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# Job Management Partner 1/Integrated Management - Manager

# Command and Definition File Reference

**■ Restrictions**

**■ Edition history**

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# Preface

This manual describes the commands and definition files of Job Management Partner 1/Integrated Management - Manager and Job Management Partner 1/Integrated Management - View systems. In this manual, *Job Management Partner 1* is abbreviated as *JP1*, and *JP1/Integrated Management* is abbreviated as *JP1/IM*.

## Intended readers

This manual is intended for professionals who use JP1/IM to manage and operate infrastructures developed for administering open platform systems. More specifically, it is intended for system administrators, system development managers, and operators who wish to:

- Apply centralized monitoring of the events that occur in a system, and take appropriate action in response to those events.

- Implement centralized monitoring of the system by associating the status of the infrastructure used to manage the system with the events that occur in the system.

## Organization of this manual

This manual consists of the following chapters:

*1. Commands*

> Chapter 1 describes the syntax for the commands that can be used in JP1/Integrated Management.

*2. Definition Files*

> Chapter 2 describes the formats and syntax of the definition files for JP1/Integrated Management.

*3. JP1 Events*

> Chapter 3 describes the types and attributes of the JP1 events that are issued by JP1/Integrated Management.

*4. Lists of System-Monitoring Objects (for Central Scope)*

> Chapter 4 describes the system-monitoring objects that are provided by JP1/Integrated Management.

*5. Monitoring Tree Models (for Central Scope)*

> Chapter 5 describes the structures of monitoring trees that are created automatically.

## Related publications

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

*Manuals related to JP1/IM*

- *Job Management Partner 1/Integrated Management - Manager Quick Reference* (3020-3-R75(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 Messages* (3020-3-R81(E))

- *Job Management Partner 1/Integrated Management - Event Gateway for Network Node Manager i Description, User's Guide and Reference* (3020-3-R82(E))

- *Job Management Partner 1/Integrated Management - Rule Operation System Configuration and User's Guide* (3020-3-K10(E))

- *Job Management Partner 1/Integrated Management - Rule Operation GUI Reference* (3020-3-K11(E))

*Manuals related to 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))

## Conventions: Abbreviations

This manual uses the following abbreviations for Hitachi program products and other products:

| Abbreviation | | Full name or meaning |
|---|---|---|
| AIX | | AIX(R) 5L 5.2 |
| | | AIX(R) 5L 5.3 |
| | | AIX(R) 6.1 |
| Cosminexus | Cosminexus Application Server | uCosminexus Application Server Standard |
| | | uCosminexus Application Server Enterprise |
| | | uCosminexus Web Redirector |
| | | uCosminexus Service Platform |
| HNTRLib | | Hitachi Network Objectplaza Trace Library |
| HNTRLib2 | | Hitachi Network Objectplaza Trace Library 2 |
| HP-UX | HP-UX (IPF) | HP-UX 11i V2 (IPF) |
| | | HP-UX 11i V3 (IPF) |
| IE | Microsoft Internet Explorer | Microsoft(R) Internet Explorer(R) |
| | Windows Internet Explorer | Windows(R) Internet Explorer(R) |
| IIS | Internet Information Services | Microsoft(R) Internet Information Services 5.01 or later |
| JP1/AJS | JP1/AJS2 - Advanced Manager | Job Management Partner 1/Automatic Job Management System 2 - Advanced Manager |
| | JP1/AJS - Agent | Job Management Partner 1/Automatic Job Management System 2 - Agent |
| | | Job Management Partner 1/Automatic Job Management System 3 - Agent |
| | JP1/AJS - Manager | Job Management Partner 1/Automatic Job Management System 2 - Manager |
| | | Job Management Partner 1/Automatic Job Management System 3 - Manager |
| | JP1/AJS - View | Job Management Partner 1/Automatic Job Management System 2 - View |
| | | Job Management Partner 1/Automatic Job Management System 3 - View |

| Abbreviation | | Full name or meaning |
|---|---|---|
| JP1/AJS2 - Scenario Operation View | | Job Management Partner 1/Automatic Job Management System 2 - Scenario Operation View |
| JP1/AJS2 - View for Mainframe | | Job Management Partner 1/Automatic Job Management System 2 - View for Mainframe |
| JP1/Base | | Job Management Partner 1/Base |
| JP1/Cm2/ESA | | Job Management Partner 1/Cm2/Extensible SNMP Agent |
| | | Job Management Partner 1/Cm2/Extensible SNMP Agent for Extension Mib Runtime |
| JP1/FTP | | Job Management Partner 1/File Transmission Server/FTP |
| JP1/Integrated Management or JP1/IM | *Version 7 products:* | |
| | JP1/IM - Central Console or JP1/IM - CC | Job Management Partner 1/Integrated Manager - Central Console |
| | JP1/IM - Central Console Upgrade or JP1/IM - CC Upgrade | Job Management Partner 1/Integrated Manager - Central Console Upgrade |
| | JP1/IM - View | Job Management Partner 1/Integrated Manager - View |
| | *Version 8 products:* | |
| | JP1/IM - Manager | Job Management Partner 1/Integrated Management - Manager |
| | JP1/IM - Rule Operation or JP1/IM - RL[#] | Job Management Partner 1/Integrated Management - Rule Operation |
| | JP1/IM - View | Job Management Partner 1/Integrated Management - View |
| | *Version 9 products:* | |
| | JP1/IM - Event Gateway for Network Node Manager i or JP1/IM - EG for NNMi[#] | Job Management Partner 1/Integrated Management - Event Gateway for Network Node Manager i |
| | JP1/IM - Manager | Job Management Partner 1/Integrated Management - Manager |

| Abbreviation | | Full name or meaning |
|---|---|---|
| | JP1/IM - View | Job Management Partner 1/Integrated Management - View |
| JP1/PAM | JP1/PA - Adaptor | Job Management Partner 1/Performance Analysis - Adaptor |
| | | Job Management Partner 1/Performance Management - Analysis Adaptor |
| | JP1/PA - Manager | Job Management Partner 1/Performance Analysis - Manager |
| | | Job Management Partner 1/Performance Management - Analysis Manager |
| | JP1/PA - View | Job Management Partner 1/Performance Analysis - View |
| | | Job Management Partner 1/Performance Management - Analysis View |
| JP1/PFM | JP1/PFM - Agent | Group of agent products such as Job Management Partner 1/Performance Management - Agent for Platform |
| | JP1/PFM - Manager | Job Management Partner 1/Performance Management - Manager |
| | JP1/PFM - View | Job Management Partner 1/Performance Management - View |
| | JP1/PFM - Web Console | Job Management Partner 1/Performance Management - Web Console |
| JP1/SES | | Job Management Partner 1/System Event Service |
| JP1/Software Distribution | | Job Management Partner 1/Software Distribution Manager |
| | | Job Management Partner 1/Software Distribution SubManager |
| | | Job Management Partner 1/Software Distribution Client |
| NNM | HP NNM | HP Network Node Manager Software Version 6 or earlier |
| | | HP Network Node Manager Starter Edition Software Version 7.5 or earlier |

| Abbreviation | | Full name or meaning |
|---|---|---|
| NNMi | HP NNMi | HP Network Node Manager i Software v8.10 |
| Solaris | | Solaris 9 |
| | | Solaris 10 |
| VMware | | VMware(R) ESX 3.5 |
| Windows 2000 | | Microsoft(R) Windows(R) 2000 Advanced Server Operating System |
| | | Microsoft(R) Windows(R) 2000 Professional Operating System |
| | | Microsoft(R) Windows(R) 2000 Server Operating System |
| Windows Server 2003 | Windows Server 2003 | Microsoft(R) Windows Server(R) 2003, Enterprise Edition |
| | | Microsoft(R) Windows Server(R) 2003, Standard Edition |
| | Windows Server 2003 (IPF) | Microsoft(R) Windows Server(R) 2003, Enterprise Edition for Itanium-based Systems |
| | Windows Server 2003 (x64) | Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition |
| | | Microsoft(R) Windows Server(R) 2003, Standard x64 Edition |
| | Windows Server 2003 R2 | Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition |
| | | Microsoft(R) Windows Server(R) 2003 R2, Standard Edition |
| | Windows Server 2003 R2 (x64) | Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition |
| | | Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition |
| Windows Server 2008 | | Microsoft(R) Windows Server(R) 2008 Enterprise |
| | | Microsoft(R) Windows Server(R) 2008 Standard |
| Windows Server 2008 (IPF) | | Microsoft(R) Windows Server(R) 2008 for Itanium-based Systems |

| Abbreviation | Full name or meaning |
|---|---|
| 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 |

#: This manual includes descriptions of only those JP1/IM - Rule Operation and JP1/IM - Event Gateway for Network Node Manager i functions that relate to JP1/IM - Manager and JP1/IM - View.

- In this manual, *Windows 2000*, *Windows XP Professional*, *Windows Server 2003*, *Windows Vista*, *Windows Server 2008*, and *Windows Server 2008 (IPF)* are generally referred to collectively as *Windows*.

- In this manual, *HP-UX*, *Solaris*, and *AIX* are generally referred to collectively as *UNIX*.

This manual also uses the following abbreviations:

| Abbreviation | Full name or meaning |
|---|---|
| ASCII | American Standard Code for Information Interchange |
| CMT | Container-Managed Transaction |
| CRLF | Carriage Return/Line Feed |
| CSV | Comma Separated Value |
| DB | Database |
| DBMS | Database Management System |
| DNS | Domain Name System |
| FQDN | Fully Qualified Domain Name |
| GMT | Greenwich Mean Time |
| GUI | Graphical User Interface |
| HTML | Hyper Text Markup Language |
| HTTP | HyperText Transfer Protocol |
| IP | Internet Protocol |
| IPF | Itanium(R) Processor Family |

| Abbreviation | Full name or meaning |
|---|---|
| ISAM | Indexed Sequential Access Method |
| J2EE | Java$^{TM}$ 2 Platform Enterprise Edition |
| Java VM | Java$^{TM}$ Virtual Machine |
| JDBC | Java$^{TM}$ DataBase Connectivity |
| LAN | Local Area Network |
| NAT | Network Address Translator |
| NIC | Network Interface Card |
| NTP | Network Time Protocol |
| OTS | Object Transaction Service |
| POSIX | Portable Operating System Interface for UNIX |
| SFO | Session Fail Over |
| SNMP | Simple Network Management Protocol |
| TCP/IP | Transmission Control Protocol/Internet Protocol |
| TXT | Text |
| UAC | User Account Control |
| UCS | Universal Multiple-Octet Coded Character Set |
| UNC | Universal Naming Convention |
| URL | Uniform Resource Locator |
| UTC | Universal Time Coordinated |
| UTF | UCS Transformation Format |
| WAN | Wide Area Network |
| WWW | World Wide Web |

## Conventions: Diagrams

This manual uses the following conventions in diagrams:

- Computer (terminal)
- Computer
- Disk drive, file
- Screen
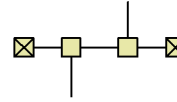
- WAN
- Network
- Communication channel
- Program
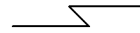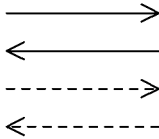
- Flow of control
- Flow of data
- Flow of process or task
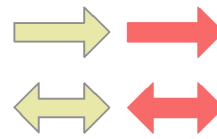
- Error

# 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, and 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 the 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. |

x

| Example font or symbol | Convention |
|---|---|
| [ ] | Square brackets enclose an item or set of items whose specification is optional.<br>If multiple items are enclosed, either omit them all or select one of them.<br>Example:<br>[A] means either nothing or A must be specified.<br>[B|C] means nothing, or B, or C must be specified. |
| \| | Only one of the options separated by a vertical bar can be specified at the same time.<br>Example:<br>A\|B\|C means A, or B, or C. |
| . . . | An ellipsis ( . . . ) indicates that the item or items enclosed in ( ) or [ ] immediately preceding the ellipsis may be specified as many times as necessary. |
| { } | One of the items or sets of items enclosed in curly brackets must be selected. Inside the curly brackets, each item or set of items is separated by a vertical bar (\|).<br>Example:<br>{A\|B\|C} means that A, or B, or C must be specified. |
| Δ | Indicates a space.<br>$\Delta_0$: Zero or more spaces (space can be omitted).<br>$\Delta_1$: One or more spaces (space cannot be omitted). |
| ▲ | Indicates a tab.<br>Example:<br>▲A means that a tab character precedes A. |

## Conventions: Installation folders for the Windows version of JP1/IM and JP1/Base

In this manual, the installation folders for the Windows versions of JP1/IM and JP1/Base are indicated as follows:

| Product name | Installation folder | Default installation folder[#] |
|---|---|---|
| JP1/IM - View | *View-path* | *system-drive*:\Program Files\HITACHI\JP1CoView |
| JP1/IM - Manager | *Manager-path* | *system-drive*:\Program Files\HITACHI\JP1IMM |
| | *Console-path* | *system-drive*:\Program Files\HITACHI\JP1Cons |
| | *Scope-path* | *system-drive*:\Program Files\HITACHI\JP1Scope |
| JP1/Base | *Base-path* | *system-drive*:\Program Files\HITACHI\JP1Base |

#: Denotes the installation folder for each product when a default installation is performed.

For Windows Server 2008 and Windows Vista, the *system-drive*:`\Program Files` part is determined at installation by an OS environment variable, and may therefore vary depending on the environment.

## 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: 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*.

## Administrator permissions

In this manual, *Administrator permissions* refers to the Administrator permissions for the local PC. Provided that the user has Administrator permissions for the local PC, operations are the same whether they are performed with a local user account, a domain user account, or in an Active Directory environment.

## Online manuals

JP1/IM provides an HTML version of this manual that can be viewed by using one of the following Web browsers:

- Microsoft Internet Explorer 6.0 or later

- Windows Internet Explorer 7 or later

The contents of the online manual and of this printed manual are identical.

To display the table of contents for this online manual:

- In JP1/IM - View, choose **Help** and then **Help Contents**. Alternatively, from the **Start** menu, choose **Programs**, **JP1_Integrated Management - View**, and then

**Help**.

*Note:*

- If you use the **Start** menu, the HTML manual may be displayed in an existing browser window, depending on the related setting in the OS.

# Contents

xvi

## 2. Definition Files                                                                                227

## 5.  Monitoring Tree Models (for Central Scope)                                              603

## Index                                                                                       609

**Chapter**

# 1. Commands

This chapter describes the syntax of the commands that are used in JP1/IM.

Format of command explanations
Lists of commands

# Format of command explanations

This section describes the format of the command explanations.

The description of a command consists of the items described below. Note that some of the items shown below may be omitted in some command explanations.

## Function

Describes the function of the command.

## Format

Describes the command's format.

## Execution permission

Describes the user permissions required in order to execute the command.

## Storage directory

Describes the command's storage location.

## Arguments

Describes the arguments of the command.

Note that arguments are case sensitive (except for the ON and OFF arguments, which are not case sensitive).

## Notes

Provides additional important information about the command.

## Return values

Describes the command's return values.

For details about the messages that may be displayed during command execution, see the manual *Job Management Partner 1/Integrated Management - Manager Messages*.

## Example

Provides an example of using the command.

## Example output

Provides an example of the output from execution of the command.

# Lists of commands

This section provides tables that list the commands that can be used in JP1/IM. Whether a command is supported in the Windows and UNIX environments is indicated in the tables by the following notations and notes:

Y: Supported

--: Not supported

#1: In Windows, a superuser means a user with Administrator permissions.

#2: This is a JP1/Base command (related to configuration definition and command execution) for the manager. For details about the command, see the chapter that describes commands in the *Job Management Partner 1/Base User's Guide*.

#3: In Windows Server 2008, you need Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console).

Following the tables below, the commands are presented and explained in alphabetical order.

## Commands related to startup, termination, and setup

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Sets up JP1/IM - Manager (JP1/IM - Central Console) | *jp1cc_setup (UNIX only)* | -- | Y | Superuser |
| Sets up JP1/IM - Manager (JP1/IM - Central Scope) | *jp1cs_setup (UNIX only)* | -- | Y | Superuser |
| Starts JP1/IM - Manager automatically | *jco_start (UNIX only)* | -- | Y | Superuser |
| Terminates JP1/IM - Manager automatically | *jco_stop (UNIX only)* | -- | Y | Superuser |
| Displays the status of JP1/IM - Manager processes | *jco_spmd_status* | Y | Y | Superuser[1] |
| Updates the status of JP1/IM - Manager processes | *jco_spmd_reload* | Y | Y | Superuser[1] |
| Specifies settings required for operation in a cluster system | *jp1cohasetup (Windows only)* | Y | -- | Superuser[1] |
| | *jp1cshasetup (Windows only)* | Y | -- | Superuser[1] |

3

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| | *jp1cc_setup_cluster (UNIX only)* | -- | Y | Superuser |
| | *jp1cs_setup_cluster (UNIX only)* | -- | Y | Superuser |
| Starts JP1/IM - Manager in a cluster system | *jco_start.cluster (UNIX only)* | -- | Y | Superuser |
| Terminates JP1/IM - Manager in a cluster system | *jco_stop.cluster (UNIX only)* | -- | Y | Superuser |
| Forcibly terminates JP1/IM - Manager in a cluster system | *jco_killall.cluster (UNIX only)* | -- | Y | Superuser |

## Commands related to IM databases

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Sets up the IM Configuration Management database for storing configuration information | *jcfdbsetup* | Y | Y | Superuser[1] |
| Cancels setup of the IM Configuration Management database that stores configuration information | *jcfdbunsetup* | Y | Y | Superuser[1] |
| Sets up an integrated monitoring database for storing JP1 events | *jcodbsetup* | Y | Y | Superuser[1] |
| Cancels setup of the integrated monitoring database that stores JP1 events | *jcodbunsetup* | Y | Y | Superuser[1] |
| Outputs to a CSV file JP1 event information registered in the integrated monitoring database | *jcoevtreport* | Y | Y | Superuser[1] |
| Backs up the IM database | *jimdbbackup* | Y | Y | Superuser[1] |
| Releases free area (free page area) in the IM Configuration Management database | *jimdbreclaim* | Y | Y | Superuser[1] |
| Restores (recovers) a database from a backup that has been stored | *jimdbrecovery* | Y | Y | Superuser[1] |
| Reorganizes fragmented free space in a database | *jimdbrorg* | Y | Y | Superuser[1] |

4

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Checks the operating status of the IM database (such as running or stopped) | *jimdbstatus* | Y | Y | Superuser[#1] |
| Terminates the IM database | *jimdbstop* | Y | Y | Superuser[#1] |

## Commands related to IM Configuration Management

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Outputs the system hierarchy, host information, and definition information managed by IM Configuration Management | *jcfexport* | Y | Y | Superuser[#1] |
| Imports IM Configuration Management information | *jcfimport* | Y | Y | Superuser[#1] |
| Creates from the host input information file and Central Scope export file a Central Scope import file that contains monitoring tree information for a virtualization configuration | *jcfmkcsdata* | Y | Y | Superuser[#1] |
| Sets up an operating environment for the IM Configuration Management processes of JP1/IM - Manager | *jp1cf_setup (UNIX only)* | -- | Y | Superuser |
| Acquires virtualization configuration information from VMware ESX and outputs it to a virtualization configuration information file | *jcfcolvmesx* | Y | Y | Superuser[#1] |
| Uses a virtualization configuration information file to update a host input information file | *jcfmkhostsdata* | Y | Y | Superuser[#1] |
| Sets up an environment for IM Configuration Management for cluster system operation | *jp1cf_setup_cluster (UNIX only)* | -- | Y | Superuser |
| Sets up an environment for IM Configuration Management for cluster system operation | *jp1cfhasetup (Windows only)* | Y | -- | Superuser[#1] |

## Commands related to upgrading

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Converts an action definition file from version 08-50 or earlier to version 09-00 | *jcadefconv* | Y | Y | Superuser[#1] |
| Changes the location of the event acquisition filter from Event Console Service to Event Base Service (when the event acquisition filter is being used for compatibility) | *jcochafmode* | Y | Y | Superuser[#1] |
| Migrates JP1/Base command execution logs for version 7 or earlier to a command execution log file for version 8 | *jcocmdconv*[#2] | Y | Y | Superuser[#1] |
| Upgrades a logical host environment that was set up with a previous version of JP1/IM - Manager or JP1/IM - Central Console | *jp1cohaverup* | Y | Y | Superuser[#1] |
| Upgrades a physical host environment of a previous version of JP1/IM - Central Scope | *jp1csverup.bat (Windows only)* | Y | -- | Superuser[#1] |
| Upgrades a logical host environment that was set up by a previous version of JP1/IM - Central Scope | *jp1cshaverup.bat (Windows only)* | Y | -- | Superuser[#1] |
| Upgrades a physical host environment from a previous version of JP1/IM - Central Scope | *jp1csverup (UNIX only)* | -- | Y | Superuser |
| Upgrades a logical host environment that was set up by a previous version of JP1/IM - Central Scope | *jp1cshaverup (UNIX only)* | -- | Y | Superuser |

## Commands related to login and logout

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Starts IM Configuration Management - View | *jcfview (Windows only)* | Y | -- | None |
| Registers into or deletes from the Windows **Start** menu the menu item for starting IM Configuration Management - View | *jcovcfsetup (Windows only)* | Y | -- | Superuser[#1] |

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Opens JP1/IM - View's Login window or Monitoring Tree (Editing) window, or logs in to JP1/IM - Manager from the command line | *jcoview (Windows only)* | Y | -- | None |

## Commands related to configuration definition

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Distributes configuration definition information to the lower hosts and enables the definition information | `jbsrt_distrib`[2] | Y | Y | Superuser[1] |
| Collects configuration definition information from the lower hosts and updates the configuration definition | `jbsrt_sync`[2] | Y | Y | Superuser[1] |
| Deletes the configuration definition information for the host that executed the command | `jbsrt_del`[2] | Y | Y | Superuser[1] |
| Displays the existing configuration definition information | `jbsrt_get`[2] | Y | Y | Superuser[1] |

## Commands related to events

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Changes the response status for severe events | *jcochstat* | Y | Y | None[3] |
| Sets up a JP1/IM - Manager system environment | *jcoimdef* | Y | Y | Superuser[1] |

## Commands related to automated actions and command execution

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Checks the definitions of automated actions and merges multiple automated action definition files | *jcamakea* | Y | Y | Superuser[1] |
| Displays the result of automated action execution | *jcashowa* | Y | Y | None[3] |

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Displays to standard output the status of the Automatic Action Service that is running and the contents of the automated action definition file that is loaded.. | *jcastatus* | Y | Y | None[#3] |
| Reloads the automated action definitions or places the automated action function on standby | *jcachange* | Y | Y | Superuser[#1] |
| Cancels automated actions | *jcacancel* | Y | Y | Superuser[#1] |
| Sets up a command execution environment | *jcocmddef*[#2] | Y | Y | Superuser[#1] |
| Outputs logs of executed commands | *jcocmdlog*[#2] | Y | Y | None |
| Deletes commands that were executed from JP1/IM - View or executed by automated actions | *jcocmddel*[#2] | Y | Y | Superuser[#1] |
| Checks the status of commands that were executed from JP1/IM - View or executed by automated actions | *jcocmdshow*[#2] | Y | Y | Superuser[#1] |

## Commands related to correlation event generation

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Changes correlation event generation definitions | *jcoegschange* | Y | Y | Superuser[#1] |
| Checks the contents of a correlation event generation definition file | *jcoegscheck* | Y | Y | Superuser[#1] |
| Places the correlation event generation function in correlation running status | *jcoegsstart* | Y | Y | Superuser[#1] |
| Displays the status of the correlation event generation function and the correlation event generation definitions that are being used currently | *jcoegsstatus* | Y | Y | None[#3] |
| Places the correlation event generation function in standby status | *jcoegsstop* | Y | Y | Superuser[#1] |

## Commands used in the Central Scope environment setup

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Registers host information into the host information database | *jcshostsimport* | Y | Y | Superuser[#1] |
| Acquires host information from the host information database | *jcshostsexport* | Y | Y | Superuser[#1] |
| Re-creates the monitoring object database | *jcsdbsetup* | Y | Y | Superuser[#1] |

## Commands related to filters

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Switches the event acquisition filter | *jcochfilter* | Y | Y | Superuser[#1] |

## Commands related to changing the monitoring node status in Central Scope

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Changes the status of monitoring nodes (monitoring objects or monitoring groups) | *jcschstat* | Y | Y | Superuser[#1] |

## Commands for migrating monitoring object database information in Central Scope

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Acquires monitoring object database storage information from JP1/IM - Manager and outputs it locally to a file | *jcsdbexport* | Y | Y | Superuser[#1] |
| Applies the information output to a file by the jcsdbexport command to the monitoring object database of JP1/IM - Manager | *jcsdbimport* | Y | Y | Superuser[#1] |

## Commands used for troubleshooting

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Creates a Java thread dump of IM Configuration Management - View | *jcfthreaddmp (Windows only)* | Y | -- | None |
| Collects data in the event of a failure in JP1/IM - Manager or JP1/IM - View | *jim_log.bat (Windows only)* | Y | -- | None[3] |
| Collects data in the event of a failure in JP1/IM - Manager | *jim_log.sh (UNIX only)* | -- | Y | Superuser |
| Collects data in the event of a failure in JP1/IM - View | *jcoview_log.bat (Windows only)* | Y | -- | None |
| Outputs a thread dump in the event of a failure in JP1/IM - View | *jcothreaddmp (Windows only)* | Y | -- | None |
| Outputs a thread dump and a core dump (UNIX only) in the event of a failure in JP1/IM - Manager | *jcogencore* | Y | Y | Superuser[1] |
| Tests the notification command that is defined in the health check definition file in JP1/IM - Manager | *jcohctest* | Y | Y | Superuser[1] |

## Commands for extending the JP1/IM - Manager functions

| Overview of function | Command name | Windows | UNIX | Required execution permission |
|---|---|---|---|---|
| Checks the definition file for extended event attributes | *jcoattrfcheck* | Y | Y | None[3] |
| Checks the definition file for opening monitor windows | *jcomonitorfcheck* | Y | Y | None[3] |
| Checks the definition file for executing applications | *jcoappexecfcheck* | Y | Y | None |
| Checks the definition file for the Tool Launcher window | *jcofuncfcheck* | Y | Y | None |

## jcacancel

### Function

This command cancels automated actions. This command is supported when the JP1/Base version on the host where the action is executed is 07-51 or later. The command is not supported if the JP1/Base version is 07-00 or earlier. An action that is not in the action information file cannot be canceled.

The action status after cancellation depends on the action status before cancellation. The following table lists and describes the action statuses that can be canceled and the action statuses after cancellation.

*Table 1-1:* Statuses of actions that can be canceled and the action statuses after cancellation

| Status of action that can be canceled | Action status after cancellation[1] |
|---|---|
| `Wait` or `Wait (Miss)` | `Cancel` |
| `Send (Miss)`[2] | |
| `Queue` or `Queue (Miss)` | |
| `Running` or `Running (Miss)` | `Kill` |

#1: If an error occurs in JP1/Base command control during cancellation processing, the action status is set to `Error (Miss)`.

#2: An action whose status is `Send` cannot be canceled. If an attempt is made to cancel such an action, the action status is set to `Send (Miss)`.

