have permission to create directories.<br>• The directory is being used by another process.<br>Correct the error, and then re-execute the data collection tool. |
| Read permission error(*file-name*) | Terminates the processing. | This message reports that the user does not have read permission. A possible reason is as follows:<br>• The user does not have permission to create directories.<br>Correct the error, and then re-execute the data collection tool. |
| File *file-name* is not found | Terminates the processing. | The directory or file specified as the additional file does not exist.<br>Specify a correct path, and then re-execute the data collection tool. |

| Message | System action | Meaning and user action |
|---|---|---|
| `[ -s ] [ -f ` *output-file* ` ] [ -h ` *Logical-Host-Name* ` ] [ -t ] [ -u ] [ ` *add-in-file* ` ... ]` | Terminates the processing. | The option is specified incorrectly. Specify the option correctly, and then re-execute the data collection tool. |

Example 1

The following command collects data about a physical host:
`_04`


Example 2

The following command collects data about a logical host (`cluster`):

`_04 -h cluster`


Example 3

The following command outputs information, including the core file (`/tmp/core`), to a specified file (`/tmp/trouble`):

`_04 -f /tmp/trouble /tmp/core`


### (b)  Data that can be collected by using the data collection tool

You can use the data collection tool (`_04`) to collect the following types of data.

For physical hosts:

- The data for first reports (`/tmp/jp1ajs2/trouble/JP1_DEFAULT_1st.tar.Z`[#1])

| Name of directory or file containing collected data | Description |
|---|---|
| `/etc/hosts` | `hosts` file |
| `/etc/passwd` | `passwd` file |
| `/etc/services` | `services` file |
| `/etc/.hitachi/pplistd/pplistd` | Information about installed Hitachi products |

| Name of directory or file containing collected data | Description |
|---|---|
| 1. `/etc/opt/jp1ajs2/conf`<br>2. `/etc/opt/jp1ajs2cm/conf`<br>3. `/etc/opt/jp1base/conf` | Directories containing the environment settings files |
| `/opt/HIRDB_J/spool/pdlckinf` | Embedded database deadlock timeout information file |
| `/opt/jp1/hcclibcnf/regdir` | Common definition |
| 1. `/opt/jp1ajs2/PatchHistory`<br>2. `/opt/jp1ajs2/PatchLog`<br>3. `/opt/jp1ajs2v/PatchHistory`<br>4. `/opt/jp1ajs2v/PatchLog` | Patch information |
| 1. `/var/adm/syslog/syslog.log` (for HP-UX)<br>2. `/var/adm/messages` (for Solaris)<br>3. `/var/adm/syslog` (for AIX) | `syslog` and the directories containing `syslog` |
| 1. `/opt/hitachi/HNTRLib/spool`<br>2. `/var/opt/hitachi/HNTRLib2/spool` | Integrated trace logs |
| `/var/opt/jp1ajs2/jobinf` | Directory containing the information about jobs |
| `/var/opt/jp1ajs2/log` | Directory containing log files |
| `/var/opt/jp1ajs2/log/_04.filelist` | List of files |
| `/var/opt/jp1ajs2/log/_04.osinfo` | OS-related information |
| `/var/opt/jp1ajs2/log/_04.processlist` | List of processes |
| `/var/opt/jp1ajs2/log/_04.backtrace` | Back trace information |
| `/var/opt/jp1ajs2/log/ajsagtshow.txt` | Execution result of the `ajsagtshow` command |
| `/var/opt/jp1ajs2/log/ajsagtprint.txt` | Execution result of the `ajsagtprint` command |
| `/var/opt/jp1ajs2/log/jajs_status.txt` | Execution result of the `jajs_status` command |
| `/var/opt/jp1ajs2/sys` | Directory containing the system files |
| `/var/opt/jp1ajs2/tmp/schedule/pd*.trc` | Trace information related to the embedded database |

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| Name of directory or file containing collected data | Description |
|---|---|
| 1.  `/var/opt/jp1ajs2cm/log`<br>2.  `/var/opt/jp1ajs2v/log`<br>3.  `/var/opt/jp1base/log` | Directories containing log files |
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB/_JF`*[#2]`/conf` | Embedded database definition file |
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB/_JF`*[#2]`/spool` | Embedded database failure investigation file |
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB/_JF`*[#2]`/etc` | Other information related to the embedded database that is needed for investigation |

#1

Output destination when the `-f` option is omitted.

#2

`_JF`* indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A directory is created for each identifier.

- The data for second reports (`/tmp/jp1ajs2/trouble/`
  `JP1_DEFAULT_2nd.tar.Z`[#1])

| Name of directory or file containing collected data | Description |
|---|---|
| 1.  `/tmp/jp1ajs2/trouble`[#1]`/CAERDIR/`<br>  `coreinfo-ISAM.shmdump.tar.Z`[#2]<br>2.  `/tmp/jp1ajs2/trouble`[#1]`/CARDIR/`<br>  `coreinfo-Scheduler.shmdump.tar.Z`[#2]<br>3.  `/tmp/jp1ajs2/trouble`[#1]`/CARDIR/../../core.Z`[#2]<br>4.  `/tmp/jp1ajs2/trouble`[#1]`/CARDIR/../../`<br>  `coreinfo-analyze.tar.Z`[#2]<br>5.  `/tmp/jp1ajs2/trouble`[#1]`/CARDIR/ProgMon.shmdump`<br>6.  `/tmp/jp1ajs2/trouble`[#1]`/CARDIR/`<br>  `coreinfo-host.shmdump` | Shared memory information used by ISAM and the scheduler, core dump files, and shared library information |
| 1.  `/var/opt/jp1ajs2/database`<br>2.  `/var/opt/jp1ajs2cm/database`<br>3.  `/tmp/jp1ajs2/trouble`[#1]`\embdatabase/_JF`*[#3] | Database storage directories |
| `/`*additionally-collected-data*[#4] | Additionally collected data |

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#1

Output destination when the -f option is omitted.

#2

This file is output to the directory containing the core dump file that has been obtained.

#3

_JF* indicates an embedded database identifier (_JF0, _JF1, _JF2, and so on). A directory is created for each identifier.

#4

This file is created when *additional-file* is specified as the argument.

For logical hosts:

- The data for first reports (/tmp/jp1ajs2/trouble/ *logical-host-name*_1st.tar.Z[#1])

| Name of directory or file containing collected data | Description |
| --- | --- |
| /*shared-directory-name*/jp1ajs2/backup | Directory containing backup files |
| /*shared-directory-name*/jp1ajs2/conf | Directory containing environment settings files |
| /*shared-directory-name*/jp1ajs2/jobinf | Directory containing job information files |
| /*shared-directory-name*/jp1ajs2/log | Directory containing log files |
| /*shared-directory-name*/jp1ajs2/sys | Directory containing the system files |
| /*shared-directory-name*/jp1ajs2/tmp | Directory containing work files |
| /*shared-directory-name*/jp1base/conf | Directory containing the environment settings files |
| /*shared-directory-name*/jp1base/log | Directory containing log files |
| /*shared-directory-name*/jp1ajs2/log/ajsagtshow.txt | Execution result of the ajsagtshow command |
| /*shared-directory-name*/jp1ajs2/log/ajsagtprint.txt | Execution result of the ajsagtprint command |
| /*shared-directory-name*/jp1ajs2/log/jajs_status.txt | Execution result of the jajs_status command |

| Name of directory or file containing collected data | Description |
|---|---|
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB` *logical-host-name*`/_JF*`[#2]`/conf` | Embedded database definition file |
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB` *logical-host-name*`/_JF*`[#2]`/spool` | Embedded database failure investigation file |
| `/tmp/jp1ajs2/trouble`[#1]`/EMBDB` *logical-host-name*`/_JF*`[#2]`/etc` | Other information related to the embedded database that is needed for investigation |

#1

Output destination when the `-f` option is omitted.

#2

`_JF*` indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A directory is created for each identifier.

- The data for second reports (`/tmp/jp1ajs2/trouble/`*logical-host-name*`_2nd.tar.Z`[#1])

| Name of directory or file containing collected data | Description |
|---|---|
| 1. `/tmp/jp1ajs2/trouble`[#1]`/CARDIR_`*logical-host-name*`/ProgMon.shmdump`<br>2. `/tmp/jp1ajs2/trouble`[#1]`/CARDIR_`*logical-host-name*`/coreinfo-host.shmdump` | Shared memory dumps |
| 1. `/`*shared-directory-name*`/jp1ajs2/database`<br>2. `/`*shared-directory-name*`/jp1ajs2cm/database`<br>3. `/tmp/jp1ajs2/trouble`[#1]`/embdatabase_`*logical-host-name*`/_JF*`[#2] | Database storage directories |

#1

Output destination when the `-f` option is omitted.

#2

`_JF*` indicates an embedded database identifier (`_JF0`, `_JF1`, `_JF2`, and so on). A directory is created for each identifier.

### (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. `/var/opt/jp1ajs2cm/database`[#1]

4. User home directory[#2]

5. Current directory in which the command was executed

#1

The data collection tool 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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

### (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, and JP1/AJS3 Console Manager and JP1/AJS3 Console 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 1-17:* 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 | `/usr/bin/uname -a` | `/usr/sbin/dmesg` | `/usr/bin/ps -elf` |
| Solaris | `/usr/bin/uname -a` | `/usr/sbin/prtconf` | `/usr/bin/ps -elf` |
| AIX | `/usr/bin/uname -a` | `/usr/sbin/bootinfo -r` | `/usr/bin/ps -elf` |

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 or JP1/AJS3 Console View.

### (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 1-18:* 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 |
| 2 | | CPU usage rate and device status | Use an OS command, such as the `sar` command, to collect the information. For details about the commands, see the documentation for the OS. | 3 | 4 | 3 |

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| No. | Component | Information to be collected | Collection method | Performance | No response | Abnormal end |
|-----|-----------|----------------------------|-------------------|-------------|-------------|--------------|
| 3 | | CPU running status and memory status for processes | Use an OS command, such as the `top` 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 `vmstat` 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 `netstat` 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:<br>• *embedded-database-practical-directory*/`spool`<br>• *embedded-database-practical-directory*/`tmp`<br>An error log file and a command log file are output to the above directories. | 2 | 2 | 2 |
| 7 | | | Error log file<br>The error log is output to a file under *embedded-database-practical-directory*/`spool/errlog`. | 2 | 2 | 2 |
| 8 | | | Command log file<br>The command log is output to a file under *embedded-database-practical-directory*/`spool/cmdlog`. | 2 | 2 | 2 |

| No. | Compo nent | Informatio n to be collected | Collection method | Performanc e | No respons e | Abnorma l end |
|---|---|---|---|---|---|---|
| 9 | | Embedded database system definitions | Obtain the files under *embedded-database-practical -directory*/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 pdsql. | -- | 6 | 5 |
| 11 | | System log file | Use the ajsembdboplog 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 ajsembdbrorg 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 `ajsembdbrorg` 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 `ajsembdbrorg` command and a description of the command, see *10.2.2 Reorganizing a database* in the *Job Management Partner 1/ Automatic Job Management System 3 Administration Guide*.

**Chapter**

# 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.

### *(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 `jpqimport` 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 (`jpqsetup.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\jpqsetup.conf`

In UNIX:

> `/etc/opt/jp1ajs2/conf/jpqsetup.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 $a`*n* (*n* is an agent ID).

- The same ID is not shared by `def_queue $q`*n* (*n* is a default queue ID) and `$queue $q`*n* (*n* is a queue ID).

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- A duplicate ID is not defined in `$queue $q`*n* (*n* is a queue ID).

- A duplicate ID is not defined in `$res $r`*n* (*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 (`jpqsetup.conf`), see *jpqimport* in *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

### (2) 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 `jpqimport` 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 *2.12(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.

- If you restart a JP1/AJS3 service that has terminated abnormally, the KAVU1103-I message (`Process monitor (`*logical-host-name*`) is already running on the same host.`) or the KAVU4111-E message (`Job queuing control (`*logical-host-name*`) or jpqimport command is already running on the same host.`) might be output to the integrated trace log. In this case, when the JP1/AJS3 service terminated abnormally, some of the JP1/AJS3 processes might have remained because they could not be stopped. Accordingly, perform the following procedure to forcibly terminate JP1/AJS3 processes and then restart the JP1/AJS3 service.

In Windows:

Use the `jajs_spmd_status` command to check the status of JP1/AJS3 processes. If the `submitqueue`, `queuea`, or `queuem` process has not stopped, restart the system.

In UNIX:

Use the `jajs_spmd_status` command to check the status of JP1/AJS3 processes. If the jpqmon process has not stopped, execute the following command to kill the jpqagt process.

```
# ps -ef | grep jpqagt
# kill -KILL jpqagt-process-ID-output-by-previous-command
```

Also use the `jajs_spmd_status` command to check the status of JP1/AJS3 processes.

If the jpqman_hst or jpqman process has not stopped, execute the following command to kill the jpqman_hst or jpqman process.

```
# kill -KILL jpqman_hst-process-ID-or-jpqman-process-ID-output-by-jajs_spmd_status-command
```

## (3) 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.

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

### (4) 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 *8.9.3 Changing the date and time of the system* in the *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*.

## 2.2 Troubleshooting problems related to the job execution environment

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

### *(1) A failure occurs on an existing agent host, or an agent host whose configuration definition can be changed is at a remote location*

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 `jpqqueopen` 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 `jpqjobsub` 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 `jpqagtdel` 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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

*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:

- `jpqagtalt`

- `jpqquealt`

- `jpqqueopen`

- `jpqqueclose`

- `jpqagtlink`

- `jpqagtunlink`

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

## 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.

### *(1)  Login to JP1/AJS3 is not possible*

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.

- Use the `ping` utility to ping the destination host. If pinging fails, the destination either 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 *Job Management Partner 1/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 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

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output data, and check the points discussed below. For details about the `jbsgetumap` command, see the *Job Management Partner 1/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 *Job Management Partner 1/ 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.

■ 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 *Job Management Partner 1/Base User's Guide*.

## *(2) The connection is lost 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 *2.2 Setting up the scheduler service environment* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

## 2.4 Troubleshooting problems related to login from JP1/AJS3 Console View

This section describes the actions to be taken for messages that might appear when you attempt to log in to JP1/AJS3 Console Manager from JP1/AJS3 Console View.

### (1) If the KAVC4501-E message (Cannot connect to the connection destination host or JP1/AJS3 Console Manager service on the connection destination host. Detailed information [(connection-destination-port-number):(connection-destination-IP-address)] is displayed

Check the following and take action as necessary:

- Use the `ping` utility to ping the destination host. If pinging fails, the destination host either is not running or is unable to connect to the network. Start the destination host or make it possible for the destination host to connect to the network.

- Check whether the JP1/AJS3 Console Manager service is running on the destination host.

  To check the service status:

  In Windows:

    In the Services dialog box or Services window, check whether the status of the JP1/AJS3 Console Manager service is **Start**.

  In UNIX:

    Execute the `ps` command to check whether the ajscminetd process has started.

- Check whether there is a firewall between the source and destination hosts. If there is, check whether packet filtering is configured correctly.

- Check whether the port number in the message matches the port number defined in the `services` file of the destination host.

### (2) If the KAVC4504-E message (The host name is specified incorrectly.) is displayed

Specify settings so that the host name can be resolved.

### (3) If the KAVC4512-E message (The Access Control Server at the connection destination could not be connected.) is displayed

Check whether the host name of the authentication server specified on the connection destination host is specified correctly.

If the host name of the authentication server is specified correctly, check whether the authentication server is running on the host.

Note that if the local host is specified as an authentication server in a UNIX environment, you must set up JP1/Base so that JP1/Base starts as an authentication server. For details, see the explanation of the authentication server settings in the *Job Management Partner 1/Automatic Job Management System 3 Administration Guide*.

## 2.5 Troubleshooting problems if the status is Unknown when JP1/AJS3 Console is in monitoring mode

This section describes the action to be taken when the status displayed in monitoring mode is *Unknown*.

Take action based on the message displayed in **Information** in the Detail Information - [AJS3 Unit Monitored Objects] dialog box.

### *(1) KAVC6xxx-E messages*

If a message from KAVC6001 to KAVC7000 appears, take the action described for the applicable message in *2.1 Messages beginning with KAVC (Messages about JP1/AJS3 Console)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 1*.

### *(2) KAVSxxxx-E messages*

Take the action described in the applicable message in *2.2 Messages beginning with KAVS (Messages about the scheduler)* in the manual *Job Management Partner 1/Automatic Job Management System 3 Messages 1*.

For the following messages, take the action described.

### (a) If the KAVS1600-E message (The specified unit name is invalid.) is displayed

Possible causes are as follows:

- The specified unit does not exist.

- The user does not have the required permission for the specified unit.

- The unit type of the specified unit is one of the following:

  - Manager job group or manager jobnet

  - Nested jobnet or job (the unit must belong to a level lower than the root jobnet)

- In the user mapping settings specified on the JP1/AJS3 Console Agent host, the OS user is mapped to a JP1 user able to access from the JP1/AJS3 Console Manager host, but the OS user is not mapped to a JP1 user on the JP1/AJS3 Console Agent host.

For the AJS3 unit to be monitored, specify a unit whose status you are able to obtain.

### (b) If the KAVS1601-E message (Requests to the specified unit could not be processed.) is displayed

The status cannot be obtained because requests to the specified unit are not supported.

For the AJS3 unit to be monitored, specify a unit whose status you are able to obtain.

**(c) If the KAVS1005-E message (Cannot connect to Access Control Server.) is displayed**

Possible causes are as follows:

- An incorrect authentication server was specified during setup of JP1/Base on the monitored host after monitoring started.

- The authentication server specified on the monitored host stopped after monitoring had started.

- After monitoring started, the monitored host and the authentication server host could not connect over the network.

Eliminate the cause of the error. When this has been done, the correct status will be displayed on the monitored host the next time that the status is acquired.

## 2.6 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 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 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 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 start condition identified in step 6.

   If the termination is successful, troubleshooting ends here.

8. If the termination fails or if the start condition is not identified in step 6, halt restoration while JP1/AJS3 is running, and stop the JP1/AJS3 service.

9. Execute the `jpomanevreset` command for the agent on which the problem occurred, and restore the event/action control manager.

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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 JP1/AJS3 service.

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

## 2.7 Troubleshooting problems related to jobs and jobnets

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

### 2.7.1 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.

### 2.7.2 Troubleshooting problems related to standard jobs, action jobs, and custom jobs

This subsection describes how to troubleshoot problems that might occur when you execute standard 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:

- An NFS-mounted directory is used in the following definition parameters:

  - Standard output file name for the job

  - Standard error output file name for the job

  - Work path for the job

  - Work directory for job environment settings

  - Home directory of the execution OS user

  If you use an NFS-mounted directory in any of the above definition parameters, job startup might fail.

  If a job fails to start, check whether you can access the file or directory specified in the above definition parameters by using the account for the JP1/AJS3 service. If you cannot access the file or directory, change the permission for the file or directory so that you can use the account for the JP1/AJS3 service to access the file or directory. Alternatively, move the file to a directory that you can access from the JP1/AJS3 service.

- 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 (`*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 UNIX only):

  An execution user without superuser permission might have attempted to execute a job with job execution priority 4 or 5.

  To execute a job with job execution priority 4 of 5 in UNIX, the execution user must have superuser permission (`root` user).

  In Windows, however, the execution user does not need to be a member of the Administrators group 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 `jpqqueshow` 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 `jpqqueopen` 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 that can be queued.

Execute the `jpqqueshow` 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 `jpqquealt` command to change the maximum number of jobs in a queue, or the `jpqimport` 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 *2.12(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`

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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 that can be queued 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 *Job Management Partner 1/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

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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 `jpqimport` 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 *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

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 *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*. For details about access tokens, see *5.3.1 User account for job execution* in the manual *Job Management Partner 1/Automatic Job Management System 3 Overview* as well.

### (2) 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 *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

- 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 settings in `/etc/logingroup` 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/logingroup`. If login groups are not specified in `/etc/logingroup`, 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/logingroup`, or create a symbolic link between `/etc/group` and `/etc/logingroup`. 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 *Job Management Partner 1/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 *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 1*.

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 `_04.bat` 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 KAVU4660-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 *14.2.18 Enabling the file access permission check for the ACL and secondary group settings during job execution* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

■ 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 `777`, 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 *14.2.18 Enabling the file access permission check for the ACL and secondary group settings during job execution* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

■ 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 `jpqjobsub` 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 *Job Management Partner 1/*

*Automatic Job Management System 3 Configuration Guide 1.*

■ 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 end 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 fie. 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 *2.12 Troubleshooting problems related to invalid ISAM files*.

■ When you execute a job on an execution host running AIX, 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, when you define resource limits in `/etc/security/limits` 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 *Job Management Partner 1/Automatic Job Management System 3 System Design (Work Tasks) Guide*.

### *(3) The status of a standard 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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

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 *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1* (for Windows) or *14.2.13 Outputting a message that reports that the maximum number of concurrently executable jobs has been reached* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1* (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.

### (4) 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.

### (5) The shell does not read environment variables (AIX only)

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

See the explanation in *12.4.1 Changing the login scripts* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*, and change the login script. The following example shows how to change the login script:

```
if [ ${JP1JobID:-""} != "" ]; then
 . /etc/environment
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` (`.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.

### (6) A job ends normally without executing the job process

In UNIX, JP1/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 *12.4.1 Changing the login scripts* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

## 2.7.3 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.

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## 2.7.4 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 *Job Management Partner 1/ Base User's Guide*. For details about regular expressions in UNIX, see the UNIX documentation.

### 2.7.5 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 *Job Management Partner 1/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.

## 2.8 Troubleshooting problems related to the embedded database

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

### 2.8.1 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

In Windows Server 2003, either back up or print the contents of any Dr. Watson log files that have been output.

Remarks

The information required to troubleshoot a problem is described in *2.8.7 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<br>In Windows:<br>    *embedded-database-practical-directory*\<br>    `spool\pdlog1,pdlog2`<br>In UNIX:<br>    *embedded-database-practical-directory*/<br>    `spool/pdlog1,pdlog2` | Messages output by the embedded database. Back up this information when a problem occurs. |
| Standard output and standard error output for command execution | 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. |
| In Windows:<br>    Windows event log (Windows)<br>In UNIX:<br>    `syslog` | Messages output by the embedded database.<br>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 `syslog`. |
| Core save files[#]<br>(in UNIX)<br>*embedded-database-practical-directory*/<br>`spool/save/`*file-name* | 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.<br>The file name format is `ajs2`*n*, where *n* is the sequence number of the core save file (1 to 3). Note that in some cases, sequence numbers might not be assigned. |
| Abort information file[#]<br>In Windows:<br>    *embedded-database-practical-directory*\<br>    `spool\save\`*file-name*<br>In UNIX:<br>    *embedded-database-practical-directory*/<br>    `spool/save/`*file-name* | 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 `abcode`.*process-ID-of-server-process*. |
| Snap information captured at the time the problem occurred[#]<br>In Windows:<br>    *embedded-database-practical-directory*\<br>    `spool\save\`*file-name*<br>In UNIX:<br>    *embedded-database-practical-directory*/<br>    `spool/save/`*file-name* | Snap information captured at the time the problem occurred. Back up this information if it is output. The file name format is `ajs2`*n*`.deb`, where *n* is the sequence number of the file (1 to 3). Note that in some cases, sequence numbers might not be assigned. |

| Information | Description |
|---|---|
| Shared memory dump file<sup>#</sup><br>In Windows:<br>　*embedded-database-practical-directory*`\`<br>　`spool\pdshmdump\`*file-name*<br>In UNIX:<br>　*embedded-database-practical-directory*`/`<br>　`spool/pdshmdump/`*file-name* | Data collected from shared memory by the embedded database. Back up this information if it is output. The file name format is `ajs2.rmb.`*process-ID-of-server-process*. |
| Simple dump file<sup>#</sup><br>In Windows:<br>　*embedded-database-practial-directory*`\s`<br>　`pool\`*directory-for-each-server*`\`*file-name*<br>In UNIX:<br>　*embedded-database-practial-directory*`/`<br>　`spool/`*directory-for-each-server*`/`<br>　*file-name* | 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. |
| Command trace files<br>In Windows:<br>　*embedded-database-practical-directory*`\`<br>　`spool\cmdlog1,cmdlog2`<br>In UNIX:<br>　*embedded-database-practical-directory*`/`<br>　`spool/cmdlog1,cmdlog2` | 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. |
| Error log files<br>In Windows:<br>　*embedded-database-practical-directory*`\`<br>　`spool\errlog\errlog1,errlog2`<br>In UNIX:<br>　*embedded-database-practial-directory*`/`<br>　`spool/errlog/errlog1,errlog2` | Internal information output by the embedded database. Back up this information if it is output. |
| Connected-user information file<br>In Windows:<br>　*embedded-database-practical-directory*`\`<br>　`spool\cnctusrinf`<br>In UNIX:<br>　*embedded-database-practical-directory*`/`<br>　`spool/cnctusrinf` | Information about users who were connected when the embedded database terminated. Use any text editor to view this information. |

| Information | Description |
|---|---|
| Connected-user details file<br>In Windows:<br>    *embedded-database-practical-directory*\\<br>    `spool\cnctusrdtl`<br>In UNIX:<br>    *embedded-database-practical-directory*/<br>    `spool/cnctusrdtl` | |
| Locked resource management table information file<br>In Windows:<br>    *embedded-database-practical-directory*\\<br>    `spool\pdlckinf\`*output-date*`.mem`<br>In UNIX:<br>    *embedded-database-practial-directory*/<br>    `spool/pdlckinf/`*output-date*`.mem` | 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.

## 2.8.2  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.<br>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 *Release Notes*. |

| Possible cause | Action to be taken |
|---|---|
| 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 `ajsembdbaddlog` 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) Action to be taken if a problem occurs in the system area*. |
| 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 `ajsembdbstart` command with the `-R` option specified. |
| The embedded database cannot be restarted in UNIX due to a problem other than the above. | See *(4) Action to be taken if another type of problem occurs (in UNIX)*. |

### (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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1* or *2. Commands Used during Setup* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

#### (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 `ajsembdbunset` command with the `-e` option specified.

2. Execute the `ajsembdbbuild` command with the `-rs` option specified.

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. Execute the `ajsembdbunset` command with the `-e` option specified.

3. Execute the `ajsembdbbuild` command with the `-rs` option specified.

## 2.8.3 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 and JP1/AJS3 Console Agent 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.

## 2.8.4 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 *2.8.1(2) The information obtained by the embedded database when a problem occurs*.

## 2.8.5 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\semmn`

>       g.dat

14. *embedded-database-practical-directory*\uxpldir\spool\system\msgmn
    g.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.

## 2.8.6 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.

## 2.8.7 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(7) Collect information about the
embedded database* (for Windows) or *1.4.2(5) Collect information about the
embedded database* (for UNIX).

## 2.8.8 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 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 -id option is invalid. | Specify the correct setup identifier, and re-execute the command. |
| 4 | The embedded database corresponding to the setup identifier specified in the -id 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 -p 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 -p 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. | |
| 24 | The user who performed installation is not a member of the Administrators group. | A user who is a member of the Administrators group 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 |
|---|---|---|
| 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 -mh option is invalid. | Specify the correct host name, and re-execute the command. |
| 4 | The setup identifier specified in the -id 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 -id option is already installed. | Specify the setup identifier of an embedded database that is not installed, and re-execute the command. |
| 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. | Store the installation image of the embedded database in the directory specified in the -s option, and then re-execute the command. |
| 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. |
| 24 | The user who attempted installation is not a member of the Administrators group. | A user who is a member of the Administrators group 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 -s option, and then re-execute the command. |

| Return value | Error cause | Action to be taken |
|---|---|---|
| 63 | An error occurred during registration in the OS. | Check whether the installation directory specified in the `-i` option satisfies the following conditions:<br>• The installation directory name consists of the following characters:<br>In Windows:<br>- Alphanumeric characters<br>- Space character<br>- The path separator \\<br>- Period (.)<br>- Underscore (_)<br>- Left parenthesis ( ( )<br>- Right parenthesis ( ) )<br>In UNIX:<br>- Alphanumeric characters<br>- Underscore (_)<br>- Slash (/)<br>• The length of the path for the installation directory is 118 bytes or less.<br>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. |
| 65 | A disk access error occurred. | 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 permission. | A user who has the superuser permission 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. |

| Return value | Error cause | Action to be taken |
|---|---|---|
| 80 | In Windows:<br>The status of the embedded database service with the specified setup identifier is not the stopped status.<br>In UNIX:<br>The embedded database specified for the installation directory is currently running. | Stop the embedded database, and re-execute the command. |
| 82 | In Windows:<br>An embedded database that has the same setup identifier is already installed.<br>In UNIX:<br>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 pdservice.exe 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. | |

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| Return value | Error cause | Action to be taken |
|---|---|---|
| 93 | An abnormal condition occurred during registration of the display name for the node switching service. | |
| 94 | An abnormal condition occurred during registration of the source name for the Windows event log. | |
| 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. | |

| Return value | Error cause | Action to be taken |
|---|---|---|
| 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 is not a member of the Administrators group. | A user who is a member of the Administrators group 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. | |
| 72 | The user who attempted uninstallation does not have the superuser permission. | A user who has the superuser permission must re-execute the command. |
| 81 | In Windows:<br>    The embedded database that has the specified setup identifier is not installed.<br>In UNIX:<br>    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.

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*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:<br>• Folders and files under *JP1/AJS3-installation-folder*\embdb\_JF0<br>• Files under *JP1/AJS3-installation-folder*\log\embdb |
| 9 | KFPX29609 | An attempt to read a file failed. | In UNIX:<br>• Directories and files under /opt/jp1ajs2/embdb/_JF0<br>• Files under /var/opt/jp1ajs2/log/embdb |
| 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. |

| Code | Message ID | Error cause | Action to be taken |
|---|---|---|---|
| 17 | KFPX29617 | An error occurred during initialization of the system area. | Back up the following information, and contact the system administrator:<br>In Windows:<br>• Folders and files under *JP1/AJS3-installation-folder*\embdb\_JF0<br>• Files under *JP1/AJS3-installation-folder*\log\embdb<br>In UNIX:<br>• Directories and files under /opt/jp1ajs2/embdb/_JF0<br>• Files under /var/opt/jp1ajs2/log/embdb |
| 18 | KFPX29618 | An error occurred during startup of the embedded database or initialization of the table area. | The system resources required by the embedded database are insufficient. See *3.2.5 Estimating the values for kernel parameters* in the *Job Management Partner 1/Automatic Job Management System 3 System Design (Configuration) Guide*, 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: |
| 20 | KFPX29620 | An error occurred during the creation of a temporary file. | In Windows:<br>• Folders and files under *JP1/AJS3-installation-folder*\embdb\_JF0<br>• Files under *JP1/AJS3-installation-folder*\log\embdb |
| 23 | KFPX29623 | An internal error occurred in the embedded database. | In UNIX:<br>• Directories and files under /opt/jp1ajs2/embdb/_JF0<br>• Files under /var/opt/jp1ajs2/log/embdb |
| 24 | KFPX29624<br>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:<br>In Windows:<br>• Folders and files under *JP1/AJS3-installation-folder*\embdb\_JF0<br>• Files under *JP1/AJS3-installation-folder*\log\embdb |

| Code | Message ID | Error cause | Action to be taken |
|---|---|---|---|
| 27 | KFPX29627 | An internal error occurred in the embedded database. | In UNIX:<br>• Directories and files under `/opt/jp1ajs2/embdb/_JF0`<br>• Files under `/var/opt/jp1ajs2/log/embdb` |

## 2.8.9 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 |
|---|---|---|
| 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:<br>In Windows:<br>1. Execute the following command:<br>`ajsembdbstop -f -id _JF0`<br>2. Execute the following command:<br>*JP1/AJS3-installation-folder*`\sys\install\embdbuninstl_JF0.cmd`<br>3. Delete all of the following folders and files:<br>Folders and files under *JP1/AJS3-installation-folder*`\embdb\_JF0` |

| Error code | Error cause | Action to be taken |
|---|---|---|
| 82 | | In UNIX:<br>1. Execute the following command:<br>   `ajsembdbstop -f -id _JF0`<br>2. In edit mode, delete the pdprcd process for `_JF0` registered in `/etc/inittab`.<br>3. Use the `kill` command to terminate the pdprcd process for `_JF0` displayed by using the `ps` command.<br>4. Delete all of the following directories and files:<br>   Directories and files under `/opt/jp1ajs2/embdb/_JF0` |
| 95 | | |

### (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. | The information about an embedded database that has already been uninstalled might still remain in the common definition of JP1/AJS3.<br>Perform the following procedure:<br><br>1. Execute the `ajsembdbuninstl` command for the setup identifiers of all the embedded databases installed in JP1/AJS3.<br>For details about this command, see *ajsembdbuninstl* in *2. Commands Used during Setup* in the manual *Job Management Partner 1/ Automatic Job Management System 3 Command Reference 2*.<br>2. Execute all of the following commands to delete the common definition:<br><br>`jbsunsetcnf -i -h JP1_DEFAULT` or *logical-host-name* `-c JP1AJS2 -n EMBDBINSTALL`<br>`jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDB`<br>`jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDBPORT`<br><br>For details about the `jbsunsetcnf` command, see the *Job Management Partner 1/Base User's Guide*. |
| 6 | Information required for uninstalling the embedded database does not exist. | |
| 81 | The embedded database has not been installed. | |

| Error code | Error cause | Action to be taken |
|---|---|---|
| 10 | The unsetup operation for the embedded database failed. | Possible causes are as follows:<br>• Information about an embedded database that has already been uninstalled still remains in the common definition of JP1/AJS3.<br>• Memory is insufficient.<br><br>Check the environment being used to uninstall JP1/AJS3. Also check whether there is sufficient free memory.<br>If this error reoccurs, perform the following procedure:<br><br>1. Execute the `ajsembdbuninstl` command for the setup identifiers of all the embedded databases installed in JP1/AJS3.<br>For details about this command, see *ajsembdbuninstl* in *2. Commands Used during Setup* in the manual *Job Management Partner 1/ Automatic Job Management System 3 Command Reference 2*.<br>2. Execute all of the following commands to delete the common definition:<br><br>`jbsunsetcnf -i -h JP1_DEFAULT` or *logical-host-name* `-c JP1AJS2 -n EMBDBINSTALL`<br>`jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDB`<br>`jbsunsetcnf -i -h JP1_DEFAULT -c JP1AJS2 -n EMBDBPORT`<br><br>For details about the `jbsunsetcnf` command, see the *Job Management Partner 1/Base User's Guide*. |

## 2.9 Troubleshooting problems related to the execution of commands

This section describes how to troubleshoot problems related to the execution of commands.

### (1) Command terminates normally, but the execution results are incorrect

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.

## 2.10 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.

### (1) How to create a profile

In Windows, click **Start**, **Settings**, 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 *2.2.4 Setting up the environment for the mail system linkage* in the *Job Management Partner 1/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.

Take the following action:

- Make sure that Outlook 2000, Outlook 2002, Outlook 2003, or Outlook 2007 is installed.

- If you are using Outlook 2000, make sure that you did not use the Internet Accounts dialog box to create a profile. (To check, in Windows, click **Start**, **Settings**, and **Control Panel**. In Control Panel, click the **Mail** icon. If the Internet Accounts dialog box does not appear, you did not use it to create a profile.)

If the Internet Accounts dialog box appears, perform the following procedure and change the settings.

To change the settings:

1. Start Outlook.

2. Click **Tools** and then **Options**.

   The Options dialog box appears.

3. Click the **Mail Delivery** tab or **Mail Services** tab.

4. Click the **Reconfigure Mail Support** button.

   The Mail Service Options dialog box appears.

5. Make sure that the **Corporate or Workgroup** check box is selected.

## (3) An email cannot be sent or received while the mail transmission job is running

Check the following and take appropriate action.

- If the browser you are using is Internet Explorer 4.0 or later, use the following procedure to check the settings.

  To check the settings:

  1. In Windows, choose **Start**, **Settings**, and then **Control Panel**. In Control Panel, choose the **Internet** icon or **Internet Options** icon.

  2. Choose the **Programs** tab.

  3. In **Mail** or **E-mail**, make sure that **Microsoft Outlook** is specified.

- Use a profile used in mail system linkage to start Outlook, and check whether emails can be sent and received.

  After you create or change a profile, you must use that profile to start Outlook. If you do not do so, you might not be able to use mail system linkage.

- Make sure that the following three profiles have the same name.

  - Profile that is actually created

  - Profile name specified for the environment setting parameters `ProfileName1` to `ProfileName4`

    For details, see *2.2.4 Setting up the environment for the mail system linkage* in the *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*.

  - Profile specified in the mail transmission job and mail reception monitoring job

- Make sure that a dialog box requesting a server name, user name, and password does not appear when you start Outlook. If one appears, check and, if necessary, revise the profile settings.

- Make sure that the JP1/AJS3 mail monitoring process or JP1/AJS3 Mail service is running.

- Make sure that the mail server you are trying to connect to is 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 change the environment settings for mail system linkage, restart the JP1/AJS3 service and the JP1/AJS3 mail monitoring process, or else the JP1/AJS3 Mail service.

- Make sure that the profile name specified when you create or change a profile is unique. For details, see *2.2.4 Setting up the environment for the mail system linkage* in the *Job Management Partner 1/Automatic Job Management System 3 Linkage Guide*.

### (4) *Mail transmission job or mail reception monitoring job ends abnormally*

If an error message is followed by a mail system error code in the format `MAPI CODE=`*xxxxxxxx*, 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

Check the following:

- Whether there is a network problem between the machine and the mail server
- Whether you can send and receive emails by using Outlook

## 2.11 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.

*Note:*

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 | jpqqueclose | 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 | jpqqueopen | Use this command to open a queue's entrance and exit when linkage with the failed agent becomes available. |
| Displaying information about a queue | jpqqueshow | 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 | jpqquealt | 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 | jpqagtalt | 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 | jpqagtshow | Use this command to check the number of jobs being executed on an agent when you change an agent's attribute. |

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| Purpose | Command | Description |
|---|---|---|
| Changing the priority levels when multiple agents are connected | `jpqagtlink` | 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 | `jpqjobcan` | Use this command to cancel the execution of a job waiting to be executed, placed on hold, or waiting for the specified time. |

## 2.12 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) Procedure for re-creating the execution environment database for QUEUE jobs and submit jobs*.

### (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*
    ```

    Cautionary note

    As the database storage directory for the job execution environment, specify the directory name specified in the DatabasePath environment setting parameter.

    The default directory name is as follows:

    For Windows Server 2008:

    ```
    %ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\datab
    ase\queue
    ```

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

    For Windows Server 2003:

    *JP1/AJS3 - Manager-installation-folder*\database\queue

    For UNIX hosts:

    ```
    /opt/jp1base/bin/Jischk -l 3 /var/opt/jp1ajs2/database/
    queue/JPQ*
    ```

Cautionary note

For logical hosts, the default is *shared-directory-name*/`jp1ajs2/`
`database/queue/JPQ*`.

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 *Job Management Partner 1/Base User's Guide*.

### *(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 `jpqexport` 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/jp1ajs2/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 *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*, 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]

   #1:

   The directory containing the execution environment database for QUEUE jobs and submit jobs is the folder specified in the `DatabasePath` environment setting parameter in `[{JP1_DEFAULT|`*logical-host-name*`}\JP1NBQMANAGER\Database]`.

   The default storage directory is as follows:

   - Windows Server 2008

   For the physical host, the default storage directory is `%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1AJS2\\database\queue`. For logical hosts, the default storage directory is *shared-folder*`\jp1ajs2\database\queue`.

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

   - Windows Server 2003

   For the physical host, the default storage directory is *JP1/AJS3 - Manager-installation-folder*`\database\queue`. For logical hosts, the default storage directory is *shared-folder*`\jp1ajs2\database\queue`.

   #2:

   When the execution environment manager process for QUEUE jobs and submit jobs is executed, the work directory is the folder specified in the `WorkPath` environment setting parameter in `[{JP1_DEFAULT|`*logical-host-name*`}\JP1AJSMANAGER\SCHEDULER\`*scheduler-service-name*`\QUEUE\MANAGER\PROCESS]`.

   For the physical host, the default work directory is *JP1/AJS3 - Manager-installation-folder*`\tmp`. For logical hosts, the default work

directory is *shared-folder*\jp1ajs2\tmp.

In UNIX:

```
rm
execution-environment-database-storage-directory-for-QUEUE-jobs-and-s
ubmit-jobs/*#1
```