### Format

```
jcacancel [-h logical-host-name]
          {[-i action-serial-number,...] | [-a] | [-s
action-executing-host-name]}
          [-f]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
  *Console-path*\bin\

11

In UNIX:

```
/opt/jp1cons/bin/
```

## Arguments

■ `-h` *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The command cancels automated actions that correspond to the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ `-i` *action-serial-number*

Specifies an automated action that is to be canceled.

You can determine the action serial numbers by using the `jcashowa` command or by displaying the List of Action Results window and the Action Log Details window in JP1/IM - View. You can specify a maximum of 20 action serial numbers. If you specify multiple action serial numbers, separate them with the comma ( `,` ). No other options can be specified between action serial numbers.

If you specify multiple action serial numbers and an error occurs on one action serial number during execution, processing continues. As many error messages are displayed as there are errors.

If you specify multiple action serial numbers in the `-i` option (in order to cancel multiple actions) and then multiple errors occur, the return value of the `jcacancel` command is for the last error that occurred.

■ `-a`

Specifies that all automated actions that are to be executed from the JP1/IM where `jcacancel` is executed and that exist on all monitored hosts are to be canceled.

If you specify the `-a` option to cancel multiple actions and multiple errors occur, the return value of the `jcacancel` command is for the last error that occurred.

■ `-s` *action-executing-host-name*

Specifies a host name when the automated actions that are to be canceled are the automatic actions executed from the JP1/IM where `jcacancel` is executed and that exist on the specified action executing host.

You can specify only a host that has been set as a managed host in the system configuration definition. Neither an IP address nor a host group can be specified.

If you specify the `-s` option to cancel multiple actions and multiple errors occur, the return value of the `jcacancel` command is for the last error that occurred.

■ -f

Specifies that the automated actions are to be cancelled without displaying a configuration message during cancellation processing.

### Notes

- Processing if the target host is restarted during cancellation processing

  If the target host where automated actions are to be executed is restarted during automated action cancellation processing, the cancellation status of actions cannot be acquired. Therefore, the action status remains as Wait (Canceling), Send (Canceling), Queue (Canceling), or Running (Canceling), making it impossible to determine whether cancellation processing was successful. Use the jcocmdshow command to check the results. If there are any remaining actions, delete them with the jcocmddel command.

### Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Invalid argument error |
| 2 | Invalid common definition error |
| 3 | Invalid action status error |
| 4 | Cancellation processing error |
| 5 | Input/output error |
| 6 | There was no response from the automated action function (Automatic Action Service) |
| 7 | Execution permission error (Windows only) |
| 255 | System error |

### Example 1

Cancel multiple automated actions (action serial numbers 23, 35, and 42):
```
jcacancel -i 23,35,42
```

### Example 2

Cancel all automated actions that are executed from the hostA logical host and that exist on all hosts that are monitored by the hostA logical host:
```
jcacancel -h hostA -a
```

### Example 3

Cancel the automated actions that are executed from the JP1/IM that executes jcacancel and that exist on the host01 host:

```
jcacancel -s host01
```

## Example 4

Cancel the automated actions that are executed from the `hostB` logical host and that exist on `host02`, which is monitored by the `hostB` logical host:

```
jcacancel -h hostB -s host02
```

## Example 5

Cancel the automated actions that are monitored by the `hostC` logical host and that have specified action serial numbers (23, 35, and 42):

```
jcacancel -h hostC -i 23,35,42
```

## jcachange

### Function

This command reloads the automated action definition file or places the automated action function on standby.

If both options are omitted, the command reloads the automated action definition file. After you have changed the contents of the automated action definition file, you use this command to activate the modified action definitions by reloading the file.

If the automated action definition file contains an invalid action definition, the command displays the KAVB5104-W message. If the loaded automated action definition file contains no valid action definitions, the command displays the KAVB4053-I message and places the automated action function on standby.

A reloaded automated action definition parameter that exceeds the maximum size is ignored by the command. For details about the size of an automated action definition parameter, see *Automated action definition file (actdef.conf)* in *2. Definition Files*.

### Format

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

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

■  -n

Specifies that the automated action function is to be placed on standby. No actions are executed even if an event that matches an action definition is received.

To restart the automated action function, either execute the jcachange command with no options specified or restart JP1/IM - Manager.

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. The command reloads or places on standby the action definitions for the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Invalid argument |
| 2 | Pipe-related error |
| 4 | There was no response from the automated action function |
| 5 | Command failed to reload the automated action definition file or place the automated action function on standby |
| -13 | A specified argument value was invalid |
| -102 | File input/output error |
| Other value | System error |

# jcadefconv

## Function

This command converts an action definition file from version 8 or earlier (DESC_VERSION value is less than 3) to version 09-00 (DESC_VERSION value is 3).

If the action definition file for version 8 or earlier uses any of the characters listed below in its messages or in basic event information, detailed event information, or extended event information, the file is converted and defined.

*Table 1-2:* Character conversion

| Character before conversion | Characters after conversion |
|---|---|
| \ | / |
| Space | %20 |
| % | %25 |

Before it executes this conversion, this command automatically checks the format of the action definition file. If it detects any errors, the action definition file is not converted and the command outputs error messages to standard error.

You can specify any output destination for the converted action definition file.

An action definition file is converted from version 8 or earlier to version 09-00 as shown below.

*Table 1-3:* Conversion of action definition files

| Format of version 8 or earlier | Format of version 09-00 | Remarks |
|---|---|---|
| No DESC_VERSION | DESC_VERSION=3 | -- |
| DESC_VERSION=1 | DESC_VERSION=3 | -- |
| DESC_VERSION=2 | DESC_VERSION=3 | -- |
| :state_watch=true | cmn<br>▲sta△true<br>end-cmn | -- |
| :state_watch=false | cmn<br>▲sta△false<br>end-cmn | -- |

| Format of version 8 or earlier | Format of version 09-00 | Remarks |
|---|---|---|
| `:state_watch` not specified | `cmn`<br>▲`sta`△`false`<br>`end-cmn` | -- |
| #*comment-1*<br>`+0`△`*`△`:action.exe` | `act`△*action-1*<br>▲`prm`△`0`<br>▲`cmt`△*comment-1*<br>`...`<br>`end-act` | -- |
| `#`△*comment-1*<br>`+0`△`*`△`:action.exe` | `act`△*action-1*<br>▲`prm`△`0`<br>▲`cmt`▲▲*comment-1*<br>`...`<br>`end-act` | -- |
| #*comment-1*<br>#*comment-2*<br><br>`+0`△`*`△`:action.exe` | `act`△*action-1*<br>▲`prm`△`0`<br>▲`cmt`△*comment-2*<br>`...`<br>`end-act` | -- |
| Action specifying a parameter group | `act`△*action-serial-number* | When the command is executed in an English language environment |
| `AND action` | `act` | -- |
| `+`*parameter-group-number* | ▲`prm`△*parameter-group-number* | -- |
| `&` | ▲`prm`△`&` | -- |
| `$`*basic-part-of-event-ID* | ▲`eid`△*basic-part-of-event-ID* | -- |
| `$`*basic-part-of-event-ID*`:`*extended-part-of-event-ID* | ▲`eid`△*basic-part-of-event-ID*`:`*extended-part-of-event-ID* | -- |
| `*` | ▲`eid`△`*` | -- |
| `/`*message*`/` | ▲▲`B.MESSAGE`△`REGEX`△*message* | -- |
| `/`*basic-event-information*`/` | ▲▲`B.BASIC`△`REGEX`△*basic-event-information* | -- |
| `/`*detailed-event-information*`/` | ▲▲`B.DETAIL`△`REGEX`△*detailed-event-information* | -- |
| `//` | No condition is set | -- |

| Format of version 8 or earlier | Format of version 09-00 | Remarks |
|---|---|---|
| `/-------E/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Emergency` | -- |
| `/------A-/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Alert` | -- |
| `/-----C--/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Critical` | -- |
| `/----E---/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Error` | -- |
| `/---W----/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Warning` | -- |
| `/--N-----/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Notice` | -- |
| `/-I------/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Information` | -- |
| `/D-------/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Debug` | -- |
| `/DINWECAE/` | ▲▲ `E.SEVERITY` Δ `IN` Δ `Emergency` Δ `Alert` Δ `Critical` Δ `Error` Δ `Warning` Δ `Notice` Δ `Information` Δ `Debug` | When a condition with multiple event levels is specified |
| *extended-event-information-attribute-name*=`/`*attribute-value*`/` | ▲▲ `E.`*extended-event-information-attribute-name* Δ `REGEX` Δ *attribute-value* | -- |
| `u=`*user-name* | ▲ `usr` Δ *user-name* | -- |
| `e=`*environment-variable-file-name* | ▲ `var` Δ *environment-variable-file-name* | -- |
| `d=`*execution-host-name* | ▲ `hst` Δ *execution-host-name* | -- |
| `d=`*group-name* | ▲ `hst` Δ *group-name* | -- |
| `dt=`*suppression-time* | ▲ `det` Δ *suppression-time* | -- |
| `rt=`*delay-monitoring-period* | ▲ `ret` Δ *delay-monitoring-period* | -- |
| `+0` Δ `*` Δ `:`*action* | ▲ `cmd` Δ *action* | -- |
| `+0` Δ `*` Δ `:<RULE>` | ▲ `rule` | When JP1/IM - RL is executed |

| Format of version 8 or earlier | Format of version 09-00 | Remarks |
|---|---|---|
| +0 △ * △ :action.exe | act △ *action-1*<br>▲ prm △ 0<br>▲ eid △ *<br><br>▲ cnd<br>▲ end-cnd<br><br>▲ cmd △ action.exe<br>end-act | When there is no event condition |
| +0 △ * △ /*message*/ :<br>action.exe | act △ *action-1*<br>▲ prm △ 0<br>▲ eid △ *<br><br>▲ cnd<br>▲▲ B.MESSAGE △ REGEX △ *message*<br>▲ end-cnd<br><br>▲ cmd △ action.exe<br>end-act | When there is an event condition |

Legend:

▲ : Indicates a tab

△ : Indicates a space

--: None

## Format

```
jcadefconv -i action-definition-file-name-before-conversion
           -o action-definition-file-name-after-conversion
        [ -h logical-host-name]
```

## Execution permission

In Windows: Administrator permissions

In UNIX: Superuser permissions

## Storage directory

In Windows:
*Console-path*\bin\

In UNIX:

```
/opt/jp1cons/bin/
```

## Arguments

- -i *action-definition-file-name-before-conversion*

Specifies the relative or absolute path name of the action definition file that is to be converted. If the path name of the action definition file contains a space, enclose the entire path name in double quotation marks ("). The file name can consist of a maximum of 255 bytes.

- -o *action-definition-file-name-after-conversion*

Specifies the relative or absolute path name of the action definition file that is obtained after conversion. If the path name of the action definition file contains a space, enclose the entire path name in double quotation marks ("). The file name can consist of a maximum of 255 bytes.

Note that the following characters and character strings cannot be specified in a file name in Windows:

- Characters: : ? " < > |

- A character string that completely matches any of the following strings (not case sensitive): CON, PRN, AUX, NUL, COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9

The user can select any name for *action-definition-file-name-after-conversion*, except that it cannot be the file name specified in the -i option. If the same file name is specified in both file name options, the command displays the KAVB5502-E message and terminates itself. In addition, the KAVB5504-E message is displayed and the program terminates.

- -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The command checks the contents of the definition file to be converted by using regular expressions used by the specified logical host.

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

## Notes

When a file is converted to the format of version 09-00, some items become undefined. If such an undefined item is present, the KAVB5503-W message is displayed. Follow the directions in the message to correct the action definition file, and then use the jcamakea command to check that the definition file has been corrected successfully.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |
| 2 | Termination with warning |

## Example

Convert an action definition file that was created in the format of version 8 or earlier to the format of version 09-00:

```
jcadefconv  -i actdef.conf  -o actdef_new.conf
```

The example assumes the following contents for the action definition file created in the format of version 8 or earlier:

```
DESC_VERSION=2
:state_watch=true
#comment
+0 $0000000A /message/,/basic-event-information/,/
detailed-event-information/,/-------E/ ATTR1=/attribute-value-1/ :
u=user-name e=environment-variable-file-name d=execution-host-name dt=20
rt=30 action
```

When the jcadefconv command is executed, the file is converted as follows:

```
DESC_VERSION=3
cmn
  sta true
end-cmn

act action-1
  prm 0
  cmt comment
  eid A
  cnd
    B.MESSAGE REGEX message
    B.BASIC REGEX basic-event-information
    B.DETAIL REGEX detailed-event-information
    E.SEVERITY IN Emergency
    E.ATTR1 REGEX attribute-value-1
  end-cnd

  usr user-name
  hst execution-host-name
```

```
    cmd action
    var environment-variable-file-name
    det 20
    ret 30
end-act
```

## jcamakea

### Function

This command checks the definitions of automated actions. If the definitions span multiple automated action definition files, the command merges the files into one file. When multiple automated action definition files are to be merged, the command uses the version of the action definition file and the automated action status monitoring parameter that apply to the first file that is loaded.

The checking and merging results are output to standard output. The command checks the output results and creates the automated action definition file.

If the command detects errors during checking, it outputs error messages to standard error.

An automated action definition parameter in a specified automated action definition file that exceeds the maximum size is not output to standard output. For details about the size of an automated action definition parameter, see *Automated action definition file (actdef.conf)* in *2. Definition Files*.

If a file contains no definition parameters or contains only comments, an error results.

### Format

```
jcamakea [-h logical-host-name] automated-action-definition-file-name-1
[...automated-action-definition-file-name-100]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that contains the regular expressions to be used to check the contents of the definition files that are to be converted. The command checks the contents of the

definition files to be converted using the regular expressions used by the specified logical host. The command also checks whether any automated action definition file exceeds the maximum file size according to the file size settings in the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ *automated-action-definition-file-name-1*
  [*...automated-action-definition-file-name-100*]

Specifies the relative or absolute path names of the files containing automated action definitions. You can specify a maximum of 100 files. Separate multiple file names with the space character. If the path name of an automated action definition file contains a space, enclose the entire path name in double quotation marks (`"`).

A file name can consist of a maximum of 255 bytes.

### Return values

| | |
|---|---|
| `0` | Normal termination |
| `3` | Invalid argument |
| `7` | Format error or no permission |
| `-1` | File open error |
| `-100` | Logical error |
| `-102` | File input/output error |
| `-103` | Insufficient memory |
| `-104` | System error |

When the command reads an action definition file in the format of version 08-50 or earlier, it sets one of the following return values:

0: Normal termination

Other than 0: Abnormal termination

If multiple errors occur, the return value is for the last error that occurred.

### Example

Merge automated action definition files `/usr/console/action1` and `/usr/console/action2` to create the automated action definition file `/usr/console/actionx1`:
```
jcamakea /usr/console/action1 /usr/console/action2 > /usr/console/actionx1
```

## jcashowa

### Function

This command displays the results of executing automated actions. Automated action execution results can be displayed for an event that was registered at a specified date and time, or for all events that were registered during a specified period of time, or for all actions.

### Format

```
jcashowa [-d {[MM/dd/hh:mm][, [MM/dd/hh:mm]]}]
         [-h logical-host-name]
         [action-information-file-name]
```

### Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

■ -d {[*MM/dd/hh:mm*][, [*MM/dd/hh:mm*]]}

Specifies the date and time an event was registered or a period of time during which events were registered. Use a comma (,) to separate the beginning date and time from the ending date and time. When a period of time is specified, the command displays information about the actions for all events that were registered during the specified period of time. When this option is omitted, the command displays information about all actions.

About the date/time specification (*MM/dd/hh:mm*):

You can use the formats shown in the table below for the date/time specification. Use the format appropriate to your operation.

*Table 1-4:* Date/time specification formats

| Date/time specification pattern | Description |
|---|---|
| *MM*/*dd*/*hh*:*mm* | Specify month in *MM*, date in *dd*, hour in *hh*, and minute in *mm*. |
| *MM*/*dd*/*hh* | Specify month in *MM*, date in *dd*, and hour in *hh*.<br>For the omitted *mm*, the command assumes 00. |
| *MM*/*dd* | Specify month in *MM* and date in *dd*.<br>For the omitted *hh* and *mm*, the command assumes 00 for both. |
| *dd* | Specify date in *dd*.<br>For the omitted *MM*, the command assumes the month the jcashowa command was executed. For *hh* and *mm*, the command assumes 00 for both. |
| *dd*/*hh*:*mm* | Specify date in *dd*, hour in *hh*, and minute in *mm*.<br>For the omitted *MM*, the command assumes the month the jcashowa command was executed. |
| *hh*:*mm* | Specify hour in *hh* and minute in *mm*.<br>For the omitted *MM*, the command assumes the month the jcashowa command was executed. For *dd*, the command assumes the date the jcashowa command was executed. |

*About the date/time range specification (*[*MM*/*dd*/*hh*:*mm*][, [*MM*/*dd*/*hh*:*mm*]]*):*

You can use the formats shown in the table below for the date/time range specification. Use the format appropriate to your operation.

*Table 1-5:* Date/time range specification formats

| Range specification pattern | Description |
|---|---|
| -d *datetime* | By specifying *datetime*, you can display the result of an action that was executed for an event registered at a specific date and time.<br>For example, to display the result of an action that was executed for an event registered at 22:00 on October 24, specify as follows:<br>jcashowa -d 10/24/22:00 |
| -d *datetime*,*datetime* | By specifying *datetime*,*datetime*, you can display the results of all actions that were executed for the events registered during a specified period (range) of time.<br>For example, to display the results of the actions that were executed for all events registered from 22:00 on October 24 through 10:00 on November 24, specify as follows:<br>jcashowa -d 10/24/22:00,11/24/10:00 |

| Range specification pattern | Description |
|---|---|
| `-d` *datetime*`,` | By specifying *datetime*`,`, you can display the results of all actions that were executed for the events registered on and subsequent to the specified date and time.<br>For example, to display the results of the actions that were executed for the events registered at 22:00 on October 24 and thereafter, specify as follows:<br>`jcashowa -d 10/24/22:00,` |
| `-d` `,`*datetime* | By specifying `,`*datetime*, you can display the results of all actions that were executed for the events registered at and before the specified date and time.<br>For example, to display the results of the actions that were executed for the events registered up to (and including) 10:00 on November 24, specify as follows:<br>`jcashowa -d ,11/24/10:00` |

*About the default year:*

If the specified beginning month value is greater than the value for the month during which the `jcashowa` command is executed, the command assumes the specified date and time belong to the previous year and treats the specification as being from the beginning date and time in the previous year to the ending date and time in the current year.

When the specified beginning month value is greater than the value for the month during which the `jcashowa` command is executed:

12 (December) ≥ value specified as the beginning month > value for the month during which the `jcashowa` command is executed

The command assumes that the year for the specified beginning date and time is the year preceding the year during which the `jcashowa` command is executed.

When the specified beginning month value is less than the value for the month during which the `jcashowa` command is executed:

Value for the month during which the `jcashowa` command is executed ≥ value specified as the beginning month ≥ 01 (January)

The command assumes that the year for the specified beginning date and time is the same as the year during which the `jcashowa` command is executed.

Example 1: The following `jcashowa` command is executed on 2003/10/31:
```
# jcashowa -d 11/01/0:00,10/01/23:59
```

The command assumes the specified time range is from 2002/11/01 0:00 to 2003/10/01 23:59 and performs processing normally.

Example 2: The following `jcashowa` command is executed on 2003/11/01:
```
# jcashowa -d 11/01/0:00,10/01/23:59
```

The command assumes the specified time range is from 2003/11/01 0:00 to 2003/10/01 23:59 and displays the message `KAVB4009-W Invalid value for option(-d)` because the specified date and time are not in chronological order.

The specification of the `-d` option determines the chronicity of the specified dates/times. If the specified beginning and ending dates/times are not in chronological order, an error results.

■ `-h` *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The command displays action execution results for the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ *action-information-file-name*

Specifies the full path of the file to be used for the action information file.

If you specify an action information file at the physical host, do not specify the `-h` option or the `JP1_HOSTNAME` environment variable.

If you specify an action information file at the logical host, specify the logical host name in the `-h` option or the `JP1_HOSTNAME` environment variable.

The action information file name can consists of a maximum of 255 bytes.

The specified action information file will be used to store information about the executed actions.

This option must be the final option specified in the command. It must be specified after you have specified all other options that need to be specified.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 3 | Argument error |
| 6 | System error |
| 7 | No permission to execute the command (Windows Server 2008 only) |

## Output format

When you execute the `jcashowa` command, automated action information is output in the following format:

```
Event information#1
```
*event-ID* Δ *serial-number* Δ *registered-time* Δ *event-arrival-time*
```
Action information#2
```
*action-serial-number* Δ *action-type* Δ *status* Δ *delay-status* Δ *PID* Δ *execution-host-name*
```
Action information
```
*action-inserted-time* Δ *action-starting-time* Δ *action-ending-time* Δ *return-code*
```
Command        command
Message        message
```

#1: If an AND condition is specified in the automated action settings, the command outputs only information about the last event received among all the events set in the execution condition.

#2: If no delay monitoring setting is specified for the action or the action is not delayed, the command outputs the following information:
```
Action information
```
*action-serial-number* Δ *action-type* Δ *status* Δ *PID* Δ *execution-host-name*

The following table lists and described each item that is output.

*Table 1-6:* Automated action information output items

| Item | Description |
|---|---|
| *event-ID* | Event ID, in the format *basic-code*:*extended-code*. |
| *serial-number* | Serial number of the event. |
| *registered-time* | Event registration time, in the format *month*/*date hour*:*minute*:*second*. |
| *event-arrival-time* | Event arrival time, in the format *month*/*date hour*:*minute*:*second*. |
| *action-serial-number* | Action serial number of the action that is to be executed. |
| *action-type* | One of the following action types:<br>• `Command` (command)<br>• `Rule` (rule startup request to JP1/IM - Rule Operation) |

| Item | Description |
|------|-------------|
| *status* | One of the following character strings indicating the action's execution status:<br>• `running` (running)<br>• `ended` (terminated)<br>• `none` (none)<br>• `fail` (not executable; error occurred before the execution request was passed to JP1/Base)<br>• `error` (execution failed; error occurred within JP1/Base command control)<br>• `unknown` (status unknown; command's execution result could not be determined)<br>• `wait` (waiting for termination of the preceding command)<br>• `send` (command is being transmitted)<br>• `queue` (waiting for command execution in JP1/Base)<br>• `cancel` (canceled)<br>• `kill` (forced termination)<br>• `deterrent` (suppressed)<br>If the action is canceled from JP1/IM - View or by the `jcacancel` command, the cancellation status is displayed following the applicable status shown above.<br>The action cancellation statuses are as follows:<br>• `canceling` (being canceled). Example: `queue (canceling)`<br>• `miss` (cancellation failed). Example: `ended (miss)`<br>If the command is re-executed during a restart of the Automatic Action Service or the action is output to the action re-execution file, `-R` is appended to the above status (example: `ended-R`).<br>If the action is re-executed from JP1/IM - View, `-RU` is appended to the above status (example: `ended-RU`).<br>If a suppressed action is re-executed from JP1/IM - View, `-RUD` is appended to the above status (example: `ended-RUD`).<br>If a suppressed action is re-executed from JP1/IM - View and then re-executed again or output to the action re-execution file because the Automatic Action Service was restarted (including node switching) during the re-execution, `-RD` is appended to the status (example: `ended-RD`).<br>If a suppressed action's status is `fail` (not executable), `-D` is appended to `fail` (example: `fail-D`). |
| *delay-status* | Action's delay status.<br>If the action is delayed, `delay` is displayed.<br>If the action is not delayed, nothing is displayed. |
| *PID* | Process ID of the execution action.<br>When action information is entered into the action re-execution file because of node switching, `OUTPUT` is displayed. |
| *execution-host-name* | Name of the host that executed the action. |

| Item | Description |
|------|-------------|
| *action-inserted-time* | Insertion time of the action to be executed, in the format *month*/*date hour*:*minute*:*second*.<br>If the action has not been inserted, `**/** **:**:**` is displayed. |
| *action-starting-time* | Action start time, in the format *month*/*date  hour*:*minute*:*second*.<br>If the action has not started, `**/** **:**:**` is displayed. |
| *action-ending-time* | Action end time, in the format *month*/*date  hour*:*minute*:*second*.<br>If the action has not ended, `**/** **:**:**` is displayed. |
| *return-code* | Return code from the executed action.<br>If the action has not ended, `***` is displayed. |
| *command* | Command executed as the action. |
| *message* | Message displayed by the command. |

## Example output

Example 1:

The command terminated abnormally and a message has been output:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                    12/03 12:03:26
Action information: 23000 Command ended 27934 raysol
Action information: 12/03 12:09:15 12/03 12:09:16
                    12/03 12:09:17 1
Command:            /usr/local/action
Message:            abc was not found.
```

Example 2:

Execution of the command is underway and no message has been output:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                    12/03 12:03:26
Action information: 23000 Command running 27934 raysol
Action information: 12/03 12:09:15 12/03 12:09:16
                    **/** **:**:** ***
Command:            /usr/local/executing
```

Example 3:

The command status is `running`, the cancellation status is `canceling`, and no message has been output:

```
Event information:  00002000:00000000 20 12/03 12:03:26
```

```
                      12/03 12:03:26
Action information: 10 Command running(canceling) 15236
raysol
Action information: 12/03 12:09:15 12/03 12:09:16
                      **/** **:**:** ***
Command:            /usr/local/action
```

Example 4:

There are results for multiple actions:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                      12/03 12:03:26
Action information: 380 Command ended 233 raysol
Action information: 12/03 12:09:13 12/03 12:09:14
                      12/03 12:09:14 20
Command:            /usr/local/action
Event information:  00002000:00000000 20 12/03 12:03:26
                      12/03 12:03:26
Action information: 381 Command ended 279 raysol
Action information: 12/05 10:39:20 12/05 10:39:21
                      12/05 10:39:23 128
Command:            /usr/local/action2
Message:            No permission
Execute as a superuser
Processing is canceled
```

Example 5:

There are multiple actions for a single event because a parameter group was
specified:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                      12/03 12:03:26
Action information: 987 Command running 2904 raysol
Action information: 12/05 10:39:20 12/05 10:39:21
                      12/03 12:09:13 0
Command:            /usr/local/first
Event information:  00002000:00000000 20 12/03 12:03:26
                      12/03 12:03:26
Action information: 988 Command ended 2906 raysol
Action information: 12/05 10:39:20 12/05 10:39:21
                      12/06 21:02:54 0
Command:            /usr/local/second
```

Example 6:

Action information was entered in the action re-execution file due to node
switching:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                    12/03 12:03:26
Action information: 45687 Command ended-R OUTPUT
Action information: **/** **:**:** *** **/** **:**:** ***
                    /****:**:** ***
```

Example 7:

The action being executed is delayed:

```
Event information:  00002000:00000000 20 12/03 12:03:26
                    12/03 12:03:26
Action information: 987 Command running delay 2904 raysol
Action information: 12/05 10:39:20 12/05 10:39:21
                    **/** **:**:** ***
Command:            /usr/local/executing
```

Example 8:

The command was executed with no arguments specified (the JP1/IM - Rule Operation linkage function is enabled):

```
Event information:  00000111:00000000 628 03/13 16:18:24
                    03/13 16:18:24
Action information: 523 Rule ended 3016 raysol
Action information: 03/13 16:18:24 03/13 16:18:24
                    03/13 16:18:28 0
Command:       jrmexecrule -c raysol -s 628 -t 1142234304
Message:       KAJX4101-I The rule started successfully.
List of start rules:
RuleOperation/rule005
Event information:  00000111:00000000 628 03/13 16:18:24
                    03/13 16:18:24
Action information: 524 Command ended 3156 raysol
Action information: 03/13 16:18:24 03/13 16:18:28  03/13
16:18:28 0
Command:            hostname
Message:            raysol
```

## jcastatus

### Function

This command displays to standard output the status (stopped, running, standby) of the automated action function that is running and the contents of the automated action definition file that is loaded by the automated action function.

### Format

```
jcastatus [-h logical-host-name]
          [-d ]
```

### Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The command displays the status of the automated action function (Event Base Service) that corresponds to the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ -d (at Event Base Service)

Specifies that the contents of the automated action definition file that is loaded by the automated action function is displayed to standard output. The command displays the information in the same format as in the automated action definition file.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 4 | No response from the automated action function (Event Base Service) |
| 5 | Command cannot display the contents of the automated action definition file because the automated action function (Event Base Service) is stopped or on standby |
| 6 | System error (at the command) |
| 7 | No permission to execute the command (Windows Server 2008 only) |
| -13 | A specified argument value was invalid |
| -102 | Input/output error |
| -104 | System error (at Event Base Service) |

## Output format

When you execute the jcastatus command, the status of the automated action function is output in the following format:
Status : *status*

The following table describes the character strings that can be displayed as *status*.

*Table  1-7:* Statuses of the automated action function

| Status | Character string displayed in status | Description |
|---|---|---|
| Stopped | STOP | The automated action function (Event Base Service) is stopped. |
| Running | RUNNING | The automated action function (Event Base Service) is running and available for use. |
| Standby | STANDBY | The Event Base Service is running, but the automated action function is in the standby mode. In this status, events are still received, but no action is taken on the received events. If the status changes from standby to running, action is not taken on the events that were received while in the standby mode. |

## Example output

The automated action function is in the standby mode:
Status : STANDBY

## jcfcolvmesx

### Function

This command acquires virtualization configuration information from VMware ESX and outputs it to a virtualization configuration information file.

In order to collect the virtual host name of a guest OS from VMware ESX, VMware Tools must be running on the guest OS. The virtual host name cannot be collected if VMware Tools is not installed or if it is installed but not running.

The virtual host name also cannot be collected if the guest OS itself is not running.

This command uses the interface of VMware Infrastructure SDK for communication.

### Format

```
jcfcolvmesx
            [-m communication-type]
            -u user-ID
            [-p password]
            -c host-name [host-name...]
            -o output-file-name
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
   *Manager-path*\bin\imcf\

In UNIX:
   /opt/jp1imm/bin/imcf/

### Arguments

■ -m *communication-type*

Specifies the method used to communicate with VMware ESX.

If https is specified, HTTPS is used for communication with VMware ESX. If http is specified, HTTP is used for communication with VMware ESX.

If this option is omitted, the command uses HTTPS for communication.

- -u *user-ID*

  Specifies the user ID associated with the connection-target VMware ESX account.

  The user ID must be a maximum of 256 characters. Neither the space nor the tab character can be specified.

- -p *password*

  Specifies the password for the user ID that was specified in the -u option.

  The password must be a maximum of 256 characters. Neither the space nor the tab character can be specified.

  If this option is omitted, the command assumes that there is no password.

- -c *host-name* [*host-name...*]

  Specifies the names of hosts where VMware ESX is running. For a host name, specify a maximum of 255 characters. You can specify multiple host names by separating them with the space character or the tab delimiter.

- -o *output-file-name*

  Specifies the relative or absolute path name of the virtualization configuration information file that is to store the configuration information collected from VMware ESX. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (").

## Return values

| | |
|---|---|
| 0 | Normal termination[1] |
| 1 | Argument error |
| 2 | Insufficient memory |
| 3 | JavaVM start error occurred |
| 4 | Execution permission error (Windows only) |
| 5 | Command was not executed from the administrator console (Windows only) |
| 6 | Output file already exists |
| 7 | Acquisition of virtualization configuration information failed[2] |
| 8 | An input/output error occurred |
| 99 | Other error |

#1

The command terminates normally even if some of the virtual host information

was not collected.

#2

If the command was unable to collect the virtualization configuration, it sets a return code.

## Format of the virtualization configuration information file

*Table 1-8:* Header information (line 1)

| Item | Description |
|------|-------------|
| Identification character string for a virtualization configuration information file | `#VM` |
| File format version | `090000` |
| Character encoding | UTF-8 fixed |

*Table 1-9:* Output items (lines beginning with line 2)

| Item | Description |
|------|-------------|
| Virtual host name | Host name of the virtual OS |
| VMM host name | Name of the host where virtualization environment software is run.<br>In the case of a VMM host with no guest OS, the virtual host name field is blank and only the VMM host name is set. |

## Example output

```
#VM,090000,UTF-8
hostV1, hostVMESX01
hostV2, hostVMESX01
,hostVMESX02
```

## jcfdbsetup

### Function

This command sets up the IM Configuration Management database for storing configuration information. You must have already specified in advance in the setup information file the database's size, port number, and storage location.

When you execute this command in Windows, the following services are registered into the OS:

- When setting up a physical host: JP1/IM-Manager DB Server, JP1/IM-Manager DB Cluster Service

- When setting up a cluster configuration: JP1/IM-Manager DB Server_*logical-host-name*, JP1/IM-Manager DB Cluster Service_*logical-host-name*

### Format

```
jcfdbsetup {-f setup-information-file-name|-s}
           [-h logical-host-name -c {online|standby}]
           [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Manager-path*\bin\imdb\

In UNIX:
    /opt/jp1imm/bin/imdb/

### Arguments

- ■ -f *setup-information-file-name*

Specifies the setup information file that contains the requisite information, such as the installation folder and the size of the database area. If neither an IM Configuration Management database nor an integrated monitoring database has been set up, you must specify this option. If the integrated monitoring database has already been set up, specify in this option the setup information file that you specified when you set up the integrated monitoring database. Alternatively, if the integrated monitoring database

has already been set up, you can specify the -s option instead. In such a case, the command uses the setup information that was specified when the integrated monitoring database was set up.

This option cannot be specified together with the -s option. Additionally, the -f and -s options cannot both be omitted.

If the path contains a space, enclose the entire path in double-quotation marks ("). If you configure a cluster environment, specify the cluster setup information file name.

■ -s

If the integrated monitoring database has already been set up, you can specify this option instead of the -f option. When this option is specified, the command sets up the IM Configuration Management database using the setup information that was specified when the integrated monitoring database was set up.

If the integrated monitoring database has not been set up but this option is specified, the command displays the KNAN11193-E message.

This option cannot be specified together with the -f option. Additionally, the -s and -f options cannot both be omitted.

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. The command sets up the IM Configuration Management database for the specified logical host. If you do not use a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

■ -c {online|standby}

Specifies the setup type in the cluster configuration (primary node or secondary node). If you have specified the -h option, you must specify this option. If the integrated monitoring database has already been set up on the same host, specify the value that you used when you created the integrated monitoring database.

- online: Specifies that the primary node is to be set up.
- standby: Specifies that the secondary node is to be set up.

If you are running a logical host in a non-cluster environment, specify online in the -c option.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

41

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Abnormal termination |

## Notes

- The contents of the cluster setup information files must be identical between the primary and secondary nodes. When you set up the secondary node, copy the cluster setup information file used for the primary node and then use that file. If the contents of the files specified for the primary and secondary nodes are different, cancel the setup at the secondary node, copy the cluster setup information file from the primary node, and then re-execute the command.

- If you execute the command with the -c option specified, do not switch servers during execution. If you switch servers during execution, cancel the setup after the command has terminated, and then re-execute the command.

- If you have canceled the command's execution by pressing **Ctrl** + **C** or **Ctrl** + **Break**, make sure that the pdistup, pdfmkfs, pddef, and pdload processes are not executing, execute the jcfdbunsetup command, and then re-execute this command.

- If the integrated monitoring database has already been set up and the IM database is being used, JP1/IM - Manager Service must be stopped.

- If you are using the integrated monitoring database in Windows, the IM database (JP1/IM-Manager DB Server) must be running and the cluster service for the IM database (JP1/IM-Manager DB Cluster Service) must be stopped.

42

## jcfdbunsetup

### Function

This command cancels setup of the IM Configuration Management database that stores configuration information.

Execute this command when you stop using the IM Configuration Management database, uninstall JP1/IM - Manager, re-create the IM Configuration Management database, or expand the database size.

In an environment in which an integrated monitoring database has been set up, the integrated monitoring database is still available even after execution of this command.

### Format

```
jcfdbunsetup [-h logical-host-name -c {online|standby}]
             [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
     *Manager-path*\bin\imdb\

In UNIX:
     /opt/jp1imm/bin/imdb/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. The command cancels setup of the IM Configuration Management database for the specified logical host. If you do not use a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

■ -c {online|standby}

Specifies the type of setup being canceled in the cluster configuration (primary node or secondary node). If you have specified the -h option, you must specify this option.