```
rm
work-directory-when-execution-environment-manager-process-for-QUEUE
-jobs-and-submit-jobs-is-executing/M_JPQ*#2
```

#1: The directory containing the execution environment database for QUEUE jobs and submit jobs is the directory specified in the `DatabasePath` environment setting parameter in `[{JP1_DEFAULT|`*logical-host-name*`}\JP1NBQMANAGER\Database]`.

For the physical host, the default storage directory is `/var/opt/jp1ajs2/database/queue`. For logical hosts, the default storage directory is *shared-directory*`/jp1ajs2/database/queue`.

#2: When the execution environment manager process for QUEUE jobs and submit jobs is executed, the work directory is the directory specified in the `WorkPath` environment setting parameter in `[{JP1_DEFAULT|`*logical-host-name*`}\JP1AJSMANAGER\SCHEDULER\`*scheduler-service-name*`\QUEUE\MANAGER\PROCESS]`.

For the physical host, the default work directory is `/var/opt/jp1ajs2/tmp`. For logical hosts, the default work directory is *shared-directory*`/jp1ajs2/tmp`.

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/jp1ajs2/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 `jpqimport` command, and check whether the ISAM files are created successfully.

If the `jpqimport` 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 `jpqexport` 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 `jpqexport` and `jpqimport` commands, see *2. Commands Used during Setup* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2* or *3. Commands Used for Special Operation* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 2*.

For details about the `jbsgetcnf` command, see the *Job Management Partner 1/Base User's Guide*.

# 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:

   - *Mgr_Path*: JP1/AJS3 - Manager installation folder

   - *Mgr_Data_Path* (for Windows Server 2008): `%ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2`

   - *Mgr_Data_Path* (for Windows Server 2003): JP1/AJS3 - Manager installation folder

   - *Base_Path*: JP1/Base installation folder

   - *Embdb_Path*: Embedded database practical directory

   - *SystemDrive*: System drive

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

- By default, *Mgr_Path* is *SystemDrive*`\Program files\Hitachi\jp1ajs2`.

- By default, *Base_Path* is *SystemDrive*`\Program files\Hitachi\jp1base`.

- 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 |
| --- | --- |
| Configuration definition file for the execution environment for QUEUE jobs and submit jobs | • *Mgr_Path*\conf\jpqsetup.conf |

*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 | • *Mgr_Path*\bin\ |
| Library file storage folder | • *Mgr_Path*\lib\ |
| Environment settings file storage folder | • *Mgr_Path*\conf\ |
| Readme file | • *Mgr_Path*\readme.txt |
| Help file storage folder | • *Mgr_Path*\doc\ |
| Help index file | • *Mgr_Path*\doc\ja\ajsmn.htm |
| Tool file storage folder | • *Mgr_Path*\tools\ |
| Header file storage folder | • *Mgr_Path*\include |

*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 | • *Mgr_Data_Path*\jobinf\ |
| Database storage folder for JP1/AJS3 | • *Mgr_Data_Path*\database\ |
| Job/jobnet information storage folder | • *Mgr_Data_Path*\database\schedule\ |
| Queue information database storage folder | • *Mgr_Data_Path*\database\queue\ |
| Job/jobnet information backup folder | • *Mgr_Data_Path*\backup\schedule\ |
| JP1/AJS3 file system folder | • *Mgr_Data_Path*\sys\ |
| System file folder for an event/action control agent | • *Mgr_Data_Path*\sys\infoagt |
| Information folder for an event/action control manager | • *Mgr_Data_Path*\sys\schedule\infodir (*Mgr_Path*\sys\schedule\*scheduler-service-name*\ when multiple scheduler services are created) |

| Item | File or folder name |
|---|---|
| Work file storage folder for JP1/AJS3 | • *Mgr_Data_Path*\tmp\ |

*Table A-4:* Embedded database files and folders (for Windows)

| Item | File or folder name |
|---|---|
| Executable file storage folder | • *Embdb_Path*\bin |
| Library file storage folder | • *Embdb_Path*\lib |
| Executable file library storage folder | • *Embdb_Path*\client |
| Troubleshooting information storage folder | • *Embdb_Path*\spool |
| Embedded database work folder | • *Embdb_Path*\tmp |
| System definition file storage folder | • *Embdb_Path*\conf |
| Client environment definition file storage folder | • *Embdb_Path*\conf\emb |
| Folder for files used by the embedded database | • *Embdb_Path*\.dbenv<br>• *Embdb_Path*\UXPLDIR |

## (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 | • *Mgr_Path*\conf\jpoov.conf<br>  (Environment definition) |

*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 | • *Mgr_Path*\bin\jp1ajs2_f<br>(Field definition)<br>• *Mgr_Path*\bin\snmpd.extend<br>(MIB object definition)<br>• *Mgr_Path*\bin\jp1ajs2_j<br>(Menu definition for Japanese)<br>• *Mgr_Path*\bin\jp1ajs2_e<br>(Menu definition for English)<br>• *Mgr_Path*\bin\trpcajs2j<br>(Event definition for Japanese)<br>• *Mgr_Path*\bin\trpcajs2e<br>(Event definition for English)<br>• *Mgr_Path*\bin\trustajs2<br>(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] | • *Mgr_Data_Path*\tmp\infodir\mail\JPO*.tmp |
| Storage folder for a file attached to mail for inherited information of an email reception monitoring job[#2] | • *Mgr_Data_Path*\tmp\infodir\mail\*_*\ |

#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 *2.5.3 List file for email reception monitoring job (Windows only)* in the *Job Management Partner 1/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[#] | • *Mgr_Data_Path*`\tmp\infodir\mail\` |

#

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) File used when the ajsevget command is used

*Table A-10:* File that can be modified by the user (when the ajsevget command of JP1/AJS3 - Manager is used in Windows)

| Item | File name |
|---|---|
| Definition file for compatibility with JP1/AJS[#] | • *Mgr_Data_Path*\custom.dir\ajses.def |

#

This file is used when the `ajsevget` command is used. Manually transfer the settings of JP1/AJS for Windows version 5 or earlier to this file. If JP1/AJS for Windows version 5 or earlier is still installed, this file is not used.

## (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*.

Note

An asterisk (*) indicates a string of one or more characters.

### (a) Common files and directories

*Table A-11:* Files that the user can modify (JP1/AJS3 - Manager for UNIX)

| Item | File name |
|---|---|
| Environment settings file for the scheduler service | • /etc/opt/jp1ajs2/conf/Schedule.conf |
| Execution environment settings file for jobs | • /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 |
| Execution environment settings file for events and actions | • /etc/opt/jp1ajs2/conf/EVAction.conf |
| Queueless-job execution environment settings file | • /etc/opt/jp1ajs2/conf/Queueless.conf |

*Table A-12:* Files and directories that the user can reference (JP1/AJS3 - Manager 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/` |
| Help file storage directory | • `/opt/jp1ajs2/doc/` |
| Help index file | • `/opt/jp1ajs2/doc/ja/ajsmn.htm` |
| Tool file storage directory | • `/opt/jp1ajs2/tools/` |

*Table A-13:* 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/jp1ajs2/jobinf/` |
| Database storage directory for JP1/AJS3 | • `/var/opt/jp1ajs2/database/` |
| Job/jobnet information storage directory | • `/var/opt/jp1ajs2/database/schedule/` |
| Queue information database storage directory | • `/var/opt/jp1ajs2/database/Queue/` |
| Job/jobnet information backup directory | • `/var/opt/jp1ajs2/backup/schedule/` |
| System file directory for JP1/AJS3 | • `/var/opt/jp1ajs2/sys/` |
| System file directory for an event/action control agent | • `/var/opt/jp1ajs2/sys/infoagt` |
| Information folder for an event/action control manager | • `/var/opt/jp1ajs2/sys/schedule/infodir` (`/var/opt/jp1ajs2/sys/schedule/`*scheduler-service-name*`/` when multiple scheduler services are created) |
| Work file storage directory for JP1/AJS3 | • `/var/opt/jp1ajs2/tmp/` |

*Table A-14:* Embedded database files and directories (for UNIX)

| Item | File or directory name |
|---|---|
| Executable file storage directory | • *Embdb_Path*`/bin` |
| Library file storage directory | • *Embdb_Path*`/lib` |

| Item | File or directory name |
|---|---|
| Executable file library storage directory | • *Embdb_Path*/client |
| Troubleshooting information storage directory | • *Embdb_Path*/spool |
| Embedded database work directory | • *Embdb_Path*/tmp |
| System definition file storage directory | • *Embdb_Path*/conf |
| Client environment definition file storage directory | • *Embdb_Path*/conf/emb |
| Directory for files used by the embedded database | • *Embdb_Path*/conf/Inittab |
| | • *Embdb_Path*/.dbenv |
| | • /dev/HiRDB/pth |

### (b) Files and directories when HP NNM linkage is used

*Table A-15:* 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 | • /etc/opt/jp1ajs2/conf/jpoov.conf (Environment definition) |

*Table A-16:* 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 | • /etc/opt/jp1ajs2/OV/ |
| Definition file for linkage with HP NNM | • /etc/opt/jp1ajs2/OV/jp1ajs2_f (Field definition)<br>• /etc/opt/jp1ajs2/OV/snmpd.extend (MIB object definition)<br>• /etc/opt/jp1ajs2/OV/trustajs2 (Trusted command definition)<br>• /etc/opt/jp1ajs2/OV/$LANG/jp1ajs2 (Menu definition)<br>• /etc/opt/jp1ajs2/OV/$LANG/trpcajs2 (Event definition )<br>• /etc/opt/jp1ajs2/OV/$LANG/jajsovm.cat (Message catalog) |

### (c) Files and directories when mail linkage is used

*Table A-17:* 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/`*monitored-user-name* |

#1

This file is used if you do not specify the `EvjobInfFile` environment setting parameter in the execution environment settings file for events and actions (`EVAction.conf`).

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-18:* 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/` |

#

This directory is used if you do not specify the `EvjobInfFile` environment setting parameter in the execution environment settings file for events and actions (`EVAction.conf`).

If you specify the `EvjobInfFile` environment setting parameter, the system creates the `mail` directory under the specified directory and uses it.

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**(d) Files and directories when Unix jobs are used**

*Table A-19:* 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**.

# 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* (for Windows Server 2008): `%ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2`

  - *Agt_Data_Path* (for Windows Server 2003): JP1/AJS3 - Agent installation folder

  - *Base_Path*: JP1/Base installation folder

  - *SystemDrive*: System drive

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

- By default, *Agt_Path* is *SystemDrive*`\Program files\Hitachi\jp1ajs2`.

- By default, *Base_Path* is *SystemDrive*`\Program files\Hitachi\jp1base`.

- An asterisk (`*`) indicates a string of one or more characters.

### (a) Common files and folders

*Table A-20:* Files and folders that the user can reference (JP1/AJS3 - Agent for Windows)

| Item | File or folder name |
|---|---|
| Execution file storage folder | • *Agt_Path*`\bin\` |
| Library file storage folder | • *Agt_Path*`\lib\` |
| Environment settings file storage folder | • *Agt_Path*`\conf\` |
| Readme file | • *Agt_Path*`\readme.txt` |

*Table A-21:* 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 | • *Agt_Data_Path*`\sys\` |
| System file folder for an event/action control agent | • *Agt_Data_Path*`\sys\infoagt` |
| Work file storage folder for JP1/AJS3 | • *Agt_Data_Path*`\tmp\` |

### (b) Files when HP NNM linkage is used

*Table A-22:* 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 | • *Agt_Path*`\conf\jpoov.conf` (Environment definition) |

*Table A-23:* 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 | • *Agt_Path*\bin\jp1ajs2_f<br>  (Field definition)<br>• *Agt_Path*\bin\snmpd.extend<br>  (MIB object definition)<br>• *Agt_Path*\bin\jp1ajs2_j<br>  (Menu definition for Japanese)<br>• *Agt_Path*\bin\jp1ajs2_e<br>  (Menu definition for English)<br>• *Agt_Path*\bin\trpcajs2j<br>  (Event definition for Japanese)<br>• *Agt_Path*\bin\trpcajs2e<br>  (Event definition for English)<br>• *Agt_Path*\bin\trustajs2<br>  (Trusted command definition) |

### (c) Files and folders when mail linkage is used

*Table A-24:* 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] | • *Agt_Data_Path*\tmp\infodir\mail\JPO*.tmp |
| Storage folder for a file attached to mail for inherited information of an email reception monitoring job[#2] | • *Agt_Data_Path*\tmp\infodir\mail\*_*\ |

#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 *2.5.3 List file for email reception monitoring job (Windows only)* in the *Job Management Partner 1/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-25:  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# | • *Agt_Data_Path*\tmp\infodir\mail\ |

#

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-26:  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**.

## (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-27:*  Files that the user can modify (JP1/AJS3 - Agent for UNIX)

| Item | File name |
|------|-----------|
| Environment settings file for job execution | • `/etc/opt/jp1ajs2/conf/Queue.conf` |
| Execution environment settings file for events and actions | • `/etc/opt/jp1ajs2/conf/EVAction.conf` |
| Queueless-job execution environment settings file | • `/etc/opt/jp1ajs2/conf/Queueless.conf` |

*Table  A-28:*  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/` |

*Table  A-29:*  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/` |

### (b)  Files and directories when HP NNM linkage is used

*Table  A-30:*  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 | • `/etc/opt/jp1ajs2/conf/jpoov.conf` (Environment definition) |

*Table A-31:* 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 | • `/etc/opt/jp1ajs2/OV/` |
| Definition file for linkage with HP NNM | • `/etc/opt/jp1ajs2/OV/jp1ajs2_f` (Field definition)<br>• `/etc/opt/jp1ajs2/OV/snmpd.extend` (MIB object definition)<br>• `/etc/opt/jp1ajs2/OV/trustajs2` (Trusted command definition)<br>• `/etc/opt/jp1ajs2/OV/$LANG/jp1ajs2` (Menu definition)<br>• `/etc/opt/jp1ajs2/OV/$LANG/trpcajs2` (Event definition)<br>• `/etc/opt/jp1ajs2/OV/$LANG/jajsovm.cat` (Message catalog) |
| Log for linkage with HP NNM | • `/var/opt/jp1ajs2/log/schedule/jpoovlink{1|2}.log` (`/var/opt/jp1ajs2/log/schedule/`*scheduler-service-name*`/jpoovlink{1|2}.log` when multiple scheduler services are created) |

Supplementary note

Logs are output to the default directory even when a cluster is used.

## (c) Files and directories when mail linkage is used

*Table A-32:* 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] | • `/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/`*monitored-user-name* |

#1

This file is used if you do not specify the `EvjobInfFile` environment setting parameter in the execution environment settings file for events and actions (`EVAction.conf`).

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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-33:* 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[#] | • `/var/opt/jp1ajs2/sys/infoagt/tmp/infodir/mail/` |
| Temporary mail file directory for mail linkage | • `/var/opt/jp1ajs2/tmp/mailbox/` |

#

This directory is used if you do not specify the `EvjobInfFile` environment setting parameter in the execution environment settings file for events and actions (`EVAction.conf`).

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-34:* 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**.

## A.3 JP1/AJS3 - View files and directories

The following table lists the JP1/AJS3 - View files and folders according to their purpose.

How to read the tables

- The tables listing files and directories use the following abbreviations:
  - *View_Path*: JP1/AJS3 - View installation folder
  - *Base_Path*: JP1/Base installation folder
  - *SystemDrive*: System drive
- By default, *View_Path* is *SystemDrive*\`Program files\Hitachi\jp1ajs2v`.
- *nnnn* indicates any value from 0001 to 9999.

*Table A-35:* Files that the user can create and modify (JP1/AJS3 - View)

| Item | File name |
|---|---|
| User-specified option file | • *View_Path*\`conf\`*JP1-user-name*\`ajs2view_opt.conf` |

*Table A-36:* Files and folders that the user can reference (JP1/AJS3 - View)

| Item | File or folder name |
|---|---|
| Environment settings file storage folder | • *View_Path*\`conf\` |
| Model file for the user-specified option file | • *View_Path*\`conf\ajs2view_opt.conf.model` |
| Wallpaper setting file | In Windows 7, Windows Server 2008, and Windows Vista:<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`conf\*JP1-user-name*\`MapBackGround\wallpaper.conf`<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`conf\*JP1-user-name*\`MapBackGround\wallpaper#`*nnnn*`.conf`<br>In Windows Server 2003 and Windows XP Professional:<br>• *View_Path*\`conf\`*JP1-user-name*\`MapBackGround\wallpaper.conf`<br>• *View_Path*\`conf\`*JP1-user-name*\`MapBackGround\wallpaper#`*nnnn*`.conf` |

| Item | File or folder name |
|------|---------------------|
| Default value setting file | In Windows 7, Windows Server 2008, and Windows Vista:<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`<br>`conf\`*JP1-user-name*`\ajs2view_def.conf`<br>In Windows Server 2003 and Windows XP Professional:<br>• *View_Path*`\conf\`*JP1-user-name*`\ajs2view_def.conf` |
| Readme file | • *View_Path*`\readme.txt` |
| Help file storage folder | • *View_Path*`\doc\` |
| Help index file | • *View_Path*`\doc\ja\ajsmn.htm` |
| Tool file storage folder | • *View_Path*`\tools\` |

\#

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

*Table  A-37:*  Folders that the user does not need to modify or reference (JP1/AJS3 - View)

| Item | Folder name |
|------|-------------|
| Execution file storage folder | • *View_Path*`\bin\` |
| Java class file storage folder | • *View_Path*`\classes\` |
| Library file storage folder | • *View_Path*`\lib\` |
| Image file storage folder | • *View_Path*`\image\` |
| Custom job registration information folder | In Windows 7, Windows Server 2008, and Windows Vista:<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`<br>`custom.dir\`<br>In Windows Server 2003 and Windows XP Professional:<br>• *View_Path*`\custom.dir\` |
| Add-in information folder | • *View_Path*`\addin.dir\` |

\#

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

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*Table A-38:* Log files (JP1/AJS3 - View)

| Item | File name |
|------|-----------|
| JP1/AJS3 - View log | In Windows 7, Windows Server 2008, and Windows Vista:<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`<br>  `log\ajs.log`<br>In Windows Server 2003 and Windows XP Professional:<br>• *View_Path*`\log\ajs.log` |
| JP1/AJS3 - View information log | In Windows 7, Windows Server 2008, and Windows Vista:<br>• `%ALLUSERSPROFILE%`[#]`\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\`<br>  `log\ajs2view#`*nnnn*`_{1\|2}.log`<br>In Windows Server 2003 and Windows XP Professional:<br>• *View_Path*`\log\ajs2view#`*nnnn*`_{1\|2}.log` |

\#

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

## (1) Files when HP NNM linkage is used

*Table A-39:* 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 | • *View_Path*`\conf\jpoov.conf`<br>  (Environment definition) |

*Table A-40:* 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 | • *View_Path*`\bin\jp1ajs2_f`<br>  (Field definition)<br>• *View_Path*`\bin\snmpd.extend`<br>  (MIB object definition)<br>• *View_Path*`\bin\jp1ajs2_j`<br>  (Menu definition for Japanese)<br>• *View_Path*`\bin\jp1ajs2_e`<br>  (Menu definition for English)<br>• *View_Path*`\bin\trpcajs2j`<br>  (Event definition for Japanese)<br>• *View_Path*`\bin\trpcajs2e`<br>  (Event definition for English)<br>• *View_Path*`\bin\trustajs2`<br>  (Trusted command definition) |

| Item | File name |
|---|---|
| Log for linkage with HP NNM | • *View_Path*\log\jpoovlink{1\|2}.conf |

Supplementary note

Logs are output to the default folder even when a cluster is used.

## A.4 JP1/AJS3 Console Manager files and directories

The following table lists the JP1/AJS3 Console 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 Console Manager according to their uses.

How to read the tables

- The tables listing files and folders use the following abbreviations:

  - *CM_Path*: JP1/AJS3 Console installation folder

  - *CM_Data_Path* (for Windows Server 2008): %ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2CM

  - *CM_Data_Path* (for Windows Server 2003): JP1/AJS3 Console installation folder

  - *SystemDrive*: System drive

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

- By default, *CM_Path* is *SystemDrive*\Program files\Hitachi\JP1AJS2CM.

*Table A-41:* Files that the user can create and modify (JP1/AJS3 Console Manager for Windows)

| Item | File or folder name |
|---|---|
| Environment settings file for JP1/AJS3 Console Manager | • *CM_Path*\conf\ajs2cm.conf |

*Table A-42:* Files and folders that the user can reference (JP1/AJS3 Console Manager for Windows)

| Item | File or folder name |
|---|---|
| Execution file storage folder | • *CM_Path*\bin\ |
| Environment settings file storage folder | • *CM_Path*\conf\ |
| Environment settings model file for JP1/AJS3 Console Manager | • *CM_Path*\conf\ajs2cm.conf.model |

*Table A-43:* Files and folders that the user does not need to modify or reference (JP1/AJS3 Console Manager for Windows)

| Item | File or folder name |
|---|---|
| Data directory | • *CM_Data_Path*\database |
| File for the creation of JP1/AJS3 Console Manager environment settings model file | • *CM_Path*\conf\ajs2cm.conf.model.model |

*Table A-44:* Log files and folders (JP1/AJS3 Console Manager for Windows)

| Item | File or folder name |
|---|---|
| Trace log | • *CM_Data_Path*\log\tracelog.cm |

## (2) In UNIX

The following table lists the files and directories for the UNIX version of JP1/AJS3 Console Manager according to their uses.

*Table A-45:* Files that the user can create and modify (JP1/AJS3 Console Manager for UNIX)

| Item | File or folder name |
|---|---|
| Environment settings file for JP1/AJS3 Console Manager | • /etc/opt/jp1ajs2cm/conf/ajs2cm.conf |

*Table A-46:* Files and directories that the user can reference (JP1/AJS3 Console Manager for UNIX)

| Item | File or directory name |
|---|---|
| Execution file storage directory | • /opt/jp1ajs2cm/bin/<br>• /opt/jp1ajs2cm/lib/ |

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| Item | File or directory name |
|------|------------------------|
| Message catalog | • `/opt/jp1ajs2cm/lib/nls/$LANG` |
| Environment settings file storage directory | • `/etc/opt/jp1ajs2cm/conf/` |
| Environment settings model file for JP1/AJS3 Console Manager | • `/etc/opt/jp1ajs2cm/conf/ajs2cm.conf.model` |

*Table A-47:* Files and directories that the user does not need to modify or reference (JP1/AJS3 Console Manager for UNIX)

| Item | File or folder name |
|------|---------------------|
| Data directory | • `/etc/opt/jp1ajs2cm/conf/ajs2cm.conf` |

*Table A-48:* Log files and directories (JP1/AJS3 Console Manager for UNIX)

| Item | File or directory name |
|------|------------------------|
| Trace log | • `/var/opt/jp1ajs2cm/log/tracelog.cm` |

Supplementary notes

- The user (generally, *root*) who created a trace log file first becomes its owner.
- In AIX, *root/system* is the owner of trace log files.

## A.5 JP1/AJS3 Console Agent files and directories

The following table lists the JP1/AJS3 Console Agent files and directories for each OS.

JP1/AJS3 Console Agent stores the JP1/AJS3 Console Agent configuration files consisting of files and directories for JP1/AJS3 - Manager plus the contents listed below.

For the tables listing the JP1/AJS3 - Manager files and directories, see *A.1 JP1/AJS3 - Manager files and directories*.

### (1) In Windows

The files exist in the same folder as JP1/AJS3 - Manager.

How to read the tables

- The tables listing files and folders use the following abbreviation:

  - *AM_Path*: JP1/AJS3 - Manager installation folder

  - *AM_Data_Path* (for Windows Server 2008): `%ALLUSERSPROFILE%\HITACHI\JP1\JP1_DEFAULT\JP1AJS2`

- *AM_Data_Path* (for Windows Server 2003): JP1/AJS3 - Manager installation folder

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

*Table A-49:* 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 | • *AM_Data_Path*\tmp\console_agent |
| Execution file | • *AM_Path*\bin\ajsca*.exe[#1]<br>• *AM_Path*\bin\ajsca*.dll[#1]<br>• *AM_Path*\bin\jp1ajs2camsg*.dll[#1] |
| Environment settings model file for JP1/AJS3 Console Agent | • *AM_Path*\conf\ajs2ca.conf.model |
| Environment settings file for JP1/AJS3 Console Agent | • *AM_Path*\conf\ajs2ca.conf |
| Trace log file | • *AM_Data_Path*\log\tracelog.ca |
| File for creation of JP1/AJS3 Console Agent environment settings model file | • *AM_Path*\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 files exist in the same directory as JP1/AJS3 - Manager.

*Table A-50:* Files and directories for JP1/AJS3 Console Agent (JP1/AJS3 Console Agent for UNIX)

| Item | File or directory name |
|---|---|
| Temporary file storage folder for JP1/AJS3 Console Agent | • /var/opt/jp1ajs2/tmp/console_agent |

| Item | File or directory name |
|---|---|
| Execution file | • `/opt/jp1ajs2/bin/ajsca*`[#] <br> • `/opt/jp1ajs2/bin/jp1ajs2casetup` <br> • `/opt/jp1ajs2/lib/libAjsca*`[#] |
| Message catalog | • `/opt/jp1ajs2cm/lib/nls/$LANG` |
| Automatic start/termination script | • `/etc/opt/jp1ajs2/jajsca_start.model` <br> • `/etc/opt/jp1ajs2/jajsca_start` <br> • `/etc/opt/jp1ajs2/jajsca_stop.model` <br> • `/etc/opt/jp1ajs2/jajsca_stop` |
| Start/termination script for JP1/AJS3 Console Agent service | • `/etc/opt/jp1ajs2/ajscainetd_startstop` |
| Environment settings model file for JP1/AJS3 Console Agent | • `/etc/opt/jp1ajs2/conf/ajs2ca.conf.model` |
| Environment settings file for JP1/AJS3 Console Agent | • `/etc/opt/jp1ajs2/conf/ajs2ca.conf` |
| Trace log file | • `/var/opt/jp1ajs2/log/tracelog.ca` |

#

An asterisk (`*`) indicates a string of one or more characters.

## A.6 JP1/AJS3 Console View files and directories

The following table lists the JP1/AJS3 Console View files and directories for each OS. JP1/AJS3 - View contains JP1/AJS3 Console View. This section explains alterations consequently made to the configuration of the existing JP1/AJS3 - View files and directories.

For the tables listing the files and directories for JP1/AJS3 - View, see *A.3 JP1/AJS3 - View files and directories*.

The files exist in the same folder as JP1/AJS3 - View.

How to read the tables

- The tables listing files and folders use the following abbreviation:

  *AV_Path*: JP1/AJS3 - View installation folder

*Table  A-51:*  Folders for JP1/AJS3 Console View (JP1/AJS3 Console View)

| File or folder name[#] | Description |
|---|---|
| • *AV_Path*\classes\JP\co\Hitachi\soft\jp1\ajs\console | Stores the Java class file for JP1/AJS3 Console View. |
| • *AV_Path*\image\console | Stores images for JP1/AJS3 Console View. |
| • *AV_Path*\image\console\background | Stores background images for JP1/AJS3 Console View. |
| • *AV_Path*\image\console\icon | Stores icon images for JP1/AJS3 Console View. |

#

The system creates folders in the EVERYONE full-control mode.

*Table  A-52:*  Files for JP1/AJS3 Console View (JP1/AJS3 Console View)

| File or folder name[#1] | Description |
|---|---|
| • *AV_Path*\bin\ajscon.exe | Execution file for JP1/AJS3 Console View start |
| • *AV_Path*\bin\ajscvsetup.exe | Execution file for JP1/AJS3 Console View setup |
| • *AV_Path*\conf\ajscon.conf | Common settings file for JP1/AJS3 Console View |
| • *AV_Path*\conf\ajscon.conf.model | Model file for JP1/AJS3 Console View common settings |
| • *AV_Path*\conf\ajs2coview_opt.conf.model | Model file for JP1/AJS3 Console View user settings |
| In Windows 7, Windows Server 2008 and Windows Vista:<br>• %ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log\ajscon.log<br>In Windows 7, Windows Server 2003 and Windows XP Professional:<br>• *AV_Path*\log\ajscon.log | Log file for JP1/AJS3 Console View |
| In Windows Server 2008 and Windows Vista:<br>• %ALLUSERSPROFILE%[#2]\Hitachi\JP1\JP1_DEFAULT\JP1AJS2V\log\ajs2coview#*nnnn*_{1\|2}.log[#3]<br>In Windows Server 2003 and Windows XP Professional:<br>• *AV_Path*\log\ajs2coview#*nnnn*_{1\|2}.log[#3] | Execution log file for JP1/AJS3 Console View |

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#1

The system creates files in the EVERYONE full-control mode.

#2

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

#3

When a single instance of JP1/AJS3 Console View is started, the system omits #*nnnn*_. When multiple instances of JP1/AJS3 Console View are started, the system allocates any value from 0001 to 9999 for each instance of JP1/AJS3 Console View.

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# 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)

*Figure  B-2:*  JP1/AJS3 processes (child and detail processes) (1/3)
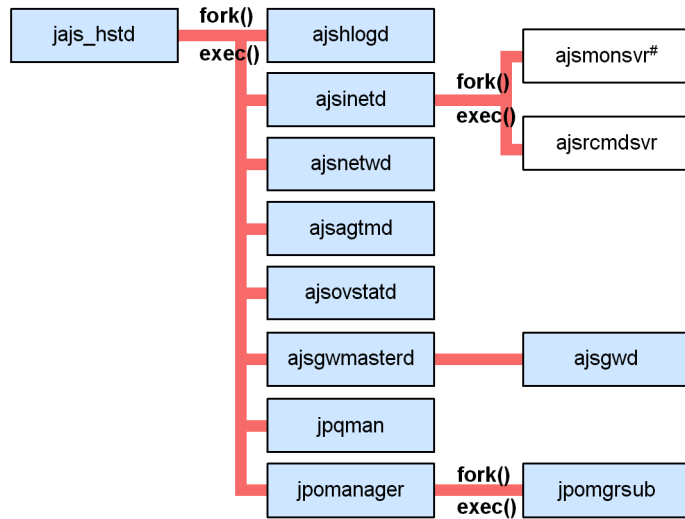


Legend:

| Process name | : Resident process |

| Process name | : Non-resident process |

#    Resident while JP1/AJS3 - View is connected.

*Figure B-3:* JP1/AJS3 processes (child and detail processes) (2/3)

```
jajs_schd ──fork()── ajslogd
           ──exec()──
                      jpqman

                      jpomanager ──fork()── jpomgrsub
                                 ──exec()──

                      ajsmasterd ──fork()── ajsschd ──fork()── ajsschbd
                                 ──exec()──          ──exec()──

                                             ajsflowd ──fork()── ajssubd
                                                      ──exec()──
                                                                 ajssubwd