   • online: Specify this value if you specified online during setup of the IM

Configuration Management database.

- `standby`: Specify this value if you specified `standby` during setup of the IM Configuration Management database.

If you cancel setup of the IM Configuration Management database on a logical host that was running in a non-cluster environment, specify `online` in the `-c` option.

■ `-q`

Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Notes

- If you expand the database size in an environment in which the integrated monitoring database has been created, you must execute the command that cancels setup of the integrated monitoring database after you've executed this command.

- If you execute this command with the `-c` option specified, do not switch servers during execution. If you switch servers during execution, re-execute the command after it has terminated.

- If you have canceled the command's execution by pressing **Ctrl** + **C** or **Ctrl** + **Break**, make sure that the `pdirst` process is not executing, and then re-execute this command.

- If you have already set up the integrated monitoring database and are using the IM database, JP1/IM - Manager Service must be stopped.

- The cluster service (P1/IM-Manager DB Cluster Service) for the IM database must be stopped.

## jcfexport

### Function

This command outputs the system hierarchy, host information, and definition information managed by IM Configuration Management.

When you execute this command, the three types of information (host, system hierarchy, and profiles) that have been managed by IM Configuration Management before import processing are all deleted and then the specified information is imported.

To use this command, IM Configuration Management Service must be running. This command cannot be executed while the jcfimport command is executing.

### Format

```
jcfexport       [-h logical-host-name ]
                [-f]
                -o directory-name
                [-m | -c | -a]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
   *Manager-path*\bin\imcf\

In UNIX:
   /opt/jp1imm/bin/imcf/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ -f

Specifies that the file is to be overwritten if the specified directory already contains a

file with the same name as the export file. If this option is omitted and the export target already contains a file with the same name, the information is not exported.

- **-o** *directory-name*

  Specifies the name of the directory to which the export data is to be output, expressed as an absolute path or a path relative to the location where the command is executed. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (").

- **-m**

  Specifies that only the host information is to be exported. The exported information is output to the host input information file (`host_input_data.csv`).

  This option cannot be specified together with the `-c` or `-a` option. If specified in such a case, an invalid argument error results. If you omit all of the `-m`, `-c`, and `-a` options, the `-a` option is assumed.

- **-c**

  Specifies that only the host information and the system hierarchy information is to be exported. The host information is output to the host input information file (`host_input_data.csv`), and the system hierarchy is output to `system_tree_information.txt`.

  This option cannot be specified together with the `-m` or `-a` option. If specified in such a case, an invalid argument error results. If you omit all of the `-m`, `-c`, and `-a` options, the `-a` option is assumed.

- **-a**

  Specifies that all three types of information are to be exported. The exported information is output to `data_information.txt`. The host information is output to the host input information file (`host_input_data.csv`), the system hierarchy is output to `system_tree_information.txt`, and the definition information is output to the following files directly under *directory-specified-in--o-option*\`definition_files`\*host-name*\*product-name*:

  - Forwarding settings file (`forward`)

  - Event log trapping function operation definition file (`ntevent.conf`)

  - Location action definition file (`jbslcact.conf`)

  This option cannot be specified together with the `-m` or `-c` option. If specified in such a case, an invalid argument error results. If you omit all of the `-m`, `-c`, and `-a` options, the `-a` option is assumed.

## Return values

| 0 | Normal termination |
|---|---|

| 4 | Invalid option |
|---|---|
| 8 | Server cannot be connected |
| 12 | Memory shortage occurred |
| 16 | Invalid permission |
| 20 | Error, such as a file error, invalid path, or file already exists |
| 24 | An input/output error occurred |
| 120 | System error occurred |
| 124 | Terminated due to other error |
| 201 or greater | JavaVM start error occurred |

## Example

Export the IM Configuration Management information directly under `c:\temp`:
```
jcfexport -o c:\temp
```

# jcfimport

## Function

This command imports IM Configuration Management information.

You cannot use this command unless IM Configuration Management Service is running. Only one instance of this command can be executing at the same time.

## Format

```
jcfimport   [-h logical-host-name]
             -i directory-name
            [-m | -c | -a]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
    *Manager-path*\bin\imcf\

In UNIX:
    /opt/jp1imm/bin/imcf/

## Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. If this option is omitted, the command assumes the logical host name specified in the JP1_HOSTNAME environment variable. If the JP1_HOSTNAME environment variable is not specified, the command assumes the physical host name. If you do not use a cluster system, there is no need to specify this option.

■ -i *directory-name*

Specifies the name of the directory to which the files were exported by the export command, expressed as an absolute path or a path relative to the location where the command is executed. This option is mandatory.

■ -m

Specifies that only the host information is to be imported. This option cannot be

specified together with the -c or -a option. If specified in such a case, an invalid argument error results. If you omit all of the -m, -c, and -a options, the -a option is assumed.

■ -c

Specifies that the system hierarchy and host information are to be imported. This option cannot be specified together with the -m or -a option. If specified in such a case, an invalid argument error results. If you omit all of the -m, -c, and -a options, the -a option is assumed.

■ -a

Specifies that all information is to be imported. This option cannot be specified together with the -m or -c option. If specified in such a case, an invalid argument error results. If you omit all of the -m, -c, and -a options, the -a option is assumed.

## Return values

| 0 | Normal termination |
|---|---|
| 4 | Invalid option |
| 8 | Server cannot be connected |
| 12 | Memory shortage occurred |
| 16 | Invalid permission |
| 20 | Error, such as a file error or invalid path |
| 24 | An input/output error occurred |
| 120 | System error occurred |
| 124 | Terminated due to other error |
| 201 or greater | JavaVM start error occurred |

## Example

Import the exported files under c:\temp:
jcfimport -i c:\temp

## jcfmkcsdata

### Function

This command creates from the host input information file (`host_input_data.csv`) and the Central Scope export file a Central Scope import file that contains monitoring tree information for a virtualization configuration.

### Format

```
jcfmkcsdata
          -f host-input-information-file-name  Central-Scope's-export-file-name
          -o export-file-name
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
     *Manager-path*`\bin\imcf\`

In UNIX:
     `/opt/jp1imm/bin/imcf/`

### Arguments

■ `-f` *host-input-information-file-name  Central-Scope's-export-file-name*

Specifies the relative or absolute path of the host input information file (`host_input_data.csv`) exported by the `jcfexport` command and of the file exported by the `jcsdbexport` command. This option is mandatory. If a path contains a space, enclose the entire path in double-quotation marks (`"`).

For the Central Scope's export file, specify the file to which a server-oriented tree has been exported.

For details about the host input information file (`host_input_data.csv`), see *8.5.1(1) Host information* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

■ `-o` *export-file-name*

Specifies the relative or absolute path of the Central Scope import file that is to be output by the command. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (`"`).

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Argument error |
| 2 | Specified file is invalid |
| 3 | Specified input file was not found |
| 4 | Export file already exists |
| 5 | No permission to access a specified file |
| 6 | Insufficient memory |
| 7 | An input/output error occurred |
| 9 | Insufficient disk space |
| 10 | Execution permission error |
| 20 | A reserved device was specified for the file path |
| 99 | Other error |
| 122 | Command was not executed from the administrator console (Windows only) |

## jcfmkhostsdata

### Function

This command uses a virtualization configuration information file to update a host input information file.

### Format

```
jcfmkhostsdata
          -imcf host-input-information-file
          -vm virtualization-configuration-information-file
          -o output-file-name
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
> *Manager-path*\bin\imcf\

In UNIX:
> /opt/jp1imm/bin/imcf/

### Arguments

■ -imcf *host-input-information-file*

Specifies the relative or absolute path name of the host input information file. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (").

■ -vm *virtualization-configuration-information-file*

Specifies the relative or absolute path name of the virtualization configuration information file. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (").

■ -o *output-file-name*

Specifies the relative or absolute path name of the host input information file to which the result of updating the host input information file is to be output. This option is mandatory. If the path contains a space, enclose the entire path in double-quotation marks (").

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Argument error |
| 2 | Insufficient memory |
| 3 | JavaVM start error occurred |
| 4 | Execution permission error (Windows only) |
| 5 | Command was not executed from the administrator console (Windows only) |
| 6 | Output file already exists |
| 7 | A specified file is invalid |
| 8 | A specified input file was not found |
| 9 | No permission to access a specified file |
| 10 | An input/output error occurred |
| 99 | Other error |

## jcfthreaddmp (Windows only)

### Function

This command creates a Java thread dump of IM Configuration Management - View.

Execute this command to collect a Java thread dump under the following circumstances:

- Window operation has become disabled.
- There are no stopped IM Configuration Management - View processes or IM Configuration Management server processes.

The command outputs a Java thread dump of IM Configuration Management - View to a text file in the `log` directory:

In Windows Server 2003 or Windows XP Professional:
    *View-path*`\log\`

In Windows Vista or Windows Server 2008:
    `%ALLUSERSPROFILE%\Hitachi\JP1\JP1_DEFAULT\JP1CoView\log`

If you create a thread dump of IM Configuration Management - View while it is running normally, JavaVM will become unstable, in which case you will have to restart IM Configuration Management - View.

### Format

    `jcfthreaddmp` *process-ID*

### Execution permission

None (if the Windows UAC feature is enabled, the command is executed from the administrator console)

### Storage directory

    *View-path*`\bin\`

### Arguments

- *process-ID*

Specifies the process ID of the `java.exe` process of IM Configuration Management - View that has become disabled.

The number of binds that can be specified by the process ID depends on OS limitations.

`CTRL_BREAK_EVENT` is not sent to a process other than IM Configuration

Management - View (`java.exe`).

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Open error or argument error |
| 2 | Process check error |
| 3 | Thread dump output request transmission error |
| 4 | Execution permission error |
| 10 | Other error |

## Example 1

The process ID of the IM Configuration Management - View that is disabled is `1234`:
`jcfthreaddmp 1234`

## Example 2

Identify the process ID of the `java.exe` process that corresponds to the IM Configuration Management - View:

Use the procedure below to identify the process ID of the `java.exe` process that corresponds to the disabled IM Configuration Management - View and then specify that process ID in the `jcfthreaddmp` command.

If you are running multiple instances of IM Configuration Management - View, there are also multiple `java.exe` processes. In such a case, you use the procedure described below to identify the process ID.

1.  Add a **PID (Process Identifier)** column.

    Open Task Manager's **Process** page, from the **View** menu choose **Select Columns**, and then select the **PID (Process Identifier)** check box in the Select Columns dialog box.

2.  Check whether the relevant IM Configuration Management - View instance is disabled.

    On the Task Manager's **Applications** page, select IM Configuration Management - View. From the right-click pop-up menu, choose **Bring to Front**. Check if the IM Configuration Management - View displayed in front is disabled.

3.  Display the PID (process identifier) of the `java.exe` process that corresponds to the disabled IM Configuration Management - View.

    On the **Applications** page, select the disabled IM Configuration Management - View, and then from the right-click pop-up menu, choose **Go To Process**.

The **Processes** page is displayed and the `java.exe` line of the disabled IM Configuration Management - View is selected. The PID column of that line is the process ID of the `java.exe` process that corresponds to the disabled IM Configuration Management - View.

## jcfview (Windows only)

### Function

This command starts IM Configuration Management - View. If the `-h`, `-u`, and `-p` options are specified, the command logs in to IM Configuration Management - View automatically without displaying the Login window.

### Format

```
jcfview [-h connection-target-host-name] [-u user-name] [-p password]
```

### Execution permission

None

### Storage directory

*View-path*`\bin\`

### Arguments

■ `-h` *connection-target-host-name*

Specifies the name of the host where the IM Configuration Management to be logged into is running. For the host name, from 1 to 255 bytes of characters are permitted. You can specify only a host where JP1/IM - Manager is running.

For the connection-target host name, you can specify the following:

- Host name defined on the host where the command is used

- Host name whose address can be resolved on the host where the command is used

- IP address

This option is optional. However, if you specify the `-p` option, you must specify this option.

If you start IM Configuration Management - View by specifying only the `-h` option or both the `-h` and the `-u` options, the Login window is displayed by using these arguments as the default values. If only the `-h` and `-p` options are specified to start IM Configuration Management - View, an error results.

■ `-u` *user-name*

Specifies a JP1 user name that has been registered in the authentication server. For the JP1 user name, from 1 to 31 alphanumeric characters are permitted (for alphabetic characters, only lower-case letters are permitted).

This option is optional. However, if you specify the `-p` option, you must specify this option.

If you start IM Configuration Management - View by specifying only the `-u` option or both the `-h` and the `-u` options, the Login window is displayed by using these arguments as the default values. If only the `-u` and `-p` options are specified to start IM Configuration Management - View, an error results.

■ `-p` *password*

Specifies the password for the specified user name. For the password, from 6 to 32 alphanumeric characters are permitted. Alphabetic characters are case sensitive. This option is optional.

If you specify this option, you must also specify the `-h` and `-u` options.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Argument error |
| 2 | Insufficient memory |
| 3 | Resource acquisition failed |
| 4 | Error message creation failed |
| 255 | System error |

## Example 1

Start IM Configuration Management - View and display the Login window:
`jcfview`

## Example 2

Enable automatic login without displaying the Login window:

This example specifies the connection-target host (`host1`), user name (`user2`), and password (`password`) to start IM Configuration Management - View:
`jcfview -h host1 -u user2 -p password`

## jco_killall.cluster (UNIX only)

### Function

When you are operating in a cluster system, this command forcibly terminates the JP1/IM - Manager processes.

Executing the `jco_stop.cluster` command during cluster operation may not stop all processes, resulting in a cluster operation failure. The `jco_killall.cluster` command forcibly terminates processes. Use this command only when processes cannot be terminated by the normal method of stopping JP1/IM - Manager Service.

The command can terminate the following processes:

- Process management (`jco_spmd`)
- Automatic Action Service (`jcamain`)
- Event Console Service (`evtcon`)
- Event Base Service (`evflow`)
- Event Generation Service (`evgen`)
- Central Scope Service (`jcsmain`)
- IM Configuration Management Service (`jcfmain`)
- IM database service

### Format

```
jco_killall.cluster [logical-host-name]
```

### Execution permission

Superuser permissions

### Storage directory

```
/etc/opt/jp1cons/
```

### Arguments

■ *logical-host-name*

Specifies a logical host name set in JP1/Base. The permitted length is from 1 to 15 characters (bytes). If this option is omitted, the command assumes the logical host name specified in the `JP1_HOSTNAME` environment variable. If the `JP1_HOSTNAME` environment variable is not specified, the command assumes the physical host name.

**Notes**

This command checks the first 15 bytes of the logical host name and then forcibly terminates the corresponding process. It cannot forcibly terminate a process at a logical host whose name consists of more than 15 bytes.

**Return values**

| | |
|---|---|
| 0 | Normal termination |
| 1 | Logical host name is not specified |
| 2 | There is no log directory |

## jco_spmd_reload

### Function

This command updates the status of JP1/IM - Manager processes. When you have changed the definition information for JP1/IM - Manager, you must reload the new information to enable it.

The `jco_spmd_reload` command enables the information in the definition files listed below. For details, see *When the definitions are applied* for each definition file in *2. Definition Files*.

- The following information is located in the automated action environment definition file (`action.conf.update`):

  - AND event storage period (`EVENTALIVEPERIOD`)
  - Default action executing user (`ACTIONEXECUSER`)
  - Automatic action issuance event (`SENDABLE_EVENT`)
  - Event-issuing host name acquisition method (`HOSTINEVENT`)

- Automatic action notification definition file (`actnotice.conf`)
- Extended startup process definition file (`jp1co_service.conf`)
- Health check definition file (`jcohc.conf`)
- Event guide information file (`jco_guide.txt`)
- Host information file (`jcs_hosts`)
- Guide information file (`jcs_guide.txt`)
- Correlation event generation system profile (`egs_system.conf`)
- Correlation event generation environment definition file
- Severity changing definition file (`jcochsev.conf`)

### Format

```
jco_spmd_reload [-h logical-host-name]
                [-t monitoring-period]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

## Arguments

- -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The permitted length is from 1 to 255 characters (bytes). If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -t *monitoring-period*

Specifies in seconds the amount of time to wait for the jco_spmd_reload command to terminate. The permitted value is from 0 to 32,767 (seconds). If the jco_spmd_reload command does not terminate within the specified amount of time, the system assumes that execution of the jco_spmd_reload command has failed. The default is 60 seconds.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| Other than 0 | Abnormal termination |

## jco_spmd_status

### Function

This command displays the startup status of the JP1/IM - Manager processes.

### Format

```
jco_spmd_status [-h logical-host-name]
                [-t monitoring-period]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. The permitted length is from 1 to 255 characters (bytes). If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -t *monitoring-period*

  Specifies in seconds the amount of time to wait for the jco_spmd_status command to terminate. The permitted value is from 0 to 32,767 (seconds). If the jco_spmd_status command does not terminate within the specified amount time, the system assumes that execution of the jco_spmd_status command has failed. The default is 60 seconds.

### Return values

| | |
|---|---|
| 0 | All child processes are running |

| 1 | • Error occurred during communication, such as in process management.<br>• When you are operating in a cluster system, the shared folder (shared directory) is not mounted.<br>• Execution permission error (Windows only). |
|---|---|
| 4 | Some child processes are running |
| 8 | All stopped |
| 12 | Request processing is underway (can be retried) |

## jco_start (UNIX only)

### Function

This command is a script for starting JP1/IM - Manager automatically.

To execute this command, you must have performed the following procedure after you completed installation and setup of JP1/IM - Manager:
```
# cd /etc/opt/jp1cons
# cp -p jco_start.model jco_start
```

Once this procedure has been executed, JP1/IM - Manager starts automatically whenever the system starts.

If you are using JP1/IM - Manager version 8 or earlier, make sure that you perform this procedure.

Before you execute this command, make sure that JP1/Base is running. JP1/IM - Manager uses the functions of JP1/Base (prerequisite product).

If this command is executed when the following conditions are satisfied, the command starts the IM database service and then starts JP1/IM - Manager:

- The IM database service has been set up.
- The integrated monitoring database is used or IM Configuration Management Service is set to be started.

The command terminates with a return value of 0 after issuing a startup request to the group of JP1/IM - Manager processes. To check whether the group of processes has started successfully, use the `jco_spmd_status` command after the `jco_start` command has terminated to display the process IDs of the services that have started. Note that the process ID of the IM database service is not displayed.

### Format

```
jco_start
```

### Execution permission

Superuser permissions

### Storage directory

```
/etc/opt/jp1cons/
```

### Return values

| | |
|---|---|
| 0 | Normal termination |

| 1 | More than one argument is specified, the event service is not running, or the IM database service cannot be started |
|---|---|
| 2 | There is no log directory |

## Example 1

When the integrated monitoring database is used:

Input value:

```
jco_start
```

Result:

```
Please wait a minutes, now starting the IM database
service...

KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11183-I The IM database service is stopped.

KNAN11189-I The status of the IM database service was
successfully confirmed.

Please wait a minutes, now starting JP1/IM - Manager...

KAVB3690-I Processing to report the status of JP1_CONS
has started.

Display the running processes

process name   process ID

     evflow       18990

    jcamain       19036

     evtcon       19037

KAVB3691-I All the processes have started.
```

## Example 2

When the integrated monitoring database is not used and IM Configuration
Management Service has not started:

Input value:

```
jco_start
```

Result:

```
Please wait a minutes, now starting JP1/IM - Manager...
```

```
KAVB3690-I Processing to report the status of JP1_CONS
has started.

Display the running processes

process name  process ID
       evflow      19237
      jcamain      19277
       evtcon      19278

KAVB3691-I All the processes have started.
```

## Example 3

When the IM database is not used:

Input value:

```
jco_start
```

Result:

```
Please wait a minutes, now starting the IM database
service...

KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11109-E The IM database service is not set up.

Unable start JP1/IM - Manager.
```

## jco_start.cluster (UNIX only)

### Function

When you are operating in a cluster system, this command starts JP1/IM - Manager on the logical host.

If you register this command into the cluster software, JP1/IM - Manager starts.

Before you execute this command, start JP1/Base on the same logical host. An error results if this command is executed while the event service of JP1/Base is not running.

The command terminates with a return value of 0 after issuing a startup request to the group of JP1/IM - Manager processes. To check whether the group of processes has started successfully, use the `jco_spmd_status` command after the `jco_start.cluster` command has terminated.

If this command is executed when the following condition is satisfied, the command starts the IM database service and then starts JP1/IM - Manager:

- The integrated monitoring database on the logical host is used or IM Configuration Management Service is set to be started.

To execute this command, you must have executed `jp1cc_setup_cluster` and `jp1cs_setup_cluster` after installing and setting up JP1/IM - Manager. For the IM database service, you must set up the cluster system for the IM database service. For details about cluster system setup, see *6. Operation and Environment Configuration in a Cluster System* in the *Job Management Partner 1/Integrated Management - Manager Configuration Guide*.

### Format

```
jco_start.cluster [logical-host-name]
```

### Execution permission

Superuser permissions

### Storage directory

```
/etc/opt/jp1cons/
```

### Arguments

■ *logical-host-name*

When you are operating in a cluster system, this option specifies the name of the logical host where this command is to be executed. The permitted length is from 1 to 63 characters (bytes). If this option is omitted, the command assumes the logical host name specified in the JP1_HOSTNAME environment variable. If the JP1_HOSTNAME environment variable is not specified, the command assumes the physical host name.

## Return values

| | |
|---|---|
| `0` | Normal termination |
| `1` | More than one argument is specified, the event service is not running, or the IM database service cannot be started |
| `2` | There is no log directory |

## jco_stop (UNIX only)

### Function

This command is a script for terminating JP1/IM - Manager automatically.

```
# cd /etc/opt/jp1cons
# cp -p jco_stop.model jco_stop
```

Once the foregoing procedure has been executed, JP1/IM - Manager terminates automatically when the system terminates. If the IM database service is running, the IM database service is stopped automatically after JP1/IM - Manager has terminated.

If JP1/IM - Manager does not terminate, the command outputs the KAVB8800-E message to standard output.

If the IM database service does not terminate, the command outputs the KAVB8801-E message to standard output.

You must register this command into the cluster software.

### Format

```
jco_stop
```

### Execution permission

Superuser permissions

### Storage directory

```
/etc/opt/jp1cons/
```

### Return values

| 0 | Normal termination |
|---|---|
| 1 | More than one argument is specified or the termination request resulted in a timeout |

### Example 1

JP1/IM - Manager and the IM database service are running:

Input value:

```
jco_stop
```

Result:

```
KAVB3674-I Termination processing of JP1_CONS has
started.
```

```
KAVB3675-I The stop command terminated normally.
```

```
KNAN11185-I Processing to stop the IM database service
will now start.

KNAN11028-I Please wait.

KNAN11187-I The IM database service stopped normally.

KNAN11186-I Processing to stop the IM database service
ended normally.

KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11183-I The IM database service is stopped.

KNAN11189-I The status of the IM database service was
successfully confirmed.
```

## Example 2

JP1/IM - Manager is running and the IM database service is not running:

Input value:

```
jco_stop
```

Result:

```
KAVB3674-I Termination processing of JP1_CONS has
started.

KAVB3675-I The stop command terminated normally.

KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11183-I The IM database service is stopped.

KNAN11189-I The status of the IM database service was
successfully confirmed.
```

## Example 3

Neither JP1/IM - Manager nor the IM database service is running:

Input value:

```
jco_stop
```

Result:

```
KAVB3674-I Termination processing of JP1_CONS has
started.

KAVB3662-I The process management is not running.
```

```
KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11183-I The IM database service is stopped.

KNAN11189-I The status of the IM database service was
successfully confirmed.
```

## Example 4

JP1/IM - Manager is not running and the IM database service is running:

Input value:

```
jco_stop
```

Result:

```
KAVB3674-I Termination processing of JP1_CONS has
started.

KAVB3662-I The process management is not running.

KNAN11185-I Processing to stop the IM database service
will now start.

KNAN11028-I Please wait.

KNAN11187-I The IM database service stopped normally.

KNAN11186-I Processing to stop the IM database service
ended normally.

KNAN11188-I The status of the IM database service will
now be confirmed.

KNAN11183-I The IM database service is stopped.

KNAN11189-I The status of the IM database service was
successfully confirmed.
```

## jco_stop.cluster (UNIX only)

### Function

When you are operating in a cluster system, this command terminates JP1/IM - Manager on the logical host.

If the IM database service is running on the logical host, the command terminates JP1/IM - Manager and then terminates the IM database service on the same logical host.

When you execute this command, the JP1/IM - Manager processes and the IM database service are terminated. If this command is executed but the processes do not terminate, use the `jco_killall.cluster` command to forcibly terminate all processes.

To execute this command, you must have executed `jp1cc_setup_cluster` and `jp1cs_setup_cluster` after installing and setting up JP1/IM - Manager. For the IM database service to terminate, you must have set up the cluster system for that IM database service. For details about cluster system setup, see *6. Operation and Environment Configuration in a Cluster System* in the *Job Management Partner 1/ Integrated Management - Manager Configuration Guide*.

### Format

```
jco_stop.cluster [logical-host-name]
```

### Execution permission

Superuser permissions

### Storage directory

```
/etc/opt/jp1cons/
```

### Arguments

■ *logical-host-name*

When you are operating in a cluster system, this option specifies the name of the logical host where this command is to be executed. The permitted length is from 1 to 63 characters (bytes). If this option is omitted, the command assumes the logical host name specified in the JP1_HOSTNAME environment variable. If the JP1_HOSTNAME environment variable is not specified, the command assumes the physical host name.

### Return values

| 0 | Normal termination |
|---|---|
| 1 | More than one argument is specified or the termination request resulted in a timeout |

## jcoappexecfcheck

### Function

This command checks the contents of a definition file for executing applications.

The definition file for executing applications in a specified directory is checked for any definition errors. Analysis results of the checking are output to standard output.

The analysis results are output in the following format:

*application-execution-definition-identifier*, *execution-path*[, *text*]

The analysis results contain the application execution definition identifier defined in the system ("default_browser" indicating the default Web browser definition used in Central Console).

### Format

jcoappexecfcheck *application-execution-definition-directory-name*

### Execution permission

None

### Storage directory

*View-path*\bin\

### Arguments

■ *application-execution-definition-directory-name*

Specifies the directory containing the definition file for executing applications that is to be checked, expressed as an absolute path or a path relative to the current directory. This cannot be a file name.

### Example

Execute the command to check the following definition file:

```
@file type="application-execution-definition", version="0300";
@define-block type="application-execution-def";
id="notepad";
path="C:\winnt\system32\notepad.exe";
@define-block-end;
@define-block type="application-execution-def";
id="dmp";
path="[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\NETM/DM/P\0521/
```

74

```
A\PathName\Path00]\bin\DMPSTS.exe";
@define-block-end;
```

The analysis results are output as follows:

```
"dmp","C:\NETMDMP\bin\DMPSTS.exe"
"notepad","C:\winnt\system32\notepad.exe"
"default_browser","C:\Program
Files\Netscape\Communicator\Program\netscape.exe"
```

75

## jcoattrfcheck

### Function

This command checks the contents of a definition file for extended event attributes.

The definition file for extended event attributes in a specified directory is checked for any definition errors. Analysis results of the checking are output to standard output. Error information, such as definition errors, is output to standard error.

The command outputs the analysis results in CSV format. Each line contains the following information for one event ID:

*platform*, *event-ID*, *language-type*, *product-name*, *attribute-name*, *display-name*, *type*

Note: The portion *, attribute-name*, *display-name*, *type* is output as many times as there are event attributes to be displayed.

JP1 event attributes displayed in the Event Details window contain this command's analysis results and the information common to the basic and extended attributes.

### Format

jcoattrfcheck *extended-event-attribute-definition-directory-name*

### Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

- *extended-event-attribute-definition-directory-name*

Specifies the name of the directory that contains the definition file for extended event

76

attributes that is to be checked. Express the directory name as an absolute path or a path relative to the current directory.

A file to be checked must have the extension `.conf` and its file type will be `extended-attributes-definition`.

# jcochafmode

## Function

This command changes the location of the event acquisition filter from Event Console Service to Event Base Service.

If you execute this command while you are using an event acquisition filter (for compatibility), the filter becomes applicable to the automated action functions and to Central Scope, as well as to JP1 event monitoring. You can then define detailed filter conditions. However, if you want to use the event acquisition filter (for compatibility) as is, there is no need to change the filter location.

Information specified in event acquisition filter version 07-01 or earlier is inherited into the event acquisition filter (for compatibility) as shown in the table below. Change the settings and condition group names as appropriate to your operation.

*Table 1-10:* Inheritance of event acquisition filter settings

| Settings before execution of jcochafmode command | After execution of jcochafmode command |
|---|---|
| None | Inherited as `Existing conditions group` with no settings |
| Only event IDs are set | Inherited as `Existing conditions group` |
| Only event levels are set | Inherited as `Existing conditions group` |
| Only JP1/SES events are set | Inherited as `Existing conditions group_SES` |
| JP1/SES events and event IDs are set | The JP1/SES event and event ID[#] settings are inherited as `Existing conditions group_SES`.<br>The event ID[#] settings are inherited as `Existing conditions group`. |
| Event levels and event IDs are set | Inherited as `Existing conditions group` |
| JP1/SES events and event levels are set | The JP1/SES event settings are inherited as `Existing conditions group_SES`.<br>The event level settings are inherited as `Existing conditions group`. |
| JP1/SES events, event levels, and event IDs are set | The JP1/SES event and event ID[#] settings are inherited as `Existing conditions group_SES`.<br>The event level and event ID[#] settings are inherited as `Existing conditions group`. |

#

The event ID settings are inherited to both condition groups.

## Format

```
jcochafmode [-h logical-host-name]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
*Console-path*\bin\

In UNIX:
/opt/jp1cons/bin/

## Arguments

■ -h *logical-host-name*

Specifies the logical host name for the event acquisition filter (for compatibility). If this option is omitted, the command assumes the physical host. If you do not use a cluster system, specification of this option is not needed.

## Notes

- If you wish to execute this command to change the location and definitions of an event acquisition filter, you must first terminate JP1/IM - Manager at the target host whose event acquisition filter is to be changed. If this command is executed while the JP1/IM - Manager is running, an error results.

- If you execute this command more than once, the converted event acquisition filter is overwritten and the customized condition definitions are discarded. Execute this filter only once when you convert an event acquisition filter.

- Once you convert an event acquisition filter, you can no longer restore the previous event acquisition filter or event acquisition filter (for compatibility) to the filter location and definitions existing before upgrading.

- An event acquisition filter version 08-01 or later cannot be converted to an event acquisition filter (for compatibility).

- If you have newly installed JP1/IM - Manager, there is no need to execute this command.

- If you change the location of an event acquisition filter to Event Base Service by executing this command, that filter becomes applicable to the correlation event

generation function thereafter.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Example

Convert the event acquisition filter (for compatibility) at the logical `host01` to the event acquisition filter that is run on Event Base Service:
```
jcochafmode -h host01
```

## Output example 1

JP1/IM - Manager at the target host whose event acquisition filter is to be changed is not running:
```
KAVB1005-I The command (jcochafmode) has started.
KAVB0836-I The event acquisition filter was switched from
interchangeability to the ordinary mode.
KAVB1002-I The command (jcochafmode) terminates normally.
```

## Output example 2

JP1/IM - Manager at the target host whose event acquisition filter is to be changed is running:
```
KAVB1005-I The command (jcochafmode) has started.
KAVB0831-E JP1/IM - Manager has started.
KAVB1003-I The command (jcochafmode) terminates abnormally.
```

## jcochfilter

### Function

This command switches the event acquisition filter that is enabled in the correlation event generation function and Event Base Service of JP1/IM - Manager to the event acquisition filter indicated by a specified filter ID. This command can also enable the specified common exclusion conditions.

The command can display a list of the event acquisition filter's filter IDs, filter names, common exclusion-conditions group IDs, and common exclusion-conditions group names.

### Format

```
jcochfilter [-i filter-ID]
            [-h logical-host-name]
            [-e [common-exclusion-conditions-group-ID
            [,common-exclusion-conditions-group-ID...]|ALL]]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

- -i *filter-ID*

Specifies the filter ID of the event acquisition filter to be switched.