                                                                 jpqnfyfd

                                                                 ajsremnetcl

                                                                 ajsreqd
```

Legend:

| Process name | : Resident process |

| Process name | : Non-resident process |
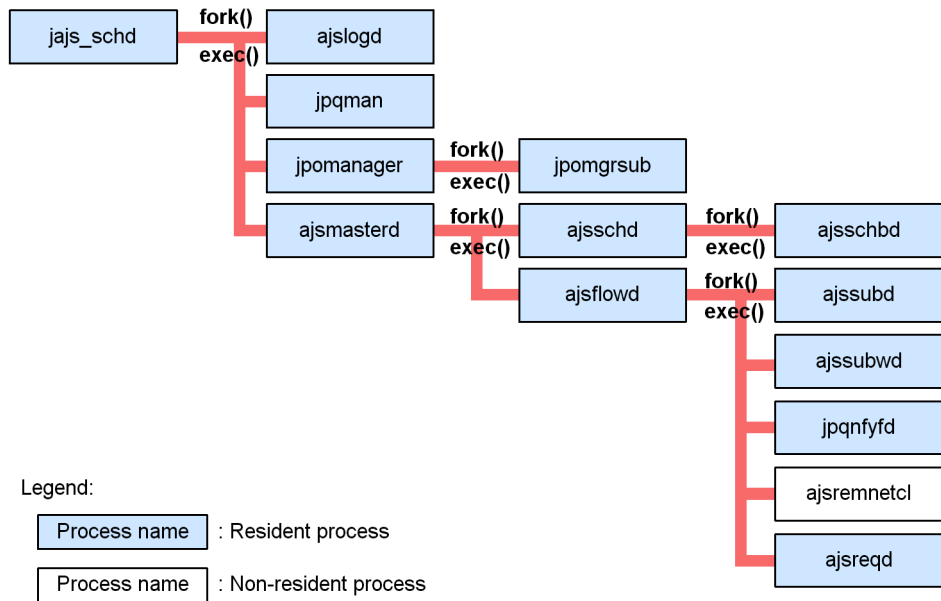
*Figure B-4:* JP1/AJS3 processes (child and detail processes) (3/3)
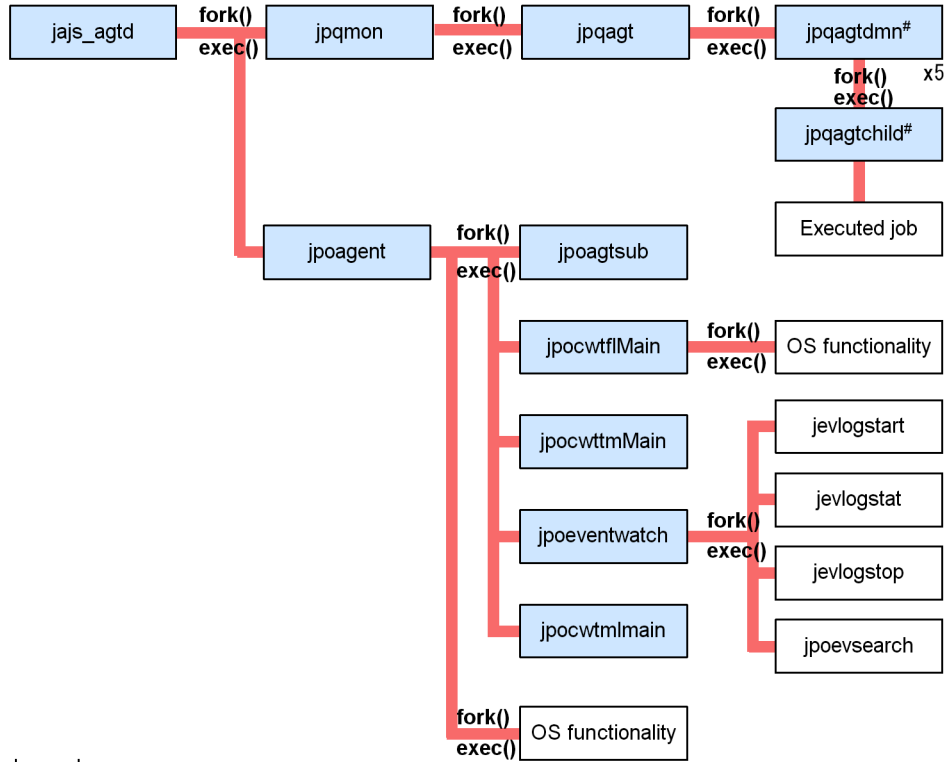


Legend:

| 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)

| | |
|---|---|
| jajs_spmd | **fork()** **exec()** → jajs_hstd |
| | jajs_agtd |
| sendmail※ | **fork()** **exec()** → jpomailrecv |
| ajsqlagtd | **fork()** → ajsqlagtd **fork()** **exec()** → Executed job |
| ajsqlftpd | **fork()** → ajsqlftpd |
| ajscminetd | **fork()** **exec()** → ajscmmonsvr **fork()** **exec()** → ajscmstatd |
| ajscainetd | **fork()** **exec()** → ajscagtd **fork()** **exec()** → ajscastatd / ajscaexecd |
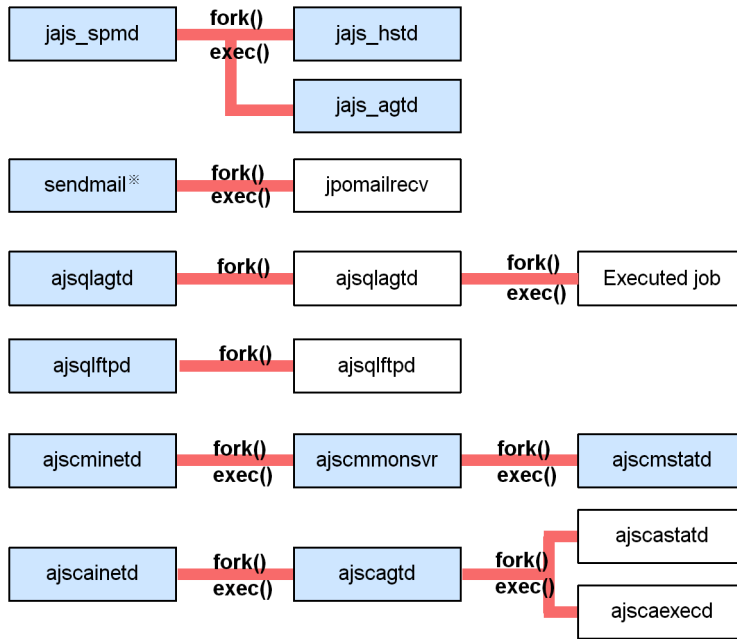
Legend:

| Process name | : Resident process
| Process name | : Non-resident process

\#   OS function

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*Figure  B-6:*  JP1/AJS3 processes (child and detail processes) (1/2)



Legend:

| Process name | : Resident process |

| Process name | : Non-resident process |

\#    Resident while JP1/AJS3 - View is connected.
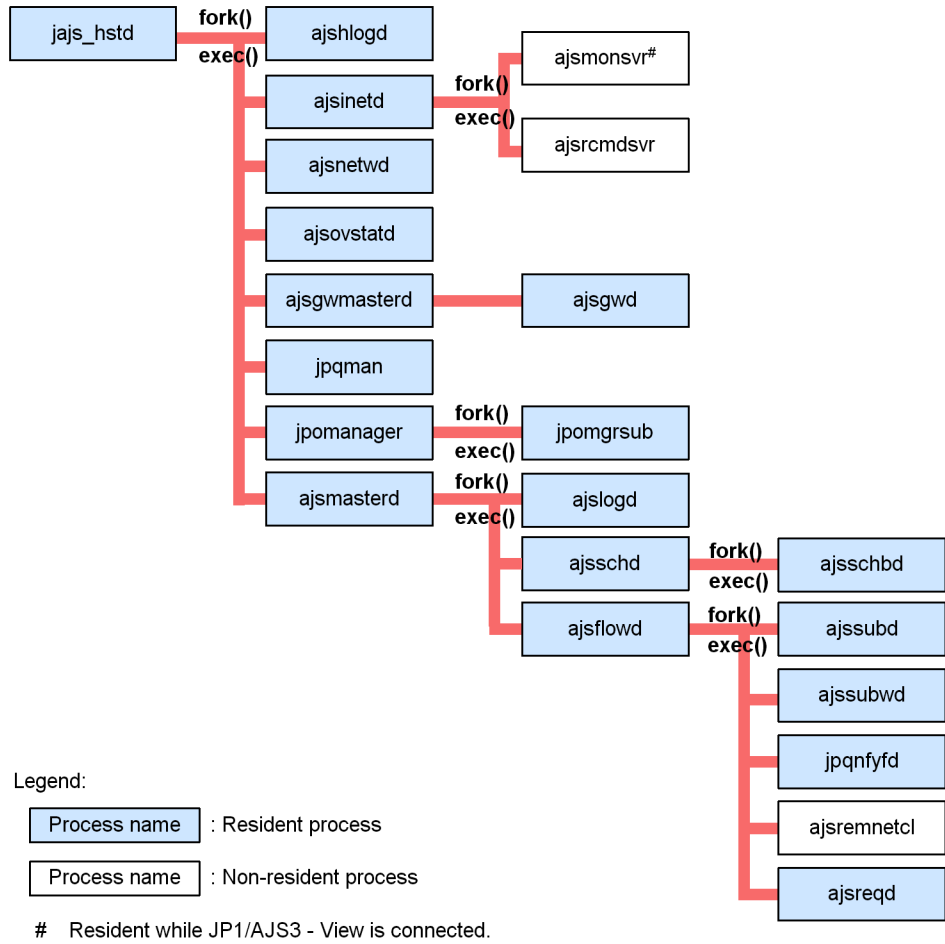
*Figure B-7:* JP1/AJS3 processes (child and detail processes) (2/2)
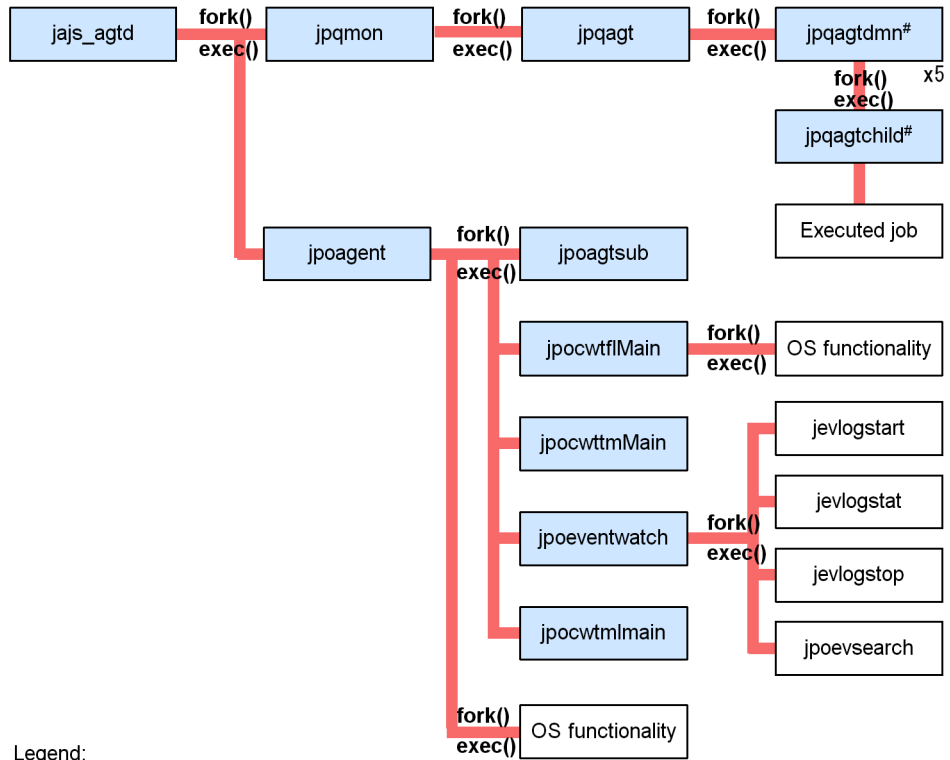


Legend:

| 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_spmd_status` command to check the status of the child processes of jajs_spmd. For details, see the description of *jajs_spmd_status* in *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

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(1) | Database management |
| | | jajs_hstd.exe(1) | Host service management |
| | | jajs_schd.exe(*number-of-scheduler-services*) | Scheduler service management |
| | | jajs_agtd.exe(1) | Agent service management |
| | | ajsqlcltd.exe(1)[#2] | This process automatically detaches the current logical host from the queueless cluster process when a switchover occurs and attaches the other logical host to the process. The process has no detail process. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajsqlagtd.exe(1) | 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. | - (*number of jobs to be executed*)[#3] | Queueless job management process thread. This process 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) | JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process. | - (*number-of-file-transfer-requests*) [#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 Email monitoring process for services | jpomlapisend.exe | Email transmission process. This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapirec.exe | Email reception process. 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. |
| jpomldsk.exe | JP1/AJS3 email monitoring process Email monitoring process used on the desktop | jpomlapisend.exe | Email transmission process (when Outlook 2000 is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| | | jpomlapisend2.exe | Email transmission process (when Outlook 2002 or later is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapirec.exe | Email reception process (when Outlook 2000 is used). 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. |
| | | jpomlapirec2.exe | Email reception process (when Outlook 2002 or later is used). 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. |
| 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). |

#1

jajs_service.exe is available as the management process.

#2

Indicated as qlcltd by the jajs_spmd_status command.

This process is generated only when the jp1ajs_spmd.conf file and the jp1ajs_service_0700.conf file are edited. For details, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 2*.

#3

Threads are spawned instead of child processes. The number of threads is indicated in parentheses.

*Table B-2:* Child and detail processes of JP1/AJS3 - Manager for Windows

| Child process name | Detail process name | 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 |
| | ajsnetwd.exe | Communication control and management |
| | ajsagtmd.exe | Agent management |
| | ajsovstatd.exe | This process monitors JP1/AJS3 from HP NNM when HP NNM is linked.<br>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 between jobnet connectors and the jobnets to which they connect. |
| | jpqman.exe | Manager process for job execution control Main process for processing specific to job execution control, such as the reception of submitted jobs |
| | jpomanager.exe | Event/action control manager process.<br>This process manages event jobs. |
| jajs_schd.exe | ajslogd.exe | Scheduler log output process |
| | jpqman.exe | Job execution control manager process.<br>Main process for the processing that is specific to job execution control, such as the reception of submitted jobs. |
| | jpomanager.exe | Event/action control manager process.<br>This process manages event jobs. |
| | ajsmasterd.exe | Scheduler.<br>This process monitors all the processes of the scheduler service. |
| jajs_agtd.exe | jpqmon.exe(1) | Job execution control.<br>This process monitors all the processes of job execution control. |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpoagent.exe(1) | Event/action control agent process.<br>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[#1] | Process to be activated when connected to JP1/AJS3 - View |
| | ajsrcmdsvr.exe | Process to be activated when a remote jobnet or remote command is executed. |
| 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 | Process for accepting event jobs |
| ajsmasterd.exe | ajsschd.exe | Schedule control process |
| | ajsschbd.exe[#2] | Generation management subprocess |
| | ajsflowd.exe | Flow control process |
| | ajssubd.exe | Job submit process |
| | ajssubwd.exe | Job completion wait process |
| | jpqnfyfd.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.<br>A maximum of eight processes are started from ajsflowd.exe. |
| jpqmon.exe | jpqagt.exe | Agent process for job execution control<br>This process activates jobs. |
| jpoagent.exe | jpoagtsub.exe | Event/action control subagent process.<br>This process mainly notifies the manager of information from the monitoring process. |
| | jpocwtflMain.exe | File monitoring process |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpocwttmMain.exe | Execution interval control process |
| | jpoeventwatch.exe | Event (such as JP1 event or log trap) monitoring process |
| | jpoevsearch.exe | Event search process.<br>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 [#3] | Mail monitoring communication process |
| | jpomlapisend.exe [#4] | Process for mail transmission by linkage to a mail system (when using Outlook 2000) |
| | jpomlapisend2.exe [#4] | Process for mail transmission by linkage to a mail system (when using Outlook 2002 or later) |
| | jpomlapirec.exe [#5] | Process for mail reception by linkage to a mail system (when using Outlook 2000) |
| | jpomlapirec2.exe [#5] | Process for mail reception by linkage to a mail system (when using Outlook 2002 or later) |

Note

When you execute a command, a process with the same name as the command is activated.

#1

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*.

#2

This process starts only when you specify the environment settings as described in *6.1.6 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

#3

This process will not start until you configure it. Note that you cannot start multiple instances of this process on the same PC.

#4

This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed.

#5

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 |
| | | 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 detail process. |
| ajsqlagtd.exe(1) | JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts execution requests for queueless jobs from JP1/AJS3 - Manager (scheduler service). The process is required to execute queueless jobs on a local host. | -- (*number-of-jobs-to-be-executed*)[#3] | Queueless job management thread. This thread executes a queueless job. The thread is generated for each job that is to be executed. The thread disappears when execution of the queueless job ends. |

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| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajsqlftpd.exe(1) | JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process. | -- (*number-of-file-transfer-requests*)[#3] | Queueless file transfer thread. This thread transfers data to a transfer file, the standard output file, and the standard error output file. The thread is generated for each file transfer request. The thread disappears when file transfer ends. |
| jpomlsrv.exe | JP1/AJS3 Mail service Email monitoring process used in the service | jpomlapisend.exe | Email transmission process. This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
|  |  | jpomlapirec.exe | Email reception process. 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. |
| jpomldsk.exe | JP1/AJS3 email monitoring process Email monitoring process used on the desktop | jpomlapisend.exe | Email transmission process (when Outlook 2000 is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| | | jpomlapisend2.exe | Email transmission process (when Outlook 2002 or later is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapirec.exe | Email reception process (when Outlook 2000 is used). 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. |
| | | jpomlapirec2.exe | Email reception process (when Outlook 2002 or later is used). 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. |
| ajschkmansvc.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

Indicated as `qlcltd` by the `jajs_spmd_status` command.

This process is generated only when the `jp1ajs_spmd.conf` file and the `jp1ajs_service_0700.conf` file are edited. For details, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 2*.

#3

A thread is generated instead of a child process. The value in parentheses indicates the number of threads.

*Table B-4:* Child and detail processes of JP1/AJS3 - Manager for Windows

| Child process name | Detail process name | 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 |
| | ajsnetwd.exe | Communication control and 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-communication control process enables communication 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 submitted 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 | Job execution control. This process monitors all the processes of job execution control. |

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| Child process name | Detail process name | Description |
|---|---|---|
| | 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[#1] | Process activated when JP1/AJS3 - View is connected |
| | ajsrcmdsvr.exe | Process activated when a remote jobnet is executed or a command is remotely executed |
| 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 | Process for accepting event jobs |
| ajsmasterd.exe | ajslogd.exe | Process for recording scheduler information |
| | ajsschd.exe | Schedule control process |
| | ajsschbd.exe[#2] | 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. |
| 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 |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpocwttmMain.exe | Execution interval control process |
| | jpoeventwatch.exe | Event (such as JP1 events and log traps) monitoring process |
| | jpoevsearch.exe | Event search process.<br>This process starts and searches for events when the event reception monitoring job specified with pre-execution event search is executed. |
| | jpocwtmlmain.exe[3] | Communication process for monitoring email |
| | jpomlapisend.exe[4] | Process for sending emails by linking to a mail system (when Outlook 2000 is used) |
| | jpomlapisend2.exe[4] | Process for sending emails by linking to a mail system (when Outlook 2002 or later is used) |
| | jpomlapirec.exe[5] | Process for receiving emails by linking to a mail system (when Outlook 2000 is used) |
| | jpomlapirec2.exe[5] | Process for receiving emails by linking to a mail system (when Outlook 2002 or later is used) |

Note

When a command is executed, a process with the command name starts.

#1

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*.

#2

This process starts only when you specify the environment settings as described in *6.1.6 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

#3

This process will not start until you configure it. Note that you cannot start multiple instances of this process on the same PC.

#4

This process places new emails in the Outlook Outbox. The process starts each

time a mail transmission job is executed.

#5

The 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.

### (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 *2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

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 |
| | | jpqmon.exe (1) [#3] | Job execution control<br>This process monitors all processes for job execution control. |
| | | ajsqlcltd.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.<br>The process has no detail process. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajsqlagtd.exe(1) | 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*) #5 | 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 Email monitoring process for services | jpomlapisend.exe | Email transmission process. This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapirec.exe | Email reception process. 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. |
| jpomldsk.exe | JP1/AJS3 email monitoring process Email monitoring process used on the desktop | jpomlapisend.exe | Email transmission process (when Outlook 2000 is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapisend2.exe | Email transmission process (when Outlook 2002 or later is used). This process places new emails in the Outlook Outbox. The process starts each time a mail transmission job is executed. |
| | | jpomlapirec.exe | Email reception process (when Outlook 2000 is used). 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. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| | | jpomlapirec2.exe | Email reception process (when Outlook 2002 or later is used). 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. |
| ajschkagtsvc.exe (1) | JP1/AJS3 Check Agent service | ajschkagtd.exe (1) | This process controls the definition pre-check (agent process). |

#1

jajs_service.exe is available as the management process.

#2

Indicated as `evactiona` by the `jajs_spmd_status` command.

#3

Indicated as `queue` by the `jajs_spmd_status` command.

#4

This process is generated only when the `jp1ajs_spmd.conf` file and the `jp1ajs_service_0700.conf` file are edited. For details, see *2.7 Setting up the queueless job execution environment* in the *Job Management Partner 1/ Automatic Job Management System 3 Configuration Guide 2*.

#5

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 |
| | jpocwttmMain.exe | Execution interval control process |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpocwtmlmain.exe [#1] | Mail monitoring communication process |
| | 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 using Outlook 2000) |
| | jpomlapisend2.exe [#2] | Process for mail transmission by linkage to a mail system (when using Outlook 2002 or later) |
| | jpomlapirec.exe [#3] | Process for mail reception by linkage to a mail system (when using Outlook 2000) |
| | jpomlapirec2.exe [#3] | Process for mail reception by linkage to a mail system (when using Outlook 2002 or later) |
| | 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. |

Note

When you execute a command, a process with the same name as the command is activated.

#1

The process cannot be started unless it is specified. 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 transmission job is executed.

#3

The 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.

### (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 Console Manager for Windows*

You can check the processes of JP1/AJS3 Console Manager for Windows on the **Processes** page in the Task Manager window.

JP1/AJS3 Console Manager consists of the following three types of processes:

- Parent process

  A parent process consists of several child processes.

- Child process

  A child process consists of several detail processes.

- Detail process

*Table B-8* lists the parent and child processes of JP1/AJS3 Console Manager for Windows. *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 Console Manager for Windows

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajscmscm.exe (1)[#] | JP1/AJS3 Console Manager service | ajscminetd.exe (1)[#] | Entity of the JP1/AJS3 Console Manager service |

[#]

The process starts when the JP1/AJS3 Console Manager service starts. The process ends when the JP1/AJS3 Console Manager service ends.

*Table B-9:* Child and detail processes of JP1/AJS3 Console Manager for Windows

| Child process | Detail process | Description |
|---|---|---|
| ajscminetd.exe | ajscmmonsvr.exe[#] | This process communicates with JP1/AJS3 Console View. |
| ajscmmonsvr.exe | ajscmstatd.exe[#] | This process communicates with JP1/AJS3 Console Agent. |

Note

When you execute a command, a process with the same name as the command is activated.

#

The process starts when the user logs in to JP1/AJS3 Console View. The process ends when the user logs out from JP1/AJS3 Console View.

## (5) Processes of JP1/AJS3 Console Agent for Windows

You can check the processes of JP1/AJS3 Console Agent for Windows on the **Processes** page in the Task Manager window.

JP1/AJS3 Console Agent consists of the following three types of processes:

- Parent process

  A parent process consists of several child processes.

- Child process

  A child process consists of several detail processes.

- Detail process

*Table B-10* lists the parent and child processes of JP1/AJS3 Console Agent for Windows. *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 Console Agent for Windows

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajscasvc.exe (1)[#] | JP1/AJS3 Console Agent service | ajscainetd.exe (1)[#] | Entity of the JP1/AJS3 Console Agent service |

#

The process starts when the JP1/AJS3 Console Agent service starts. The process ends when the JP1/AJS3 Console Agent service stops.

*Table B-11:* Child and detail processes of JP1/AJS3 Console Agent for Windows

| Child process | Detail process | Description |
|---|---|---|
| ajscainetd.exe | ajscagtd.exe[#1] | This process communicates with JP1/AJS3 Console Manager. |
| ajscagtd.exe | ajscastatd.exe[#2] | This process acquires the status of JP1/AJS3 work tasks. |
| | ajscaexecd.exe[#3] | This process manipulates the objects of JP1/AJS3. |

Note

When you execute a command, a process with the same name as the command is activated.

#1

The process starts when the user logs in to JP1/AJS3 Console View. The process ends when the user logs out from JP1/AJS3 Console View.

#2

The process starts when the specified monitoring start time is reached or a refresh is executed. The process ends when the acquisition of information is completed.

#3

The process starts when the user attempts to manipulate a JP1/AJS3 object. The process ends when the user completes the manipulation of the JP1/AJS3 object.

### (6) Processes of JP1/AJS3 Console View for Windows

You can check the processes of JP1/AJS3 Console View for Windows on the **Processes** page in the Task Manager window.

The following table lists the processes of JP1/AJS3 Console view for Windows.

*Table B-12:* Processes of JP1/AJS3 Console View for Windows

| Process name | Description |
|---|---|
| ajscon.exe | Main process for JP1/AJS3 Console View |
| java.exe | Java GUI process for JP1/AJS3 Console View |
| ajs2java.exe | java.exe monitoring process |

## 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_spmd_status` command to check the status of the child processes of jajs_spmd. For details, see the description of *jajs_spmd_status in 2. Commands* in the manual *Job Management Partner 1/Automatic Job Management System 3 Command Reference 1*.

To check the status of parent, child and detail processes, use the `ps` command.

### (a) Standard configuration

*Table B-13* lists the parent and child processes. *Table B-14* 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-13:* Parent and child processes of JP1/AJS3 - Manager for UNIX

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| jajs_spmd (1)[#] | JP1/AJS3 service | jajs_dbmd(1) | Database management |
| | | jajs_hstd(1) | Host service management |
| | | jajs_schd(*number-of-scheduler-services*) | Scheduler service management |
| | | jajs_agtd(1) | Agent service management |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajsqlagtd(1) | JP1/AJS3 Queueless Agent service (queueless agent process) This process accepts queueless job execution requests from JP1/AJS3 - Manager (scheduler service). | ajsqlagtd (*number of jobs to be executed*) | 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. |
| ajsqlftpd(1) | JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process. | ajsqlftpd (*number of file transfer requests*) | 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). |

Legend:

--: Not applicable.

\#

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_spmd process for hostA is represented as jajs_spmd -h hostA.

*Table B-14:* 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 |
| | ajsnetwd | Communication control and management |
| | ajsagtmd | Agent management |
| | ajsovstatd | This process monitors JP1/AJS3 from HP NNM when HP NNM is linked.<br>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.<br>Main process for the processing that is specific to job execution control, such as the reception of submitted jobs. |
| | jpomanager | Event/action control manager process.<br>This process manages event jobs. |
| jajs_schd | ajslogd | Process for recording scheduler information |
| | jpqman[#1] | Job execution control manager process.<br>Main process for the processing that is specific to job execution control, such as the reception of submitted jobs. |
| | jpomanager | Event/action control manager process.<br>This process manages event jobs. |
| | ajsmasterd | Scheduler.<br>This process monitors all the processes of the scheduler service. |
| jajs_agtd | jpqmon | Job execution control.<br>This process monitors all the processes of job execution control. |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpoagent | Event/action control agent process.<br>This process monitors and controls the monitoring processes other than jpomanager. jpoagent also controls monitoring processes on JP1/AJS3 - Manager. |
| ajsinetd | ajsmonsvr[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 |
| ajsgwmasterd[1] | ajsgwd[3] | Scheduler service inter-communication control process.<br>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[1] | jpomgrsub[1] | Process for accepting event jobs |
| ajsmasterd | ajsschd[3] | Schedule control process |
| | ajsschbd[3, 4] | Generation management subprocess |
| | ajsflowd[3] | Flow control process |
| | ajssubd[3] | Job submit process |
| | ajssubwd[3] | Job completion wait process |
| | 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.<br>A maximum of eight process instances start from ajsflowd. |
| jpqmon[1] | jpqagt[1] | Agent process for job execution control<br>This process activates jobs. |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpqagtdmn[#1] | Job monitoring process activating process for job execution control<br>Process for activating the job monitoring process<br>Five processes are always activated. In a cluster system, five processes are activated for each logical host. |
| | jpqagtchild[#1] | Job monitoring process for job execution control<br>Process for monitoring job process execution<br>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. |
| jpoagent[#1] | jpoagtsub[#1] | Event/action control subagent process.<br>This process mainly notifies the manager of information from the monitoring process. |
| | jpocwtflMain[#1] | File monitoring process |
| | jpocwttmMain[#1] | Execution interval control process |
| | jpoeventwatch[#1] | Event (such as JP1 event or log trap) monitoring process |
| | jpoevsearch[#1] | Event search process.<br>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[#1] | Mail monitoring communication process |

Note

When you execute a command, a process with the same name as the command is activated.

#1

A process name for a physical host is indicated as *process-name physical-host-name*. For example, when the physical 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 ajslogd process for hostA is indicated as ajslogd_hostA.

#4

This process starts only when you specify the environment settings as described in *14.1.6 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

### (b) Compatible ISAM configuration

*Table B-15* lists the parent and child processes. *Table B-16* 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-15:* Parent and child processes of JP1/AJS3 - Manager for UNIX

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| jajs_spmd(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). | ajsqlagtd (*number-of-jobs-to-be-executed*) | 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. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajsqlftpd(1) | JP1/AJS3 Queueless File Transfer service (queueless file transfer process) This process accepts file transfer requests from the queueless job management process. | ajsqlftpd (*number-of-file-transfer-requests*) | 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_spmd process for hostA is jajs_spmd -h hostA.

*Table B-16:* 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 |

| Child process name | Detail process name | Description |
|---|---|---|
| | ajsinetd | Network control process that controls access from other servers |
| | ajsnetwd | Communication control and management |
| | ajsovstatd | This process monitors JP1/AJS3 from HP NNM when HP NNM is linked.<br>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.<br>Main process for the processing that is specific to job execution control, such as the reception of submitted jobs. |
| | jpomanager | Event/action control manager process.<br>This process manages event jobs. |
| | ajsmasterd | Scheduler.<br>This process monitors all the processes of the scheduler service. |
| jajs_agtd | jpqmon | Job execution control.<br>This process monitors all the processes of job execution control. |
| | jpoagent | Event/action control agent process.<br>This process monitors and controls the monitoring processes other than jpomanager. jpoagent also controls monitoring processes on JP1/AJS3 - Manager. |
| ajsinetd | ajsmonsvr[#2] | Process activated when JP1/AJS3 - View is connected.<br>This process has no detail process. |
| | ajsrcmdsvr | Process activated when a remote jobnet is executed or a command is remotely executed |

| Child process name | Detail process name | Description |
|---|---|---|
| ajsgwmasterd[#1] | ajsgwd[#3] | Scheduler service inter-communication control process.<br>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] | Process for accepting event jobs |
| ajsmasterd | ajslogd[#3] | Process for recording scheduler information |
| | ajsschd[#3] | Schedule control process |
| | ajsschbd[#3, #4] | Generation management subprocess |
| | ajsflowd[#3] | Flow control process |
| | ajssubd[#3] | Job submit process |
| | ajssubwd[#3] | Job completion wait process |
| | 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.<br>A maximum of eight process instances start from ajsflowd. |
| jpqmon[#1] | jpqagt[#1] | Job execution control agent process.<br>This process starts a job. |
| | jpqagtdmn[#1] | Process for starting the process that monitors the job execution control job.<br>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. |

| Child process name | Detail process name | Description |
|---|---|---|
| | jpqagtchild[#1] | Process for monitoring a job execution control job.<br>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] | jpoagtsub[#1] | Event/action control subagent process.<br>This process mainly reports the information from monitoring processes to the manager. |
| | jpocwtflMain[#1] | File monitoring process |
| | jpocwttmMain[#1] | Execution interval control process |
| | jpoeventwatch[#1] | Event (such as JP1 events and log traps) monitoring process |
| | jpoevsearch[#1] | Event search process.<br>This process starts and searches for events when the event reception monitoring job specified with pre-execution event search is executed. |
| | jpocwtmlmain[#1] | Email monitoring communication process |

Note

When you execute a command, a process with the command name starts.

#1

A process name for a physical host is indicated as *process-name physical-host-name*. For example, when the physical 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 ajslogd process for hostA is ajslogd_hostA.

#4

This process starts only when you specify the environment settings as described in *14.1.6 Changing the mode in which unregistration or generation management deletes the generations of a jobnet* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 1*.

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

To check the status of parent, child and detail processes, use the ps command.

*Table B-17* lists the parent and child processes. *Table B-18* 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-17:*  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 |
| | | jpqmon (1) | Job execution control This process monitors all processes for job execution control. |

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| 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 (*number of jobs to be executed*) | 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 (*number of jobs to be checked*) | This process controls the definition pre-check (agent 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_spmd process for hostA is represented as jajs_spmd -h hostA.

*Table  B-18:*  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 |

| Child process name | Detail process name | Description |
|---|---|---|
| | 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. |
| jpqmon[#] | 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. |

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 Console Manager for UNIX

To check the processes of JP1/AJS3 Console Manager for UNIX, use the ps command.

JP1/AJS3 Console Manager consists of the following three types of processes:

- Parent process

  A parent process consists of several child processes.