- -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ `-e`
[*common-exclusion-conditions-group-ID*[,*common-exclusion-conditions-group-ID*
...]|`ALL`]

Specifies the IDs of the common exclusion-conditions groups that you want to enable.
The common exclusion conditions whose group IDs are not specified will be disabled.
Separate multiple IDs with the comma. To enable all common exclusion conditions,
specify `ALL`. Note that if you specify nothing following `-e`, all common exclusion
conditions will be disabled.

## Notes

- If `-i` and `-e` are both omitted, the command displays the following information
  in list format:
  - Filter IDs and filter names of the event acquisition filters that are currently
    enabled
  - IDs and names of the common exclusion-conditions groups currently
    enabled
  - Filter IDs and filter names of the event acquisition filters that have been set
  - IDs and names of the common exclusion-conditions groups that have been
    set
- If JP1/IM - Manager is not running at the specified host and the event acquisition
  filter is used for compatibility, the `jcochfilter` command cannot be executed.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Argument error |
| 2 | Connection cannot be established with JP1/IM - Manager (JP1/IM - Central Console) (communication error) |
| 3 | Operating status of JP1/IM - Manager cannot be verified |
| 4 | There was no response from JP1/IM - Manager within a specific amount of time |
| 5 | Event acquisition filter is running in the compatibility mode |
| 6 | Error from JP1/IM - Manager |
| 7 | Filter ID specified in the `-i` option does not exist |
| 8 | User does not have permissions to execute the `jcochfilter` command (Windows only) |
| 9 | The maximum length for an event acquisition filter was exceeded |
| 10 | The common exclusion conditions specified in the `-e` option do not exist |

| 255 | Other error |
|-----|-------------|

### Example 1

List the event acquisition filters on logical host `hostA`:
```
jcochfilter -h hostA
```

### Example 2

Change the filter ID of the event acquisition filter on logical host `hostA` to `3`:
```
jcochfilter -i 3 -h hostA
```

### Example 3

Enable common exclusion-conditions groups (IDs: `0`, `2`) for the event acquisition filters on logical host `hostA`:
```
jcochfilter -e 0,2 -h hostA
```

## jcochstat

### Function

This command changes information about the response status for severe events.

The command accesses the event database on the host specified in `-h` and changes the response status of the JP1 events whose serial numbers are specified in `-n`.

When a response status is changed, the change is also applied to the response status displayed by other JP1/IM - Views that are logged in to the same manager. If a JP1 event whose response status is to be changed has been forwarded from another host or is set to be forwarded to another host, the response status is not changed at the source or target host.

This command can also be used to change the response status of JP1 events that are not displayed on the **Severe Events** page in the Event Console window. In such a case, you must use one of the following methods to check the change:

- If the JP1 event whose response status has been changed is displayed on the **Monitor Events** page in the Event Console window: Check the **Monitor Events** page.

- If the JP1 event whose response status has been changed is not displayed on the **Monitor Events** page in the Event Console window: Search for the event to check its status.

You can use this command while JP1/IM - Manager is running.

### Format

```
jcochstat [-h manager-host-name]
          {-k severe-event-response-status-key | -d |
           -k severe-event-response-status-key -d}
          -n serial-number-1[,...,serial-number-10]
```

### Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
```
/opt/jp1cons/bin/
```

## Arguments

■ `-h` *manager-host-name*

Specifies the manager that has the event database in which the severe events are registered. If this option is omitted, the command assumes the logical host. If this option is omitted during cluster system operation, the command assumes the name of the physical host where the command is executed. If JP1/IM - Manager is not running at the specified manager, an error results.

Specify the manager host name as a string of from 1 to 255 characters.

■ `-k` *severe-event-response-status-key*

Specifies the key value that represents the new severe event response status. The severe event response status of the severe events specified in the `-n` option is changed to the response status indicated by this key. If you use JP1/IM - View to display the status, the response status symbol changes.

A severe event response status key is case sensitive.

You must specify one or both of the `-k` and `-d` options. When both options are specified, the command changes the response status and then deletes the events from the JP1/IM - View window. The `-k` and `-d` options cannot both be omitted.

*Table 1-11:* Severe event response status keys

| Key value | Response status | Response status symbol displayed in JP1/IM - View |
|---|---|---|
| PROCESSED | Processed | 🏁 |
| PROCESSING | Being processed | ▶ |
| HELD | On hold | ⏸ |
| UNPROCESSED | Unprocessed | (No symbol) |

■ `-d`

Specifies that the severe events specified in the `-n` option are to be deleted from the JP1/IM - View window. They are not deleted from the event database.

You must specify one or both of the `-k` and `-d` options. When both options are specified, the command changes the response status and then deletes the events from the JP1/IM - View window. The `-k` and `-d` options cannot both be omitted.

- `-n` *serial-number*

  Specifies the serial number of a severe event whose response status is to be changed. This option is mandatory. The permitted value is a decimal integer in the range from 0 to 2,147,483,647.

  You can specify a maximum of 10 serial numbers. Separate multiple serial numbers with the comma. Do not specify any spaces before or after a delimiter comma.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Argument error |
| 2 | Network failure |
| 3 | Updating of the event database failed |
| 4 | Specified key is not supported |
| 5 | A specified event cannot be updated |
| 7 | No permission to execute the command (Windows Server 2008 only) |
| 255 | Other error |

## Example

Change to processed status the response status of the events that are registered in the event database on the `host01` manager and whose serial numbers are `35` and `400,` and then delete those events from the window:
`jcochstat -h host01 -k PROCESSED -n 35,400 -d`

## jcodbsetup

### Function

This is a setup command for creating an integrated monitoring database area for storing JP1 events. You must have already specified in advance in the setup information file the database's size, port number, and storage location.

When you execute this command in Windows, the following services are registered to the OS:

- When setting up a physical host: JP1/IM-Manager DB Server, JP1/IM-Manager DB Cluster Service

- When setting up a cluster configuration: JP1/IM-Manager DB Server_*logical-host-name*, JP1/IM-Manager DB Cluster Service_*logical-host-name*

### Format

```
jcodbsetup {-f setup-information-file-name|-s}
           [-h logical-host-name -c {online|standby}]
           [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
*Console-path*\bin\

In UNIX:
/opt/jp1cons/bin/

### Arguments

- ■ -f *setup-information-file-name*

Specifies the setup information file that contains the requisite information, such as the IM database installation folder and the size of the database area. If neither the IM Configuration Management database nor an integrated monitoring database has been set up, you must specify this option. If the IM Configuration Management database has already been set up, specify in this option the setup information file that you specified when you set up the IM Configuration Management database. Alternatively, if the IM

Configuration Management database has already been set up, you can specify the `-s` option instead. In such a case, the command uses the setup information that was specified when the IM Configuration Management database was set up.

This option cannot be specified together with the `-s` option. Additionally, the `-f` and `-s` options cannot both be omitted.

If the path contains a space, enclose the entire path in double-quotation marks (`"`). If you configure a cluster environment, specify the cluster setup information file name.

■ `-s`

If the IM Configuration Management database has already been set up, you can specify this option instead of the `-f` option. When this option is specified, the command sets up the integrated monitoring database by using the setup information that was specified when the IM Configuration Management database was set up.

If the IM Configuration Management database has not been set up but this option is specified, the command displays the `KNAN11193-E` message.

This option cannot be specified together with the `-f` option. Additionally, the `-s` and `-f` options cannot both be omitted.

■ `-h` *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. The command sets up the integrated monitoring database for the specified logical host. If you do not use a cluster system, specification of this option is not needed. Note that this logical host name cannot be `JP1_DEFAULT`.

■ `-c` `{online|standby}`

Specifies the setup type in the cluster configuration (primary node or secondary node). If you have specified the `-h` option, you must specify this option. If the IM Configuration Management database has already been set up on the same host, specify the value that you used when you created the IM Configuration Management database.

- `online`: Specifies that the primary node is to be set up.

- `standby`: Specifies that the secondary node is to be set up.

If you run a logical host in a non-cluster environment, specify `online` in the `-c` option.

■ `-q`

Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| 0 | Normal termination |
|---|---|

| 1 | Abnormal termination |
|---|---|

## Notes

- The contents of the cluster setup information files must be identical between the primary and secondary nodes. When you set up the secondary node, copy the cluster setup information file used for the primary node and then use that file. If the contents of the files specified for the primary and secondary nodes are different, cancel the setup at the secondary node, copy the cluster setup information file from the primary node, and then re-execute the command.

- If you execute the command with the `-c` option specified, do not switch servers during execution. If you switch servers during execution, cancel the setup after the command has terminated, and then re-execute the command.

- If you have canceled the command's execution by pressing **Ctrl** + **C** or **Ctrl** + **Break**, make sure that the `pdistup`, `pdfmkfs`, `pddef`, and `pdload` processes are not executing, execute the `jcodbunsetup` command, and then re-execute this command.

- If the IM Configuration Management database has already been set up and the IM database is being used, JP1/IM - Manager Service must be stopped.

- If you are using the IM Configuration Management database in Windows, the IM database (JP1/IM-Manager DB Server) must be running and the cluster service for the IM database (JP1/IM-Manager DB Cluster Service) must be stopped.

## jcodbunsetup

### Function

This command cancels setup of the integrated monitoring database that stores JP1 events.

Execute this command when you stop using the integrated monitoring database, uninstall JP1/IM - Manager, re-create the integrated monitoring database, or expand the database size.

In an environment in which an IM Configuration Management database has been set up, the IM Configuration Management database is still available even after execution of this command.

### Format

```
jcodbunsetup [-h logical-host-name -c {online|standby}]
             [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
  *Console-path*\bin\

In UNIX:
  /opt/jp1cons/bin/

### Arguments

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. The command cancels setup of the integrated monitoring database for the specified logical host. If you do not use a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

- -c {online|standby}

  Specifies the type of setup being canceled in the cluster configuration (primary node or secondary node). If you have specified the -h option, you must specify this option.

90

- online: Specify this value if you specified online during setup of the integrated monitoring database.

- standby: Specify this value if you specified standby during setup of the integrated monitoring database.

If you cancel setup of the integrated monitoring database on the logical host that was running in a non-cluster environment, specify online in the -c option.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Notes

- If you expand the database size in an environment in which the IM Configuration Management database has been created, you must execute the command that cancels setup of IM Configuration Management database after you've executed this command.

- If you execute the command with the -c option specified, do not switch servers during execution. If you switch servers during execution, re-execute the command after the command has terminated.

- If you have canceled the command's execution by pressing **Ctrl** + **C** or **Ctrl** + **Break**, make sure that the pdirst process is not executing, and then re-execute this command.

- If you have already set up the IM Configuration Management database and are using the IM database, JP1/IM - Manager Service must be stopped.

- The cluster service (P1/IM-Manager DB Cluster Service) for the IM database must be stopped.

## jcoegschange

### Function

This command changes correlation event generation definitions. You can execute this command while the status of the correlation event generation function is stopped, running, or standby, but not while the status is starting or stopping.

The following notes apply to execution of the jcoegschange command:

- When you execute the jcoegschange command to change correlation event generation definitions, the new definitions take effect immediately. If there are JP1 events under correlation event generation processing when the new definitions take effect, all these events will fail.

- If no conditions are defined in the correlation event generation definition file when the jcoegschange command is issued, the command executes processing with no correlation event generation conditions. This means that no correlation events are issued.

- If the correlation event generation function is in running status and the correlation event generation definitions to be changed by the jcoegschange command contain an error, the definitions are not changed and processing continues.

- If the correlation event generation function is not running, the only processing that occurs is that the correlation event generation definitions are set. Once you start the correlation event generation function, the correlation event generation definitions take effect.

- The jcoegschange command cannot be executed together with the jcoegsstatus command in which the -d option is specified.

### Format

```
jcoegschange [-h logical-host-name]
                -f correlation-event-generation-definition-file-name
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
  *Console-path*\bin\

In UNIX:

```
/opt/jp1cons/bin/
```

## Arguments

- -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -f *correlation-event-generation-definition-file-name*

Specifies the relative or absolute path of the correlation event generation definition file.

## Return values

| 0 | Correlation event generation definitions were changed successfully |
|---|---|
| 1 | Attempt to change correlation event generation definitions failed |
| 2 | A timeout occurred during communication with the Event Generation Service (when the integrated monitoring database is not used) or with Event Base Service (when the integrated monitoring database is used) |
| 100 | Execution permission error (Windows only) |
| 101 | Argument error |
| 102 | Communication error |
| 255 | Other abnormal termination (system error) |

## Example

Change the correlation event generation definitions for the physical host hostP to the definitions specified in the correlation event generation definition file /tmp/teigi1.conf:

Input value:
```
jcoegschange -f /tmp/teigi1.conf
```

Result:
```
KAJV3201-I The correlation event generation definition
file (/tmp/teigi1.conf) has been read, and the
definitions for the correlation event generation function
on (hostP) have been updated.
```

The same result is output even if no correlation event generation definitions are set for

the correlation event generation function.

# jcoegscheck

## Function

This command checks the contents of a correlation event generation definition file.

This command looks for definition errors and redundant definitions in the correlation event generation definition file.

## Format

```
jcoegscheck -f correlation-event-generation-definition-file-name
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
*Console-path*\bin\

In UNIX:
/opt/jp1cons/bin/

## Arguments

- -f *correlation-event-generation-definition-file-name*

Specifies the relative or absolute path of the correlation event generation definition file.

## Return values

| 0 | Contents of the correlation event generation definition file were correct |
|---|---|
| 1 | Correlation event generation definition file contained invalid contents |
| 100 | No execution permissions (Windows only)<br>Execution permissions are only granted to root (UNIX only) |
| 101 | Argument error |
| 255 | Other abnormal termination (system error) |

## Example

Check the contents of correlation event generation definition file /tmp/

teigi1.conf at the physical host hostP:

Input value:

```
jcoegscheck -f /tmp/teigi1.conf
```

Result (when the definitions were correct):

```
KAJV3311-I The content of the correlation event
generation definition file (/tmp/teigi1.conf) will now be
checked.

KAJV3312-I No mistakes were found in the content of the
correlation event generation definition file (/tmp/
teigi1.conf).
```

Result (when there were errors in the definitions):

```
KAJV3311-I The content of the correlation event
generation definition file (/tmp/teigi1.conf) will now be
checked.

Contents of the correlation event generation definition
file (/tmp/teigi1.conf) are now checked.

KAJV3313-E There is an invalid definition in the
correlation event generation definition.

KAJV3314-E There is an error in the contents of the
correlation event generation definition file. (file name
= /tmp/teigi1.conf, line = 5, incorrect contents = The
correlation event generation condition name has not been
specified.)

KAJV3314-E There is an error in the contents of the
correlation event generation definition file. (file name
= /tmp/teigi1.conf, line = 25, incorrect contents=The
number of specified event conditions exceeds the maximum
for a single correlation event generation condition.)
```

## jcoegsstart

### Function

This command changes the status of the correlation event generation function from standby to running. When the correlation event generation function is placed in running status, it starts processing in accordance with the correlation event generation definitions.

You can use the jcoegsstart command only after you have used the jcoegsstop command to place the correlation event generation function on standby status. The jcoegsstart command cannot start the correlation event generation function when it is stopped (service start and stop are controlled by process management (jco_spmd)).

When the status is changed successfully by the jcoegsstart command, a JP1 event (00003F25) is issued. For details about the 00003F25 JP1 event, see *3.2.2 Details of JP1 events*.

If the correlation event generation function is already in running status when the jcoegsstart command is executed, the status remains unchanged.

### Format

jcoegsstart [-h *logical-host-name*]

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
*Console-path*\bin\

In UNIX:
/opt/jp1cons/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system,

specification of this option is not needed.

## Return values

| | |
|---|---|
| 0 | Correlation event generation function restarted successfully |
| 1 | Restart of the correlation event generation function failed |
| 2 | A timeout occurred during communication with the correlation event generation function |
| 100 | No execution permissions (Windows only). In UNIX, execution permissions are only granted to `root`. |
| 101 | Argument error |
| 102 | Communication error |
| 255 | Other abnormal termination (system error) |

## Example

Restart the correlation event generation function at the physical host `hostP`:

Input value:
```
jcoegsstart
```

Result:
```
KAJV3291-I The correlation event generation function for
hostP has restarted.
```

# jcoegsstatus

## Function

This command displays the status of the correlation event generation function and the start options. By using the options, you can also display the correlation event generation definitions that are currently in use and the date and time at which correlation event generation definitions were applied.

## Format

```
jcoegsstatus [-h logical-host-name]
             [-d]
```

## Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

## Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

## Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ -d

Specifies that the following are to be displayed: the status of the correlation event generation function, start options, correlation event generation definitions that are currently in use, and the date and time at which the correlation event generation definitions were applied by the jcoegschange command.

The jcoegsstatus command with the -d option specified cannot be executed together with the jcoegschange command.

## Output format

*In Windows:*

When you execute the `jcoegsstatus` command, the status of the correlation event generation function is displayed in the following format:

```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function: status
Start option                         : start-option
```

When the `-d` option is specified, the status is displayed in the following format:

```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function: status
Start option                         : start-option

KAJV3281-I The correlation event generation definition for
hostP will now be displayed.
File name          : absolute-path-of-file
Reflection time : YYYY/MM/dd hh:mm:ss

VERSION=0002
# comment
 [generation-condition-name]
TARGET=filtering-condition-for-the-correlation-target-range
CON=event-condition
SAME_ATTRIBUTE=duplicate-attribute-value-condition
CORRELATION_NUM=maximum-correlation-number
TIMEOUT=timeout-period
TYPE=event-correlation-type
SUCCESS_EVENT=correlation-event-information
```

*In UNIX:*

When you execute the `jcoegsstatus` command, the status of the correlation event generation function is displayed in the following format:

```
KAJV3261-I The status of the correlation event generation
service for host-name will now be displayed.
Correlation event generation function : status
Start option                          : start-option
```

When the `-d` option is specified, the status is displayed in the following format:

```
KAJV3261-I The status of the correlation event generation
service for host-name will now be displayed.
Correlation event generation function : status
Start option                          : start-option
```

```
KAJV3281-I The correlation event generation definition for
host-name will now be displayed.
File name : absolute-path-of-file
Reflection time : YYYY/MM/dd hh:mm:ss

VERSION=0002
# comment
[generation-condition-name]
TARGET=filtering-condition-for-the-correlation-target-range
CON=event-condition
SAME_ATTRIBUTE=duplicate-attribute-value-condition
CORRELATION_NUM=maximum-correlation-number
TIMEOUT=timeout-period
TYPE=event-correlation-type
SUCCESS_EVENT=correlation-event-information
```

The following table lists and describes the character strings that are displayed as *status*.

*Table 1-12:* Character strings displayed as status

| Operating status | Character string displayed as status | Description |
|---|---|---|
| Starting | STARTING | The correlation event generation function is executing startup processing. |
| Running | RUNNING | The correlation event generation function is running and is ready to perform correlation event generation processing.<br>This status occurs in the following cases:<br>• The correlation event generation function has started.<br>• The jcoegsstart command is executed while the correlation event generation function is in standby status. |
| Standby | STANDBY | The correlation event generation function is running, but correlation event generation processing has stopped.<br>Correlation event generation processing is not performed on a JP1 event that is issued while the function is in standby status.<br>Even when the function status changes from standby to running, the correlation event generation processing is not performed on a JP1 event that was issued while the function was in standby status.<br>*Remarks:*<br>A correlation event that was being generated before the function was placed in standby status results in a failure after the function is placed in standby status. |
| Stopping | STOPPING | The correlation event generation function is engaged in termination processing. |

| Operating status | Character string displayed as status | Description |
|---|---|---|
| Stopped | STOP | The correlation event generation function has stopped. |

The following table lists and describes the character strings that are displayed as *start-option*.

*Table  1-13:*  Character strings displayed as start-option

| Start option | Character string displayed as start-option | Description |
|---|---|---|
| Cold start | cold | Do not inherit the information that was under correlation event generation processing when the function went into stop status during the previous session. |
| Warm start | warm | Inherit the information that was under correlation event generation processing when the function went into stop status during the previous session. |

For details about the format of a correlation event generation definition file, see *Correlation event generation definition file* in *2. Definition Files*.

## Return values

| 0 | Status was displayed successfully |
|---|---|
| 1 | Status display failed |
| 2 | A timeout occurred during communication with the correlation event generation function |
| 100 | No permission to execute the command (Windows Server 2008 only) |
| 101 | Argument error |
| 102 | Communication error |
| 255 | Other abnormal termination (system error) |

## Example 1

Display the status of the correlation event generation function on the physical host hostP (status: running; start option: cold):

Input value:

```
jcoegsstatus
```

Result:
```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function : RUNNING
Start option                          : cold
```

## Example 2

Display the status of the correlation event generation function on the physical host `hostP` and the correlation event generation definitions (status: running; start option: `cold`):

Input value:
```
jcoegsstatus  -d
```

Result:
```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function : RUNNING
Start option                          : cold

KAJV3281-I The correlation event generation definition
for hostP will now be displayed.
File name          :  /tmp/teigi1.conf
Reflection time :  2005/11/05 20:35:30

VERSION=2
[CONDITION]
TARGET=B.SOURCESERVER==host1;host2;host3
CON=CID:1, B.ID==100,
E.SEVERITY==Emergency;Critical;Alert;Error
SAME_ATTRIBUTE=B.SOURCESERVER
CORRELATION_NUM=20
SUCCESS_EVENT=B.ID:A00, E.SEVERITY:Emergency,
B.MESSAGE:$EV1_B.MESSAGE
```

## Example 3

Display the status of the correlation event generation function on the physical host `hostP` and the correlation event generation definitions (status: standby; start option: `warm`):

The following condition applies:

- When JP1/IM - Manager is newly installed

  `KAJV3283-I` is displayed because the correlation event generation definition file has not been set.

Input value:
```
jcoegsstatus -d
```

Result:
```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function : STANDBY
Start option                           : warm

KAJV3283-I The correlation event generation definition
for hostP has not been defined.
```

## Example 4

Display the status of the correlation event generation function on the physical host hostP and the correlation event generation definitions (status: stopped (process down); start option: cold):

Input value:
```
jcoegsstatus  -d
```

Result:
```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function : STOP
Start option                           : cold

KAJV3281-I The correlation event generation definition
for hostP will now be displayed.
File name           :  /tmp/teigi1.conf
Reflection time :  2005/11/05 20:35:30

VERSION=2
[CONDITION]
TARGET=B.SOURCESERVER==host1;host2;host3
CON=CID:1, B.ID==100,
E.SEVERITY==Emergency;Critical;Alert;Error
SAME_ATTRIBUTE=B.SOURCESERVER
CORRELATION_NUM=20
SUCCESS_EVENT=B.ID:A00, E.SEVERITY:Emergency,
B.MESSAGE:$EV1_B.MESSAGE
```

## Example 5

Load an invalid correlation event generation definition file while the correlation event generation function is running:

Input value:
```
jcoegsstatus  -d
```

Result:
```
KAJV3261-I The status of the correlation event generation
service for hostP will now be displayed.
Correlation event generation function : RUNNING
Start option                          : cold

KAJV3281-I The correlation event generation definition
for hostP will now be displayed.
File name               :  /tmp/teigi1.conf
Reflection time :  2005/11/05 20:35:30

KAJV3285-I  Operations will continue while ignoring an
invalid correlation event generation definition of hostP.

[CONDITION]
CON=CID:1, B.ID==ZZZ    ...#Message ID is invalid
SUCCESS_EVENT=B.ID:A00, E.SEVERITY:Emergency,
B.MESSAGE:$EV1_B.MESSAGE
```

## jcoegsstop

### Function

This command changes the status of the correlation event generation function from running to standby. When the correlation event generation function is placed in standby status, it stops correlation event generation processing.

Use the jcoegsstop command when you want to stop correlation event generation processing without stopping the correlation event generation function. To restore the correlation event generation function to running status, either execute the jcoegsstart command or restart JP1/IM - Manager.

When the status is changed successfully by the jcoegsstop command, a JP1 event (00003F26) is issued. For details about the 00003F26 JP1 event, see *3.2.2 Details of JP1 events*.

### Format

```
jcoegsstop [-h logical-host-name]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
*Console-path*\bin\

In UNIX:
/opt/jp1cons/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

### Notes

- If you execute this command during correlation event generation processing, all correlation events undergoing generation processing will result in failure.

106

- A JP1 event that is issued while the correlation event generation function is in standby status is not subject to correlation event generation processing.

- If the correlation event generation function is already in standby status when the jcoegsstop command is executed, the status remains unchanged.

## Return values

| | |
|---|---|
| 0 | Correlation event generation function was terminated successfully |
| 1 | Termination of the correlation event generation function failed |
| 2 | A timeout occurred during communication with the correlation event generation function |
| 100 | No execution permissions (Windows only) <br> Execution permissions are only granted to root (UNIX only) |
| 101 | Argument error |
| 102 | Communication error |
| 255 | Other abnormal termination (system error) |

## Example

Terminate the correlation event generation function on the physical host hostP:

Input value:
```
jcoegsstop
```

Result:
```
KAJV3301-I The correlation event generation function for
hostP has stopped.
```

# jcoevtreport

## Function

This command outputs to a CSV file information about the JP1 events registered in the integrated monitoring database. Only one instance of this command can be executing at the same time.

The `jcoevtreport` command can output JP1 event information to a CSV file as long as the IM database service is running, even if the integrated monitoring database is disabled or Central Console is not running.

The command outputs error information to standard error, such as invalid definitions or a file size that exceeds the maximum value.

The following table describes the output functions.

| Function | Description |
|---|---|
| Output of event report | Function that outputs to a CSV file information about the JP1 events registered in the integrated monitoring database |
| Output of maintenance information | Function that outputs all information about the JP1 events registered between an output start date/time and an output end date/time in the event of an integrated monitoring database failure |
| Output-and-save | Function that saves JP1 event information from the output of event report function before the information is deleted from the integrated monitoring database |
| Output-and-save status display | Function that displays the size and percentage of the JP1 events in the integrated monitoring database that have not been output and saved (percentage of the maximum capacity of the integrated monitoring database), as well as the deletion warning notification level |

## Format

Output of event report

```
jcoevtreport [-h logical-host-name]
             [-o output-file-name]
              -s output-start-date -e output-end-date
             [-user]
             [-f filter-condition-definition-file-name]
             [-k item-file-name]
             [-t {ON|OFF}]
             [ -a {EVTATTR|DISP}]
```

Output of maintenance information
```
jcoevtreport [-h logical-host-name]
             [-o output-file-name]
              -s output-start-date -e output-end-date
              -sys
```

Output-and-save
```
jcoevtreport [-h logical-host-name]
             [-o output-file-name]
              -save
             [ -t {ON|OFF}]
             [ -a {EVTATTR|DISP}]
```

Output-and-save status display
```
jcoevtreport [-h logical-host-name]
              -showsv
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

## Arguments

- -h *logical-host-name*

    When you are operating in a cluster system, this option specifies the logical host name of the host that executes the command. The command acquires JP1 event information from the integrated monitoring database that is running at the specified logical host and performs output of event reports, output of maintenance information, output-and-save, or output-and-save status display. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -o *output-file-name*

    Specifies the relative or absolute path name of the CSV file to which the JP1 event

information acquired from the integrated monitoring database is to be output.

If you specify a file name that begins with a hyphen (`-`), use a relative or absolute path that includes a directory (such as `./-hoge`) in order to distinguish the file name from an option. The permitted file name is a maximum of 250 bytes including the path.

Note that the following characters cannot be specified in a file name in Windows:

- Characters: `:  ?  "  <  >  |`

- A character string that completely matches any of the following strings (not case sensitive): `CON, PRN, AUX, NUL, COM1, COM2, COM3, COM4, COM5, COM6, COM7, COM8, COM9, LPT1, LPT2, LPT3, LPT4, LPT5, LPT6, LPT7, LPT8, LPT9`

The following describes the relationship between the specified output file name and the file name that is actually created.

Event information in the integrated monitoring database is output to a CSV file named *output-file-name_serial-number*`.csv`. The serial number is a number from 000 to 999. If a file with the same name already exists, the command does not overwrite the file. Instead, the command creates a new file by incrementing the serial number until an unused file name is obtained. If this option is omitted, the command outputs a CSV file named `jcoevtreport_`*serial-number*`.csv` to the current directory.

If the current directory (`.`) or the root directory (`/`) is specified in the file name, the command handles it as shown below:

| -o argument | Windows | UNIX |
|---|---|---|
| `.` | `._`*xxx*`.csv` is created in the current directory. | `_`*xxx*`.csv` is created in the current directory. |
| `/` | `_`*xxx*`.csv` is created in the root directory. | `_`*xxx*`.csv` is created in the root directory. |
| `""` (null character) | `_`*xxx*`.csv` is created in the current directory. | Insufficient argument error |

- `-s` *output-start-date*

Specifies the start date and time for the events that are to be output.

The specification format is *YYYYMMDDhhmmss*.

The specified date/time must be within the period from 1970/01/01 00:00:00 to 2038/01/19 03:14:07 (GMT).

`-e` *output-end-date*

Specifies the end date and time for the events that are to be output.

The specification format is *YYYYMMDDhhmmss*.

The specified date/time must be within the same period as for the `-s` option.

- `-k` *item-file-name*

  Specifies the relative or absolute path name of the output item definition file when an event report is to be output.

  If you specify a file name that begins with a hyphen (`-`), use a relative or absolute path that includes a directory (such as `./-hoge`) in order to distinguish the file name from an option.

- `-f` *filter-condition-definition-file-name*

  Specifies the relative or absolute path name of the filter condition definition file when an event report is to be output.

  If you specify a file name that begins with a hyphen (`-`), use a relative or absolute path that includes a directory (such as `./-hoge`) in order to distinguish the file name from an option.

- `-t` {`ON`|`OFF`}

  Specifies whether the registration time, arrival time, and `START_TIME` and `END_TIME` (common information for the extended attributes) are to be output in the format *YYYYMMDDhhmmss* or in absolute time in seconds.

  - `ON`: Specifies that the registration time, arrival time, and `START_TIME` and `END_TIME` (common information for the extended attributes) are to be output in the format *YYYYMMDDhhmmss* (i.e., they are to be converted from absolute time in seconds from January 1, 1970, to the calendar format *YYYYMMDDhhmmss*).

  - `OFF`: Specifies that the time is not to be converted to the calendar format.

  This option takes precedence over the item file specification.

  `ON` and `OFF` are not case sensitive.

- `-a` {`EVTATTR`|`DISP`}

  Specifies the output format for the header. If the `-a` option is omitted, no header is output.

  When `EVTATTR` is specified, the command displays attribute names (such as `B.ID` and `E.SEVERITY`); when `DISP` is specified, the command displays item names (such as event ID and severity).

  `EVTATTR` and `DISP` are not case sensitive.

- `-user`

  Specifies that an event report on the JP1 events registered in the integrated monitoring database is to be output.

  The `-user` option is optional.

111

If you omit all of the `-user`, `-sys`, `-save`, and `-showsv` options, the output of event report function is assumed.

- ■ `-sys`

Specifies that maintenance information on the JP1 events registered in the integrated monitoring database is to be output.

- ■ `-save`

Specifies that all JP1 events in the integrated monitoring database that have not been output and saved are to be output and saved.

- ■ `-showsv`

Specifies that the size and percentage of the JP1 events in the integrated monitoring database that have not been output and saved (percentage of the maximum capacity of the integrated monitoring database), as well as the deletion warning notification level, are to be displayed.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Invalid option or argument |
| 2 | Invalid filter |
| 3 | Invalid item file |
| 4 | Report output processing error |
| 5 | Execution permission error (Windows only) |
| 6 | Concurrent execution error |
| 7 | Serial number of the output file has reached the maximum value |
| 101 | Integrated monitoring database has not been set up |
| 102 | IM database service is not running |
| 103 | Error occurred in the connection with the IM database service |
| 254 | Memory shortage occurred |
| 255 | System error |

## Example 1

Output to a report the events that arrived at the manager from 2008/06/01 12:00:00 to 2009/01/01/00:00:00:
```
jcoevtreport -s 20080601120000 -e 20090101000000 -user
```

### Example 2KAVB4600

Set `report_`*xxx*`.csv` as the output destination and output an event report on the JP1 events dated from 2009/07/08 08:45:00 to 2009/07/14 17:15:00:

```
jcoevtreport -s 20090708084500 -e 20090714171500 -o report
```

### Example 3

Set `report_`*xxx*`.csv` as the output destination and output maintenance information on the JP1 events dated from 2009/07/08 08:45:00 to 2009/07/14 17:15:00:

```
jcoevtreport -sys -s 20090708084500 -e 20090714171500 -o report
```

### Example 4

Set `report_`*xxx*`.csv` as the output destination and perform output-and-save:

```
jcoevtreport -save -o report
```

### Example 5

Displays the output-and-save status:

```
jcoevtreport -showsv
```

# jcofuncfcheck

## Function

This command checks for definition errors in the definition files for executing applications and the definition file for the Tool Launcher window in a specified directory, and then outputs the analysis results to standard output.

The analysis results are output in the following formats:

```
Function tree definition
  tree-hierarchy "displayed-character-string" [,"execution-command-path"]

Function toolbar definition
  row = column
    "displayed-character-string"[,"execution-command-path"]
```

Note:

The `Function toolbar definition` heading and information are displayed only when one of the following directories is specified as the Tool Launcher window definition directory:

*View-path*`\conf\function\ja`

*View-path*`\conf\function\en`

The analysis results contain the application execution definition identifier defined in the system (`"default_browser"` indicating the default Web browser definition used in Central Console) and the Tool Launcher window identifier (`"root"` indicating the highest node of the menu tree).

## Format

jcofuncfcheck *application-execution-definition-directory-name* Δ
　　　　　　　 *Tool-Launcher-window-definition-directory-name*

## Execution permission

None

## Storage directory

*View-path*`\bin\`

## Arguments

- *application-execution-definition-directory-name*

  Specifies the directory containing the definition files for executing applications that are to be checked, expressed as an absolute path or a path relative to the current directory. This cannot be a file name.

- *Tool-Launcher-window-definition-directory-name*

  Specifies the directory containing the definition file for the Tool Launcher window that is to be checked, expressed as an absolute path or a path relative to the current directory. This cannot be a file name.

## Example

Execute the command on the following definition files:

*Definition file for executing applications*
```
@file type="application-execution-definition", version="0300";
@define-block type="application-execution-def";
id="notepad";
path="C:\winnt\system32\notepad.exe";
@define-block-end;
@define-block type="application-execution-def";
id="dmp";
path="[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\NETM/DM/P\0521/
A\PathName\Path00]\bin\DMPSTS.exe";
@define-block-end;
```

*Definition file for the Tool Launcher window*
```
@file type="function-definition", version="0300";
@define-block type="function-tree-def";
id="node1";
parent_id="root";
name="Node 1";
@define-block-end;
@define-block type="function-tree-def";
id="node11";
parent_id="node1";
name="Node 11";
icon="%JCO_INSTALL_PATH%\image\1206.gif";
execute_id="default_browser";
args="http://";
@define-block-end;
@define-block type="function-tree-def";
id="node2";
parent_id="root";
```

115

```
name="Node 2";
icon="%JCO_INSTALL_PATH%\image\1206.gif";
execute_id="notepad";
@define-block-end;
@define-block type="function-tree-def";
id="node3";
parent_id="root";
name="Node 3";
icon="%JCO_INSTALL_PATH%\image\1206.gif";
execute_id="dmp";
@define-block-end;
```

The analysis results are output as follows:

```
Function tree definition
  "Integrated Management"
   "Node-1"
     "Node 11","C:\Program
Files\Netscape\Communicator\Program\netscape.exe"
     "Node 2","C:\winnt\system32\notepad.exe"
     "Node 3","C:\NETMDMP\bin\DMPSTS.exe"
Function toolbar definition
  row=1
   "Node 11","C:\Program
Files\Netscape\Communicator\Program\netscape.exe"
    "Node 2","C:\winnt\system32\notepad.exe"
```

# jcogencore

## Function

This command outputs dumps in the event that JP1/IM - Manager processes fail (except for Central Scope Service (jcsmain) and IM Configuration Management Service (jcfmain)). Once you have executed the jcogencore command, you must restart JP1/IM - Manager.

- In Windows:

  Execute this command if the evtcon and evgen processes of JP1/IM - Manager have failed.

- In UNIX:

  Execute this command if the evflow, jcamain, evtcon, and evgen processes of JP1/IM - Manager have failed.

To detect failures, use the health check function of JP1/IM - Manager (for details about the health check function, see *7.2 JP1/IM - Manager health check function* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*).

When you execute the jcogencore command, it displays a message asking you to choose the processes for which failure data is to be output. Select the processes that have failed. The following table shows the files that are output when the jcogencore command is executed.

*Table 1-14:* Files that are output

| OS | Process name | Name of output file | |
|---|---|---|---|
| | | **Java thread dump** | **Core dump** |
| Windows | evflow | *javacore-process-ID.XXXXXXXXXX*.txt | -- |
| | jcamain | -- | -- |
| | evtcon[1] | *javacore-process-ID*ID.*XXXXXXXXXX*.txt | -- |
| | evgen[1, 2] | *javacore-process-ID.XXXXXXXXXX*.txt | -- |

117

| OS | Process name | Name of output file | |
| --- | --- | --- | --- |
| | | **Java thread dump** | **Core dump** |
| UNIX | `evflow` | *javacore-process-ID.XXXXXXX XXX*`.txt` | `core.evflow` |
| | `jcamain` | -- | `core.jcamain` |
| | `evtcon`[#1] | *javacore-process-ID.XXXXXXX XXX*`.txt` | `core.evtcon` |
| | `evgen`[#1, #2] | *javacore-process-ID.XXXXXXX XXX*`.txt` | `core.evgen` |

Legend:

> *XXXXXXXXX*: Unique ID assigned automatically by the OS

> --: Not output

#1

> `evtcon` and `evgen` are function names.

#2

> This function name is used when the integrated monitoring database is not used.

The output files are stored in the following folders:

*In Windows:*

> Physical host: *Console-path*`\log\`

> Logical host: *shared-disk*`\jp1cons\log\`

*In UNIX:*

> Physical host: `/var/opt/jp1cons/log/`

> Logical host: *shared-disk*`/jp1cons/log/`

In addition to the thread and core dumps that are output, other failure data can be obtained by using the data collection tool.

Once you have executed this command, you must restart JP1/IM - Manager.

- In Windows:

  Physical host: After the command has executed, stop JP1/IM - Manager Service by choosing **Control Panel**, **Administrative Tools**, **Services**, and **JP1/IM-Manager Service**, and then restart JP1/IM - Manager. After JP1/IM - Manager has restarted, use the `jco_spmd_status` command to check the process statuses.

Logical host: After the command has executed, stop JP1/IM - Manager Service by choosing **Control Panel**, **Administrative Tools**, **Services**, and **JP1/IM-Manager Service**, and then restart JP1/IM - Manager. If you use cluster software to monitor **JP1/IM-Manager Service**, use the cluster software to either restart the service or trigger failover.

- In UNIX:

Physical host: After the command has executed, the selected processes are terminated forcibly. Use the `jco_stop` command to terminate all processes and then restart the processes with the `jco_start` command. After the processes have restarted, use the `jco_spmd_status` command to check the process statuses.

Logical host: After the command has executed, the selected processes are forcibly terminated. Use the `jco_stop.cluster` command to terminate all processes and then restart the processes with the `jco_start.cluster` command. If you use cluster software to monitor JP1/IM - Manager, use the cluster software to either restart the service or trigger failover.

## Format

```
jcogencore [-h logical-host-name]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
*Console-path*`\bin\`

In UNIX:
`/opt/jp1cons/bin/`

## Arguments

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

When you are operating in a cluster system, this option specifies the logical host name. The command outputs the thread or core dump of the JP1/IM - Manager processes at the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

## Notes

- When you execute the `jcogencore` command in UNIX, the processes are terminated forcibly after the dump has been output. Execute this command only in the event of process hang-up. You can use health checking to detect process hang-ups.

  Take precautions when you execute the `jcogencore` command during cluster system operation.

- Before you execute this command in UNIX, first check the available capacity in your machine. If you output a core dump for five processes, the total size of the core dump may be as much as 8,419 megabytes.

- If multiple processes have failed, execute the command on Event Console Service (`java`), Automatic Action Service (`jcamain`), and Event Base Service (`evflow`) in that order.

  You can execute the command on the correlation event generation function (`evgen`) in any order because it has no dependency on other processes.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Option or argument analysis error |
| 2 | Process check error |
| 3 | Logical host error |
| 4 | Execution permission error (Windows only) |
| 5 | Pipe creation error (Windows only) |
| 6 | Thread dump output processing error |
| 10 | Other error |

## Example 1

Execute the command because a hang-up occurred in the Event Console Service (`java`) process on the physical host in Windows:
```
jcogencore
```

## Example 2

Execute the command because a hang-up occurred in the Event Console Service (`java`) process on the logical host `hostA` in Windows:
```
jcogencore -h hostA
```

## Example 3

Execute the command because a hang-up occurred in the Event Console Service (`java`) process on the physical host in UNIX:
`/opt/jp1cons/bin/jcogencore`

## Example output

When a hang-up occurred in the Event Console Service (`java`) process on the physical host in UNIX, and core and thread dumps were output:

```
      ProcessName    PID
[1] : evflow         1234
[2] : jcamain        94320
[3] : evtcon         3333
[4] : evgen          65654
[5] : Exit
KAVB8427-I When outputting dumps for the three processes evflow,
jcamain, and evtcon at the same time, output the dumps in order
of evtcon, jcamain, and evflow.
KAVB8417-I Please enter a number for the process to output the
core dump file [1-5]:3
KAVB8414-I The thread dump output request has been sent.
KAVB8407-I When the core dump is output, evtcon will stop. Is
this OK? (y/n):y
KAVB8406-I The core dump file will be output.
KAVB8416-I The core dump file has been output.
```

## jcohctest

### Function

This command tests the health check definition file (`jcohc.conf`) that is used by the health check function of JP1/IM - Manager to determine whether the specified definitions will execute correctly. You can test the notification command on the basis of the health check definition file.

The `jcohctest` command can be executed only when JP1/IM - Manager is running.

If you have made changes to the health check definition file (`jcohc.conf`), you cannot execute the `jcohctest` command unless you have first applied the new settings in the health check definition file by means of a method such as executing the `jco_spmd_reload` command.

During testing by the `jcohctest` command, the variables specified in the health check definition file (`HCHOST`, `HCFUNC`, `HCPNAME`, `HCPID`, `HCDATE`, and `HCTIME`) are displayed as shown below.

*Table 1-15:* Values displayed during execution of the jcohctest command

| Variable name | Value displayed during execution of the jcohctest command |
|---|---|
| HCHOST | Physical host name or logical host name specified in the `-h` option |
| HCFUNC | `evflow` |
| HCPNAME | `evflow` |
| HCPID | Process ID of `evflow` |
| HCDATE | Notification command execution date (*YYYY*/*MM*/*DD*) |
| HCTIME | Notification command execution time (*hh*:*mm*:*ss*) |

For details about the health check definition file (`jcohc.conf`), see *Health check definition file (jcohc.conf)* in *2. Definition Files*.

### Format

```
jcohctest [-h logical-host-name]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
 *Console-path*\bin\

In UNIX:
 /opt/jp1cons/bin/

## Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. The command tests the notification command that is set in the health check definition file for the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Argument error |
| 2 | Logical host does not exist |
| 3 | Notification command execution failure |
| 7 | Execution permission error (Windows only) |
| 10 | Other error |

# jcoimdef

## Function

This command sets up a system environment for JP1/IM - Manager or references settings. The values set by this command take effect at the following times:

- When JP1/IM - Manager is restarted
- Once this command has executed with the `-i` option specified
- Once the `jco_spmd_reload` command has executed

When this command is executed, the settings are output to standard output.

## Format

```
jcoimdef  [-r EXE | OUTPUT | OFF]
          [-b event-acquisition-location]
          [-s ON | OFF]
          [-egs ON | OFF]
          [-rulehost host-name]
          [-ruleuser user-name]
          [-rule ON | OFF]
          [-e retry-interval]
          [-t timeout-period]
          [-c retry-count:retry-interval]
          [-o retry-count:retry-interval]
          [-i]
          [-h logical-host-name]
          [-memo ON | OFF]
          [-chsev ON | OFF]
          [-db ON | OFF]
          [-dbntc ON | OFF]
          [-dbntcpos deletion-warning-notification-level]
          [-cf ON | OFF]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
  *Console-path*\bin\

In UNIX:
```
/opt/jp1cons/bin/
```

## Arguments

■ *No arguments specified*

Specifies that a list of current settings is to be displayed at standard output.

The display format is as follows:
*setting-item-name=setting*

The figure below shows the information that is output by this command when the default values are used. You can change the settings for the items by specifying arguments.

*Figure 1-1:* jcoimdef command output format

```
F_TIME_TO_GO_BACK=-1                              ●━━━━━━━    Event acquisition start position (specified in -b)

                                                             Retry interval at which connection establishment with
F_EVENT_CONNECT_RETRY_INTERVAL=10                 ●━━━━━      Event Service is retried automatically
                                                             (specified in -e)

F_DISPATCH_CONNECT_RETRY_COUNT=30        ⎫                   Retry count and retry interval at which connection
                                         ⎬ ━━━●              establishment is retried automatically during event
F_DISPATCH_CONNECT_RETRY_INTERVAL=2      ⎭                   transmission (specified in -c)

F_DISPATCH_TIME_OUT=60                            ●━━━━━     Timeout period for automatic transmission retry
                                                             processing (specified in -t)

F_DISPATCH_RETRY_COUNT=3                 ⎫                   Retry count and retry interval at which event
                                         ⎬ ━●               transmission is retried automatically
F_DISPATCH_RETRY_INTERVAL=0              ⎭                   (specified in -o)

F_CS=OFF                                 ●━━━━━━━━━━         Whether events are transmitted to Central Scope
                                                             Service (specified in -s)

A_REEXECUTE_RUNNING_ACTION=OFF           ━━●                Setting for the Automatic Action Service
                                                             (specified in -r)

S_EGS=OFF                                ●━━━━━━             Whether Event Generation Service is started (specified
                                                             in -egs)

A_RULE=OFF                               ●━━━━━━━            Whether the JP1/IM - Rule Operation linkage items are
                                                             displayed (specified in -rule)

A_RULE_HOST=                             ━●━                Host name of the linked JP1/IM - Rule Operation
                                                             (specified in -rulehost)

A_RULE_USER=                             ━●━                Name of user who executes the linked JP1/IM - Rule
                                                             Operation (specified in -ruleuser)

S_MEMO=OFF                               ━●━                Setting for memo entry setting function
                                                             (specified in -memo)

S_CHANGE_SEVERITY=OFF                    ●━━                Whether the severity changing function is enabled or
                                                             disabled (specified in -chsev)

S_DB=OFF                                 ━●━                Whether the event storage function is enabled or
                                                             disabled (specified in -db)

S_DBNTC=OFF                              ━●━                Whether deletion warning notification events are issued
                                                             (specified in -dbntc)

S_DBNTCPOS=80                            ━●━                Setting for the deletion warning notification position as a
                                                             percentage (specified in -dbntcpos)

S_CF=OFF                                 ━●━                Whether IM Configuration Management Service is
                                                             started (specified in -cf)
```

Legend:
▁▁▁ (underscore): Indicates the default.

■ -r EXE | OUTPUT | OFF

Specifies the operation that is to be performed on an action whose status is Wait, Send, Queue, or Running when the Automatic Action Service starts:

- EXE: Re-execute the actions whose status is `Wait`, `Send`, `Queue`, or `Running`. When the status of such an action is displayed (by a method such as executing the `jcashowa` command or in the Action Log window), the displayed status name contains `-R`.

- OUTPUT: Output a list of the actions whose status is `Wait`, `Send`, `Queue`, or `Running` to the action re-execution file (`actreaction`).

  When the status of such an action is displayed (by a method such as executing the `jcashowa` command or in the Action Log window), `Ended -R` is displayed as the status.

  As many sets of the following information items are output as there are actions in the action re-execution file:
  ###     *date*# △ *time*# △ *event-ID* △ *serial-number*    ### [*linefeed*]

  [u=*execution-user-name* △ ] [e=*environment-variable-file-name*] [d=*execution-host-name*]
         *execution-command* [*linefeed*]

  #: Date and time the re-execution function was executed.

- OFF: Perform no processing on actions whose status is `Wait`, `Send`, `Queue`, or `Running`, and do not change the status.

■ `-b` *event-acquisition-start-position*

Specifies the position at which event acquisition is to start when JP1/IM - Manager starts. The permitted value is from -1 to 144.

- If you specify `-1`, processing continues from the status existing the last time JP1/IM - Manager was terminated. The default is that `-1` is set.

  For example, if `-1` is specified, JP1/IM - Manager has received events through serial number `12000`, events with serial numbers from `10001` to `12000` (2,000 events) have been stored in the event buffer, and JP1/IM - Manager is restarted, the following takes place:

  Event buffer of JP1/IM - Manager:

  > The events that were in the event buffer the last time JP1/IM - Manager was terminated (events with serial numbers from `10001` to `12000`) are stored in the event buffer again.

  Automated action:

  > Automated action is performed on the events starting with the event (serial number `12001`) that immediately follows the event with serial number `12000`. The automated action processing involves matching events with action definitions.

- If you specify 0, acquisition processing starts from the first event that is registered after JP1/IM - Manager starts.

  Event buffer of JP1/IM - Manager:

  > The events that are registered in the event database after the start are stored in the event buffer.

  Automated action:

  > The events that are registered in the event database after the start are subject to automated action processing.

- If you specify a value in the range from 1 to 144, the command acquires the events from the event database starting with the event that was registered at the specified number of hours before JP1/IM - Manager started.

  This value is in units of hours. For example, to collect events starting from an event that was registered 1 hour before JP1/IM - Manager startup, specify 1.

  Event buffer of JP1/IM - Manager:

  > The events that have been registered in the event database at the manager since the specified number of hours before the startup are stored in the event buffer.

  Automated action:

  > The events that have been registered in the event database at the manager since the specified number of hours before the startup are subject to automated action processing.

  > Note that an event that has already been processed by an automated action is no longer subject to automated action processing. In other words, action matching is performed only once per event.

In all cases, the events that are transmitted to Central Scope Service are the same as for the automated actions.

■ -s ON | OFF

Specifies whether Central Scope Service is to be started and whether events are to be transmitted to Central Scope Service.

If you specify ON, Central Scope Service starts when JP1/IM - Manager starts and events are transmitted to Central Scope Service. Also, in the Event Console window, the **Central Scope** button and menu are enabled.

If you specify OFF, events cannot be set to be transmitted to Central Scope Service because Central Scope Service is not started when JP1/IM - Manager starts. In this case, the **Central Scope** button and menu are disabled in the Event Console window. The default is OFF.

To enable the `-s` setting, you must also restart the connected JP1/IM - View.

■ `-egs ON | OFF`

Specifies whether the correlation event generation function is to be enabled.

If you specify `ON`, the following occurs when JP1/IM - Manager starts:

- If the integrated monitoring database is not used, the Event Generation Service is started.

- If the integrated monitoring database is used, the correlation event generation function of Event Base Service is enabled.

If you specify `OFF`, the following occurs when JP1/IM - Manager starts:

- If the integrated monitoring database is not used, the Event Generation Service is not started.

- If the integrated monitoring database is used, the correlation event generation function of Event Base Service is disabled.

The default is `OFF`.

■ `-rulehost` *host-name*

Specifies the host name of the linked JP1/IM - Rule Operation. This must be a host name that was set as a managed host in the system configuration definition. Express the host name using from 1 to 255 ASCII characters excluding the space, tab, and control characters. A host group cannot be specified. If you specify `""` as the host name, the null character (none) is set, in which case the host executing the command is assumed.

■ `-ruleuser` *user-name*

Specifies the name of the JP1 user who is to execute the linked JP1/IM - Rule Operation. Express the user name using from 1 to 31 ASCII characters excluding the space, tab, and control characters and the following special characters: `*` `"` `'` `/` `\` `[` `]` `{` `}` `(` `)` `:` `;` `|` `=` `,` `+` `?` `<` `>`. If you specify `""` as the user name, the null character (none) is set, in which case the user is assumed based on the following priority:

- JP1 user specified in `ACTIONEXECUSER` in the automated action environment definition file (`action.conf`)

- `jp1admin`

■ `-rule ON | OFF`

Specifies whether the items for JP1/IM - Rule Operation linkage are to be displayed in JP1/IM - View.

If you specify `ON`, the function for displaying the items for JP1/IM - Rule Operation

linkage in JP1/IM - View is enabled when JP1/IM - Manager starts.

If you specify OFF, the function for displaying the items for JP1/IM - Rule Operation linkage in JP1/IM - View is disabled when JP1/IM - Manager starts. The default is OFF.

To enable the -rule setting, you must also restart the connected JP1/IM - View.

- -e *retry-interval*

  Specifies the interval at which connection establishment with the event service is to be retried automatically when a connection establishment attempt fails or connection is lost while the event service is acquiring events from Event Base Service. The permitted value is from 1 to 86,400 (seconds). This is a setting for Event Base Service.

- -t *timeout-period*

  Specifies the timeout period for retry processing when event transmission from Event Base Service to Central Scope Service or Event Console Service fails and automatic transmission is retried. The permitted value is from 1 to 3,600 (seconds). When Event Base Service issues a transmission request to Central Scope Service or Event Console Service and there is no response within the time specified in this option, Event Base Service stops event transmission to that control. This is a setting for Event Base Service.

- -c *retry-count*:*retry-interval*

  Specifies a retry count and a retry interval at which connection establishment is to be retried automatically if an attempt to establish connection with Central Scope Service or Event Console Service, fails or if connection is lost when events are transmitted from Event Base Service to Central Scope Service or Event Console Service. The permitted retry count is from 0 to 100, and the permitted retry interval is from 0 to 3600 (seconds). This is a setting for Event Base Service.

- -o *retry-count*:*retry-interval*

  Specifies a retry count and a retry interval at which events are to be transmitted automatically when event transmission from Event Base Service to Central Scope Service or Event Console Service fails. The permitted retry count is from 0 to 100, and the permitted retry interval is from 0 to 3600 (seconds). This is a setting for Event Base Service.

- -i

  Specifies that the values of the specified options are to be enabled. When this option is specified, the values set in the options specified in this command are loaded into Event Base Service and the Automatic Action Service and those values take effect.

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. The command sets up the system environment of JP1/IM - Manager at the specified

logical host or references the settings for the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ -memo {ON | OFF}

Specifies whether the memo entry setting function is to be used.

If the integrated monitoring database is enabled and ON is specified in this option, the memo entry setting function is enabled. If OFF is specified, the memo entry setting function is disabled. If the integrated monitoring database is disabled, specifying ON in this option will not enable the memo entry setting function. The default is OFF.

■ -chsev {ON | OFF}

Specifies whether the severity changing function is to be used.

If the integrated monitoring database is enabled and ON is specified in this option, the severity changing function is enabled. If OFF is specified, the severity changing function is disabled. If the integrated monitoring database is disabled, specifying ON in this option will not enable the severity changing function. The default is OFF.

■ -db {ON | OFF}

Specifies whether the event storage function is to be used.

- ON: Enable the event storage function; events can be stored in the integrated monitoring database.

- OFF: Disable the event storage function; events cannot be not stored in the integrated monitoring database.

If the integrated monitoring database is disabled, specifying ON in this option will not enable the event storage function. The default is OFF.

■ -dbntc {ON | OFF}

Specifies whether a deletion warning notification event is to be issued when the number of JP1 events (expressed as a percentage of the maximum capacity of the integrated monitoring database) in the integrated monitoring database on which output-and-save has not been performed exceeds the deletion warning notification level.

- ON: Issue a deletion warning notification event when the ratio of JP1 events in the integrated monitoring database on which output-and-save has not been performed exceeds the deletion warning notification level.

- OFF: Do not issue a deletion warning notification event even if the ratio of JP1 events in the integrated monitoring database on which output-and-save has not been performed exceeds the deletion warning notification level. The default is

OFF.

If the integrated monitoring database is disabled, specifying ON in this option will not result in issuance of a deletion warning notification event if the ratio of JP1 events in the integrated monitoring database on which output-and-save has not been performed has exceeded the deletion warning notification level.

■ -dbntcpos *deletion-warning-notification-level*

Specifies the number of JP1 events (expressed as a percentage of the maximum capacity of the integrated monitoring database) in the integrated monitoring database on which output-and-save has not been performed that is to trigger issuance of a deletion warning notification event.

The permitted value range is from 20 to 80 (%). The default is 80.

For example, if you specify -dbnotcpos 70, the deletion warning notification level is set to 70%.

■ -cf {ON | OFF}

Specifies whether IM Configuration Management Service is to be started.

- ON: Start IM Configuration Management Service when JP1/IM - Manager starts.

- OFF: Do not start IM Configuration Management Service when JP1/IM - Manager starts. The default is OFF.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |
| 7 | Execution permission error (Windows only) |

# jcomonitorfcheck

## Function

This command checks the definition file for opening monitor windows.

When this command is executed, it checks a specified definition file for opening monitor windows for any definition errors and then outputs the analysis results to standard output. Error information, such as definition errors, is output to standard error.

An analysis result is output for each event ID in the following format:

*product-name*, *event-ID*
　*start-version*, *end-version*
　　[*subkey-name*, *attribute-name-used-as-key*
　　　[*attribute-value-used-as-key*, *interface-name*]]
　　　[*interface-name*, *application-execution-definition-identifier*,
　　　 *command-argument*, *replacement-event-attribute*]

If there is only one version specification, such as `0600`, the same value is output for both the start version and the end version. Similarly, if `ALL` is specified, `ALL` is displayed for both the start version and the end version.

If `SUBKEY` is set in the `DEF_KEY` key definition, the contents of the subkey are displayed. `SUBKEY` is duplicated if it is also used in another `DEF_KEY` key definition.

This command does not check whether the application execution definition identifier is defined in the definition file for executing applications.

## Format

```
jcomonitorfcheck monitor-window-opening-definition-directory-name
```

## Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

## Storage directory

In Windows:
　　*Console-path*\bin\

In UNIX:
```
/opt/jp1cons/bin/
```

## Arguments

■ *monitor-window-opening-definition-directory-name*

Specifies the name of the monitor window opening definition directory, expressed as an absolute path or a path relative to the current directory.

## Example

Execute the command for the following definition file:

```
DESC_VERSION=0300

# Monitor window transition definition file for AJS-View

DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004102
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004103
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004104
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004105
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004106
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004107
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004108
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004109
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004120
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004121
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004122
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004123
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004124
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=00004125
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=000041A7
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=000041A8
```

```
INTERFACE=AJS2_MONITOR
DEF_KEY PRODUCT_NAME=/HITACHI/JP1/AJS2 EVENT_ID=000041A9
INTERFACE=AJS2_MONITOR

DEF_MTR_CALL NAME=AJS2_MONITOR EXEC_ID=jco_JP1_AJS2 PATH="-j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%" PARAM=B.SOURCESERVER,E.A0,E.A1,E.A3
```

The analysis results are as follows:

```
/HITACHI/JP1/AJS2, 41a9
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4109
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 41a8
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4108
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 41a7
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4107
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
```

```
/HITACHI/JP1/AJS2, 4106
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4125
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4105
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4124
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4104
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4123
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4103
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4122
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
```

```
/HITACHI/JP1/AJS2, 4102
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4121
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
/HITACHI/JP1/AJS2, 4120
 ALL, ALL
    AJS2_MONITOR, jco_JP1_AJS2, -j
%IM_EVC_PARAMETER_1%::%IM_EVC_PARAMETER_2%/
%IM_EVC_PARAMETER_3% -t %JCO_JP1TOKEN% -v monitor -l
%IM_EVC_PARAMETER_4%, B.SOURCESERVER, E.A0, E.A1, E.A3
```

## jcothreaddmp (Windows only)

### Function

This command outputs a thread dump in the event of a JP1/IM - View failure.

A thread dump output by the `jcothreaddmp` command is stored in the following folder:

In Windows Vista:

>  *system-drive*:`\ProgramData\HITACHI\JP1\JP1_DEFAULT\JP1CoView\log\`

In any other OS:

>  *View-path*`\log\`

You can use the data collection tool to collect other failure data in addition to the output thread dump.

### Format

```
jcothreaddmp process-ID
```

### Execution permission

None

### Storage directory

*View-path*`\bin\`

### Arguments

■ *process-ID*

Specifies the process ID of the `java.exe` process of the disabled JP1/IM - View. You can specify only one process ID. It is not permissible to omit the process ID or to specify multiple process IDs.

If you are running multiple instances of JP1/IM - View, you must determine the process ID of the JP1/IM - View that can no longer be controlled by the Windows Task Manager.

In Windows Task Manager, JP1/IM - View is displayed as `java.exe`. If another java program is running at the same time, that program is also displayed as `java.exe`, making it difficult to distinguish between the programs. For details about how to identify the process ID of JP1/IM - View, see *9.4.1(2) Outputting a thread dump for JP1/IM* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

**Notes**

- If the `jcothreaddmp` command is executed on a JP1/IM - View that is running normally, operation of JP1/IM - View may become unstable. In such a case, restart JP1/IM - View.

- Collecting Web-based JP1/IM - View data

  If operation using Web-based JP1/IM - View is disabled, you must use another method to collect data. For details about data collection, see the following:

  - About the settings required prior to dump collection

    See *4.14.4 Specifying display settings for the Java Console window* in the *Job Management Partner 1/Integrated Management - Manager Configuration Guide*

  - About how to collect data

    For Windows, see *9.4.1(3) Collecting information related to the Web version of JP1/IM - View* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*

    For UNIX, see *9.4.2(3) Collecting information related to the Web version of JP1/IM - View* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*

**Return values**

| | |
|---|---|
| 0 | Normal termination |
| 1 | Option analysis error |
| 2 | Process checking error |
| 3 | Thread dump output request transmission error |
| 10 | Other error |

# jcovcfsetup (Windows only)

## Function

This command registers into or deletes from the Windows **Start** menu the menu item for starting IM Configuration Management - View. Note that the item for starting IM Configuration Management - View is not registered into the Windows **Start** menu automatically.

If the JP1/IM - View being used is for Windows Server 2008 or Windows Vista, this command is supported only when it is executed from the command prompt that is started from **Run as Administrator**.

## Format