- Child process

  A child process consists of several detail processes.

- Detail processes

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*Table B-19* lists the parent and child processes of JP1/AJS3 Console Manager for UNIX. *Table B-20* 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-19:*  Parent and child processes of JP1/AJS3 Console Manager for UNIX

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajscminetd (1)[#1] | JP1/AJS3 Console Manager service | ajscmmonsvr (Number in logged-in JP1/AJS3 Console Views)[#2] | This process communicates with JP1/AJS3 Console View. |

#1

The process starts when the JP1/AJS3 Console Manager service starts. The process ends when the JP1/AJS3 Console Manager service stops.

#2

The process starts when the user logs in to JP1/AJS3 Console View. The process ends when the user logs out from JP1/AJS3 Console View.

*Table  B-20:*  Child and detail processes of JP1/AJS3 Console Manager for UNIX

| Child process | Detail process | Description |
|---|---|---|
| ajscmmonsvr | ajscmstatd[#] | This process communicates with JP1/AJS3 Console Agent. |

Note

When you execute a command, a process with the same name as the command is activated.

#

The process starts when the user logs in to JP1/AJS3 Console View. The process ends when the user logs out from JP1/AJS3 Console View.

## (4)  Processes of JP1/AJS3 Console Agent for UNIX

To check the processes of JP1/AJS3 Console Agent for UNIX, use the `ps` command.

JP1/AJS3 Console Agent consists of the following three types of processes:

- Parent process

A parent process consists of several child processes.

- Child process

  A child process consists of several detail processes.

- Detail process

*Table B-21* lists the parent and child processes of JP1/AJS3 Console Agent for UNIX. *Table B-22* 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-21:*  Parent and child processes of JP1/AJS3 Console Agent for UNIX

| Parent process (number of processes) | Description | Child process (number of processes) | Description |
|---|---|---|---|
| ajscainetd (1)[#1] | JP1/AJS3 Console Agent service | ajscagtd (Number of agents monitored by using JP1/AJS3 Console View)[#2] | This process communicates with JP1/AJS3 Console Manager. |

#1

The process starts when the JP1/AJS3 Console Agent service starts. The process ends when the JP1/AJS3 Console Agent service stops.

#2

The process starts when the user logs in to JP1/AJS3 Console View. The process ends when the user logs out from JP1/AJS3 Console View.

*Table  B-22:*  Child and detail processes of JP1/AJS3 Console Agent for UNIX

| Child process | Detail process | Description |
|---|---|---|
| ajscagtd | ajscastatd[#1] | This process acquires the status of JP1/AJS3 work tasks. |
| ajscagtd | ajscaexecd[#2] | This process manipulates the objects of JP1/AJS3. |

Note

When you execute a command, a process with the same name as the command is activated.

#1

The process starts when the specified monitoring start time is reached or a refresh is executed. The process ends when the acquisition of information is completed.

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#2

The process starts when the user attempts to manipulate a JP1/AJS3 object. The process ends when the user completes the manipulation of the JP1/AJS3 object.

## 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



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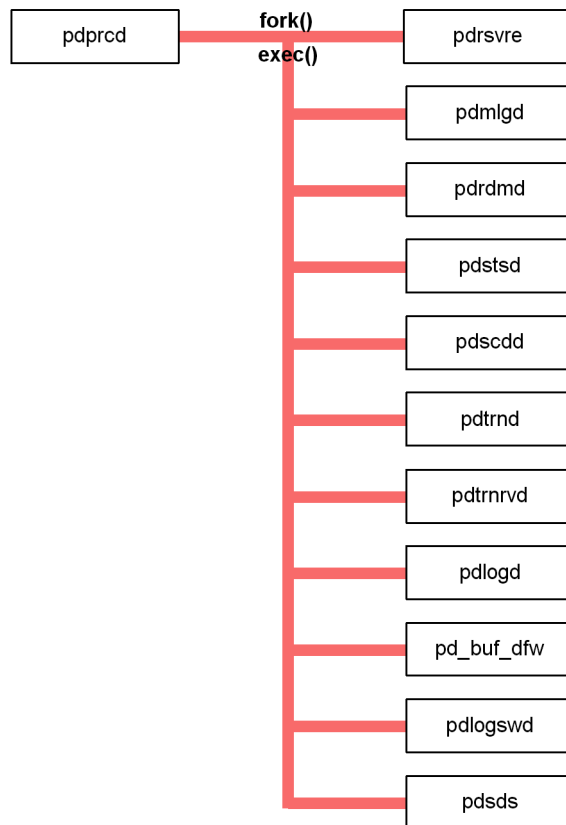
## *(2) Processes in Windows*

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-23:* List of parent and child processes for the Windows version of the embedded database

| 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 |
| | | pdstsd.exe (1) | Status server process, which controls input and output for the status file for units |

| Parent process (instances) | Explanation | Child process (instances) | Explanation |
|---|---|---|---|
| | | pdscdd.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 |

#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.

## *(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-24:* List of parent and child processes for the UNIX version of the embedded database

| Parent process (instances) | Explanation | Child process (instances) | Explanation |
|---|---|---|---|
| pdprcd (1) | Process server process, which manages the processes related to the embedded database | pdrsvre (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 |

| Parent process (instances) | Explanation | Child process (instances) | Explanation |
|---|---|---|---|
| | | pdstsd (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 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.

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#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 |
|---|---|---|---|---|---|
| A001 | Scheduler service started | KAVS0200-I | 00004100 | ajsstart jajs_spmd | -- |
| A002 | Scheduler service terminated | KAVS0201-I | 00004101 | ajsstop jajs_spmd_st op | -- |
| 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_st op | -- |
| A013 | Authentication denied | KAVS1009-W | None | -- | -- |
| N001 | Jobnet started | KAVS0260-I | 00004102 | -- | -- |
| N002 | Jobnet ended normally | KAVS0261-I | 00004103 | -- | -- |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| N003 | Jobnet ended abnormally | KAVS0262-E | 00004104 | -- | -- |
| N004 | Jobnet ended with warning | KAVS0268-W | 00004108 | -- | -- |
| 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 | -- | -- |
| 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 | -- | -- |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| 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 | -- | -- |
| 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** |
| C102 | Registered jobnet canceled | None | None | ajsleave | **Cancel Registration** used |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| C103 | Jobnet temporarily changed | None | None | 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** |
| C104 | Jobnet execution interrupted | None | None | ajsintrpt | **Interrupt** |
| C105 | Jobnet rerun | None | None | ajsrerun | **Rerun** |
| C106 | Jobnet suspended/ released from suspension | None | None | ajssuspend | **Suspension** |
| C107 | Jobnet registration for execution information imported | None | None | ajsrgimport | -- |
| C108 | Jobnet registered by import of jobnet registration for execution information | None | None | ajsrgimport | -- |
| C201 | Jobnet/job forcibly ended | None | None | ajskill | **Kill** |
| C202 | Job status changed | None | None | ajschgstat | **Change Job Status** |
| C301 | Unit definitions changed | None | None | ajschange ajschgjob ajschgnet | Changing a definition |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| 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` | -- |
| 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` | -- |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| 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 | -- |
| I001 | Command processing started | None | None | ajsalter ajsimport ajsname ajsprint ajsschedule ajsshow ajsstart ajsstop | -- |
| | | | | ajsbackup | **Backup** |
| | | | | ajscalendar | Changing a calendar |
| | | | | ajschange ajschgjob ajschgnet | Changing a definition |
| | | | | ajschgstat | **Change Job Status** |
| | | | | ajscopy | **Paste** |
| | | | | ajsdefine | **New** |
| | | | | ajsdelete | **Delete** |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| | | | | ajsentry | **Register for Execution**, or in the Daily Schedule or Monthly Schedule window, specifying a root jobnet and adding a jobnet by clicking **Add** |
| | | | | ajsexport | **Package** |
| | | | | ajsintrpt | **Interrupt** |
| | | | | ajskill | **Kill** |
| | | | | ajsleave | **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** |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| | | | | ajsrelease | **Release Entry**, **Release Cancel**, or viewing release information (by selecting the jobnet related to the release in the list area) |
| | | | | ajsrerun | **Rerun** |
| | | | | ajsrestore | **Restore** |
| | | | | ajsrgexport | -- |
| | | | | ajsrgimport | -- |
| | | | | ajssuspend | **Suspension** |

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| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/ AJS3 - View |
|---|---|---|---|---|---|
| I002 | Command-to-scheduler service processing request started | None | None | ajschgstat | **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** |
| | | | | ajsintrpt | **Interrupt** |
| | | | | ajskill | **Kill** |
| | | | | ajsleave | **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** |
| | | | | ajsrerun | **Rerun** |
| | | | | ajssuspend | **Suspension** |

The formats and the items output are described below for each log entry. A △ 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 *2.2(62) LOGHEADER* and *2.1(13) HOSTLOGHEADER* in the *Job Management Partner 1/Automatic Job Management System 3 Configuration Guide 2*.

*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 `PID` in the `LOGHEADER` or `HOSTLOGHEADER` environment setting parameter. | *log-number* △ *date* △ *time* △ *additional-information* △ |
| To include a process ID, specify `none` in the `LOGHEADER` or `HOSTLOGHEADER` environment setting parameter. | *log-number* △ *date* △ *time* △ [*process-ID*] △ *additional-information* △ |

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) |
|---|---|---|
| *log-type* | A log type (for example, `A001`) is output. | 4 |
| *date* | The date that the entry was output to the log.<br>The month and the day are delimited by either one or two one-byte space characters.<br>Examples:<br>- December 1: `Dec` △ `1` or `Dec` △ `01`[#]<br>- December 10: `Dec` △ `10`<br>If `yes` is specified in the `AJSLOGOUTPUTYEAR` or `HOSTLOGOUTPUTYEAR` environment setting parameter, the date is expressed in *YYYY/MM/DD* format.<br>Example:<br>December 7, 2009: `2009/12/07` | 6 or 11 |

| Item | Description | Length (bytes) |
|---|---|---|
| *time* | 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.: 23:05:00 | 8 |
| [*process-ID*] | The process ID of a command or a scheduler service. A process ID is included if `PID` is specified in the `LOGHEADER` or `HOSTLOGHEADER` environment setting parameter. A process ID is not included if `none` is specified in the `LOGHEADER` or `HOSTLOGHEADER` environment setting parameter. The value enclosed in square brackets is the process ID. | 0 or 3 to 12 |
| *additional-information* | 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 ( $\Delta$ ) 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.

### (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:

A001 △ *date* △ *time* △ KAVS0200-I △ *scheduler-service-name*

When a process ID is to be included in the log information:

A001 △ *date* △ *time* △ [*process-ID*] △ KAVS0200-I △ *scheduler-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) |
|------|-------------|----------------|
| *scheduler-service-name* | 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:

A002 △ *date* △ *time* △ KAVS0201-I △ *scheduler-service-name*

When a process ID is to be included in the log information:

A002 △ *date* △ *time* △ [*process-ID*] △ KAVS0201-I △ *scheduler-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) |
|------|-------------|----------------|
| *scheduler-service-name* | 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:

A003 △ *date* △ *time* △ KAVS0204-E △ *scheduler-service-name* △ *process-name* △ *end-code*

When a process ID is to be included in the log information:

A003 △ *date* △ *time* △ [*process-ID*] △ KAVS0204-E △ *scheduler-service-name* △ *process-name* △ *end-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) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *process-name* | One of the following is output:<br>- ajsflowd<br>- ajsschd<br>- ajslogd | 1 to 30 |
| *end-code* | An end 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:

A007 △ *date* △ *time* △ KAVS0534-I △ *host-name* △ ;CONNECT △ *user-name* △ [*user-type*] △ [*requesting-host-IP-address* , *requesting-source-identification*] △ *scheduler-service-name*

When a process ID is to be included in the log information:

A007 △ *date* △ *time* △ [*process-ID*] △ KAVS0534-I △ *host-name* △ ;CONNECT △ *user-name* △ [*user-type*] △ [*requesting-host-IP-address* , *requesting-source-identification*] △ *scheduler-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 jp1admin
[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) |
|---|---|---|
| *host-name* | The host name of the host that was connected is output. | 1 to 255 |
| *user-name* | The name of the JP1 user who performed the operation is output. | 0 to 20 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host requested to perform the operation is output. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. (`JP1/AJS2-View`) | 13 |
| *scheduler-service-name* | 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:

A008 △ *date* △ *time* △ KAVS0535-I △ *host-name* △ ;DISCONNECT △ *user-n*

*ame* △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identific*
*ation*] △ *scheduler-service-name*

When a process ID is to be included in the log information:

A008 △ *date* △ *time* △ [*process-ID*] △ KAVS0535-I △ *host-name* △ ;DISCO
NNECT △ *user-name* △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-
source-identification*] △ *scheduler-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 jp1admin KAVS0535-I hostA ;DISCONNECT
[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) |
|---|---|---|
| *host-name* | The host name of the host that was disconnected is output. | 1 to 255 |
| *user-name* | The name of the JP1 user who performed the operation is output. | 0 to 20 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>  A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The information for identifying the source requesting the operation is output. | 7 to 15 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *requesting-source-identification* | The name of the product used to perform the operation is output (`JP1/AJS2-View`). | 13 |
| *scheduler-service-name* | 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:

A011 △ *date* △ *time* △ KAVS0220-I

When a process ID is to be included in the log information:

A011 △ *date* △ *time* △ [*process-ID*] △ KAVS0220-I

Logging conditions:

An entry is output to the log only if `all` 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:

A012 △ *date* △ *time* △ KAVS0221-I

When a process ID is to be included in the log information:

A012 △ *date* △ *time* △ [*process-ID*] △ KAVS0221-I

Logging conditions:

An entry is output to the log only if `all` 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:

> A013 △ *date* △ *time* △ KAVS1009-W △ *requesting-host-IP-address* △ *user-na me* △ *host-name*

When a process ID is to be included in the log information:

> A013 △ *date* △ *time* △ [*process-ID*] △ KAVS1009-W △ *requesting-host-IP-ad dress* △ *user-name* △ *host-name*

Logging conditions:

> An entry is output to the log only if all is specified in the AUTHLOG environment setting parameter. Logging begins when an attempt is made to connect from one of the following clients, but user authentication or user mapping in JP1/Base fails:
>
> - JP1/AJS3 - View
>
> - 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 jp1admin 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) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output. | 7 to 15 |
| *user-name* | The name of the JP1 user who performed the operation is output. | 0 to 20 |
| *host-name* | The host name of the host that accepted the request is output. | 1 to 255 |

### (10) 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:

> N001 △ *date* △ *time* △ KAVS0260-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*[#]

When a process ID is to be included in the log information:

> N001 △ *date* △ *time* △ [*process-ID*] △ KAVS0260-I △ *scheduler-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-10:*  Items specific to a Jobnet Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet or jobnet connector that started is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet or jobnet connector that started is output in @*alphanumeric-character* format. | 1 to 10 |

## (11)  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:

> N002 △ *date* △ *time* △ KAVS0261-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*#

When a process ID is to be included in the log information:

> N002 △ *date* △ *time* △ [*process-ID*] △ KAVS0261-I △ *scheduler-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-11:* Items specific to the Jobnet Ended Normally log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet or jobnet connector that ended is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet or jobnet connector that ended is output in @*alphanumeric-character* format. | 1 to 10 |

### (12) 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:

N003 △ *date* △ *time* △ KAVS0262-E △ *scheduler-service-name*:*jobnet-name*: *execution-ID*#

When a process ID is to be included in the log information:

N003 △ *date* △ *time* △ [*process-ID*] △ KAVS0262-E △ *scheduler-service-na me*:*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-12:* Items specific to the Jobnet Ended Abnormally log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet or jobnet connector that ended abnormally is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet or jobnet connector that ended abnormally is output in @*alphanumeric-character* format. | 1 to 10 |

### (13) 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:

N004 △ *date* △ *time* △ KAVS0268-W △ *scheduler-service-name*:*jobnet-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

N004 △ *date* △ *time* △ [*process-ID*] △ KAVS0268-W △ *scheduler-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-13:* Items specific to the Jobnet Ended with Warning log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet or jobnet connector that ended with a warning is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet or jobnet connector that ended with a warning is output in @*alphanumeric-character* format. | 1 to 10 |

### (14) 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:

N005 △ *date* △ *time* △ KAVS0270-I △ *scheduler-service-name*:*jobnet-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

N005 △ *date* △ *time* △ [*process-ID*] △ KAVS0270-I △ *scheduler-service-na*

*me*:*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-14:* Items specific to the Jobnet on Hold log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet on hold is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet on hold is output in @*alphanumeric-character* format. | 1 to 10 |

### *(15)  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:

> `N006` △ *date* △ *time* △ `KAVS0272-E` △ *scheduler-service-name*:*jobnet-name*: *execution-ID*# △ *maintenance-information*

When a process ID is to be included in the log information:

> `N006` △ *date* △ *time* △ [*process-ID*] △ `KAVS0272-E` △ *scheduler-service-na me*:*jobnet-name*:*execution-ID*# △ *maintenance-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.

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*Table C-15:* Items specific to the Jobnet Shut Down log entry (N006) (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the shut-down jobnet is output. | 1 to 930 |
| *execution-ID* | The execution ID of the shut-down jobnet is output in @*alphanumeric-character* format. | 1 to 10 |
| *maintenance-information* | Maintenance information is output. | 8 |

## (16) 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:

N007 △ *date* △ *time* △ KAVS0273-E △ *scheduler-service-name*:*jobnet-name*:*execution-ID*[#] △ *maintenance-information*

When a process ID is to be included in the log information:

N007 △ *date* △ *time* △ [*process-ID*] △ KAVS0273-E △ *scheduler-service-name*:*jobnet-name*:*execution-ID*[#] △ *maintenance-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-16:* Items specific to the Jobnet Shut Down log entry (N007) (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the shut-down jobnet is output. | 1 to 930 |
| *execution-ID* | The execution ID of the shut-down jobnet is output in @*alphanumeric-character* format. | 1 to 10 |
| *maintenance-information* | Maintenance information is output. | 8 |

### (17) 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:

N008 △ *date* △ *time* △ KAVS0275-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*[#]

When a process ID is to be included in the log information:

N008 △ *date* △ *time* △ [*process-ID*] △ KAVS0275-I △ *scheduler-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-17:* Items specific to the Jobnet Start Delayed log entry(scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet whose startup was delayed is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet whose startup was delayed is output in @*alphanumeric-character* format. | 1 to 10 |

### (18) 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:

N009 △ *date* △ *time* △ KAVS0276-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*[#]

When a process ID is to be included in the log information:

N009 △ *date* △ *time* △ [*process-ID*] △ KAVS0276-I △ *scheduler-service-name*:*jobnet-name*:*execution-ID*[#]

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#

> :*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-18:*  Items specific to the Jobnet End Delayed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet whose end was delayed is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet whose end was delayed is output in @*alphanumeric-character* format. | 1 to 10 |

## (19)  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:

> N010 Δ *date* Δ *time* Δ KAVS0277-I Δ scheduler-*service-name*:*jobnet-name*: *execution-ID*#

When a process ID is to be included in the log information:

> N010 Δ *date* Δ *time* Δ [*process-ID*] Δ KAVS0277-I Δ *scheduler-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-19:*  Items specific to the Next Schedule Queuing log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The applicable jobnet name is output. | 1 to 930 |
| *execution-ID* | The applicable execution ID is output in @*alphanumeric-character* format. | 1 to 10 |

## (20)  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:

> N011 △ *date* △ *time* △ KAVS0240-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*[#]

When a process ID is to be included in the log information:

> N011 △ *date* △ *time* △ [*process-ID*] △ KAVS0240-I △ *scheduler-service-na me*:*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-20:*  Items specific to the Jobnet Start Condition Monitoring Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet for which start condition monitoring started is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet for which start condition monitoring started is output in @*alphanumeric-character* format. | 1 to 10 |

### *(21)  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:

N012 △ *date* △ *time* △ KAVS0241-I △ *scheduler-service-name*:*jobnet-name*: *execution-ID*<sup>#</sup> △ *end-status*

When a process ID is to be included in the log information:

N012 △ *date* △ *time* △ [*process-ID*] △ KAVS0241-I △ *scheduler-service-name*:*jobnet-name*:*execution-ID*<sup>#</sup> △ end-*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-21:*  Items specific to the Jobnet Start Condition Monitoring Terminated log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of the jobnet for which start condition monitoring terminated is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet for which start condition monitoring terminated is output in @*alphanumeric-character* format. | 1 to 10 |
| *end-status* | One of the following is output:<br>u: Unmonitored + Ended<br>c: Monitor terminated<br>i: Interrupted monitoring<br>n: Monitor-end normal | 1 |

### *(22)  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:

N013 △ *date* △ *time* △ KAVS0279-E △ *scheduler-service-name*:*jobnet-name*:

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*execution-ID*[#]

When a process ID is to be included in the log information:

> N013 △ *date* △ *time* △ [*process-ID*] △ KAVS0279-E △ *scheduler-service-na me*:*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-22:* Items specific to the Jobnet Skipped So Not Executed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The name of root jobnet name of the jobnet whose status became Skipped so not exe. is output. | 1 to 930 |
| *execution-ID* | The execution ID of the jobnet whose status became Skipped so not exe. is output in @*alphanumeric-character* format. | 1 to 10 |

### (23) 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:

> N014 △ *date* △ *time* △ KAVS0267-I △ *scheduler-service-name*

When a process ID is to be included in the log information:

> N014 △ *date* △ *time* △ [*process-ID*] △ KAVS0267-I △ *scheduler-service-na me*

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-23:* Item specific to the All Jobnet Registrations Canceled log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |

## (24) 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:

> N015 △ *date* △ *time* △ KAVS1420-I △ *scheduler-service-name*:*jobnet-name*:
> *execution-ID-of-new-generation* △ *execution-ID-of-previous-generation*

When a process ID is to be included in the log information:

> N015 △ *date* △ *time* △ [*process-ID*] △ KAVS1420-I △ *scheduler-service-na*
> *me*:*jobnet-name*:*execution-ID-of-new-generation* △ *execution-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-24:* Items specific to the Start Condition Monitoring Waiting to Terminate log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *jobnet-name* | The applicable jobnet name is output. | 1 to 930 |
| *execution-ID-of-new-generation* | The execution ID of the new generation is output in @*alphanumeric-character* format. | 1 to 10 |
| *execution-ID-of-previous-generation* | The execution ID of the previous generation is output in @*alphanumeric-character* format. | 1 to 10 |

## (25) 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:

> J001 △ *date* △ *time* △ KAVS0263-I △ *scheduler-service-name*:*job-name*:*exe cution-ID*[#] △ *execution-host-name*[#] △ *job-number*[#]

When a process ID is to be included in the log information:

> J001 △ *date* △ *time* △ [*process-ID*] △ KAVS0263-I △ *scheduler-service-na me*:*job-name*:*execution-ID*[#] △ *execution-host-name*[#] △ *job-number*[#]

[#]

> :*execution-ID* △ *execution-host-name* △ *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-25:* Items specific to the Job Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job that started is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job that started is output in @*alphanumeric-character* format. | 1 to 10 |
| *execution-host-name* | The name of the execution host of the job that started is output. | 1 to 255 |
| *job-number* | The job number of the job that started is output as a decimal number. If JP1/NQSEXEC is linked, and the machine ID specified by JP1/NQSEXEC is a value other than 0, the job number is output in *mmmm*0*nnnnn* format (*mmmm* is the machine ID and *nnnnn* is the job number). | 1 to 10 |

### (26) 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:

> J002 △ *date* △ *time* △ KAVS0264-I △ *scheduler-service-name*:*job-name*:*exe cution-ID*[#] △ *execution-host-name*[#] △ *return-value*[#] △ *job-number*[#]

When a process ID is to be included in the log information:

J002 △ *date* △ *time* △ [*process-ID*] △ KAVS0264-I △ *scheduler-service-na me*:*job-name*:*execution-ID*# △ *execution-host-name* # △ *return-value*# △ *job-number*#

\# 

:*execution-ID* △ *execution-host-name* △ *return-value* △ *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-26:* Items specific to the Job Ended Normally log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job that ended is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job that ended is output in @*alphanumeric-character* format. | 1 to 10 |
| *execution-host-name* | The name of the execution host of the job that ended is output. | 1 to 255 |
| *return-value* | The return value of the job that ended is output as a decimal number. | 1 to 10 |
| *job-number* | The job number of the job that ended is output as a decimal number. If JP1/NQSEXEC is linked, and the machine ID specified by JP1/NQSEXEC is a value other than 0, the job number is output in *mmmm*0*nnnnn* format (*mmmm* is a machine ID and *nnnnn* is a job number). | 1 to 10 |

## (27) 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:

J003 △ *date* △ *time* △ KAVS0265-E △ *scheduler-service-name*:*job-name*:*exe cution-ID*# △ *end-status* △ *return-value* △ *execution-host-name*# △ *job-number* #

When a process ID is to be included in the log information:

J003 △ *date* △ *time* △ [*process-ID*] △ KAVS0265-E △ *scheduler-service-na me*:*job-name*:*execution-ID*[#] △ *end-status* △ *return-value* △ *execution-host-na me*[#] △ *job-number*[#]

\#

    :*execution-ID* and △ *execution-host-name* △ *job-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-27:* Items specific to the Job Ended Abnormally log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job that ended abnormally is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job that ended abnormally is output in @*alphanumeric-character* format. | 1 to 10 |
| *end-status* | One of the following is output:<br>- a: Ended abnormally<br>- f: Failed to start<br>- c: Killed<br>- ?: Unknown end status | 1 |
| *return-value* | The return value of the job that ended abnormally is output as a decimal number. | 1 to 10 |
| *execution-host-name* | The name of the execution host of the job that ended abnormally is output. | 1 to 255 |
| *job-number* | The job number of the job that ended abnormally is output as a decimal number.<br>If JP1/NQSEXEC is linked, and the machine ID specified by JP1/NQSEXEC is a value other than 0, the job number is output in *mmmm*0*nnnnn* format (*mmmm* is a machine ID and *nnnnn* is a job number).<br>If the job could not be started because submission of the job failed, the job number is blank. | 1 to 10 |

### *(28)* *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:

J004 △ *date* △ *time* △ KAVS0269-W △ *scheduler-service-name*:*job-name*:*exe cution-ID*[#] △ *return-value* △ *execution-host-name*[#] △ *job-number*[#]

When a process ID is to be included in the log information:

J004 △ *date* △ *time* △ [*process-ID*] △ KAVS0269-W △ *scheduler-service-na me*:*job-name*:*execution-ID*[#] △ *return-value* △ *execution-host-name* [#] △ *job-number* [#]

\#

:*execution-ID* and △ *execution-host-name* △ *job-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 hostA 5
```

The following table describes the items that are specific to these formats.

*Table C-28:* Items specific to the Job Ended with Warning log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job that ended with a warning is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job that ended with a warning is output in @*alphanumeric-character* format. | 1 to 10 |
| *return-value* | The return value of the job that ended with a warning is output as a decimal number. | 1 to 10 |
| *execution-host-name* | The name of the execution host of the job that ended with a warning is output. | 1 to 255 |
| *job-number* | The job number of the job that ended with a warning is output as a decimal number. If JP1/NQSEXEC is linked, and the machine ID specified by JP1/NQSEXEC is a value other than 0, the job number is output in *mmmm*0*nnnnn* format (*mmmm* is a machine ID and *nnnnn* is a job number). | 1 to 10 |

### (29) 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:

J005 △ *date* △ *time* △ KAVS0271-I △ *scheduler-service-name*:*job-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

J005 △ *date* △ *time* △ [*process-ID*] △ KAVS0271-I △ *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:

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-29:* Items specific to the Job on Hold log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job on hold is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job on hold is output in @*alphanumeric-character* format. | 1 to 10 |

### (30) 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:

J006 △ *date* △ *time* △ KAVS0278-I △ *scheduler-service-name*:*job-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

J006 △ *date* △ *time* △ [*process-ID*] △ KAVS0278-I △ *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:

```
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-30:*  Items specific to the Job Submission Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the submitted job is output. | 1 to 930 |
| *execution-ID* | The execution ID of the submitted job is output in @*alphanumeric-character* format. | 1 to 10 |

## *(31)  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:

`J007` △ *date* △ *time* △ `KAVS0242-I` △ *scheduler-service-name*:*event-job-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

`J007` △ *date* △ *time* △ [*process-ID*] △ `KAVS0242-I` △ *scheduler-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.

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*Table C-31:* Items specific to the Event Job Execution Request Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *event-job-name* | The applicable event job name is output. | 1 to 930 |
| *execution-ID* | The execution ID of the event job is output in @*alphanumeric-character* format. | 1 to 10 |

### (32) 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:

> J008 △ *date* △ *time* △ KAVS0248-I △ *scheduler-service-name*:*job-name*:*execution-ID*[#]

When a process ID is to be included in the log information:

> J008 △ *date* △ *time* △ [*process-ID*] △ KAVS0248-I △ *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:

```
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-32:* Items specific to the Job End Delayed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job whose end was delayed is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job whose end was delayed is output in @*alphanumeric-character* format. | 1 to 10 |

### (33) 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:

> `J009` △ *date* △ *time* △ `KAVS0266-I` △ *scheduler-service-name* `:` *job-name* `:` *exe cution-ID*[#] △ *job-number*[#]

When a process ID is to be included in the log information:

> `J009` △ *date* △ *time* △ [*process-ID*] △ `KAVS0266-I` △ *scheduler-service-na me* `:` *job-name* `:` *execution-ID*[#] △ *job-number* [#]

#

> `:` *execution-ID* △ *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-33:* Items specific to the Job Queuing Canceled log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *scheduler-service-name* | The applicable scheduler service name is output. | 1 to 30 |
| *job-name* | The name of the job that ended is output. | 1 to 930 |
| *execution-ID* | The execution ID of the job that ended is output in @*alphanumeric-character* format. | 1 to 10 |
| *job-number* | The job number of the job that ended is output as a decimal number. | 1 to 10 |

### (34) 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:

> `C001` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;ALTER` △ *o ption*

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When a process ID is to be included in the log information:

> C001 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;ALTER △ *option*

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 jp1admin 0 JP1_DEFAULT ;ALTER -F
> AJSROOT1 -c COPY

The following table describes the items that are specific to these formats.

*Table C-34:* Items specific to the Scheduler Service Operation Environment Temporarily Changed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsalter` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *option* | The options specified in the executed `ajsalter` command are output. | 1 or more |

### (35) 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:

> C002 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;STOP △ *opt ion*

When a process ID is to be included in the log information:

> C002 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;STOP △ *option*

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-35:* Items specific to the Scheduler Service Stopped log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsstop` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *option* | The options specified in the executed `ajsstop` command are output. | 1 or more |

## (36) 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:

C003 $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;START` $\triangle$ *option*

When a process ID is to be included in the log information:

C003 $\triangle$ *date* $\triangle$ *time* $\triangle$ [*process-ID*] $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;START` $\triangle$ *option*

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-36:* Items specific to the Scheduler Service Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsstart` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *option* | The options specified in the executed `ajsstart` command are output. | 1 to 500 |

## (37) 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:

> C101 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;ENTRY △ [*user-type*]# △ [*requesting-host-IP-address*, *requesting-source-identification*]# △ *option* △ *unit-name*

When a process ID is to be included in the log information:

> C101 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* e △ ;ENTRY △ [*user-type*]# △ [*requesting-host-IP-address*, *requesting-source-identification*]# △ *option* △ *unit-name*

\#

> △ [*user-type*] △ [*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 jp1admin KAVS0681-E JP1_DEFAULT ;ENTRY
-F AJSROOT1 -s /group/net1
```

The following table describes the items that are specific to these formats.

*Table C-37:* Items specific to the Jobnet Registered log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsentry` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = `*export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsentry` command are output.<br>For 08-00 or earlier, the value of the `-c` option is output when `detail` is specified in `MACLOG`.<br>For 08-10 or later, the value of the `-c` option is output when `yes` is specified in `AJSLOGOUTPUTEXTEND`, regardless of the specification of `MACLOG`. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsentry` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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.

### (38) 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` $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;LEAVE` $\triangle$ [ *user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*] [#] $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

C102 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam* *e* △ ;LEAVE △ [*user-type*] [^#] △ [*requesting-host-IP-address*, *requesting-source-identification*] [^#] △ *option* △ *unit-name*

[^#]

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio n*] 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-38:* Items specific to the Registered Jobnet Canceled log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsleave 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br> A user who is a member of the Administrators group or has superuser privileges<br>• USER<br> A general user | 4 or 5 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = ` *export-source-file-name*`, OUT = ` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsleave` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsleave` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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.

### (39) 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:

`C103` $\Delta$ *date* $\Delta$ *time* $\Delta$ *user-name* $\Delta$ *message-ID* $\Delta$ *host-name* $\Delta$ `;PLAN` $\Delta$ `[`*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:

C103 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ ;PLAN △ [*user-type*]<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source-identification*] <sup>#</sup> △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*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 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-39:* Items specific to the Jobnet Temporarily Changed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsplan 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br> A user who is a member of the Administrators group or has superuser privileges<br>• USER<br> A general user | 4 or 5 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>   Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = ` *export-source-file-name*, `OUT = ` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>   Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsplan` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsplan` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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.

### (40) 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` $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;INTRPT` $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*][#] $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

C104 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam*
*e* △ ;INTRPT △ [*user-type*]
<sup>#</sup> △ [*requesting-host-IP-address*,*requesting-source-identification*]
<sup>#</sup> △ *option* △ *unit-name*

#

△ [*user-type*] △ [*requesting-host-IP-address*,*requesting-source-identificatio
n*] 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 `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-40:*  Items specific to the Jobnet Execution Interrupted log entry
(scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsintrpt` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsintrpt` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsintrpt` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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.

### (41) 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:

`C105` $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;RERUN` $\triangle$ `[` *user-type*`]`[#] $\triangle$ `[`*requesting-host-IP-address*`,`*requesting-source-identification*`]`[#] $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

C105 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam*
*e* △ ;RERUN △ [*user-type*]
<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source-identification*]
<sup>#</sup> △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio
n*] 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 `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-41:*  Items specific to the Jobnet Rerun log entry (scheduler information
log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsrerun` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = ` *export-source-file-name* `,`<br>  `OUT = ` *export-execution-result-file-name* `)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsrerun` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsrerun` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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.

## (42)  *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` $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;SUSPEND` $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identificatio*

*n*] [#] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C106 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ ;SUSPEND △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*] [#] △ *option* △ *unit-name*

#

△ [*user-type*] △ [*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 jp1admin 0 JP1_DEFAULT ;SUSPEND -F
AJSROOT1 -C -r /group/net1
```

The following table describes the items that are specific to these formats.

*Table C-42:* Items specific to the Jobnet Suspended/Released from Suspension log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajssuspend 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>    A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>    A general user | 4 or 5 |

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| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = ` *export-source-file-name* `, OUT = ` *export-execution-result-file-name* `)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*# | The options specified in the executed `ajssuspend` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajssuspend` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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.

### (43) 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 $\Delta$ *date* $\Delta$ *time* $\Delta$ *user-name* $\Delta$ *message-ID* $\Delta$ *host-name* $\Delta$ `;RGIMP` $\Delta$ [ *user-type*]# $\Delta$ *option*

When a process ID is to be included in the log information:

C107 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;RGIMP △ [*user-type*]<sup>#</sup> △ *option*

\#

△ [*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 rgimport is specified in the OPELOG environment setting parameter.

Example of a log entry:

```
C107 Dec 07 19:14:15 jp1admin 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-43:* Items specific to the Jobnet Registration for Execution Information Imported log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsrgimport 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>  A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>  A general user | 4 or 5 |
| *option*<sup>#</sup> | The options specified in the executed ajsrgimport command are output. | 1 to 500 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

### (44) 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;RGIMP △ [ *user-type*]# △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C108 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam* e △ ;RGIMP △ [*user-type*]# △ *option* △ *unit-name*

\#

△ [*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 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-44:* Items specific to the Jobnet Registered by Import of Jobnet Registration for Execution Information log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsrgimport 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 |
| *message-ID* | 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 |

| Item | Description | Length (bytes) |
|---|---|---|
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>  A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>  A general user | 4 or 5 |
| *option*# | The options that are output are the ones specified in the ajsrgimport command when the command was used to register the jobnet. | 1 to 500 |
| *unit-name* | The root jobnet name that is output is name actually registered by using the ajsrgimport command. | 1 to 930 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

## (45)  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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;KILL △ [*user-type*]# △ [*requesting-host-IP-address*, *requesting-source-identification*]# △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C201 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ ;KILL △ [*user-type*]# △ [*requesting-host-IP-address*, *requesting-source-identification*]# △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*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 `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-45:* Items specific to the Jobnet/Job Forcibly Ended log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajskill` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT =` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajskill` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajskill` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

### (46)  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` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;CHGSTAT` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*][#] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

`C202` △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;CHGSTAT` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*][#] △ *option* △ *unit-name*

#

△ [*user-type*] △ [*requesting-host-IP-address* , *requesting-source-identificatio n*] 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 jp1admin 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-46:* Items specific to the Job Status Changed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajschgstat` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-a ddress* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*<sup>#</sup> | The options specified in the executed `ajschgstat` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajschgstat` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

### *(47) 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` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;CHANGE` △ [*user-type*]<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source-identification*]<sup>#</sup> △ *option* △ *unit-name*

When a process ID is to be included in the log information:

`C301` △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;CHANGE` △ [*user-type*]<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source-identification*]<sup>#</sup> △ *option* △ *unit-name*

#

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△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio n*] △ *option* 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 `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 jp1admin 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 jp1admin 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 jp1admin 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 jp1admin 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, mlsbj, 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.

The following table describes the items that are specific to these formats.

*Table C-47:* Items specific to the Unit Definitions Changed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajschange`, `ajschgjob`, or `ajschgnet` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = `*export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *option*# | The options specified in the executed `ajschange`, `ajschgnet`, or `ajschgjob` command, or the changes made by a user from JP1/AJS3 - View are output.<br>For 08-00 or earlier, command options are not output.<br>For 08-10 or later, command options or the changes made by the user from JP1/AJS3 - View are output if `yes` is specified in `AJSLOGOUTPUTEXTEND`.<br>In *option*, 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.<br>The definition change operation types are as follows:<br>• For `ajschange`: `CHANGE`<br>• For `ajschgnet`: `CHGNET`<br>• For `ajschgjob`: `CHGJOB`<br>• For JP1/AJS3 - View: `VIEW` | 1 to 510 |
| *unit-name* | The unit name specified in the executed `ajschange`, `ajschgnet`, or `ajschgjob` command, or the name of the unit for which operations were performed from JP1/AJS3 - View is output.<br>For the `ajschange`, `ajschgnet`, and `ajschgjob` commands, unit names do not include scheduler service names. However, if the target is a scheduler service, the indication in *option* is `-f` *scheduler-service-name*. For JP1/AJS3 - View, unit names include scheduler service names. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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 510 bytes, only 510 bytes are output. Note that the 510-byte limit is exceeded before an option name or a parameter name is complete, that option or parameter is not output.

## (48) 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:

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C302 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;DELETE △ [*user-type*]<sup># </sup>△ [*requesting-host-IP-address*, *requesting-sourc e-identification*]<sup> #</sup> △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio n*] 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 jp1admin 0 JP1_DEFAULT ;DELETE -F
AJSROOT1 -S /group/net1
```

The following table describes the items that are specific to these formats.

*Table C-48:* Items specific to the Unit Deleted log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsdelete` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-a ddress* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT =` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsdelete` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsdelete` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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.

### (49) 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 $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ ;RESTORE $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*] [#] $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

C303 $\triangle$ *date* $\triangle$ *time* $\triangle$ [*process-ID*] $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ ;RESTORE $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*] [#] $\triangle$ *option* $\triangle$ *unit-name*

#

△ [*user-type*] △ [*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-49:* Items specific to the Unit Restored log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsrestore` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT =` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsrestore` command are output. | 1 to 500 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

### (50) 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:

> C304 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;DEFINE` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*][#] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

> C304 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;DEFINE` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*][#] △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio*

*n*] 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 `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-50:* Items specific to the Unit Created log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsdefine` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

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| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-ide ntification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*, `OUT =` *export-execution-result-file-name*)<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*# | The options specified in the executed `ajsdefine` command are output only for an abnormal termination. | 1 to 500 |
| *unit-name* or definition file name | The unit name or the definition file name specified in the executed `ajsdefine` command is output.<br>The unit name is output for a normal termination.<br>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 ( $\triangle$ )) 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 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` $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;COPY` $\triangle$ [*user-type*]# $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*]# $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

`C305` $\triangle$ *date* $\triangle$ *time* $\triangle$ [*process-ID*] $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ `;COPY` $\triangle$ [*user-type*]# $\triangle$ [*requesting-host-IP-address*, *requesting-source-i*

*dentification*] # △ *option* △ *unit-name*

#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio n*] 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 `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-51:* Items specific to the Unit Copied or Moved log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajscopy` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-a ddress* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT =` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajscopy` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajscopy` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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:

C306 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;IMPORT` △ [*user-type*][#] △ *option*

When a process ID is to be included in the log information:

C306 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* e △ `;IMPORT` △ [*user-type*][#] △ *option*

#

△ [*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-52:*  Items specific to the Unit Imported log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsimport` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *option*[#] | The options specified in the executed `ajsimport` command are output. | 1 to 500 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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 Released log entry

The following are the formats of the Jobnet Released log entry.

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When no process ID is to be included in the log information:

C307 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;RELEASEO
PE △ [*user-type*]# △ *option*

When a process ID is to be included in the log information:

C307 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam*
*e* △ ;RELEASEOPE △ [*user-type*]# △ *option*

\#

△ [*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 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-53:* Items specific to the Jobnet Released log entry (scheduler
information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsrelease 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|---|---|---|
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>   A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>   A general user | 4 or 5 |
| *option*[#] | The options specified in the executed `ajsrelease` command are output. | 1 to 500 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;CALENDAR` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*] [#] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

`C401` △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;CALENDAR` △ [*user-type*][#] △ [*requesting-host-IP-address*, *requesting-source-identification*] [#] △ *option* △ *unit-name*

#

△ [*user-type*] △ [*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 `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 `AJSLOGOUTPUTEXTEND` 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 jp1admin 0 JP1_DEFAULT ;CALENDAR -F
AJSROOT1 mo we /
```

The following table describes the items that are specific to these formats.

*Table C-54:* Items specific to the Calendar Changed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajscalendar` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>   A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>   A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = `*export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajscalendar` command or the changes made by the user from JP1/AJS3 - View are output.<br>If `no` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter, one of the following values is output for *option* to indicate the type of change:<br>• When a calendar is changed: `mo`<br>• When a standard week value is changed: `we`<br>• When a base date is changed: `sd`<br>• When a base time is changed: `st`<br>If `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter, the options specified in the executed `ajscalendar` command or the name of the definition parameter changed by the user from JP1/AJS3 - View is output for *option*.<br>The name of the definition parameter to be output is as follows when JP1/AJS3 - View is used to change the parameter:<br>• When an open day is added or deleted: `op`<br>• When a closed day is added or deleted: `cl`<br>• When a base date is changed: `sdd`<br>• When a base month for the calendar is changed: `md`<br>• When a base time is changed: `stt` | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajscalendar` command is output. | 1 to 930 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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 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 Δ *date* Δ *time* Δ *user-name* Δ *message-ID* Δ *host-name* Δ ;SHOW 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:

C502 Δ *date* Δ *time* Δ [*process-ID*] Δ *user-name* Δ *message-ID* Δ *host-name* Δ ;SHOW 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.

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 jp1admin 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-55:* Items specific to the Unit Status Displayed log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsshow 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 |
| *message-ID* | Always 0. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|---|---|---|
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br> A user who is a member of the Administrators group or has superuser privileges<br>• USER<br> A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• JP1/AJS2-View<br> Indicates that the operation was performed from JP1/AJS3 - View.<br>• JP1/AJS2-DA (IN = *export-source-file-name*, OUT = *export-execution-result-file-name*)<br>• REMOTE<br> Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*# | The options specified in the executed ajsshow command are output. Note that the value specified for the -f, -t, or -i option is always enclosed in double quotation marks (""). | 1 to 500 |
| *unit-name* | The unit name specified in the executed ajsshow command is output. | 1 to 930 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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:

C503 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;PRINT △ [
*user-type*]<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source-identification*]
<sup>#</sup> △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C503 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam*
*e* △ ;PRINT △ [*user-type*]<sup>#</sup> △ [*requesting-host-IP-address*, *requesting-source*
*-identification*] <sup>#</sup> △ *option* △ *unit-name*

#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio*
*n*] 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 print is specified in the REFLOG
environment setting parameter.

Example of a log entry:

```
C503 Dec 07 09:14:22 jp1admin 0 JP1_DEFAULT ;PRINT -F
AJSROOT1 -a /group/*
```

The following table describes the items that are specific to these formats.

*Table C-56:* Items specific to the Unit Definitions Output log entry (scheduler
information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsprint 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 |
| *message-ID* | Always 0. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = ` *export-source-file-name*`, OUT = ` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsprint` command are output. Note that the value specified for the `-f` or `-t` option is always enclosed in double quotation marks (`""`). | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsprint` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;BACKUP △ [*user-type*]^# △ [*requesting-host-IP-address*, *requesting-source-identification*] ^# △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C504 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;BACKUP △ [*user-type*]^# △ [*requesting-host-IP-address*, *requesting-sourc e-identification*] ^# △ *option* △ *unit-name*

\#

△ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identificatio n*] 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 backup is specified in the REFLOG environment setting parameter.

Example of a log entry:

```
C504 Dec 07 09:14:22 jp1admin 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-57:* Items specific to the Unit Definitions Backed Up log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsbackup 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 |
| *message-ID* | Always 0. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the executed `ajsbackup` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsbackup` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;SCHEDULE △ [*user-type*]<sup>#</sup> △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C506 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;SCHEDULE △ [*user-type*]<sup>#</sup> △ *option* △ *unit-name*

#

　　△ [*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 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-58:* Items specific to the Root Jobnet Schedule Information Output log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsschedule 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>　A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>　A general user | 4 to 5 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *option*[#] | The options specified in the executed `ajsschedule` command are output. | 1 to 500 |
| *unit-name* | The root jobnet name specified in the executed `ajsschedule` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;NAME` △ [*user-type*][#] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

`C507` △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;NAME` △ [*user-type*][#] △ *option* △ *unit-name*

#

△ [*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 `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-59:* Items specific to the Unit Name Output log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsname` 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 |
| *message-ID* | Always `0`. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *option*# | The options specified in the executed `ajsname` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsname` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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 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 $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ ;EXPORT $\triangle$ [*user-type*]# $\triangle$ *option*

When a process ID is to be included in the log information:

C508 $\triangle$ *date* $\triangle$ *time* $\triangle$ [*process-ID*] $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $e$ $\triangle$ ;EXPORT $\triangle$ [*user-type*]# $\triangle$ *option*

#

△ [*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 jp1admin 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-60:* Items specific to the Unit Definitions Exported log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsexport` 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>　A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>　A general user | 4 or 5 |
| *option*[#] | The options specified in the executed `ajsexport` command are output. | 1 to 500 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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.