```
jcovcfsetup [-i | -u]
```

## Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

## Storage directory

*View-path*\bin\

## Arguments

If no options are specified, the command executes in the same manner as when the -i option is specified.

■ -i

Specifies that the menu for starting IM Configuration Management - View is to be registered into the Windows **Start** menu.

■ -u

Specifies that the menu for starting IM Configuration Management - View is to be removed from the Windows **Start** menu.

Note that if you have manually changed the menu name or its storage location, the command cannot remove the menu. In such a case, you must remove the menu manually.

## Notes

The maximum length of the command arguments (in bytes) depends on the OS. Specify the command arguments within the limitation of the applicable OS.

### Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

### Example 1

Add **Configuration Management** to the menu of JP1/IM - View:
```
jcovcfsetup or jcovcfsetup -i
```

### Example 2

Remove **Configuration Management** from the menu of JP1/IM - View:
```
jcovcfsetup -u
```

## jcoview (Windows only)

### Function

This command opens a JP1/IM - View window.

The window to be opened depends on the option specifications, as shown below:

- Starting the Login window for JP1/IM - View

  When any option other than -p or -e is specified or no option is specified, the Login window opens.

  -c option is specified: The **Central Console** check box is selected in the Login window.

  -s option is specified: The **Central Scope** check box is selected in the Login window.

  -h option is specified: A value is entered in **Host to connect** in the Login window.

  -u option is specified: A value is entered in **User name** in the Login window.

- Opening the Event Console window and the Monitoring Tree window of JP1/IM - View

  When the -h, -u, or -p option is specified, the Event Console window and the Monitoring Tree window open. To open the Event Console window and the Monitoring Tree window, you must specify the -h, -u, or -p option.

  -c option is specified: The Event Console window opens.

  -s option is specified: The Monitoring Tree window opens.

  Neither the -c nor the -s option is specified: The Event Console window opens.

- Opening the Monitoring Tree (Editing) window of JP1/IM - View

  When the -e option is specified, the Monitoring Tree (Editing) window opens.

### Format

```
jcoview [[-c] [-s]
        [-h connection-target-host-name] [-u user-name] [-p password]
        | -e ]
```

### Execution permission

None

### Storage directory

*View-path*\bin\

**Arguments**

■ -c

Specifies that the Event Console window is to open.

If the password (-p option) is omitted, the Login window opens with the **Central Console** check box selected. This option cannot be specified together with the -e option.

This option is optional.

If the -h, -u, and -p options are specified and none of the -c, -s, and -e options is specified, the command assumes that the -c option is specified.

■ -s

Specifies that the Monitoring Tree window is to open.

If the password (-p option) is omitted, the Login window opens with the **Central Scope** check box selected. This option cannot be specified together with the -e option.

This option is optional.

■ -h *connection-target-host-name*

Specifies the name of the connection-target host. For the host name, from 1 to 255 bytes of characters are permitted. You can specify only a host where JP1/IM - Manager is running.

For the connection-target host name, you can specify the following:

- Host name defined on the host where the command is used

- Host name whose address can be resolved on the host where the command is used

- IP address

This option is optional, but if you specify the -p option, you must also specify this option.

■ -u *user-name*

Specifies the name of a JP1 user that has been registered in the authentication server. For the JP1 user name, from 1 to 31 alphanumeric characters are permitted (for alphabetic characters, only lower-case letters are permitted).

This option is optional, but if you specify the -p option, you must also specify this option.

■ -p *password*

Specifies the specified user's password. For the password, from 6 to 32 alphanumeric characters are permitted. Alphabetic characters are case sensitive.

143

If you specify this option, you must also specify the -h and -u options.

This option is optional.

■ -e

Specifies that the Monitoring Tree (Editing) window is to open.

When you specify this option, you must not specify any other options.

This option is optional.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Argument error |
| 2 | Insufficient memory |
| 3 | Resource acquisition failed |
| 4 | Error message creation failed |
| 255 | System error |

## Example 1

Start JP1/IM - View and open the Login window:
```
jcoview
```

## Example 2

Start JP1/IM - View and display the Login window with host set in **Host to connect** and jp1admin set in **User name**:
```
jcoview -h host -u jp1admin
```

## Example 3

Start JP1/IM - View, log in by specifying jp1admin as the user name, jp1admin as the password, and host as the connection-target host, and then open the Event Console window:
```
jcoview -h host -u jp1admin -p jp1admin
```

## Example 4

Start JP1/IM - View, log in by specifying jp1admin as the user name, jp1admin as the password, and host as the connection-target host, and then open the Monitoring Tree window:
```
jcoview -s -h host -u jp1admin -p jp1admin
```

### Example 5

Start JP1/IM - View, log in by specifying `jp1admin` as the user name, `jp1admin` as the password, and `host` as the connection-target host, and then open the Event Console window and the Monitoring Tree window:
```
jcoview -c -s -h host -u jp1admin -p jp1admin
```

### Example 6

Start JP1/IM - View and open the Monitoring Tree (Editing) window:
```
jcoview -e
```

### Example 7

You can create a command shortcut, such as for Examples 2 and 3, for each host and each user.

# jcoview_log.bat (Windows only)

## Function

This command is a tool for collecting data in the event of a JP1/IM - View failure. The data collected by this tool includes JP1/IM - View maintenance data, OS system information, and integrated trace logs.

This tool constitutes a batch file, which cannot be customized by the user.

When you execute this tool, the target folders or files used for data collection are classified into primary and secondary data categories and the collected data is stored directly under a specified data storage folder.

The primary data, which consists of a minimum amount of logs and settings files, is collected for purposes such as identifying failures and investigating minor errors. The secondary data consists of the Windows event log and crash dump, and provides the detailed information needed to investigate failures in depth.

If you execute `jcoview_log.bat` during a thread dump of JP1/IM - View, the tool displays the `KAVB8946-I` message asking whether the thread dump is to be deleted. If you enter `y`, the tool deletes the thread dump.

If necessary, compress the collected data by using a program such as a compression tool.

For details about the data that can be collected by this tool, see *9.3 Data that needs to be collected when a problem occurs* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

The following tables show the organization of the folders directly under the data storage folder and the details of the data that is stored.

*Table 1-16:* Organization of the internal folders for the primary data

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_1st\coview | JP1/IM - View patch information |
| *data-storage-folder*\jp1_default\imm_1st\coview\conf | JP1/IM - View settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st\coview\default | Common definition information for JP1/IM - View |
| *data-storage-folder*\jp1_default\imm_1st\coview\log | Log files for JP1/IM - View |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_1st\oslog | OS log information[#] |
| *data-storage-folder*\jp1_default\imm_1st\spool | Integrated trace logs |

#

> If JP1/IM - Manager and JP1/Base are installed on the same machine, data for JP1/IM - Manager and JP1/Base is also collected.

*Table 1-17:* Organization of the internal folders for the secondary data

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_2nd\oslog | • Windows event log<br>• Crash dump[#] |

#

> Crash dumps are not collected in the case of the Windows Vista and Windows Server 2008 versions of JP1/IM - View.

## Format

```
jcoview_log.bat -f data-storage-folder
                [-t]
                [-u]
                [-q]
```

## Execution permission

None

## Storage directory

*View-path*\tools\

## Arguments

■ -f *data-storage-folder*

Specifies the name of the folder to which the collected data is to be output, expressed as a full path or a path relative to the location where the command is executed. If the path contains a space, enclose the entire path in double-quotation marks ("). This option is mandatory.

If a nonexistent folder is specified, a new folder with that name is created. If an existing folder is specified, the contents of that folder are deleted and then the specified folder is created.

- ■ `-t`

  Specifies that the `hosts` and `services` files are not to be collected.

- ■ `-u`

  Specifies that a crash dump is not to be collected. This option is not supported by the Windows Vista and Windows Server 2008 versions of JP1/IM - View.

- ■ `-q`

  Specifies that the command is to be executed without requesting confirmation from the user.

### Notes

- If you wish to collect JP1/IM - View data at the same host as for JP1/IM - Manager, use the `jim_log.bat` command.

- Do not execute this tool more than once. If it is executed multiple times, collected data may be overwritten or data collection may fail.

- If a file to be collected cannot be found, the tool may display a message such as `The file was not found`; however, no action is necessary.

### Return values

| | |
|---|---|
| `0` | Normal termination |
| `8` | Abnormal termination |

### Example

Collect data in the `F:\tmp\bat` folder:
`jcoview_log.bat -f F:\tmp\bat`

The output results are as follows:
```
KAVB8925-I The directory does not exist. ("F:\tmp\bat")
          The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("F:\tmp\bat\jp1_default\imm_1st")
          The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("F:\tmp\bat\jp1_default\imm_2nd")
          The directory will be created.
Press any key to continue...
KAVB8926-I Data acquisition processing will start.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" command will
```

```
start.
KAVB8921-I The information for JP1/IM - View will be acquired.
KAVB8922-I The information for JP1/IM - View has been acquired.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8929-I The system information will be acquired. Please wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I The system information has been acquired.
KAVB8929-I "Watson log and crash dump" will be acquired. Please
wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" command will
start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8922-I "Watson log and crash dump" has been acquired.
KAVB8921-I Windows Eventlog(Application) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(Application) has been acquired.
KAVB8921-I Windows Eventlog(System) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(System) has been acquired.
KAVB8921-I The setup.ini of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ini of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ilg of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ini of JP1/Base will be acquired.
KAVB8922-I The setup.ini of JP1/Base has been acquired.
KAVB8921-I The setup.ilg of JP1/Base will be acquired.
KAVB8922-I The setup.ilg of JP1/Base has been acquired.
KAVB8921-I The setup.ini of JP1/IM - View will be acquired.
KAVB8922-I The setup.ini of JP1/IM - View has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - View will be acquired.
KAVB8922-I The setup.ilg of JP1/IM - View has been acquired.
```

```
KAVB8921-I The integrated trace log will be acquired.
KAVB8922-I The integrated trace log has been acquired.
KAVB8921-I The integrated installer log will be acquired.
KAVB8922-I The integrated installer log has been acquired.
KAVB8921-I The installer log file will be acquired.
KAVB8922-I The installer log has been acquired.
KAVB8921-I The hosts will be acquired.
KAVB8922-I The hosts has been acquired.
KAVB8921-I The services will be acquired.
KAVB8922-I The services has been acquired.
KAVB8921-I The registry information will be acquired.
KAVB8922-I The registry information has been acquired.
KAVB8921-I The netstat information will be acquired.
KAVB8922-I The netstat information has been acquired.
KAVB8921-I The ipconfig information will be acquired.
KAVB8922-I The ipconfig information has been acquired.
KAVB8921-I The net start information will be acquired.
KAVB8922-I The net start information has been acquired.
KAVB8921-I The set information will be acquired.
KAVB8922-I The set information has been acquired.
KAVB8918-I The data was successfully acquired.
```

## jcschstat

### Function

This command changes the status of monitoring nodes (monitoring objects or monitoring groups). It also clears the logs of status change events at the monitoring nodes. It cannot change the monitoring status of monitoring nodes.

You can include this command in batch processing in order to automatically initialize the status of monitoring nodes as the last processing of error recovery, or you can use this command to automatically initialize the status of monitoring nodes after eliminating the cause of an error by linking with the help desk system.

You can use this command when the Central Scope functions are enabled.

Communication is lost at the server end if you execute this command while JP1/IM - Manager (JP1/IM - Central Scope) is already processing 32 or more command requests, and the command fails.

### Format

```
jcschstat [-h logical-host-name]
          -n monitoring-node-ID-1, monitoring-node-ID-2,
monitoring-node-ID-3...
          [-s status-value]
          [-i]
          [-t timeout-period]
          [-d]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Scope-path*\bin\

In UNIX:
    /opt/jp1scope/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name.

If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ `-n` *monitoring-node-ID-1*, *monitoring-node-ID-2*, *monitoring-node-ID-3*...

Specifies the IDs of the monitoring nodes (monitoring object IDs or monitoring group IDs) whose status is to be changed, expressed in hexadecimal notation.

You can specify a maximum of 10 monitoring node IDs. When you specify multiple IDs, separate them with the comma (`,`). The monitoring nodes are processed in the order in which they are specified.

■ `-s` *status-value*

Specifies the new status for the specified monitoring nodes. The status value is case sensitive. For monitoring objects, you can specify `Emergency`, `Alert`, `Critical`, `Error`, `Warning`, `Normal`, `Debug`, or `Initial`. For monitoring groups, you can specify only `Initial`.

When the status of a specified monitoring node changes, the status is propagated to the higher nodes and the lower nodes are initialized.

If this option is omitted, `Initial` is assumed.

■ `-i`

Specifies that a confirmation message is to be displayed when the status of a monitoring node is to be changed.

■ `-t` *timeout-period*

Specifies a timeout period for communication with the server. The permitted value is from 1 to 32,767 (seconds). The default is 1,800 seconds (30 minutes).

■ `-d`

Specifies that command processing is to be canceled and the command is to be terminated with an error if a monitoring node specified in the `-n` option does not exist or if a monitoring node status change fails.

If this option is omitted, the command skips processing on any monitoring node that does not exist or on which status change processing fails, and then processes the next monitoring node.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Logical host name was not found |
| 2 | Argument error |

| 4 | No permission to execute the command |
|---|---|
| 12 | Insufficient memory |
| 32 | Data access error |
| 33 | Specified monitoring tree ID or monitoring node ID was not found in the database |
| 37 | No response from the server (connection establishment request failed) |
| 38 | Communication with the server failed (the server was terminated during communication or the server's connection count exceeded the maximum value) |
| 39 | A timeout occurred (after a request was sent to the server, the timeout period was exceeded before a response was received) |
| 40 | An invalid response was sent from the server |
| 42 | Another command or request is being processed |
| 43 | A monitoring node for which not monitor is set is specified in `-n` |
| 44 | A monitoring group is specified in `-n` |
| 99 | Other error |

## Example

Change the status of monitoring node ID 8 to `Error`:
```
jcschstat -n 8 -s Error
```

## Example output

```
jcschstat -n 5 -s Normal
KAVB7630-I The status of the monitoring node (5) has been set to
Normal.
```

---

## jcsdbexport

---

### Function

This command acquires monitoring object database storage information and outputs it locally to a file as a configuration file for monitoring tree. The information that is output to the file includes monitoring tree configuration information, common event monitoring conditions, and Visual Monitoring window configuration information.

You can use this command to store multiple generations of storage information in the monitoring object database. To copy the storage information in the monitoring object database to another server, execute this command and then use the `jcsdbimport` command to copy the storage information to the monitoring object database of the other server.

You can use this command when the Central Scope functions are enabled.

If you execute this command while updating data for Central Scope Service, the command terminates with an error. For example, if you execute this command while updating the server's tree from the Monitoring Tree (Editing) window or while changing the status of a monitoring node with the `jcschstat` command, the command terminates with an error.

A configuration file for monitoring tree that was output by JP1/IM - Manager version 08-10 or later cannot be imported by JP1/IM - Manager version 08-01 or earlier.

### Format

```
jcsdbexport [-h logical-host-name]
            -o file-name
            [-t timeout-period]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
   *Scope-path*\bin\

In UNIX:
   /opt/jp1scope/bin/

## Arguments

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -o *file-name*

  Specifies the full path of the file to which tree configuration information is to be output. The file name must end with .dat. If the path contains a space, enclose the entire path in double-quotation marks (").

- -t *timeout-period*

  Specifies the timeout period for communication with the server. The permitted value is from 10 to 32,767 (seconds). The default is 1,800 seconds (30 minutes).

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Logical host name was not found |
| 2 | Argument error |
| 3 | Specified file is invalid |
| 4 | No permission to execute the command |
| 6 | No permission to access the specified file |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 31 | Database initialization failed at the server |
| 32 | Database access failed at the server |
| 33 | Specified monitoring tree ID or monitoring node ID was not found in the database |
| 37 | No response from the server (connection establishment request failed) |
| 38 | Communication with the server failed (the server was terminated during communication or the server's connection count exceeded the maximum value) |
| 39 | A timeout occurred (after a request was sent to the server, the timeout period was exceeded before a response was received) |
| 40 | An invalid response was sent from the server |

| 42 | Another command or request is being processed |
|----|----------------------------------------------|
| 99 | Other error |

## Example

Output monitoring object database storage information to `c:\temp\output.dat`:
`jcsdbexport -o c:\temp\output.dat`

## Example output

```
KAVB7670-I Exporting of the monitoring tree definition to the
file c:\temp\output.dat was successful.
```

## jcsdbimport

### Function

This command applies monitoring object database storage information that was output by the jcsdbexport command (monitoring tree configuration information, common event monitoring conditions, and Visual Monitoring window configuration information) to the monitoring object database of JP1/IM - Manager.

Use this command together with the jcsdbexport command to migrate JP1/IM - Manager monitoring object database storage information to another server.

You can use this command when the Central Scope functions are enabled.

If you execute this command while updating data for Central Scope Service, the command terminates with an error. For example, if you execute this command while updating the server's tree from the Monitoring Tree (Editing) window or while changing the status of a monitoring node with the jcschstat command, the command terminates with an error.

### Format

```
jcsdbimport [-h logical-host-name]
            -o file-name
            [-t timeout-period]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Scope-path*\bin\

In UNIX:
    /opt/jp1scope/bin/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system,

specification of this option is not needed.

■ -o *file-name*

Specifies the full path of a file that was output by the `jcsdbexport` command and that is to be applied to the monitoring object database of JP1/IM - Manager. The file name must end with `.dat`. If the path contains a space, enclose the entire path in double-quotation marks (`"`).

■ -t *timeout-period*

Specifies the timeout period for communication with the server. The permitted value is from 10 to 32,767 (seconds). The default is 1,800 seconds (30 minutes).

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Logical host name was not found |
| 2 | Argument error |
| 3 | Specified file is invalid |
| 4 | No permission to execute the command |
| 6 | No permission to access the specified file |
| 12 | Insufficient memory |
| 31 | Database initialization failed at the server |
| 32 | Database access failed at the server |
| 34 | Format error in the configuration file for monitoring tree |
| 37 | No response from the server (connection establishment request failed) |
| 38 | Communication with the server failed (the server was terminated during communication or the server's connection count exceeded the maximum value) |
| 39 | A timeout occurred (after a request was sent to the server, the timeout period was exceeded before a response was received) |
| 40 | Invalid response was sent from the server |
| 41 | Specified input file was not found |
| 42 | Another command or request is being processed |
| 48 | The file is not compatible with the file version specified by the server |
| 99 | Other error |

## Example

Apply the file `input.dat` output by the `jcsdbexport` command to the monitoring object database of JP1/IM - Manager:

```
jcsdbimport -o input.dat
```

## Example output

```
KAVB7660-I Importing of the monitoring tree definition from the
file input.dat was successful.
```

## jcsdbsetup

### Function

This command creates a new ISAM file for storing the monitoring object database. When you execute this command, the existing monitoring object database is deleted and a new monitoring object database is created.

You must terminate JP1/IM - Manager before you can create a monitoring object database.

You can use this command when the Central Scope functions are enabled.

### Format

```
jcsdbsetup [-h logical-host-name]
           [-f]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Scope-path*\bin\

In UNIX:
    /opt/jp1scope/bin/

### Arguments

- -h *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

- -f

  You must specify this option when there is an existing monitoring object database (if this option is omitted in such a case, an error results). If there is no existing monitoring object database, you can omit this option.

  When this option is specified and there is a monitoring object database, the command

displays the confirmation message Database files are existed. Delete these files? [y/n]. Entering Y and then pressing the **Enter** key will cause the existing monitoring object database to be deleted and a new monitoring object database to be created. If there is no existing monitoring object database, the command will create a new monitoring object database without displaying the confirmation message.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Logical host name is invalid |
| 2 | Argument error |
| 4 | No permission to execute the command |
| 10 | Setup has not been completed |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 20 | Database already exists |
| 99 | Other error |

# jcshostsexport

## Function

This command acquires host information from the host information database. When this command is executed, it loads host information from the host information database and stores it in a specified host information file (if no host information file name is specified, the host information is output to standard output).

You can use this command when the Central Scope functions are enabled.

## Format

```
jcshostsexport [-h logical-host-name] > host-information-file-name
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
    *Scope-path*\bin\

In UNIX:
    /opt/jp1scope/bin/

## Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ *host-information-file-name*

Specifies the name of the file in which the host information is to be stored.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Logical host name is invalid |
| 2 | Argument error |

| 4 | No permission to execute the command |
|---|---|
| 10 | Setup has not been completed |
| 11 | There is no host information database |
| 12 | Insufficient memory |
| 14 | Host information database is corrupted |
| 15 | Message initialization failed |
| 16 | Host information database is in use |
| 99 | Other error |

# jcshostsimport

## Function

This command registers host information into and deletes host information from the host information database. You can apply the host information while JP1/IM - Manager is running by executing the `jco_spmd_reload` command after this command has executed. While JP1/IM - Manager is stopped, you can apply the host information by starting JP1/IM - Manager.

You can use this command when the Central Scope functions are enabled.

## Format

```
jcshostsimport { { -o | -r } host-information-file-name | -d}
                [-h logical-host-name]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
    *Scope-path*`\bin\`

In UNIX:
    `/opt/jp1scope/bin/`

## Arguments

- `-r` *host-information-file-name*

  Specifies the name of the file that contains the host information that is to be registered into the host information database. When the `-r` option is specified, the command deletes all host information from the existing host information database and then registers the specified host information into the database.

  For details about the format of the host information file, see *Host information file (jcs_hosts)* in *2. Definition Files*.

- `-o` *host-information-file-name*

  Specifies the name of the file that contains the host information that is to be registered into the host information database. When the `-o` option is specified, the command adds to the host information database the host information contained in the host information file without deleting the existing host information from the database (if an identical IP

address exists, the information for that host is overwritten).

For details about the format of the host information file, see *Host information file (jcs_hosts)* in *2. Definition Files*.

- ■ `-d`

  Specifies that all the existing host information is to be completely deleted from the host information database.

- ■ `-h` *logical-host-name*

  When you are operating in a cluster system, this option specifies the logical host name. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Logical host name is invalid |
| 2 | Argument error |
| 3 | File name is invalid |
| 4 | No permission to execute the command |
| 5 | Syntax error in the specified host information file |
| 6 | No permission to access the specified host information file |
| 10 | Setup has not been completed |
| 11 | There is no host information database |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 14 | Host information database is corrupted |
| 15 | Message initialization failed |
| 16 | Host information database is in use |
| 99 | Other error |

# jim_log.bat (Windows only)

## Function

This is a tool for collecting data in the event of a failure in JP1/IM - Manager or JP1/IM - View. The data collected by this tool includes maintenance information for JP1/IM - Manager, JP1/IM - View, and JP1/Base, system information from the OS, and integrated trace logs.

This tool is a batch file, which cannot be customized by the user.

When you execute this tool, the target folders or files used for data collection are classified into primary and secondary data categories and the collected data is stored directly under the specified data storage folder.

The primary data is collected for such purposes as identifying a failure and investigating the causes of minor failures. It consists of the minimum amount of logs and settings files. The secondary data provides the detailed information needed for an in-depth investigation of a failure. It consists of such data as the Windows event log, a crash dump, and the JP1/Base event database.

If you execute `jim_log.bat` while a thread dump of JP1/IM - Manager (JP1/IM - Central Console) or JP1/IM - View is available, the tool displays the `KAVB8946-I` message asking whether the thread dump is to be deleted. If you enter `y`, the tool deletes the thread dump.

If necessary, use a program such as a compression tool to compress the collected data.

For details about the data that can be collected by this tool, see *9.3 Data that needs to be collected when a problem occurs* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

The following tables show the organization of folders directly under the data storage folder and the data that is stored.

*Table 1-18:* Organization of the internal folders for the primary data of the physical host

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_1st\imm | • Data storage folder for JP1/IM - Manager<br>• JP1/IM - Manager patch information |
| *data-storage-folder*\jp1_default\imm_1st\imm\conf | JP1/IM - Manager settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st\imm\log | Log files for JP1/IM - Manager |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_1st \cons | Data storage folder for JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\jp1_default\imm_1st \cons\conf | JP1/IM - Manager (JP1/IM - Central Console) settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \cons\default | Common definition information for JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\jp1_default\imm_1st \cons\log | Log files for JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\jp1_default\imm_1st \scope | Data storage folder for JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\jp1_default\imm_1st \scope\conf | JP1/IM - Manager (JP1/IM - Central Scope) settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \scope\default | Common definition information for JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\jp1_default\imm_1st \scope\log | Log files for JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\jp1_default\imm_1st \coview | • Data storage folder for JP1/IM - View<br>• JP1/IM - View patch information |
| *data-storage-folder*\jp1_default\imm_1st \coview\conf | JP1/IM - View settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \coview\default | Common definition information for JP1/IM - View |
| *data-storage-folder*\jp1_default\imm_1st \coview\log | Log files for JP1/IM - View |
| *data-storage-folder*\jp1_default\imm_1st \imm\Patchlog_jp1imm.txt | JP1/IM - Manager patch information |
| *data-storage-folder*\jp1_default\imm_1st \imm\conf\tools | JP1/IM - Manager settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \imcf\conf\imcf | IM Configuration Management settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \imdb\conf\imdb | IM database settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \imcf\system\default\new\imcf | Common definition information for IM Configuration Management |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_1st \imdb\database\imdb | Detailed log information for the IM database |
| *data-storage-folder*\jp1_default\imm_1st \imcf\log\imcf | Log files for IM Configuration Management |
| *data-storage-folder*\jp1_default\imm_1st \imdb\log\imdb | Log files for the IM database |
| *data-storage-folder*\jp1_default\imm_1st \base | • Data storage folder for JP1/Base<br>• JP1/Base patch information |
| *data-storage-folder*\jp1_default\imm_1st \base\conf | JP1/Base settings and definition files |
| *data-storage-folder*\jp1_default\imm_1st \base\default | Common definition information for JP1/Base |
| *data-storage-folder*\jp1_default\imm_1st \base\log | Log files for JP1/Base |
| *data-storage-folder*\jp1_default\imm_1st \base\plugin\conf | Settings file for JP1/Base plug-in services |
| *data-storage-folder*\jp1_default\imm_1st \base\sys\tmp | Logs and temporary files for JP1/Base |
| *data-storage-folder*\jp1_default\imm_1st \oslog | OS log information |
| *data-storage-folder*\jp1_default\imm_1st \spool | Integrated trace logs |

*Table 1-19:* Organization of the internal folders for the secondary data of the physical host

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_2nd\ cons | Data storage folder for JP1/IM - Manager (JP1/ IM - Central Console) |
| *data-storage-folder*\jp1_default\imm_2nd\ cons\operation\evgen | Correlation event generation history files for JP1/ IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\jp1_default\imm_2nd\ scope | Data storage folder for JP1/IM - Manager (JP1/ IM - Central Scope) |
| *data-storage-folder*\jp1_default\imm_2nd\ scope\database | Database information for JP1/IM - Manager (JP1/IM - Central Scope) |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\jp1_default\imm_2nd\base | Data storage folder for JP1/Base |
| *data-storage-folder*\jp1_default\imm_2nd\base\log\COMMAND | Command execution log files for JP1/Base |
| *data-storage-folder*\jp1_default\imm_2nd\base\sys\event\servers\default | Event database for JP1/Base |
| *data-storage-folder*\jp1_default\imm_2nd\oslog | • Windows event log<br>• Crash dump |
| *data-storage-folder*\jp1_default\imm_2nd\imcf\data\imcf | Data files for IM Configuration Management |
| *data-storage-folder*\jp1_default\imm_2nd\imdb\database\imdb\imdbbackup.dat | Backup files of the IM database |

*Table 1-20:* Organization of the internal folders for the primary data of the logical host

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\\*logical-host-name*\imm_1st\cons | Data storage folder for the logical host of JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\cons\conf | Logical host settings and definition files for JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\cons\log | Log files for the logical host of JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\scope | Data storage folder for the logical host of JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\scope\conf | Logical host settings and definition files for JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\scope\log | Log files for the logical host of JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\\*logical-host-name*\imm_1st\base | Data storage folder for the logical host of JP1/Base |
| *data-storage-folder*\\*logical-host-name*\imm_1st\base\conf | Logical host name settings and definition files for JP1/Base |
| *data-storage-folder*\\*logical-host-name*\imm_1st\base\event | Event server settings for the logical host of JP1/Base |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\*logical-host-name*\imm_1st\base\log | Log files for the logical host of JP1/Base |
| *data-storage-folder*\*logical-host-name*\imm_1st\oslog | OS log information |
| *data-storage-folder*\*logical-host-name*\imm_1st\imm\Patchlog_jp1imm.txt | JP1/IM - Manager patch information |
| *data-storage-folder*\*logical-host-name*\imm_1st\imcf\conf\imcf | IM Configuration Management settings and definition files |
| *data-storage-folder*\*logical-host-name*\imm_1st\imdb\database\imdb | Detailed log information for the IM database |
| *data-storage-folder*\*logical-host-name*\imm_1st\imcf\log\imcf | Log files for IM Configuration Management |
| *data-storage-folder*\*logical-host-name*\imm_1st\imdb\log\imdb | Log files for the IM database |

*Table 1-21:* Organization of the internal folders for the secondary data of the logical host

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\*logical-host-name*\imm_2nd\cons | Data storage folder for the logical host of JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\*logical-host-name*\imm_2nd\cons\operation\evgen | Correlation event generation history file for the logical host of JP1/IM - Manager (JP1/IM - Central Console) |
| *data-storage-folder*\*logical-host-name*\imm_2nd\scope | Data storage folder for the logical host of JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\*logical-host-name*\imm_2nd\scope\database | Database information for the logical host of JP1/IM - Manager (JP1/IM - Central Scope) |
| *data-storage-folder*\*logical-host-name*\imm_2nd\base | Data storage folder for the logical host of JP1/Base |
| *data-storage-folder*\*logical-host-name*\imm_2nd\base\log\COMMAND | Command execution log files for the logical host of JP1/Base |
| *data-storage-folder*\*logical-host-name*\imm_2nd\base\event | Event database for the logical host of JP1/Base |
| *data-storage-folder*\*logical-host-name*\imm_2nd\imcf\data\imcf | Data files for IM Configuration Management |

| Folder name | Stored data |
|---|---|
| *data-storage-folder*\\*logical-host-name*\imm_2n d\imdb\database\imdb\imdbbackup.dat | Backup files of the IM database |

## Format