### (61) 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;SHOW △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C509 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* e △ ;SHOW △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

Logging conditions:

An entry is output to the log only if yes is specified in the AJSLOGOUTPUTEXTEND 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] jp1admin 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-61:* Items specific to the Unit Status Displayed (Abnormal End) log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsshow 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. | 10 |
| *host-name* | The name of the logical host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = export-source-file-name, OUT = export-execution-result-file-name)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the `ajsshow` command are output. Note that the value specified for the `-f`, `-t`, or `-i` option is always enclosed in double quotation marks (`""`). | 1 to 500 |
| *unit-name* | The unit name specified in the `ajsshow` command is output. | 1 to 930 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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 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:

C510 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;PRINT △ [ *user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C510 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;PRINT △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

Logging conditions:

An entry is output to the log only if `yes` is specified in the `AJSLOGOUTPUTEXTEND` 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] jp1admin KAVS0161-I JP1_DEFAULT
;PRINT [ADMIN] -F AJSROOT1 -a /net
```

The following table describes the items that are specific to these formats.

*Table C-62:* Items specific to the Unit Definitions Output (Abnormal End) log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsprint` 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. | 10 |
| *host-name* | The name of the logical host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|---|---|---|
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>　A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>　A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>　Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT = ` *export-execution-result-file-name*`)`<br>• `REMOTE`<br>　Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*[#] | The options specified in the `ajsprint` command are output. Note that the value specified for the `-f` or `-t` option is always enclosed in double quotation marks (`""`). | 1 to 500 |
| *unit-name* | The unit name specified in the `ajsprint` command is output. | 1 to 930 |

\#

If the value of an option (the part that is not the option name and the subsequent space ( $\Delta$ )) 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 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;BACKUP △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C511 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ ;BACKUP △ [*user-type*] △ [*requesting-host-IP-address*, *requesting-source-identification*] △ *option* △ *unit-name*

Logging conditions:

An entry is output to the log if yes is specified in the AJSLOGOUTPUTEXTEND 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] jp1admin 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-63:* Items specific to the Unit Definitions Backed Up (Abnormal End) log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsbackup 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. | 10 |
| *host-name* | The name of the logical host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br> A user who is a member of the Administrators group or has superuser privileges<br>• USER<br> A general user | 4 or 5 |

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| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>  Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>  Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option*# | The options specified in the `ajsbackup` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the `ajsbackup` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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` △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;NAME` △ [*user-type*] △ *option* △ *unit-name*

When a process ID is to be included in the log information:

`C512` △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam*

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*e* △ ;NAME △ [*user-type*] △ *option* △ *unit-name*

Logging conditions:

An entry is output to the log only if `yes` is specified in the AJSLOGOUTPUTEXTEND 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] jp1admin KAVS0161-I JP1_DEFAULT
;NAME [ADMIN] -F AJSROOT1 /net
```

The following table describes the items that are specific to these formats.

*Table  C-64:*  Items specific to the Unit Name Output (Abnormal End) log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the `ajsname` 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. | 10 |
| *host-name* | The name of the logical host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *option*[#] | The options specified in the `ajsname` command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the `ajsname` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;RGEXP △ [*user-type*]<sup>#</sup> △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C513 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ ;RGEXP △ [*user-type*]<sup>#</sup> △ *option* △ *unit-name*

\#

   △ [*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 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-65:* Items specific to the Jobnet Registration for Execution Information Exported log entry (scheduler information log)

| Item | Description | Length (bytes) |
|---|---|---|
| *user-name* | The name of the JP1 user who executed the ajsrgexport 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. If the operation was performed successfully, 0 is output. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |

| Item | Description | Length (bytes) |
|---|---|---|
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>  A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>  A general user | 4 or 5 |
| *option*# | The options specified in the executed ajsrgexport command are output. | 1 to 500 |
| *unit-name* | The unit name specified in the executed ajsrgexport command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( △ )) 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 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:

C514 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ ;RGEXP △ [ *user-type*]# △ *option* △ *unit-name*

When a process ID is to be included in the log information:

C514 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-nam e* △ ;RGEXP △ [*user-type*]# △ *option* △ *unit-name*

#

△ [*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 rgexport is specified in the REFLOG environment setting parameter.

Example of a log entry:

```
C514 Dec 07 19:14:15 jp1admin 0 JP1_DEFAULT ;RGEXP -F
AJSROOT1 -e f /group/rootnet1
```

The following table describes the items that are specific to these formats.

*Table C-66:* Items specific to the Jobnet Information Output by Export of Jobnet Registration for Execution Information log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the `ajsrgexport` 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 |
| *message-ID* | The ID of the message reporting the result of the operation is output. If the operation was performed successfully, `0` is output. | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *option*[#] | The options specified in the executed `ajsrgexport` command are output. | 1 to 500 |
| *unit-name* | The jobnet name specified in the `ajsrgexport` 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 ( $\Delta$ )) 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 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 Δ *date* Δ *time* Δ *user-name* Δ *message-ID* Δ *host-name* Δ ;RELEASER
EF Δ [*user-type*]# Δ *option* Δ *unit-name*

When a process ID is to be included in the log information:

C515 Δ *date* Δ *time* Δ [*process-ID*] Δ *user-name* Δ *message-ID* Δ *host-nam*
*e* Δ ;RELEASEREF Δ [*user-type*]# Δ *option* Δ *unit-name*

\#

    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 release is specified in the REFLOG
environment setting parameter.

Example of a log entry:

C515 Dec 07 19:14:15 jp1admin 0 JP1_DEFAULT ;RELEASEREF -F
AJSROOT1 -i /group/releasenet

The following table describes the items that are specific to these formats.

*Table C-67:* Items specific to the Jobnet Release Information Referenced log
entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | The name of the JP1 user who executed the ajsrelease 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 |
| *message-ID* | 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 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>  A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>  A general user | 4 or 5 |

| Item | Description | Length (bytes) |
|---|---|---|
| *option*[#] | The options specified in the `ajsrelease` command are output. These options were specified when the command was used to output release information. | 1 to 500 |
| *unit-name* | The unit name specified in the executed `ajsrelease` command is output. | 1 to 930 |

#

If the value of an option (the part that is not the option name and the subsequent space ( $\triangle$ )) 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 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 $\triangle$ *date* $\triangle$ *time* $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ ;START $\triangle$ *command-name* $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*] [#] $\triangle$ *option* $\triangle$ *unit-name*

When a process ID is to be included in the log information:

I001 $\triangle$ *date* $\triangle$ *time* $\triangle$ [*process-ID*] $\triangle$ *user-name* $\triangle$ *message-ID* $\triangle$ *host-name* $\triangle$ ;START $\triangle$ *command-name* $\triangle$ [*user-type*][#] $\triangle$ [*requesting-host-IP-address*, *requesting-source-identification*] [#] $\triangle$ *option* $\triangle$ *unit-name*

#

$\triangle$ [*user-type*] $\triangle$ [*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 jp1admin - JP1_DEFAULT ;START ENTRY -F
AJSROOT1 -n /group/net
```

The following table describes the items that are specific to these formats.

*Table C-68:* Items specific to the Command Processing Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | 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 |
| *message-ID* | Always a hyphen (-). | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *command-name* | The applicable command name is output in upper-case alphabetic characters.<br>Example:<br>For the ajsentry command, the prefix (ajs) is removed and the remainder of the name is output in upper case (ENTRY). | 7 to 11 |
| *user-type* | The type of the user (ADMIN or USER) who performed the operation is output.<br>• ADMIN<br>    A user who is a member of the Administrators group or has superuser privileges<br>• USER<br>    A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br>Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN = `*export-source-file-name*`, OUT = `*export-execution-result-file-name*`)`<br>• `REMOTE`<br>Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option* | The options specified in the executed command are output. | 1 to 500 |
| *unit-name* | 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.

## (69) 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:

I002 △ *date* △ *time* △ *user-name* △ *message-ID* △ *host-name* △ `;REQUEST` △ *command-name* △ [*user-type*]# △ [*requesting-host-IP-address*, *requesting-source-identification*] # △ *option* △ *unit-name*

When a process ID is to be included in the log information:

I002 △ *date* △ *time* △ [*process-ID*] △ *user-name* △ *message-ID* △ *host-name* △ `;REQUEST` △ *command-name* △ [*user-type*]# △ [*requesting-host-IP-addr*

*ess*, *requesting-source-identification*] <sup>#</sup> Δ *option* Δ *unit-name*

\#

Δ [*user-type*] Δ [*requesting-host-IP-address*, *requesting-source-identificatio n*] is output if `yes` is specified in the `AJSLOGOUTPUTEXTEND` environment setting parameter.

Example of a log entry:

```
I002 Dec 15 09:14:22 jp1admin - JP1_DEFAULT ;REQUEST ENTRY
-F AJSROOT1 -n /group/net
```

The following table describes the items that are specific to these formats.

*Table C-69:* Items specific to the Command-to-Scheduler Service Processing Request Started log entry (scheduler information log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *user-name* | 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 |
| *message-ID* | Always a hyphen (-). | 1 |
| *host-name* | The name of the host requested to perform the operation is output. | 1 to 255 |
| *command-name* | The applicable command name is output in upper-case alphabetic characters. Example: For the `ajsentry` command, the prefix (`ajs`) is removed and the remainder of the name is recorded in upper case (`ENTRY`). | 7 to 11 |
| *user-type* | The type of the user (`ADMIN` or `USER`) who performed the operation is output.<br>• `ADMIN`<br>  A user who is a member of the Administrators group or has superuser privileges<br>• `USER`<br>  A general user | 4 or 5 |
| *requesting-host-IP-address* | The IP address of the host used to perform the operation is output.<br>This IP address is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command. | 7 to 15 |

| Item | Description | Length (bytes) |
|---|---|---|
| *requesting-source-identification* | The information for identifying the source requesting the operation is output. This information is output only if the user performed the operation from JP1/AJS3 - View or JP1/AJS3 - Definition Assistant, or if the user remotely executed the command.<br>• `JP1/AJS2-View`<br> Indicates that the operation was performed from JP1/AJS3 - View.<br>• `JP1/AJS2-DA (IN =` *export-source-file-name*`,`<br> `OUT =` *export-execution-result-file-name*`)`<br>• `REMOTE`<br> Indicates that the user remotely executed the command or that a remote jobnet executed the command.<br>If the length of the information exceeds 100 bytes, only 100 bytes are output. | 1 to 100 |
| *option* | The options specified in the executed command are output. | 1 to 500 |
| *unit-name* | 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-70:* 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 | -- | -- | -- |

| Log entry type | Log entry name | Associated message ID | Associated JP1 event | Command name | Operation from JP1/AJS3 - View | API |
|---|---|---|---|---|---|---|
| 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 | -- | -- | -- |
| J103 | Queueless job ended abnormally | KAVS0253-E | None | -- | -- | -- |
| J104 | Queueless job ended with warning | KAVS0254-W | None | -- | -- | -- |
| J106 | Submission request accepted | KAVS1984-I | None | -- | -- | -- |

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 $\triangle$ 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.

A101 $\triangle$ *date* $\triangle$ *time* $\triangle$ KAVS1801-I $\triangle$ *host-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-71:* 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.

A102 △ *date* △ *time* △ KAVS1802-I △ *host-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-72:*  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

C901 △ *date* △ *time* △ ajsqlalter △ *maximum-number-of-concurrently-executab le-jobs* △ *maximum-number-of-waiting-jobs* △ *user-mapping-cache-clear-option* △ *class-name* △ *logical-host-name*

### (b) ajsqlattach

C901 △ *date* △ *time* △ ajsqlattach △ *logical-host-name*

### (c) ajsqldetach

C901 △ *date* △ *time* △ ajsqldetach △ *logical-host-name* △ *forced-termination-s pecification*

### (d) ajsqlstop

C901 △ *date* △ *time* △ ajsqlstop △ *end-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-73:* Items specific to the Command Request Received log entry (queueless log)

| Item | Description | Length (bytes) |
|---|---|---|
| *logical-host-name* | The logical host name specified in the `-h` option is output. If the `-h` option is not specified in the command, a logical host name is not output. | 0 to 255 |
| *maximum-number-of-concurrently-executable-jobs* | The new maximum number of concurrently executable jobs is output as a decimal number. If no value is specified in the command, `-1` is output. | 1 to 4 |
| *maximum-number-of-waiting-jobs* | The new maximum number of waiting jobs is output as a decimal number. If no value is specified in the command, `-1` is recorded. | 1 to 6 |
| *user-mapping-cache-clear-option* | `0` or `1` is output. `0`: Clearing the cache is not specified. `1`: Clearing the cache is specified. | 1 |
| *class-name* | The target class name is output. If no class name is specified in the command, a name is not output. | 0 to 63 |
| *forced-termination-specification* | `0` or `1` is output. `0`: Forced termination is not specified. `1`: Forced termination is specified. | 1 |
| *end-mode* | `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.

J101 △ *date* △ *time* △ KAVS0251-I △ *manager-host-name* △ *scheduler-service-name*:*job-name*:*execution-ID* △ *agent-host-name*

Example of a log entry:

```
J101 Dec 15 17:14:01 KAVS0251-I hostA AJSROOT1:/group/net1/
job1:@A100 hostB
```

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The following table describes the items that are specific to this format.

*Table C-74:* Items specific to the Queueless Job Started log entry (queueless log)

| Item | Description | Length (bytes) |
|---|---|---|
| *manager-host-name* | The name of the manager host that requested execution of the queueless job is output. | 1 to 255 |
| *job-name* | The name of the queueless job that started is output in *scheduler-service-name*:*job-name*:*execution-ID* format. | 1 to 969 |
| *agent-host-name* | 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.

J102 △ *date* △ *time* △ KAVS0252-I △ *manager-host-name* △ *scheduler-service-name*:*job-name*:*execution-ID* △ *agent-host-name* △ *return-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-75:* Items specific to the Queueless Job Ended Normally log entry (queueless log)

| Item | Description | Length (bytes) |
|---|---|---|
| *manager-host-name* | The name of the manager host that requested execution of the queueless job is output. | 1 to 255 |
| *job-name* | The name of the queueless job that ended normally is output in *scheduler-service-name*:*job-name*:*execution-ID* format. | 1 to 969 |
| *agent-host-name* | The name of the agent host on which the queueless job ended normally is output. | 1 to 255 |
| *return-value* | 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.

J103 △ *date* △ *time* △ KAVS0253-E △ *manager-host-name* △ *scheduler-service-n*

*ame*:*job-name*:*execution-ID* △ *agent-host-name* △ *end-status* △ *return-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-76:* Items specific to the Queueless Job Ended Abnormally log entry (queueless log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *manager-host-name* | The name of the manager host that requested execution of the queueless job is output. | 1 to 255 |
| *job-name* | The name of the queueless job that ended abnormally is output in *scheduler-service-name*:*job-name*:*execution-ID* format. | 1 to 969 |
| *agent-host-name* | The name of the agent host on which the queueless job ended abnormally is output. | 1 to 255 |
| *return-value* | The return value of the queueless job that ended abnormally is output as a decimal number. | 1 to 10 |
| *end-status* | One of the following is output:<br>a: Ended abnormally<br>f: Failed to start<br>c: Killed<br>?: Unknown end status | 1 |

### *(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.

J104 △ *date* △ *time* △ KAVS0254-W △ *manager-host-name* △ *scheduler-service-n ame*:*job-name*:*execution-ID* △ *agent-host-name* △ *return-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.

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*Table C-77:* Items specific to the Queueless Job Ended with Warning log entry (queueless log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *manager-host-name* | The name of the manager host that requested execution of the queueless job is output. | 1 to 255 |
| *job-name* | The name of the queueless job that ended with a warning is output in *scheduler-service-name*:*job-name*:*execution-ID* format. | 1 to 969 |
| *agent-host-name* | The name of the agent host on which the queueless job ended with a warning is output. | 1 to 255 |
| *return-value* | 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.

J106 △ *date* △ *time* △ KAVS1984-I △ *manager-host-name* △ *scheduler-service-name*:*job-name*:*execution-ID* △ *agent-host-name*

Example of a log entry:

```
J106 Dec 15 12:21:03 KAVS1984-I hostA AJSROOT1:/group/net1/
job1:@A100 hostB 0
```

The following table describes the items that are specific to this format.

*Table C-78:* Items specific to the Submission Request Accepted log entry (queueless log)

| Item | Description | Length (bytes) |
|------|-------------|----------------|
| *manager-host-name* | The name of the manager host that requested execution of the queueless job is output. | 1 to 255 |
| *job-name* | The name of the queueless job for which a submission request was accepted is output in *scheduler-service-name*:*job-name*:*execution-ID* format. | 1 to 969 |
| *agent-host-name* | 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-79:*  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 | `ajschkstart` | -- | -- |
| A202 | JP1/AJS3 Check Manager service stopped | KAVS3403-I | None | `ajschkstop` | -- | -- |
| C901 | Command request received | -- | None | `ajschkdef` | -- | -- |
| A203 | JP1/AJS3 Check Agent service started | KAVS3406-I | None | `ajschkstart` | -- | -- |
| A204 | JP1/AJS3 Check Agent service stopped | KAVS3407-I | None | `ajschkstop` | -- | -- |

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.

A201 △ *date* △ *time* △ KAVS3402-I △ *name-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-80:*  Item specific to the JP1/AJS3 Check Manager Service Started log entry

| Item | Description | Length (bytes) |
|---|---|---|
| *name-of-host-on-which-service-started* | 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.

A202 △ *date* △ *time* △ `KAVS3403-I` △ *name-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-81:* Item specific to the JP1/AJS3 Check Manager Service Stopped log entry

| Item | Description | Length (bytes) |
|---|---|---|
| *name-of-host-on-which-service-stopped* | 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.

C901 △ *date* △ *time* △ *command-execution-type* △ *check-item* △ *registered-user-name* △ *output-file-name* △ *full-unit-name*

Example of a log entry:

```
C901 Dec 15 13:30:18 START O jp1admin C:\Program
Files\HITACHI\JP1AJS2\log\ajscheckfile.txt net1
```

The following table describes the items that are specific to this format.

*Table C-82:* Items specific to the Command Request Received log entry

| Item | Description | Length (bytes) |
|---|---|---|
| *command-execution-type* | 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 |
| *check-item* | The check item options specified in the command are output (the options are `O`, `M`, `P`, `H`, `U`, `D`, and `A`). | 1 to 7 |
| *registered-user-name* | The registered user name specified in the `-u` option is output. | 1 to 31 |
| *output-file-name* | The output file name specified in the `-o` option is output. | 1 to 255 |
| *full-unit-name* | 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 △ *date* △ *time* △ KAVS3406-I △ *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-83:* Item specific to the JP1/AJS3 Check Agent Service Started log entry

| Item | Description | Length (bytes) |
|---|---|---|
| *name-of-host-on-which-service-started* | 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 △ *date* △ *time* △ KAVS3407-I △ *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-84:* Item specific to the JP1/AJS3 Check Agent Service Stopped log entry

| Item | Description | Length (bytes) |
|---|---|---|
| *name-of-host-on-which-service-stopped* | The name of the host on which the service stopped is output. | 1 to 255 |

# 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
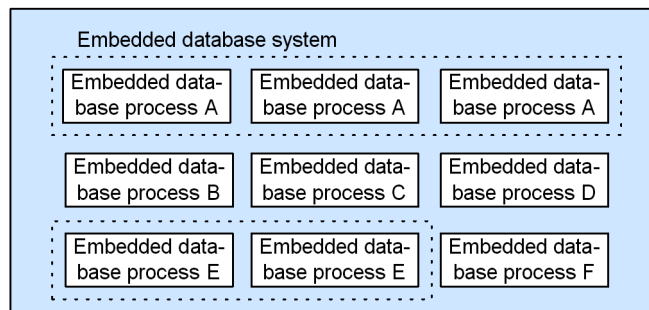


In this manual, the *embedded database system* might also be called *embedded database server* or, simply, *embedded database*. When a single embedded database process is explained, the term *embedded database process* is used to clarify that a process is meant.

## 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 UNIX, when the environment for the embedded database system is set up, the pdprcd process starts, and manages all embedded database processes. Regardless of the status of the embedded database system, the pdprcd process remains resident on

the OS until the setup of the embedded database system environment is removed.

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.

### (b) Processes existing on the OS while the embedded database system is operating

When the embedded database system is started, the pdprcd 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 | | | |
|---|---|---|---|---|
| pdsds | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdlogswd | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pd_buf_dfw | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdlogd | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdtrnrvd | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdtrnd | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdscdd | ○ → ─ | ○ → ▼ | ○ → ▼ | ○ → ─ |
| pdstsd | ○ → ─ | ○ → ▼ | ○ → × | ○ → ─ |
| 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 pdstsd 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 `init` OS process.

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 (`ajsembdbstop` 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
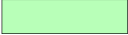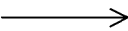
## D.3 Embedded database system

The following figure shows the status transitions of the embedded database system.

*Figure D-3:* Status transitions of the embedded database system
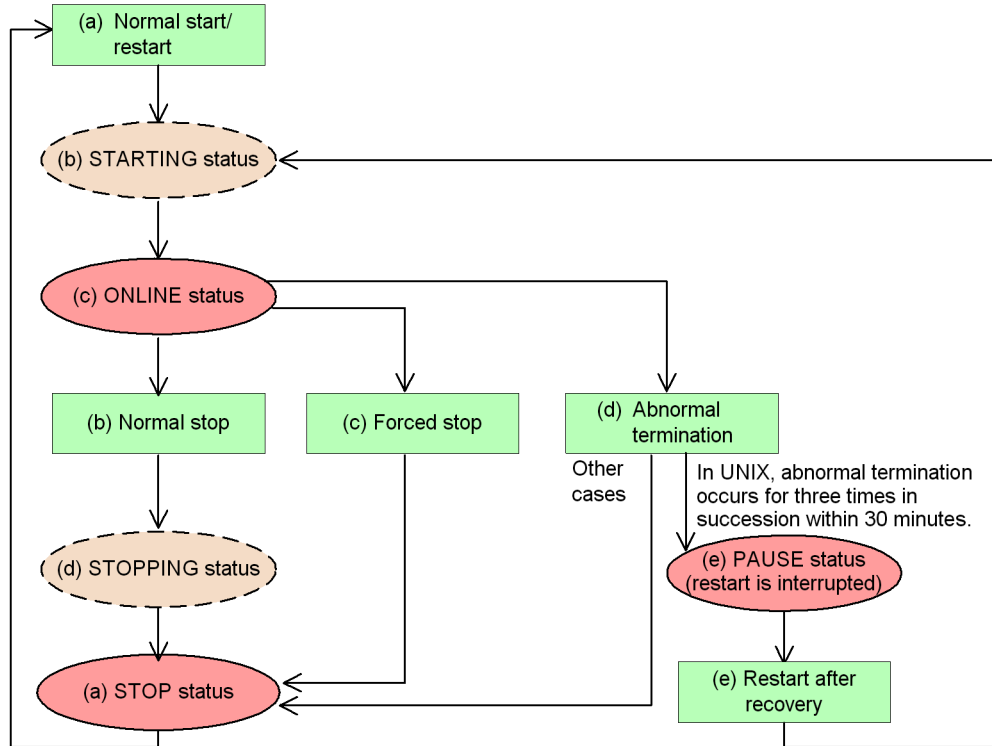
For details about the permanent and transitional statuses of the embedded database system in the figure, see *(1) Embedded database system statuses*. For details about the events that occur in the embedded database system in the figure, see *(2) Events that occur in the embedded database system*.

### (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 pdprcd 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 09-00

The following lists the revisions in 09-00 for each program.

### *(1) JP1/AJS3 - Manager*

- The standard database of JP1/AJS3 is now an embedded database.

- Functions related to an embedded database have been changed as follows:

  - The sizes of the large-scale, medium-scale, and small-scale database models have been changed.

  - The database area auto-increment function and the system log auto-increment function have been added.

  - The system log is no longer used.

  - The functions of the commands used to control an embedded database have been enhanced.

- The ISAM database is now used only for QUEUE jobs and submit jobs.

- An agent management function has been added for specifying a logical execution agent name as the destination host for a job or jobnet. Previously, users could only specify execution hosts by their real names.

- Jobs that are in the *Now queuing* status when the service is stopped are now returned to the *Wait for prev. to end* status when the service restarts (in hot-start mode), before being resubmitted.

- A jobnet release function has been added for replacing the definition of a jobnet that is registered for execution with another definition.

- The job execution control manager process (jpqman) and event/action control manager process (jpomanager) can now be started on a scheduler service basis.

- A scheduler log file can now be output for an individual scheduler service or host.

- The following functions have been enhanced:

  - The method by which the number of logs to keep is managed

  - The process by which monitored generations of jobnets with start conditions are established

  - The process by which execution generations when a start condition is established are held

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- A format specification has been added to the `ajsshow` command for outputting the standard output file name.

- The Manager Environment Settings dialog box is no longer provided. Instead, you can use the `jajs_config` command to set up the manager environment.

- A function has been added to support end delay monitoring based on how long a job takes to execute.

- The jobnet connector functionality has been enhanced to enable control of the execution order of root jobnets managed by different scheduler services.

- The definition pre-check has been enhanced so that if an invalid execution order is found in the units of the jobnet being checked, the names of the units are output to the check results file.

- The file permission check performed at execution of a Unix job has been enhanced to include checks of the access control list and secondary group settings as well as file permissions.

- A function has been added that enables event jobs to continue executing even if the JP1/AJS3 service stops on the execution host.

- A function has been added for exporting and importing the registration statuses of jobnets as registered execution-schedule information.

- Linkage with message queues on UNIX hosts (TP1/LiNK, TP1/Message Queue, MQSeries) is no longer supported.

- Windows Server 2008 has been added as platforms supported by JP1/AJS3 - Manager.

- A unit called a jobnet connector which controls the execution order of root jobnets has been added.

- An option has been added to output a detailed history of user operations, such as changes to jobnet definitions, to the scheduler log.

- The `ajslogprint` command for extracting log entries from the scheduler log has been added.

### (2) JP1/AJS3 - Agent

- The Agent Environment Settings dialog box is no longer provided. Instead, you can use the `jajs_config` command to set up the agent environment.

- Linkage with a message queue system is no longer supported.

- The 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.

## E.2 Revisions in 08-00

The following lists the revisions in 08-00 for each program.

### (1) JP1/AJS2 - Manager

- The recommended values for the environment settings are now set during installation and setup.

- A Monitoring Files job can now monitor files larger than 2 gigabytes (large files).

- The `ajsstatus` command can now output the connection status of JP1/AJS2 - View.

- The following commands used to control an embedded database have been added:

    - `ajsembdbaddarea` command (expands a database area in an embedded database)

    - `ajsembdbaddlog` command (expands a log area in an embedded database)

    - `ajsembdbcancel` command (cancels execution of a command

          manipulating an embedded database)

- `ajsembdboplog` command (manipulates embedded database logs)

- `ajsembdbreclaim` command (maintains an embedded database)

- `ajsembdbrorg` command (unloads and reloads an embedded database )

- `ajsembdbrstr` command (backs up and restores an embedded database)

- `ajsembdbstart` command (starts an embedded database)

- `ajsembdbstatus` command (monitors an embedded database )

- `ajsembdbstop` command (stops an embedded database)

- `ajsembdbunset` command (removes the setup of an embedded database)

With support of the `ajsembdbreclaim` command, the time required to reclaim free pages has been reduced.

- JP1/Performance Management - Agent Option for JP1/AJS2 can now be linked with JP1/AJS2 to analyze the operating status.

- The `jajs_start` command and the `jajs_start.cluster` command can now check whether a process has already been started when JP1/AJS2 is started. (UNIX only)

### *(2) JP1/AJS2 - Agent*

- The recommended values for the environment settings are now set during installation and setup.

- A Monitoring Files job can now monitor files larger than 2 gigabytes (large files).

### *(3) JP1/AJS2 - View*

- Icons have been changed.

## E.3  Revisions in 07-50

### *(1) JP1/AJS2 - Manager*

- Macro variables can now be used during registration for execution to specify information to be passed.

- Judgment jobs can now perform variable judgment.

- A function has been added that suppresses jobnet executions that follow an abnormally terminated jobnet and that will be started when their start conditions are satisfied.

- A definition pre-check function has been added for conducting a final check before starting production in the production environment after the unit definitions are migrated from the development environment.

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- The `jpomanevreset` command has been added for deleting data accumulated in the event action manager if a large amount of unprocessed data accumulated in the event action manager has caused delay. To identify the start conditions and agents that have caused this problem, the `jpomanevshow` command has also been added for displaying information about agents that frequently send data to the manager and the start conditions.

- A function that alleviates consumption of the Desktop heap has been added. (Windows only)

- A function has been added for specifying the maximum wait time for the scheduler service to connect to a database.

- Messages that were output to only the integrated trace log can now be output to syslog also. (UNIX only)

- The following functions have been added to the data collection tool:

    - Specifying a logical host name

    - Filtering the data to be collected

    - Adding types of data that can be collected

- Descriptions of messages have been improved.

- An urgent command has been added that can be executed if an error occurs.

- A function has been added that places limits on, for example, the size of files that can be received, to prevent a part of job processing from affecting the entire system operation.

- A function has been added that performs a synchronized write when updating event job information or the wait information file.

- The monitoring interval for linkage with MQ Series can now be specified in seconds.

- If a TCP/IP connection error occurs, the retry interval and count can now be changed.

- The policy to determine the agent hosts to which a job will be dispatched can now be specified.

- All the detailed processes of the event action function can now be stopped to terminate the agent process for the event action function if any of the detailed processes have terminated upon receiving a signal.

- Microsoft(R) Visual C++ .NET Version 2003 is now supported as a compiler for the provided code functions.

- The `ajsshow` command can now display the hold attribute of a jobnet or job even when the jobnet or job has already terminated.

## *(2) JP1/AJS2 - Agent*

- A definition pre-check function has been added for conducting a final check before starting production in the production environment after the unit definitions are migrated from the development environment.

- The following functions have been added to the data collection tool:

  - Specifying a logical host name

  - Filtering the data to be collected

  - Adding types of data that can be collected

- Descriptions of messages have been improved.

- The monitoring interval for linkage with MQ Series can now be specified in seconds.

- All the detailed processes of the event action function can now be stopped to terminate the agent process for the event action function if any of the detailed processes have terminated upon receiving a signal.

- A function has been added that performs a synchronized write when updating event job information or the wait information file.

## *(3) JP1/AJS2 - View*

- Macro variables can now be used during registration for execution to specify information to be passed.

- Judgment jobs can now perform variable judgment.

- A function has been added that suppresses the jobnet executions that follow an abnormally terminated jobnet and that will be started when their start conditions are satisfied.

- The **Add**, **Change Time**, **Execute Immediately**, and **Release Change** options have been added to the JP1/AJS2 - View window.

- The **Paste (Extension)** menu command has been added for copying units and relationship lines at the same time.

- Relationship lines can now be drawn from multiple units to a single job network element.

- When opening the Jobnet Monitor window of JP1/AJS2 - View from JP1/AJS2 Console View, if there is already an activated JP1/AJS2 - View, the window can now be opened in JP1/AJS2 - View.

- The following functions have been added to the data collection tool:

  - Specifying a logical host name

- Filtering the data to be collected

- Adding types of data that can be collected

- Descriptions of messages have been improved.

- The maximum log file size for JP1/AJS2 - View has been increased.

- The maximum log file size for JP1/AJS2 Console View has been increased.

- In JP1/AJS2 - View, log information that previously was output many times in small units can now be output at one time.

- In JP1/AJS2 Console View, log information that previously was output many times in small units can now be output at one time.

- In the Windows version of JP1/AJS2 - View, **Help** has been added to the **Start** menu.

## E.4  Revisions in 07-00

Version 07-00 features the addition of a new program, JP1/AJS2 - Advanced Manager, to enable the use of an embedded database (HiRDB) in a JP1/AJS2 scheduler database.

This section explains the changes in each version from 06-71 to 07-00, on a program-by-program basis.

### (1)  About JP1/AJS2 - Manager

- A function was provided to temporarily compress JP1/AJS2 and reconfigure the ISAM database (scheduler database and job execution environment database) without stopping active applications.

- ISAM databases can now be reconfigured in parallel.

- The number of scheduler services that can be added has been changed from 9 to 20.

- An option was added for outputting the execution timings of reference commands, such as `ajsshow` and the history of service processing requests from operation commands, as the operation log to the scheduler log.

- The number of logs to keep for a jobnet has been changed from 99 to 999.

- For a cold start of JP1/AJS2, the job execution environment database is deleted so that the startup time of JP1/AJS2 becomes shorter.

- A function is now supported for validating the user profile information in the environment setup for job execution control.

- By setting the number of days that job information is held to 0 days, jobs that terminate abnormally can now be handled by changing the save time.

- The JP1/AJS2 job information deletion can now be suppressed.

- Any event job can now be used in a DNS environment (host name in the FQDN format).

- Event job reception information can now be inherited as macro variables as the parameters of standard jobs and action jobs without having to pay attention to double quotation marks in the inherited information.

- The extended regular expression supported by JP1/Base can now be used in Receive event job monitoring jobs, Monitoring log files jobs, and Monitoring event log jobs according to the JP1/Base settings.

- A function to execute queueless jobs is now supported.

### (2) About JP1/AJS2 - Agent

- Event job reception information can now be inherited as macro variables of the parameters of standard jobs and action jobs without being aware of double quotation marks in the inherited information.

- A function for executing queueless jobs was supported.

- When JP1/AJS2 - Agent starts, it no longer accesses the authentication server (07-00-/C or later).

### (3) About JP1/AJS2 - View

- A user profile can now be used to set the JP1/AJS2 - View environment.

- A line feed character can now be inserted at any point in a unit name displayed in the map area of the Jobnet Editor and Jobnet Monitor windows.

- The default values in the dialog box can now be changed.

- Display items (columns) in the following locations can now be selected.

  - List area in the JP1/AJS2 - View window

  - Execution result list in the Daily Schedule window

  - Execution result list in the Monthly Schedule window

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# F. Changes in 3020-3-S08-04(E)

The following table list the changes in this manual (3020-3-S08-04(E)).

*Table F-1:* Changes in 3020-3-S08-04(E)

| No. | Location | Changes |
|---|---|---|
| 1 | All | Windows 7 has been added as an OS supported by JP1/AJS3 - View. |
| 2 | *1.2.4(1)* | The description of the default values for `%ALLUSERSPROFILE%` has been changed. |
| 3 | *1.2.4(1)(2)* | Agent management control related logs have been added. |

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# 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*.

**abnormal threshold**

> A value that is compared with a job's return code to evaluate whether the job ended normally or abnormally.

**action job**

> A job that sends email, or sends events reporting the system status to JP1/ IM or the HP NNM.

**agent host**

> A host that executes jobs on request from a manager host. JP1/AJS3 - Agent must be installed on the agent host, or since JP1/AJS3 - Manager also provides JP1/AJS3 - Agent functionality, JP1/AJS3 - Manager might be installed on the agent host.
>
> The agent host executes the job on receipt of a job request from the manager host. At completion of the job, the agent host receives the execution result (return value) of the executable file and forwards it to the manager host.

**AJS3 unit monitored object**

> An object for monitoring the status of root jobnets in JP1/AJS3. By defining the monitoring conditions in this object, you can then switch to monitoring mode and monitor the root jobnets.

**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.

**backup box**

> A directory or a folder for storing backup files.

**backup file**

A file containing the units defined in JP1/AJS3.

**base day**

A date specified as the starting day of the month in the calendar information.

**base time**

The time that marks when a day ends and the next day begins in a JP1/AJS3 system. For example, if 8:00 a.m. is set as the base time, the previous day is regarded as lasting until 7:59 a.m.

**calendar information**

Information about open days and closed days for jobnet execution. You can define calendar information separately for each job group. The calendar information specifies the days on which jobnets in the job group can and cannot be executed. (When the processing cycle falls on a closed day, the jobnet can be executed on another day if a substitute schedule is defined.) For open days, you can specify the base day, base month, and base time.

**closed day**

A day on which jobnets are not executed. However, if **Execute without shift** is specified, the jobnet will be executed on that closed day.

**cluster system**

A system configured as multiple linked server systems, designed to continue operation even if one system fails. If a failure occurs in the server currently executing applications (primary node), the other standby server (secondary node) takes over and continues processing the applications. Therefore, a cluster system is also referred to as a *node switching system*.

The term *cluster system* can also mean load balancing based on parallel processing. In this manual, however, *cluster system* refers only to node-switching functionality for preventing interruption of application processing.

**common user profile**

A file containing the environment settings for JP1/AJS3 - View, accessible to all JP1 users. The system administrator saves the common user profile in JP1/AJS3 - Manager. JP1 users can download this file, enabling the same JP1/AJS3 - View environment to be set for all JP1 users.

A common user profile is useful when a large number of JP1 users will be using JP1/AJS3 - View in the same environment.

**compatible ISAM configuration**

A system configuration in which JP1/AJS3 information is managed exclusively by the

ISAM database.

This configuration is offered to help users migrate from JP1/AJS2 version 8 or earlier. It can restrict to the same degree as in previous versions, the use of resources such as hard disk and memory. However, from version 9 only a subset of the new features offered is provided.

**correlation ID**

Information for identifying sent and received messages. The correlation ID is received in the character code set specified by the sender.

**custom job**

A predefined job for executing a task with a specific purpose. JP1/AJS3 provides standard custom jobs such as file transfer and job requests to a mainframe. In addition, you can register your own frequently used jobs as custom jobs. When registering a custom job, you can represent it by creating an icon with a special shape and design, and you can create a dialog box for entering job information.

To use a custom job, the requisite program for the job must be installed.

**Daily Schedule window**

A window that displays each day's execution schedules, execution status, and execution results.

**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.

**embedded database**

The standard database of JP1/AJS3. An embedded database offers high reliability, and is well suited to large-scale systems that handle large quantities of information.

**embedded database administrator (database administrator)**

A user authorized to assign and cancel various permissions for an embedded database (a user with DBA permissions).

Database administrators are managed within an embedded database.

**embedded database operation commands**

A generic term for commands whose name begins with `ajsembdb`.

**embedded database service**

A service that provides the environment for using the embedded database in Windows. This service must be started before you can use the embedded database. The name of the embedded database service is `JP1/AJS3 Database` *setup-identifier*.

**embedded database system administrator**

The owner of an embedded database practical directory and embedded database file system areas (data area and system area). The embedded database system administrator can execute commands for an embedded database.

The OS manages embedded database system administrators.

**end with warning**

A status indicating that a jobnet finished, but some of the processes defined in the jobnet were executed incorrectly. The jobnet continues to the end without interruption.

This ending method is used when an error is not so serious as to terminate the jobnet.

**environment setting parameter**

A parameter for defining the information required to operate JP1/AJS3, written in an environment settings file. With these parameters, you can specify the directory in which information about JP1/AJS3 units is stored, whether to output syslog messages, and other such preferences.

**environment settings file**

A file containing the settings required to operate JP1/AJS3, such as the scheduler service environment and job execution environment.

**event**

A specific event, such as email reception or file update, that occurred in the system. Events can be used to start a job or jobnet, and can be monitored using an event job.

**event job**

A job that monitors specific events occurring in the system. When an event job is initiated, it starts monitoring for file updates, incoming messages, or other specified events.

**execution agent**

The logical name of an agent host that executes jobs or jobnets. Based on the agent information defined in the manager host, the manager maps the execution agent specified in the job or jobnet to the physical host name of the agent host, and distributes the job or jobnet accordingly.

**execution agent group**

> A group of execution agents configured to realize load distribution. The manager distributes jobs among the execution agents according to their assigned priorities.

**execution ID**

> A number assigned to an execution schedule of the uppermost jobnet.

**execution-locked resource**

> A means of preventing multiple jobs from executing at the same time, by specifying the same resource name (execution-locked resource name) for each job.

**fixed execution registration**

> A method of registering a jobnet so that it starts and runs at a predetermined date and time calculated by the system from schedule definitions.

**fixed schedule**

> A schedule set by absolute times when a jobnet is registered for fixed execution.

**HP NNM**

> A suite of integrated network management tools from Hewlett-Packard Co. for managing network configuration, performance, and failures.

**immediate execution registration**

> A method for starting and processing a jobnet immediately after registering it for execution.

**ISAM database**

> The database that manages the execution environment for QUEUE jobs and submit jobs. Data is indexed using the Indexed Sequential Access Method (ISAM) and is managed in the database. The ISAM database is provided as standard with JP1/Base.

**job**

> A group of commands, shell scripts, or Windows executable files.

**job execution environment**

> A job execution environment consists of a JP1/AJS3 manager and agents.

> The job execution environment for the manager is used to manage the definition information for execution agents (such as the maximum number of concurrently executable jobs and job transfer restriction status), job distribution method, and job execution results.

> The job execution environment for the agent is used mainly to manage how a job is executed.

These job execution environments are managed by using a database and environment setting parameters.

When QUEUE jobs and submitted jobs are used, the ISAM database and environment setting parameters are used as the job execution environment for the QUEUE jobs and submitted jobs.

Note that queueless jobs are managed in the queueless job execution environment.

**job group**

A folder for classifying and managing jobnets.

**job network element**

The generic term for these elements is *unit*.

**jobnet**

A set of jobs associated in execution order. When a jobnet is executed, the jobs in the jobnet are automatically executed in their predetermined order.

**jobnet connector**

A unit for controlling the execution order of root jobnets. A jobnet connector establishes connections between root jobnets and controls their execution order by having connected generations wait for their counterparts to start or finish.

**Jobnet Editor window**

A window in which you can create new jobnets or edit existing jobnets.

**Jobnet Monitor window**

A window that displays the execution status or detailed execution results of jobnets or jobs. You can manipulate jobnets or jobs in this window.

**JP1 event**

Event information that is reported to JP1/Base when an event occurs in the system. JP1 events are reported to other systems via JP1/Base.

**JP1 permission level**

A name that indicates the operations that a JP1 user is allowed to perform on management targets (resources) defined in JP1/AJS3, including applications and events. Use JP1/Base to define JP1 permission levels.

**JP1 resource group**

A name given to a specific JP1/AJS3 unit for controlling access by JP1 users to that unit.

**JP1 user**

> A user designation for using JP1/AJS3 or JP1/IM - Manager. Each JP1 user is registered in the authentication server, which controls the user's access to management targets (resources).

**JP1/AJS3 - Definition Assistant**

> This program allows you to register a large amount of JP1/AJS3 definition information edited using an Excel template into a manager host, or to retrieve JP1/AJS3 definition information from a manager host to an Excel template. The Excel templates provided by JP1/AJS3 - Definition Assistant are called *definition management templates*. With a definition management template in the spreadsheet format, you can enter or edit definition information efficiently by using automatic filling, automatic filtering, and other Excel functionalities.

**JP1/AJS3 Console Agent**

> A JP1/AJS3 component that regularly monitors the status of objects (root jobnets) on the local host, specified in JP1/AJS3 Console Manager. Any change in status is notified to JP1/AJS3 Console Manager.

**JP1/AJS3 Console Manager**

> A JP1/AJS3 component that stores definitions about monitored objects defined in JP1/AJS3 Console View, and gets status information about monitored objects by issuing requests to JP1/AJS3 Console Agent.

**JP1/AJS3 Console View**

> A JP1/AJS3 component that allows you to define objects to be monitored, using a graphical user interface. The definitions are stored in JP1/AJS3 Console Manager. Using JP1/AJS3 Console View, you can view and monitor the status of target objects notified by JP1/AJS3 Console Agent to JP1/AJS3 Console Manager. You need to log in to JP1/AJS3 Console Manager before using JP1/AJS3 Console View.

**JP1/AJS3 for Enterprise Applications**

> A program that allows you to control jobs in an R/3 system from another system. You can submit, delete, and monitor R/3 jobs.

> R/3 jobs can be executed automatically from JP1/AJS3 if you register them as custom jobs for JP1/AJS3 for Enterprise Applications when you define a JP1/AJS3 jobnet.

> JP1/AJS3 for Enterprise Applications is the successor to JP1/Application Manager for R/3.

**JP1/AJS2 for Oracle E-Business Suite**

> A program that allows you to access Oracle E-Business Suite from another system and to request concurrent execution of applications.

Requests for concurrent execution can be issued from JP1/AJS3 if you register the requests as custom jobs for JP1/AJS2 for Oracle E-Business Suite when you define a JP1/AJS3 jobnet.

Using JP1/AJS3's schedule definition facility, you can specify the processing cycles and the execution dates of concurrent requests.

JP1/AJS2 for Oracle E-Business Suite is the successor to JP1/Application Manager for Oracle E-Business Suite.

### 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/FTP

A program for performing file transfer tasks efficiently, including file transfer/reception linked to application execution, scheduled file transfer, and automated program execution following file reception. JP1/FTP supports monitoring of transfer status, enhancing file transfer reliability.

### JP1/IM

A program for centrally monitoring a distributed system. Using the windows in JP1/IM - View, the system administrator can monitor JP1 events, which provide information about job execution status or problems in the distributed system.

### JP1/NQSEXEC

A program for executing routine batch processing on a distributed system and for running batch jobs efficiently.

### JP1/OJE for Midrange Computer

A program for submitting batch jobs to AS/400 from a Windows or UNIX host, or for submitting batch jobs from AS/400 to a Windows or UNIX host.

### JP1/OJE for VOS3

A program that links with JP1/AJS3 for executing and monitoring batch jobs between a Windows or UNIX system and a mainframe (VOS3).

### JP1/Script

A program for creating and executing scripts (batch files) that control jobs on Windows. Job operation can be automated by linking JP1/Script with JP1/AJS3.

**JP1/Software Distribution**

A general term for a system that distributes software and manages clients using batch operations over a network.

By linking with JP1/AJS3 using the JP1/Software Distribution command interface, the user can automate software distribution and other tasks.

**judgment job**

A job that executes a dependent job or jobnet 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 defined for a succeeding job for referencing information received in an event. By defining a macro variable name in an event job, you can pass the event information to a succeeding job or jobnet.

Specify macro variables in the form `?AJS2xxxxxxxxx?`:*name-of-information-to-pass*.

**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.

**physical host**

An environment unique to each of the servers (nodes) in a cluster system. When a secondary node takes over from the primary node, the environment of the physical host remains unchanged and is not inherited by the other server.

**planned execution registration**

A method of registering a jobnet so that it starts and executes according to schedule definitions.

**planning group**

A unit for switching execution among multiple root jobnets in a planned manner. Directly under a planning group, you can create a number of root jobnets, each defined differently and with differing execution schedules. This enables the root jobnets to be executed automatically in turn, according to the set schedules.

**preceding job**

A job executed immediately before another job or jobnet.

**preceding jobnet**

A jobnet executed immediately before another job or jobnet.

**processing cycle**

> The interval between one execution start date and the next execution start date of a jobnet. By defining a processing cycle, you can execute a jobnet at regular intervals.

**queue**

> An area for temporarily keeping jobs registered for execution. Jobs are submitted to the queue in order of registration, and are sequentially transferred for execution to the agent connected to that queue.

> The queue controls the number of jobs that the agent executes concurrently, thereby preventing any degradation in performance caused by a large number of jobs being executed at the same time.

**queueless job**

> A job transferred directly from the manager to an agent host for execution, without using a queue. Queueless jobs simplify processing because they are not managed in a queue by the job execution control. As a result, they offer better performance than ordinary queued jobs, allowing more jobs to be executed within a given period of time. However, job execution control functions such as execution agent names and execution agent groups are not available with queueless jobs.

> You can define PC jobs and Unix jobs in a jobnet as queueless jobs by specifying **Queueless Agent** as the execution service.

> Unless otherwise indicated, the descriptions in this manual apply to jobs for which **Standard** is specified as the execution service.

**queueless job execution environment**

> A queueless job execution environment consists of execution environments for the JP1/AJS3 manager (scheduler service and queueless file transfer service) and queueless agents (queueless agent services). The execution of queueless jobs is managed by using the environment setting parameters for the job execution environment.

> Note that the job execution environment must be set up by using the `ajsqlsetup` command before environment setting parameters are set.

**queuing job**

> A job submitted directly to a queue and waiting to be executed.

**recovery job**

> A job to be executed when a job or jobnet ends abnormally.

**recovery jobnet**

> A jobnet to be executed when a job or jobnet ends abnormally.

**schedule by days from start**

> A schedule defined for recalculating the next scheduled execution date, using as the base day the next scheduled execution date determined from the execution start time, processing cycle, and substitute schedule for closed days.

**schedule information file**

> A text file containing schedule information parameters, entered by command when setting fixed execution registration for a jobnet.

**schedule rule**

> Jobnet information such as execution start time and processing cycle. Up to 144 schedule rules can be defined for a single jobnet.

**scheduler service**

> A service that manages the schedules for jobnet execution, and executes processes according to those schedules. Each scheduler service manages all the units in the root job group whose name matches the scheduler service name.

> Multiple scheduler services can be activated in a single manager. This allows root job groups to be managed individually. For example, if you start a separate scheduler service for each application, each scheduler service can run its specific application (jobnet and jobs) in parallel, independently of the other scheduler services.

**shift days**

> A set number of days within which to determine a substitute date when the next execution date falls on a closed day.

**shutdown status**

> A situation in which a jobnet fails to start or end due to an error, and the execution status or the next scheduled execution cannot be verified. If this happens, you must cancel and then re-register the jobnet for execution.

**SMTP (Simple Mail Transfer Protocol)**

> A protocol, generally used in UNIX networks, for transferring ASCII data by TCP/IP between heterogeneous systems.

**standard configuration**

> A system configuration in which JP1/AJS3 information is managed by the embedded database.

> Unless otherwise indicated, the descriptions in this manual relate to a system in a standard configuration.

> Note that the ISAM database is still used to store some information related to QUEUE jobs and submit jobs.

**start condition**

A definition of the conditions under which a jobnet starts when the jobnet is driven by a specific event.

**subject**

A character string written in the subject line of an email message. Non-ASCII characters are supported in JP1/AJS3, but might not be supported in connected email systems.

**submit**

To request the system to execute a job.

**submitted job**

A standard job registered using the `jpqjobsub` command.

**substitute schedule**

A means of executing a jobnet on a different day when the next execution date, determined from the jobnet schedule, falls on a closed day.

**succeeding job**

A job executed immediately after another job or jobnet.

**succeeding jobnet**

A jobnet executed immediately after another job or jobnet.

**suspend**

To suppress the execution of the root jobnet and lower units.

When you change a definition under a root jobnet that has been registered for execution, you should suspend the root jobnet to prevent erroneous operation such as the execution control processing running with the old definition. By suspending the root jobnet, the redefinition processing can be synchronized with the execution control processing.

**threshold**

A value for evaluating the termination status of a job. You can define an abnormal threshold and a warning threshold for each job.

**timeout period**

A time interval after which an executed job is forcibly terminated if there was no response from the job or if it failed to complete during the specified period.

**TP1/Server Base**

Software for distributing transaction processing and server processing in an open

system. JP1/AJS2 uses TP1/Server Base transaction processing.

**unit**

A generic term for any job network element.

**unit definition parameter file**

A text file containing unit definition parameters, entered by command when defining the units.

**unit ID**

A unique number allocated to a unit.

**warning threshold**

A value for evaluating whether a job ended with a warning.

**Windows Messaging**

A facility that provides an interface for sending and receiving email. Using Windows Messaging, you can manage, access, and share a variety of information such as data received from an online service.

# Index

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