```
jim_log.bat -f data-storage-folder
                [-h logical-host-name]
                [-t]
                [-u]
                [-n]
                [-p]
                [-r]
                [-g]
                [-s]
                [-c]
                [-d]
                [-x]
                [-w]
                [-q]
```

## Execution permission

In Windows Server 2003: None

In Windows Server 2008: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: None

## Storage directory

*Manager-path*\tools\

## Arguments

- ■ -f *data-storage-folder*

  Specifies the name of the folder to which the collected data is to be output, expressed as a full path or a path relative to the location where the command is executed. If the path contains a space, enclose the entire path in double-quotation marks ("). This option is mandatory.

  If a nonexistent folder is specified, a new folder with the specified name is created. If an existing folder is specified, the contents of that existing folder are deleted and the specified folder is created.

- ■ -h *logical-host-name*

  When you are operating in a cluster system, this option specifies a logical host name and that the command is to collect data for that logical host as well as for the physical

host. If this option is omitted, the command collects data for the physical host only. If you are not using a cluster system, there is no need to specify this option.

Note that this command will not use the logical host name that is set in the JP1_HOSTNAME environment variable. Therefore, if you use this command in a cluster system, make sure that you specify the logical host name in this option.

- -t

Specifies that the `hosts` and `services` files are not to be collected.

- -u

Specifies that a crash dump is not to be collected. This option is not supported by the Windows Server 2008 version of JP1/IM - View.

- -n

Specifies that maintenance data for JP1/Base is not to be collected.

- -p

Specifies that the event database for JP1/Base is not to be collected.

- -r

Specifies that the command execution log files for JP1/Base are not to be collected.

- -g

Specifies that the correlation event generation history file is not to be collected.

- -s

Specifies that maintenance data for JP1/IM - Manager (JP1/IM - Central Scope) is not to be collected.

- -c

Specifies that maintenance data for IM Configuration Management is not to be collected.

- -d

Specifies that maintenance data for the IM database is not to be collected.

- -x

Specifies that IM database backup files are to be collected.

The IM database backup files are not included in the maintenance data for the IM database that is collected by default. If the IM database service is not running, the maintenance data is not collected; in such a case, start the IM database service and then re-execute the data collection command. The backup files can be collected even when JP1/IM - Manager is running.

■ -w

Specifies that maintenance data for JP1/IM - View is not to be collected.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

## Notes

- It is possible that this tool will collect a vast amount of data. Before you execute this tool, you must estimate the amount of disk space required and then check the available capacity in your machine. For details, see *9.4 Collecting data* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

- Do not execute this tool more than once.

- If a file to be collected is not found, the tool might display a message such as `The file was not found`. However, it is not necessary to take any action.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 8 | Abnormal termination |

## Example 1

Collect data for the physical host and for logical host `hostA` into the `D:\temp` folder:
`jim_log.bat -f D:\temp -h hostA`

The output result is as follows:
```
KAVB8925-I The directory does not exist.
("D:\temp\jp1_default\imm_1st")
        The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("D:\temp\jp1_default\imm_2nd")
        The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("D:\temp\hostA\imm_1st")
        The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("D:\temp\hostA\imm_2nd")
        The directory will be created.
Press any key to continue...
KAVB8926-I Data acquisition processing will start.
```

```
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" command will
start.
KAVB8921-I The information for JP1/IM - Manager will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8922-I The information for JP1/IM - Manager has been
acquired.
KAVB8921-I The information for JP1/IM - Central Console will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8921-I The logical host (hostA) information will be
acquired.
KAVB8922-I The logical host (hostA) information has been
acquired.
KAVB8922-I The information for JP1/IM - Central Console has been
acquired.
KAVB8921-I The information for JP1/IM - Central Scope will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8921-I The logical host (hostA) information will be
acquired.
KAVB8922-I The logical host (hostA) information has been
acquired.
KAVB8922-I The information for JP1/IM - Central Scope has been
acquired.
KAVB8921-I The information for JP1/Base will be acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8921-I The logical host (hostA) information will be
acquired.
KAVB8922-I The logical host (hostA) information has been
acquired.
KAVB8922-I The information for JP1/Base has been acquired.
KAVB8921-I The information for JP1/IM - View will be acquired.
KAVB8922-I The information for JP1/IM - View has been acquired.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8929-I The system information will be acquired. Please wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" execution is ended.
(ERRORLEVEL=0)
```

174

```
KAVB8922-I The system information has been acquired.
KAVB8929-I "Watson log and crash dump" will be acquired. Please
wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" command will
start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8922-I "Watson log and crash dump" has been acquired.
KAVB8921-I Windows Eventlog(Application) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(Application) has been acquired.
KAVB8921-I Windows Eventlog(System) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(System) has been acquired.
KAVB8921-I The setup.ini of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ini of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ilg of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ini of JP1/IM - View will be acquired.
KAVB8922-I The setup.ini of JP1/IM - View has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - View will be acquired.
KAVB8922-I The setup.ilg of JP1/IM - View has been acquired.
KAVB8921-I The setup.ini of JP1/Base will be acquired.
KAVB8922-I The setup.ini of JP1/Base has been acquired.
KAVB8921-I The setup.ilg of JP1/Base will be acquired.
KAVB8922-I The setup.ilg of JP1/Base has been acquired.
KAVB8921-I The integrated trace log will be acquired.
KAVB8922-I The integrated trace log has been acquired.
KAVB8921-I The integrated installer log will be acquired.
KAVB8922-I The integrated installer log has been acquired.
KAVB8921-I The installer log file will be acquired.
KAVB8922-I The installer log file has been acquired.
KAVB8921-I The hosts will be acquired.
KAVB8922-I The hosts has been acquired.
KAVB8921-I The services will be acquired.
KAVB8922-I The services has been acquired.
KAVB8921-I The registry information will be acquired.
KAVB8922-I The registry information has been acquired.
```

175

```
KAVB8921-I The netstat information will be acquired.
KAVB8922-I The netstat information has been acquired.
KAVB8921-I The ipconfig information will be acquired.
KAVB8922-I The ipconfig information has been acquired.
KAVB8921-I The net start information will be acquired.
KAVB8922-I The net start information has been acquired.
KAVB8921-I The set information will be acquired.
KAVB8922-I The set information has been acquired.
KAVB8918-I The data was successfully acquired.
```

## Example 2

Collect data for the physical host into the nonexistent folder D:\temp, but do not specify the existing logical host (hostA):

```
jim_log.bat -f D:\temp
```

The output result is as follows:

```
KAVB8925-I The directory does not exist. ("D:\temp")
           The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("D:\temp\jp1_default\imm_1st")
           The directory will be created.
Press any key to continue...
KAVB8925-I The directory does not exist.
("D:\temp\jp1_default\imm_2nd")
           The directory will be created.
Press any key to continue...
KAVB8926-I Data acquisition processing will start.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" command will
start.
KAVB8921-I The information for JP1/IM - Manager will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8922-I The information for JP1/IM - Manager has been
acquired.
KAVB8921-I The information for JP1/IM - Central Console will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8922-I The information for JP1/IM - Central Console has been
acquired.
KAVB8921-I The information for JP1/IM - Central Scope will be
acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
```

```
KAVB8922-I The information for JP1/IM - Central Scope has been
acquired.
KAVB8921-I The information for JP1/Base will be acquired.
KAVB8921-I The physical host information will be acquired.
KAVB8922-I The physical host information has been acquired.
KAVB8922-I The information for JP1/Base has been acquired.
KAVB8921-I The information for JP1/IM - View will be acquired.
KAVB8922-I The information for JP1/IM - View has been acquired.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetConfInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8929-I The system information will be acquired. Please wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetMsInfo.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I The system information has been acquired.
KAVB8929-I "Watson log and crash dump" will be acquired. Please
wait.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" command will
start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetWtsnInfo.exe" execution is
ended. (ERRORLEVEL=0)
KAVB8922-I "Watson log and crash dump" has been acquired.
KAVB8921-I Windows Eventlog(Application) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(Application) has been acquired.
KAVB8921-I Windows Eventlog(System) will be acquired.
KAVB8927-I Execution of the "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" command will start.
KAVB8928-I "D:\Program
Files\Hitachi\JP1IMM\bin\jimGetEvLog.exe" execution is ended.
(ERRORLEVEL=0)
KAVB8922-I Windows Eventlog(System) has been acquired.
KAVB8921-I The setup.ini of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ini of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - Manager will be acquired.
KAVB8922-I The setup.ilg of JP1/IM - Manager has been acquired.
KAVB8921-I The setup.ini of JP1/IM - View will be acquired.
KAVB8922-I The setup.ini of JP1/IM - View has been acquired.
KAVB8921-I The setup.ilg of JP1/IM - View will be acquired.
```

```
       KAVB8922-I The setup.ilg of JP1/IM - View has been acquired.
       KAVB8921-I The setup.ini of JP1/Base will be acquired.
       KAVB8922-I The setup.ini of JP1/Base has been acquired.
       KAVB8921-I The setup.ilg of JP1/Base will be acquired.
       KAVB8922-I The setup.ilg of JP1/Base has been acquired.
       KAVB8921-I The integrated trace log will be acquired.
       KAVB8922-I The integrated trace log has been acquired.
       KAVB8921-I The integrated installer log will be acquired.
       KAVB8922-I The integrated installer log has been acquired.
       KAVB8921-I The installer log file will be acquired.
       KAVB8922-I The installer log file has been acquired.
       KAVB8921-I The hosts will be acquired.
       KAVB8922-I The hosts has been acquired.
       KAVB8921-I The services will be acquired.
       KAVB8922-I The services has been acquired.
       KAVB8921-I The registry information will be acquired.
       KAVB8922-I The registry information has been acquired.
       KAVB8921-I The netstat information will be acquired.
       KAVB8922-I The netstat information has been acquired.
       KAVB8921-I The ipconfig information will be acquired.
       KAVB8922-I The ipconfig information has been acquired.
       KAVB8921-I The net start information will be acquired.
       KAVB8922-I The net start information has been acquired.
       KAVB8921-I The set information will be acquired.
       KAVB8922-I The set information has been acquired.
       KAVB8918-I The data was successfully acquired.
       KAVB8934-I The following logical host(s) exist on this machine:
       hostA
       To acquire information about a logical host, execute
       "jim_log.bat -f output-directory-name -h logical-hostname".
       Press any key to continue...
```

# jim_log.sh (UNIX only)

## Function

This is a tool for collecting data in the event of a failure in JP1/IM - Manager. The data collected by this tool includes maintenance information for JP1/IM - Manager and JP1/Base, system information from the OS, and integrated trace logs.

This tool is a shell script, which cannot be customized by the user.

When you execute this tool, it classifies the target directories or files used for data collection into primary and secondary data categories, uses the `tar` command to archive the data directly under the specified data storage directory, and then uses the `compress` command to create compressed files.

The primary data is collected for such purposes as identifying a failure and investigating the causes of minor failures. It consists of the minimum amount of logs and settings files. The secondary data provides the detailed information needed for an in-depth investigation of a failure. It consists of such data as core analysis information and data from the JP1/Base event database.

If you execute the `jim_log.sh` command while a core dump and a thread dump of JP1/IM - Manager (JP1/IM - Central Console) are available, the tool displays the `KAVB8941-I` and `KAVB8942-I` messages asking whether the core dump or the thread dump is to be deleted. If you enter `y` or `yes`, the tool deletes the core dump or thread dump.

For details about the data that can be collected by this tool, see *9.3 Data that needs to be collected when a problem occurs* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

The following table lists and describes the compressed files containing the collected data.

*Table 1-22:* Compressed files containing the collected data

| File name | Description |
|---|---|
| `jp1_default_imm_1st.tar.Z` | Primary data for the physical host |
| `jp1_default_imm_2nd.tar.Z` | Secondary data for the physical host |
| *logical-host-name*`_imm_1st.tar.Z`[#] | Primary data for the logical host |
| *logical-host-name*`_imm_2nd.tar.Z`[#] | Secondary data for the logical host |

#: Created only when a logical host was specified in the `-h` option.

179

The compressed files are stored in the data storage directory. The following tables show the organization of the internal directories for the compressed files.

*Table 1-23:* Organization of the internal directories for the primary data of the physical host

| Directory and file name | Stored data |
|---|---|
| `./etc/opt/jp1base` | Automated startup and stop scripts for JP1/Base |
| `./etc/opt/jp1base/conf` | JP1/Base settings and definition files |
| `./etc/opt/jp1base/default` | Common definition information for JP1/Base |
| `./etc/opt/jp1cons` | Automated startup and stop scripts for JP1/IM - Manager (JP1/IM - Central Console) |
| `./etc/opt/jp1cons/conf` | JP1/IM - Manager (JP1/IM - Central Console) settings and definition files |
| `./etc/opt/jp1cons/default` | Common definition information for JP1/IM - Manager (JP1/IM - Central Console) |
| `./etc/opt/jp1imm/conf/tools` | JP1/IM - Manager settings and definition files |
| `./etc/opt/jp1imm/conf/imcf` | IM Configuration Management settings and definition files |
| `./etc/opt/jp1imm/conf/imdb` | IM database settings and definition files |
| `./etc/opt/jp1imm/default/imcf` | Common definition information for IM Configuration Management |
| `./etc/opt/jp1scope/conf` | JP1/IM - Manager (JP1/IM - Central Scope) settings and definition files |
| `./etc/opt/jp1scope/default` | Common definition information for JP1/IM - Manager (JP1/IM - Central Scope) |
| `./opt/jp1/hcclibcnf` | Common definition information |
| `./opt/jp1base` | Patch application history and patch log information for JP1/Base |
| `./opt/jp1base/conf` | Settings file for JP1/Base plug-in services |
| `./opt/jp1imm` | Patch application history and patch log information for JP1/IM - Manager |
| `./var/opt/jp1base/log` | Log files for JP1/Base |
| `./var/opt/jp1base/sys/tmp` | Logs and temporary files for JP1/Base |
| `./var/opt/hitachi/HNTRLib2/spool` | Integrated trace logs |

| Directory and file name | Stored data |
|---|---|
| `./var/opt/jp1cons/log` | Log files for JP1/IM - Manager (JP1/IM - Central Console) |
| `./var/opt/jp1imm/database/imdb` | Detailed log information for the IM database |
| `./var/opt/jp1imm/log/imcf` | Log files for IM Configuration Management |
| `./var/opt/jp1imm/log/imdb` | Log files for the IM database |
| `./var/opt/jp1imm/log/_jp1_default/`<br>`oslog` | OS log information |
| `./var/opt/jp1scope/log` | Log files for JP1/IM - Manager (JP1/IM - Central Scope) |

*Table 1-24:* Organization of the internal directories for the secondary data of the physical host

| Directory and file name | Stored data |
|---|---|
| `./var/opt/jp1base/log/COMMAND` | Command execution log files for JP1/Base |
| `./var/opt/jp1base/sys/event/servers/`<br>`default` | Event database for JP1/Base |
| `./var/opt/jp1cons/operation/evgen` | Correlation event generation history files for JP1/IM - Manager (JP1/IM - Central Console) |
| `./var/opt/jp1imm/log/_jp1_default/`<br>`oslog` | OS log information |
| `./var/opt/jp1imm/log/_jp1_default/`<br>`core` | Core file |
| `./var/opt/jp1scope/database` | Database information for JP1/IM - Manager (JP1/IM - Central Scope) |
| `./var/opt/jp1imm/data/imcf` | Data files for IM Configuration Management |
| `./var/opt/jp1imm/database/imdb/`<br>`imdbbackup.dat` | Backup files of the IM database |
| `./tmp/.JP1_SES*`<br>`./usr/tmp/jp1_ses`<br>`./usr/lib/jp1_ses/log`<br>`./usr/lib/jp1_ses/sys`<br>`./usr/bin/jp1_ses/jp*`<br>`./var/opt/jp1_ses` | Log for JP1/SES compatibility |

*Table 1-25:* Organization of the internal directories for the primary data of the logical host

| Directory and file name | Stored data |
|---|---|
| `./`*shared-disk*`/jp1base/../event` | Event server settings for the logical host of JP1/Base |
| `./`*shared-disk*`/jp1base/conf` | Logical host settings and definition files for JP1/Base |
| `./`*shared-disk*`/jp1base/log` | Log files for the logical host of JP1/Base |
| `./`*shared-disk*`/jp1cons/conf` | Logical host settings and definition files for JP1/IM - Manager (JP1/IM - Central Console) |
| `./`*shared-disk*`/jp1cons/log` | Log files for the logical host of JP1/IM - Manager (JP1/IM - Central Console) |
| `./`*shared-disk*`/jp1scope/conf` | Logical host settings and definition files for JP1/IM - Manager (JP1/IM - Central Scope) |
| `./`*shared-disk*`/jp1scope/log` | Log files for the logical host of JP1/IM - Manager (JP1/IM - Central Scope) |
| `./var/opt/jp1imm/log/_`*logical-host-name*`/oslog` | OS log information |
| `./`*shared-disk*`/jp1imm/conf/imcf` | IM Configuration Management settings and definition files |
| `./var/opt/jp1imm/database/imdb` | Detailed log information for the IM database |
| `./`*shared-disk*`/jp1imm/log/imcf` | Log files for IM Configuration Management |
| `./var/opt/jp1imm/log/imdb` | Log files for the IM database |

*Table 1-26:* Organization of the internal directories for the secondary data of the logical host

| Directory and file name | Stored data |
|---|---|
| `./`*shared-disk*`/event` | Event database for the JP1/BaseEvent database for JP1/Base |

182

| Directory and file name | Stored data |
|---|---|
| `./`*shared-disk*`/jp1base/log/COMMAND` | Command execution log files for JP1/Base |
| `./`*shared-disk*`/jp1cons/operation/evgen` | Correlation event generation history files for JP1/IM - Manager (JP1/IM - Central Console) |
| `./`*shared-disk*`/jp1scope/database` | Database information for JP1/IM - Manager (JP1/IM - Central Scope) |
| `./var/opt/jp1imm/log/`*_logical-host-name*`/oslog` | OS log information |
| `./var/opt/jp1imm/log/`*_logical-host-name*`/core` | Core file |
| `./`*shared-disk*`/jp1imm/data/imcf` | Data files for IM Configuration Management |
| `./`*shared-disk*`/jp1imm/database/imdb/imdbbackup.dat` | Backup files of the IM database |

## Format

```
jim_log.sh -f data-storage-directory
              [-h logical-host-name]
              [-t]
              [-u]
              [-n]
              [-p]
              [-r]
              [-g]
              [-s]
              [-c]
              [-d]
              [-x]
              [-q]
              [directory-name-or-file-name...]
```

## Execution permission

Superuser permissions

## Storage directory

`/opt/jp1imm/tools/`

## Arguments

■ `-f` *data-storage-directory*

Specifies the name of the directory or device to which the collected data is to be output,

expressed as a full path or a path relative to the root directory. If you specify a directory name, the tool creates the files containing the collected data under that directory. If the path contains a space, enclose the entire path in double-quotation marks (`"`). This option is mandatory.

If a nonexistent directory is specified, a new directory with the specified name is created. If an existing directory is specified, that directory is deleted and the specified directory is created.

If a device name is specified, a write operation occurs on that device for each file that is created. If a device file name such as for a tape device is specified, the collected data is stored on the device without being compressed.

If you specify a device name and the `-q` option, the tool assumes that you have chosen `yes` for user confirmation. In such a case, you must set the device before you execute the command.

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

  When you are operating in a cluster system, this option specifies a logical host name and that the command is to collect data for that logical host as well as for the physical host. If this option is omitted, the command collects data for the physical host only. If you are not using a cluster system, there is no need to specify this option.

  Note that this command will not use the logical host name that is set in the `JP1_HOSTNAME` environment variable. Therefore, if you use this command in a cluster system, make sure that you specify the logical host name in this option.

- `-t`

  Specifies that the `hosts`, `services`, and `passwd` files are not to be collected.

- `-u`

  Specifies that core analysis information is not to be collected. The core analysis information consists of a file obtained by using the `car` command of the Seraph tool to analyze a core dump file.

- `-n`

  Specifies that maintenance data for JP1/Base is not to be collected.

- `-p`

  Specifies that the event database for JP1/Base is not to be collected.

- `-r`

  Specifies that the command execution log files for JP1/Base are not to be collected.

- `-g`

  Specifies that the correlation event generation history file is not to be collected.

■ -s

Specifies that maintenance data for JP1/IM - Manager (JP1/IM - Central Scope) is not to be collected.

■ -c

Specifies that maintenance data for IM Configuration Management is not to be collected.

■ -d

Specifies that maintenance data for the IM database is not to be collected.

■ -x

Specifies that IM database backup files are to be collected.

The IM database backup files are not included in the maintenance data for the IM database that is collected by default. If the IM database service is not running, the maintenance data is not collected. In such a case, start the IM database service and then re-execute the data collection command. The backup files can be collected even when JP1/IM - Manager is running.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

■ *directory-name-or-file-name*

Specifies a file or directory to be collected by the data collection tool. Specify a full path name. To specify multiple names, use the space character to separate the names.

Note that this option must be the last option specified in the command. Specify it after you have specified all the other options that you need to specify. The collected data is stored as the primary data for the physical host.

**Notes**

- It is possible that this tool will collect a vast amount of data. Before you execute this tool, you must estimate the amount of disk space required and check the available capacity in your machine. For details, see *9.4 Collecting data* in the *Job Management Partner 1/Integrated Management - Manager Administration Guide*.

- Do not execute this tool more than once. If it is executed multiple times, previously collected data might be overwritten or data collection might fail.

**Return values**

| 0 | Normal termination |
|---|---|

| 8 | Abnormal termination |
|---|---|

## Example 1

Collect data for the physical host and the logical host `hostA` into `/tmp/jp1log`:
`jim_log.sh -f /tmp/jp1log -h hostA`

The output result is as follows:
```
KAVB8925-I The directory does not exist. (/var/opt/jp1imm/log/
_jp1_default).
          The directory will be created.
KAVB8925-I The directory does not exist. (/var/opt/jp1imm/log/
_hostA).
          The directory will be created.
KAVB8926-I Data acquisition processing will start.
KAVB8921-I The physical host's first material will be acquired.
KAVB8922-I The physical host's first material has been acquired.
KAVB8921-I The physical host's second material will be acquired.
KAVB8922-I The physical host's second material has been
acquired.
KAVB8921-I The logical host(hostA)'s first material will be
acquired.
KAVB8922-I The logical host(hostA)'s first material has been
acquired.
KAVB8921-I The logical host(hostA)'s second material will be
acquired.
KAVB8922-I The logical host(hostA)'s second material has been
acquired.
KAVB8918-I The data was successfully acquired.
```

## Example 2

Collect data for the physical host into the nonexistent directory `/tmp/jp1log/`, but
do not specify the existing logical host (`hostA`):
`jim_log.sh -f /tmp/jp1log`

The output result is as follows:
```
KAVB8925-I The directory does not exist. (/tmp/jp1log).
          The directory will be created.
KAVB8925-I The directory does not exist. (/var/opt/jp1imm/log/
_jp1_default).
          The directory will be created.
KAVB8926-I Data acquisition processing will start.
KAVB8921-I The physical host's first material will be acquired.
KAVB8922-I The physical host's first material has been acquired.
KAVB8921-I The physical host's second material will be acquired.
KAVB8922-I The physical host's second material has been
acquired.
```

```
KAVB8918-I The data was successfully acquired.
KAVB8935-I The following logical host(s) exist on this machine:
hostA
To acquire information about a logical host, execute "jim_log.sh
-f output-directory-name -h logical-hostname".
```

## Example 3

Collect data for the physical host into the /tmp/jp1log/ directory, which contains
the jp1_default_imm_1st.tar.Z and jp1_default_imm_2nd.tar files, but
do not specify the existing logical host (hostA):
```
jim_log.sh -f /tmp/jp1log
```

The output result is as follows (when y is entered for all responses):
```
KAVB8925-I The directory does not exist. (/var/opt/jp1imm/log/
_jp1_default).
            The directory will be created.
KAVB8926-I Data acquisition processing will start.
KAVB8921-I The physical host's first material will be acquired.
KAVB8922-I The physical host's first material has been acquired.
KAVB8921-I The physical host's second material will be acquired.
KAVB8944-I (/tmp/jp1log/jp1_default_imm_2nd.tar.Z) already
exists. Do you want to overwrite it? [yes/no]y
KAVB8922-I The physical host's second material has been
acquired.
KAVB8918-I The data was successfully acquired.
KAVB8944-I (/tmp/jp1log/jp1_default_imm_1st.tar.Z) already
exists. Do you want to overwrite it? [yes/no]y
KAVB8935-I The following logical host(s) exist on this machine:
hostA
To acquire information about a logical host, execute "jim_log.sh
-f output-directory-name -h logical-hostname".
```

## jimdbbackup

### Function

This command backs up the IM database. The following describes the purposes of making such a backup and the types of data that can be acquired.

Backup for error recovery

You must back up the database periodically in order to recover the database in the event of a database failure. The database backup targets are the integrated monitoring database area, the IM Configuration Management database area, and the system database areas. Note that system log files and unload log files in the system database area are not backed up.

Backup for expansion

When you are preparing to expand the size of the database, you must temporarily back up the database's data. The database backup targets are the integrated monitoring database area and the IM Configuration Management database area.

### Format

```
jimdbbackup -o backup-file-name
            -m {MAINT|EXPAND}
              [-h logical-host-name]
              [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
*Manager-path*\bin\imdb\

In UNIX:
/opt/jp1imm/bin/imdb/

### Arguments

- -o *backup-file-name*

Specifies the absolute path name of the file to which the database is to be backed up. You must specify a logical drive or a backup file. This option is mandatory.

An error results if you specify a network drive, a UNC path, or a Windows reserved device file. If the specified backup file already exists, the existing file will be overwritten.

The characters permitted for the file name are alphanumeric characters, the underscore (_), dot (.), hash mark (#), and at mark (@). The character set also depends on the OS. If the name contains a space or a parenthesis (( or )), the entire name must be enclosed in double-quotation marks ("). In Windows, the backup file name when MAINT is specified must be in all lower-case letters. The maximum length of the file name depends on OS limitations.

If the directory for storing the specified backup file is not found, command execution fails. Make sure that you create the directory before you execute the command.

■ -m {MAINT|EXPAND}

Specifies the database backup format. The permitted characters are upper-case letters. This option is mandatory.

- MAINT: Specifies a backup for error recovery

- EXPAND: Specifies a backup for expansion

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command backs up the database that corresponds to the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| 0 | Backup terminated normally |
|---|---|
| 1 | Backup terminated abnormally |

## Notes

- Before you execute this command, make sure that the execution conditions for the jimdbrecovery command are satisfied.

- If you execute another JP1/IM - Manager command or start a JP1/IM - Manager service while this command is executing, execution may fail because this

command places the database in the mode that disables referencing and updating.

- While this command is executing, do not press **Ctrl** +**C** or **Ctrl** + **Break**. Because the command executes backup processing in the background, the backup processing will continue even though **Ctrl** +**C** or **Ctrl** + **Break** is pressed. If you press **Ctrl** +**C** or **Ctrl** + **Break** and then immediately attempt to execute another JP1/IM - Manager command or start a JP1/IM - Manager service, execution of the requested command or startup of the requested service may fail.

  If you have canceled command execution by pressing **Ctrl** + **C** or **Ctrl** + **Break**, first make sure that the following process is not executing, and then re-execute the command:

  - `pdcopy` process if you are performing a backup for error recovery

  - `pdrorg` process if you are performing a backup for expansion

- The `jimdbbackup` command creates a temporary file during execution. In the case of a backup for expansion or a backup for error recovery, the amount of free space that is needed on the drive at the installation target is about 2 gigabytes for a small database, about 15 gigabytes for a medium-sized database, and about 50 gigabytes for a large database.

- When the IM database is used, JP1/IM - Manager must not be running.

- In Windows, the IM database (JP1/IM-Manager DB Server) must be running, and the cluster service for the IM database (JP1/IM-Manager DB Cluster Service) must be stopped.

- A backup file for recovery cannot be distinguished from a backup file for expansion. We recommend that you name the backup files so that you can distinguish between the types of backup files.

- At the time a backup file is output, it is in a status in which any user can access it. We recommend that immediately after you have made a backup, you change the access permissions or move the file to a protected location so that unauthorized users cannot access it.

## jimdbreclaim

### Function

This command releases free area (free page area) in the IM Configuration Management database.

If a large amount of data in the IM Configuration Management database, such as host information or JP1/IM system configuration information, is deleted during processing such as by a batch job, the area that was used to store that data may become used free area. This command changes used free area into unused free area so that it can be reused.

You can execute this command during operations without having to stop JP1/IM - Manager Service.

### Format

```
jimdbreclaim [-h logical-host-name]
             [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
  *Manager-path*\bin\imdb\

In UNIX:
  /opt/jp1imm/bin/imdb/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command releases free area in the IM Configuration Management database for the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

- ■ -q

  Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Notes

- If you execute another JP1/IM - Manager command while this command is executing, execution of the other command may fail.

- We recommend that you execute this command during a time when there is a low incidence of referencing and updating operations, such as at nighttime, because the CPU workload is high during execution of this command.

- If you cancel this command's processing by pressing **Ctrl** + **C** or **Ctrl** + **Break**, release of free area in the database may fail. Before you re-execute the command, check that neither the pdreclaim process nor the pdrorg process is running. If either of these processes is running, wait a while and then check again.

- Do not stop the database service while this command is executing.

  If you have stopped the database service during execution of this command, you must start the database service and then re-execute the command.

- In Windows, the IM database service *JP1/IM-Manager DB Server* must be running.

## jimdbrecovery

### Function

This command recovers a database from its backup. The command can recover the following types of data:

Recovery for error recovery

> In the event of a database failure, the command recovers the database from backup data that was acquired previously. The command recovers only the backup data without using system logs.

Recovery for expansion

> Before you expand the size of a database, temporarily back up the data. The databases you need to back up are the integrated monitoring database area and the IM Configuration Management database area.

> As part of expanding the size of a database, the command recovers the database from the backup data that was created temporarily.

### Format

```
jimdbrecovery -i backup-file-name
              -m {MAINT|EXPAND}
              [-h logical-host-name]
              [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
> *Manager-path*\bin\imdb\

In UNIX:
> /opt/jp1imm/bin/imdb/

### Arguments

■ `-i` *backup-file-name*

Specifies the absolute path name of the file to which the database was backed up by the `jimdbbackup` command. You must specify a logical drive for the backup file. This

option is mandatory.

An error results if you specify a network drive, a UNC path, or a Windows reserved device file.

- -m {MAINT|EXPAND}

    Specifies the database recovery format. The permitted characters are upper-case letters. This option is mandatory.

    - MAINT: Specifies recovery for error recovery

    - EXPAND: Specifies recovery for expansion

    When you execute recovery for error recovery, specify the backup file that was acquired by a backup for error recovery; when you execute recovery for expansion, specify the backup file that was acquired by a backup for expansion. An error results if the specified argument does not match the type of backup file.

- -h *logical-host-name*

    When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command recovers the database that corresponds to the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

- -q

    Specifies that the command is to be executed without requesting confirmation from the user.

## Return values

| | |
|---|---|
| 0 | Recovery terminated normally |
| 1 | Recovery terminated abnormally |

## Notes

- When you execute the jimdbrecovery command to recover backup data acquired by the jimdbbackup command, use the same OS that was used to make the backup. If the backup is recovered to a database under a different OS, the integrity of the operation cannot be guaranteed.

- If you execute another JP1/IM - Manager command or start a JP1/IM - Manager service while this command is executing, the requested execution might fail because this command places the database in the mode that disables referencing and updating.

- While this command is executing, do not press **Ctrl** +**C** or **Ctrl** + **Break**. Because the command executes recovery processing in the background, the recovery processing will continue even though **Ctrl** +**C** or **Ctrl** + **Break** is pressed. If you press **Ctrl** +**C** or **Ctrl** + **Break** and then immediately attempt to execute another JP1/IM - Manager command or start a JP1/IM - Manager service, execution of the requested command or startup of the requested service might fail.

  If you have canceled command execution by pressing **Ctrl** +**C** or **Ctrl** + **Break** during error recovery processing, make sure that the pdrstr process is not running before you restart JP1/IM - Manager. If you have canceled command execution by pressing **Ctrl** +**C** or **Ctrl** + **Break** during a recovery for expansion, make sure that the pdrorg process is not running before you start another command or a JP1/IM - Manager service.

- This command creates a temporary file during execution. In the case of a recovery for expansion, the amount of free space that is needed on the drive at the installation target is about 1 gigabyte for a small or medium-sized database and about 4 gigabytes for a large database. In the case of a recovery for error recovery, the amount of free space that is needed on the drive at the installation target is from about 5 to 50 megabytes regardless of the database size.

- When you execute a recovery for error recovery, the database storage directory used to execute the backup for error recovery must be the same as the database storage directory used to execute the recovery for error recovery.

- When you execute a recovery for expansion, the storage space must be larger than when the backup for expansion was executed.

- Recovery for expansion might fail if the available capacity is the same as for the backup for expansion. If this occurs, set up the database again and then, with the database free of data, recover the database.

- When the IM database is used, JP1/IM - Manager must not be running.

- In Windows, the IM database (JP1/IM-Manager DB Server) must be running and the cluster service for the IM database (JP1/IM-Manager DB Cluster Service) must be stopped.

## jimdbrorg

### Function

This command reorganizes fragmented free space in a database.

When you perform maintenance of JP1/IM - Manager, you can also resolve low data storage efficiency caused by fragmentation by executing database reorganization.

### Format

```
jimdbrorg [-h logical-host-name]
          [-q]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
   *Manager-path*\bin\imdb\

In UNIX:
   /opt/jp1imm/bin/imdb/

### Arguments

■ -h *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command reorganizes the database for the specified logical host. If this option is omitted, the logical host name specified in the JP1_HOSTNAME environment variable is assumed. If the JP1_HOSTNAME environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed. Note that this logical host name cannot be JP1_DEFAULT.

■ -q

Specifies that the command is to be executed without requesting confirmation from the user.

### Return values

| | |
|---|---|
| 0 | Reorganization terminated normally |

| 1 | Reorganization terminated abnormally |
|---|---|

## Notes

- If you execute another JP1/IM - Manager command or start a JP1/IM - Manager service while this command is executing, the requested execution might fail.

- While this command is executing, do not press **Ctrl** +**C** or **Ctrl** + **Break**. Because the command executes database reorganization processing in the background, the database reorganization processing will continue even though **Ctrl** +**C** or **Ctrl** + **Break** is pressed. If you press **Ctrl** +**C** or **Ctrl** + **Break** and then immediately attempt to execute another JP1/IM - Manager command or start a JP1/IM - Manager service, execution of the requested command or startup of the requested service may fail.

  If you have canceled command execution by pressing **Ctrl** +**C** or **Ctrl** + **Break**, you must use a method such as the Windows Task Manager to make sure that the pdrorg process is not running before you execute another JP1/IM - Manager command or use JP1/IM - Manager. If the pdrorg process is running, wait until it terminates before executing another JP1/IM - Manager command or using JP1/IM - Manager.

- We recommend that you make a backup for error recovery before and after you execute this command.

- This command creates a temporary file during execution. The amount of free space that is needed on the drive at the installation target is about 1 gigabyte for a small or medium-sized database and about 4 gigabytes for a large database.

- When the IM database is used, JP1/IM - Manager must not be running.

- In Windows, the IM database (JP1/IM-Manager DB Server) must be running and the cluster service for the IM database (JP1/IM-Manager DB Cluster Service) must be stopped.

# jimdbstatus

## Function

This command checks the operating status of the IM database, such as running or stopped.

## Format

```
jimdbstatus [-h logical-host-name]
```

## Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

## Storage directory

In Windows:
```
Manager-path\bin\imdb\
```

In UNIX:
```
/opt/jp1imm/bin/imdb/
```

## Arguments

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

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command then starts the IM database for the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

## Return values

| | |
|---|---|
| 0 | IM database is running |
| 1 | `jimdbstatus` command terminated abnormally |
| 4 | IM database is engaged in startup or termination processing |
| 8 | Database has been terminated (IM database restart processing was canceled and the IM database became unstable) |
| 12 | IM database was terminated (normal termination status) |
| 16 | IM database has not been started (applicable to Windows) |

198

| 20 | IM database has not been set up |
|----|--------------------------------|

## jimdbstop

### Function

This command terminates the IM database. Use this command to set the termination command with the start sequence control function of JP1/Base.

If the IM database is in restart canceled status, you can forcibly terminate it by executing this command with the `-f` option specified.

### Format

```
jimdbstop [-h logical-host-name]
          [-f]
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
   *Manager-path*`\bin\imdb\`

In UNIX:
   `/opt/jp1imm/bin/imdb/`

### Arguments

■ `-h` *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command then stops the IM database for the specified logical host. If this option is omitted, the logical host name specified in the `JP1_HOSTNAME` environment variable is assumed. If the `JP1_HOSTNAME` environment variable is not specified, the physical host name is assumed. If you are not using a cluster system, specification of this option is not needed.

■ `-f`

Specifies that the IM database is to be terminated forcibly.

### Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Abnormal termination |

| 4 | IM database is engaged in startup or termination processing |
| 8 | Database has been terminated (IM database restart processing was canceled and the IM database became unstable) |
| 12 | IM database was terminated (normal termination status) |
| 20 | IM database has not been set up |

### Notes

- If you cancel processing by pressing **Ctrl** + **C** or **Ctrl** + **Break**, termination of the IM database might fail. If you re-execute the command in such a case, first make sure that the `pdstop` process is not running. If the `pdstop` process is running, wait a while and then check again.

- JP1/IM - Manager must not be running while the IM database is being used.

## jp1cc_setup (UNIX only)

### Function

This command sets up an operating environment for JP1/IM - Manager (JP1/IM - Central Console).

Use this command only after you have uninstalled JP1/Base on a computer where both JP1/IM - Manager and JP1/Base were installed and you have then re-installed JP1/Base. When you use Hitachi Program Product Installer to perform a new installation or an overwrite installation of JP1/IM - Manager, there is no need to execute this command.

### Format

```
jp1cc_setup
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1cons/bin/
```

### Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Abnormal termination |

## jp1cc_setup_cluster (UNIX only)

### Function

This command sets up an operating environment for a logical host of JP1/IM -
Manager (JP1/IM - Central Console). Use this command for environment setup in a
cluster system.

Set up the environment for the primary node first, and then set up the standby node.

In the environment setup for the primary node, you must specify the logical host name
and shared directory name. When you execute this command, information such as
definition files is copied to the specified shared directory; therefore, you must have
already made the shared disk available for use.

In the environment setup for the standby node, specify only the logical host name. The
operating environment is set up on the basis of the information specified for the
executing node.

Before you start setting up an environment for the secondary node, you must use the
`jbsgetcnf` and `jbssetcnf` commands of JP1/Base to copy to the standby node the
common definition information set at the executing node.

When you execute this command, the socket binding method used for TCP/IP
communication is changed to the IP binding method. The command changes this
setting for the physical host and for the logical host that is to be created. For details
about the socket binding method used for TCP/IP communication, see the
documentation for the applicable OS.

### Format

```
jp1cc_setup_cluster -h logical-host-name
                        [-d shared-directory-name]
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1cons/bin/
```

### Arguments

- -h *logical-host-name*

Specifies a host name for the logical host whose environment is to be set up. The
permitted length is from 1 to 63 characters (bytes).

Set the specified logical host name in the `hosts` file and in the name server to enable
TCP/IP communication. For DNS operation, do not specify the host name in FQDN

format (for example, for `jp1v6.soft.hitachi.co.jp`, specify `jp1v6`).

■ `-d` *shared-directory-name*

Specifies a shared directory for storing the information that is to be inherited during node switching. Specify a directory on the shared disk. The permitted length is from 1 to 165 characters (bytes).

The command creates the directories listed below in the specified shared directory and then copies definition files from `/etc/opt/jp1cons/conf/`.

*Table 1-27:* Directories created by the jp1cc_setup_cluster command

| Type of files to be stored | Directory |
|---|---|
| Definition files | *shared-directory-name*`/jp1cons/conf/` |
| Log files | *shared-directory-name*`/jp1cons/log/` |
| Temporary files | *shared-directory-name*`/jp1cons/tmp/` |
| History files[#] | *shared-directory-name*`/jp1cons/operation/` |

#: The processing of the correlation event generation function is output as history data.

Change the definition files, if necessary.

### Notes

- You must set a logical host for each node.

- You must make the shared disk available for use before you set up an environment for the primary node by executing the `jp1cc_setup_cluster` command.

### Return values

| `0` | Normal termination |
|---|---|
| `1` | Abnormal termination |

### Examples

Set up an environment with the following conditions:
```
Logical host name: lnode0
Shared disk: /shdsk/lnode0
```

- Setting up the logical host environment at the primary server
  ```
  jp1cc_setup_cluster -h lnode0 -d /shdsk/lnode0
  ```

- Setting up the logical host environment at the secondary server
  ```
  jp1cc_setup_cluster -h lnode0
  ```

## jp1cf_setup (UNIX only)

### Function

This command sets up an operating environment for IM Configuration Management.

Use this command only after you have uninstalled JP1/Base on a computer where both JP1/IM - Manager and JP1/Base were installed and you have then re-installed JP1/Base.

### Format

```
jp1cf_setup
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1imm/bin/imcf
```

### Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## jp1cf_setup_cluster (UNIX only)

### Function

This command sets up an environment for IM Configuration Management when you are operating in a cluster system.

This cluster setup for IM Configuration Management applies to both the primary node and the standby node of the logical host. When the -d option is specified, the command sets up the primary node; when the -d option is omitted, the command sets up the secondary node.

The following table lists and describes the settings for the primary and secondary nodes.

*Table 1-28:* Settings for the primary and secondary nodes

| Host where command is executed | Setting item | Overview of setting |
|---|---|---|
| Primary node | Common definition settings for the logical host | Use the jbsgetcnf and jbssetcnf commands to set the common definitions of IM Configuration Management for the physical host to also be the common definitions for the logical host. Some information (such as directory names) must be changed. |
| | Creating the shared directory | Create the required directories under the shared directory. |
| | Copying the definition files | Copy the definition files from /opt/jp1imm/conf/imcf to the directories under *shared-directory*/jp1imm/conf/imcf. |
| | Setting startup of IM Configuration Management for the instance of Central Console on the logical host | Use the jcoimdef command to set IM Configuration Management Service to start according to process management of the instance of Central Console on the logical host. |
| | Changing the communication method for IM Configuration Management on the physical host | Change the communication method for IM Configuration Management on the physical host to the IP binding method. |

206

| Host where command is executed | Setting item | Overview of setting |
|---|---|---|
| Secondary node | Changing the communication method on the physical host | Same as above |

■ Setting the common definitions

Cluster setup of IM Configuration Management sets the values shown below in the common definitions for the logical host.

*Table 1-29:* Common definitions for the logical host

| Path | Key name | Setting |
|---|---|---|
| *logical-host-name\* `JP1CONF\` | `JP1CONFIG_CONFDIR` | *shared-directory-name*`/jp1imm/conf/imcf` |
| | `JP1CONFIG_TMPDIR` | *shared-directory-name*`/jp1imm/tmp` |
| | `JP1CONFIG_LOGDIR` | *shared-directory-name*`/jp1imm/log/imcf` |
| | `JP1CONFIG_DATADIR` | *shared-directory-name*`/jp1imm/data/imcf` |
| | `JP1_BIND_ADDR` | `IP` |

■ Creating the shared directory

Cluster setup of IM Configuration Management creates the directories shown below.

*Table 1-30:* Directories created when the jp1cf_setup_cluster command is executed

| Type of files to be stored | Directory |
|---|---|
| Definition files | *shared-directory-name*`/jp1imm/conf/imcf` |
| Log files | *shared-directory-name*`/jp1imm/log/imcf` |
| Temporary files | *shared-directory-name*`/jp1imm/tmp` |
| Data for the system hierarchy and profiles | *shared-directory-name*`/jp1imm/data/imcf` |

■ Setting startup of IM Configuration Management for the instance of Central Console on the logical host

Execute the `jcoimdef` command to add the IM Configuration Management startup settings to the process management of the instance of Central Console on the same logical host.

■ Changing the communication method for IM Configuration Management on the physical host

Cluster setup of IM Configuration Management changes the communication method for the physical host to the IP binding method by changing the value of `JP1_BIND_ADDR` under the `JP1_DEFAULT\JP1CONFIG\` common definition to `IP`.

## Format

```
jp1cf_setup_cluster  -h logical-host-name
                        [-d shared-directory-name]
```

## Execution permission

Superuser permissions

## Storage directory

`/opt/jp1imm/bin/imcf`

## Arguments

■ `-h` *logical-host-name*

When you are operating in a cluster system, this option specifies the logical host name of the host where the command is executed. The command reorganizes the database for the specified logical host. The permitted length is from 1 to 63 characters (bytes). If this option is omitted, an error results.

■ `-d` *shared-directory-name*

Specifies the shared directory for the logical host in order to set up the primary node. When this option is omitted, the command sets up the secondary node. The permitted length is from 1 to 165 characters (bytes).

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Notes

- When you set up the primary node, you must mount the shared disk in order to copy the definition files to the shared directory and create a monitoring object database.

- You must set up a logical host for each node.

- When you execute this command, the socket binding method used for TCP/IP communication is changed to the IP binding method. The command changes this setting for the physical host and for the logical host that is to be created. For details about the socket binding method used for TCP/IP communication, see the

documentation for the applicable OS.

## jp1cfhasetup (Windows only)

### Function

This command sets up an environment for IM Configuration Management when you are operating in a cluster system.

Before you execute this command, you must set up the logical host of JP1/Base.

When you execute this command, the socket binding method used for TCP/IP communication is changed to the IP binding method. The command changes this setting for the physical host and for the logical host that is to be created. For details about the socket binding method used for TCP/IP communication, see the documentation for the applicable OS.

### Format

```
jp1cfhasetup
```

### Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

### Storage directory

*Manager-path*`\bin\imcf\`

### Notes

- Use this command to set up an environment for JP1/IM - Manager (JP1/IM - Central Console) in a cluster system. Use the `jp1cshasetup` command to set up an environment for JP1/IM - Manager (JP1/IM - Central Scope).

- Set a logical host for each node.

- You must have set up the logical host for JP1/Base beforehand. For details about how to set up JP1/Base, see the *Job Management Partner 1/Base User's Guide*.

# jp1cohasetup (Windows only)

## Function

This command displays the Settings for Central Console Cluster System dialog box, which is used to set up an operating environment for the logical host of JP1/IM - Manager (JP1/IM - Central Console). Use this command to set up an environment for JP1/IM - Manager (JP1/IM - Central Console) in a cluster system.

When you execute this command, the socket binding method used for TCP/IP communication is changed to the IP binding method. The command changes this setting for the physical host and for the logical host that is to be created. For details about the socket binding method used for TCP/IP communication, see the documentation for the applicable OS.

## Format

```
jp1cohasetup
```

## Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

## Storage directory

*Console-path*\bin\

## Notes

- Use this command to set up an environment for JP1/IM - Manager (JP1/IM - Central Console) in a cluster system. Use the jp1cshasetup command to set up an environment for JP1/IM - Manager (JP1/IM - Central Scope).

- Set a logical host for each node.

- You must have set up the logical host for JP1/Base beforehand. For details about how to set up JP1/Base, see the *Job Management Partner 1/Base User's Guide*.

## jp1cohaverup

### Function

This command upgrades a logical host environment that was set up for JP1/IM - Manager or JP1/IM - Central Console under version 08-50 or earlier. Use this command after you have upgraded your JP1/IM - Manager or JP1/IM - Central Console from version 08-50 or earlier.

### Format

```
jp1cohaverup -h logical-host-name
```

### Execution permission

In Windows: Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

In UNIX: Superuser permissions

### Storage directory

In Windows:
    *Console-path*\bin\

In UNIX:
    /opt/jp1cons/bin/

### Arguments

■ -h *logical-host-name*

Specifies the name of the logical host to be upgraded. If this option is omitted, an error results.

### Notes

- You must terminate JP1/IM - Manager before you execute this command. An error results if this command is executed while JP1/IM - Manager is running.

- Execute this command only on the primary host. Make sure that the shared disk is mounted when the command executes. Do not execute this command on the secondary host.

- After you have executed this command, you must back up the common definition information from the primary host, copy the backup common definition information to the secondary host, and then use the jbssetcnf command to set the information.

- If you have installed a corrected edition of the same version by overwriting, there

212

is no need to execute this command.

## Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

## Examples

Upgrade logical host `host01`:
`jp1cohaverup -h host01`

## Example output

```
jp1cohaverup -h host01
KAVB9101-I The upgrading of the logical host environment will
now start.
KAVB9102-I The upgrading of the logical host environment has
finished.
```

## jp1cs_setup (UNIX only)

### Function

This command sets up an operating environment for JP1/IM - Manager (JP1/IM - Central Scope).

Use this command only after you have uninstalled JP1/Base on a computer where both JP1/IM - Manager and JP1/Base were installed and you have then re-installed JP1/Base. When you use Hitachi Program Product Installer to perform a new installation or an overwrite installation of JP1/IM - Manager, there is no need to execute this command.

You must terminate JP1/IM - Manager before you use this command.

### Format

```
jp1cs_setup
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1scope/bin/
```

### Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Abnormal termination |

## jp1cs_setup_cluster (UNIX only)

### Function

This command sets up an operating environment for a logical host of JP1/IM - Manager (JP1/IM - Central Scope). Use this command for environment setup in a cluster system.

Set up the environment for the primary node first, and then set up the standby node.

In the environment setup for the primary node, you must specify the logical host name and shared directory name. When you execute the command, information such as definition files is copied to the specified shared directory; therefore, you must have already made the shared disk available for use.

In the environment setup for the standby node, specify only the logical host name. The operating environment is set up based on the information specified for the executing node.

Before you start setting up an environment for the secondary node, you must use the `jbsgetcnf` and `jbssetcnf` commands of JP1/Base to copy to the standby node the common definition information set at the executing node.

Before you use this command, terminate JP1/IM - Manager.

When you execute this command, the socket binding method used for TCP/IP communication is changed to the IP binding method. The command changes this setting for the physical host and for the logical host that is to be created. For details about the socket binding method used for TCP/IP communication, see the documentation for the applicable OS.

### Format

```
jp1cs_setup_cluster -h logical-host-name
                    [-d shared-directory-name]
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1scope/bin/
```

### Arguments

■ `-h` *logical-host-name*

Specifies a host name for the logical host whose environment is to be set up. The permitted length is from 1 to 63 characters (bytes).

Set the specified logical host name in the `hosts` file and in the name server to enable TCP/IP communication. For DNS operation, do not specify the host name in FQDN format (for example, for `jp1v6.soft.hitachi.co.jp`, specify `jp1v6`).

■ `-d` *shared-directory-name*

Specifies a shared directory for storing the information that is to be inherited during node switching. Specify a directory on the shared disk. The permitted length is from 1 to 165 characters (bytes).

The command creates the directories listed below in the specified shared directory and then copies definition files from `/etc/opt/jp1scope/conf/`.

*Table 1-31:* Directories created by the jp1cs_setup_cluster command

| Type of files to be stored | Directory |
|---|---|
| Definition files | *shared-directory-name*/`jp1scope/conf/` |
| Log files | *shared-directory-name*/`jp1scope/log/` |
| Temporary files | *shared-directory-name*/`jp1scope/tmp/` |
| Database information | *shared-directory-name*/`jp1scope/database/` |

Change the definition files, if necessary.

### Notes

- You must set a logical host for each node.

- You must make the shared disk available for use before you set up an environment for the primary node by executing the `jp1cs_setup_cluster` command.

### Return values

| 0 | Normal termination |
|---|---|
| 1 | Abnormal termination |

### Examples

Set up an environment with the following conditions:
```
Logical host name: lnode0
Shared disk: shdsk/lnode0
```

- Setting up the logical host environment at the primary server
  `jp1cs_setup_cluster -h lnode0 -d /shdsk/lnode0`

216

- Setting up the logical host environment at the secondary server
  ```
  jp1cs_setup_cluster -h lnode0
  ```

## jp1cshasetup (Windows only)

### Function

This command displays the Settings for Central Scope Cluster System dialog box that is used to set up an operating environment for the logical host of JP1/IM - Manager (JP1/IM - Central Scope). Use this command to set up an environment for JP1/IM - Manager (JP1/IM - Central Scope) in a cluster system.

When you execute this command, the socket binding method used for TCP/IP communication is changed to the IP binding method. The command changes this setting for the physical host and for the logical host that is to be created. For details about the socket binding method used for TCP/IP communication, see the documentation for the applicable OS.

### Format

```
jp1cshasetup
```

### Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

### Storage directory

*Scope-path*`\bin\`

### Notes

- Use this command to set up an environment for JP1/IM - Manager (JP1/IM - Central Scope) in a cluster system. Use the `jp1cohasetup` command to set up an environment for JP1/IM - Manager (JP1/IM - Central Console).

- Set a logical host for each node.

- You must have set up the logical host for JP1/Base beforehand. For details about how to set up JP1/Base, see the chapter that describes setup for operation in a cluster system in the *Job Management Partner 1/Base User's Guide*.

  You must have already set up a logical host for JP1/IM - Manager (JP1/IM - Central Console).

## jp1cshaverup (UNIX only)

### Function

This command upgrades a logical host environment that was set up for JP1/IM - Central Scope under version 08-01 or earlier. Use this command after you have upgraded your JP1/IM - Central Scope from version 08-01 or earlier.

You must execute this command in order to use the functions of a new version of JP1/IM - Central Scope that has been installed. However, if you want to use only the functions supported by version 08-01 or earlier, do not execute this command.

### Format

```
jp1cshaverup -h logical-host-name
             [-w work-directory]
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1scope/bin/
```

### Arguments

■ `-h` *logical-host-name*

Specifies the name of the logical host to be upgraded. If this option is omitted, an error results.

■ `-w` *work-directory*

Specifies the full path of a work directory that is used to upgrade the logical host environment for JP1/IM - Central Scope.

If this option is omitted, `/opt/jp1scope/tmp/` is assumed.

### Notes

• You must terminate JP1/IM - Manager before you execute this command. An error results if this command is executed while JP1/IM - Manager is running.

• Once the `jp1cshaverup` command has been executed, JP1/IM - Central Scope runs under the new version that has been installed, and you can no longer log in from the Monitoring Tree (Editing) window of JP1/IM - View version 08-01 or earlier.

### Return values

| | |
|---|---|
| 0 | Normal termination |

| 1 | Specified logical host name was not found |
|---|---|
| 2 | Argument error |
| 4 | No permission to execute the command |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 31 | Database initialization error |
| 32 | Data access error |
| 42 | A service is running |
| 45 | An attempt was made to execute the command on the new version of the database |
| 99 | Other error |

## Examples

Upgrade the `logicalhost` logical host environment for the JP1/IM - Central Scope instance that is running under version 08-01; use the `/temp/` work directory:
```
jp1cshaverup -h logicalhost -w /temp
```

## Example output

```
The upgrade processing started.
KAVB7750-I Upgrading of the database version has finished.
KAVB7624-I The jcsdbconvert command finished successfully.
The upgrade processing ends successfully.
```

## jp1cshaverup.bat (Windows only)

### Function

This command upgrades a logical host environment that was set up for JP1/IM - Central Scope under version 08-01 or earlier. Use this command after you have upgraded your JP1/IM - Central Scope from version 08-01 or earlier.

You must execute this command in order to use the functions of a new version of JP1/IM - Central Scope that has been installed. However, if you want to use only the functions supported by version 08-01 or earlier, do not execute this command.

### Format

```
jp1cshaverup.bat -h logical-host-name
                  [-w work-directory]
```

### Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

### Storage directory

*Scope-path*\bin\

### Arguments

■ `-h` *logical-host-name*

Specifies the name of the logical host that is to be upgraded. If this option is omitted, an error results.

■ `-w` *work-directory*

Specifies the full path of a work folder that is used to upgrade the logical host environment for JP1/IM - Central Scope. If the path contains a space, enclose the entire path in double-quotation marks (`"`).

If this option is omitted, *Scope-path*\tmp\ is assumed.

### Notes

- You must terminate JP1/IM - Manager before you execute this command. An error results if this command is executed while JP1/IM - Manager is running.

- Once the `jp1cshaverup.bat` command has been executed, JP1/IM - Central Scope runs under the new version that has been installed, and you can no longer log in from the Monitoring Tree (Editing) window of JP1/IM - View version 08-01 or earlier.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 1 | Specified logical host name was not found |
| 2 | Argument error |
| 4 | No permission to execute the command |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 31 | Database initialization error |
| 32 | Data access error |
| 42 | A service is running |
| 45 | An attempt was made to execute the command on the new version of the database |
| 99 | Other error |

## Examples

Upgrade the `logicalhost` logical host environment for the JP1/IM - Central Scope instance that is running under version 08-01; use the `C:\temp\` work folder:

```
jp1cshaverup -h logicalhost -w C:\temp
```

## Example output

```
The upgrade processing started.
KAVB7750-I Upgrading of the database version has finished.
KAVB7624-I The jcsdbconvert command finished successfully.
The upgrade processing ends successfully.
```

## jp1csverup (UNIX only)

### Function

This command upgrades a physical host environment that has been set up for JP1/IM - Central Scope under version 08-01 or earlier. Use this command after you have upgraded your JP1/IM - Central Scope from version 08-01 or earlier.

You must execute this command in order to use the functions of a new version of JP1/IM - Central Scope that has been installed. However, if you want to use only the functions supported by version 08-01 or earlier, do not execute this command.

### Format

```
jp1csverup [-w work-directory]
```

### Execution permission

Superuser permissions

### Storage directory

```
/opt/jp1scope/bin/
```

### Arguments

- -w *work-directory*

  Specifies the full path of a work directory that is used to upgrade the physical host environment for JP1/IM - Central Scope.

  If this option is omitted, `/opt/jp1scope/tmp/` is assumed.

### Notes

- You must terminate JP1/IM - Manager before you execute this command. An error results if this command is executed while JP1/IM - Manager is running.

- Before you execute this command, check the available disk space. To execute this command, you need free space equivalent to the size of the monitoring object database. The monitoring object database consists of all data in the following directory:

  ```
  /var/opt/jp1scope/database/jcsdb/
  ```

- Once the jp1csverup command has been executed, JP1/IM - Central Scope runs under the new version that has been installed, and you can no longer log in from the Monitoring Tree (Editing) window of JP1/IM - View version 08-01 or earlier.

### Return values

| 0 | Normal termination |
|---|---|

| 2  | Argument error |
|----|----------------|
| 4  | No permission to execute the command |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 31 | Database initialization error |
| 32 | Data access error |
| 42 | A service is running |
| 45 | An attempt was made to execute the command on the new version of the database |
| 99 | Other error |

## Examples

Upgrade the physical host environment for the JP1/IM - Central Scope that is running under version 08-01; use the `/temp/` work directory:

```
jp1csverup -w /temp
```

## Example output

```
The upgrade processing started.
KAVB7750-I Upgrading of the database version has finished.
KAVB7624-I The jcsdbconvert command finished successfully.
The upgrade processing ends successfully.
```

## jp1csverup.bat (Windows only)

### Function

This command upgrades a physical host environment that has been set up for JP1/IM - Central Scope under version 08-01 or earlier. Use this command after you have upgraded your JP1/IM - Central Scope from version 08-01 or earlier.

You must execute this command in order to use the functions of a new version of JP1/IM - Central Scope that has been installed. However, if you want to use only the functions supported by version 08-01 or earlier, do not execute this command.

### Format

```
jp1csverup.bat [-w work-directory]
```

### Execution permission

Administrator permissions (if the Windows UAC feature is enabled, the command is executed from the administrator console)

### Storage directory

*Scope-path*\bin\

### Arguments

■ -w *work-directory*

Specifies the full path of a work folder that is used to upgrade the physical host environment for JP1/IM - Central Scope. If the path contains a space, enclose the entire path in double-quotation marks (").

If this option is omitted, *Scope-path*\tmp\ is assumed.

### Notes

- You must terminate JP1/IM - Manager before you execute this command. An error results if this command is executed while JP1/IM - Manager is running.

- Before you execute this command, check the available disk space. To execute this command, you need free space equivalent to the size of the monitoring object database. The monitoring object database consists of all data in the following folder:

  *Scope-path*\database\jcsdb\

- Once the jp1csverup.bat command has been executed, JP1/IM - Central Scope runs under the new version that has been installed, and you can no longer log in from the Monitoring Tree (Editing) window of JP1/IM - View version 08-01 or earlier.

## Return values

| | |
|---|---|
| 0 | Normal termination |
| 2 | Argument error |
| 4 | No permission to execute the command |
| 12 | Insufficient memory |
| 13 | Insufficient disk capacity |
| 31 | Database initialization error |
| 32 | Data access error |
| 42 | A service is running |
| 45 | An attempt was made to execute the command on the new version of the database |
| 99 | Other error |

## Examples

Upgrade the physical host environment for the JP1/IM - Central Scope that is running under version 08-01; use the `C:\temp` work folder:
```
jp1csverup -w C:\temp
```

## Example output

```
The upgrade processing started.
KAVB7750-I Upgrading of the database version has finished.
KAVB7624-I The jcsdbconvert command finished successfully.
The upgrade processing ends successfully.
```

**Chapter**

# 2. Definition Files

This chapter describes the format and syntax of JP1/IM definition files.

List of definition files
Format of definition file explanations
Definition files for displaying user-specific event attributes

# List of definition files

The following table lists and describes the JP1/Integrated Management definition files.

*Table 2-1:* List of definition files

| Product name | | Definition file name | Description |
|---|---|---|---|
| JP1/Base | | Configuration definition file (`jbs_route.conf`) | Defines the system hierarchy that is to be managed by JP1/IM. |
| | | Environment variable file | Defines environment variables to be used when commands are executed at managed hosts in JP1/IM. |
| | | Host group definition file | Defines a group of managed hosts in JP1/IM. |
| JP1/IM - Manager | Central Console | Automated action environment definition file (`action.conf.update`) | Defines an execution environment for automated actions. |
| | | Automated action definition file (`actdef.conf`) | Defines conditions for executing an automated action and the command to be executed as the action. |
| | | Automated action definition file (`actdef.conf`) (for conversion) | Defines (for conversion) conditions for executing an automated action and the command to be executed as the action. |
| | | Automatic action notification definition file (`actnotice.conf`) | Defines the automated action status notification function. |
| | | Extended startup process definition file (`jp1co_service.conf`) | Defines process information for the functions that constitute JP1/IM - Manager. |
| | | IM parameter definition file (`jp1co_param_V7.conf`) | Defines whether a JP1 event is to be issued when JP1/IM - Manager processes fail or when JP1/IM - Manager processes are recovered automatically from abnormal termination. |
| | | System profile (`.system`) | Defines environment information for the basic operation of the event console. |
| | | User profile (`defaultUser` \| `profile_user-name`) | Defines environment information for how the Event Console window is displayed. |

| Product name | | Definition file name | Description |
|---|---|---|---|
| | | Communication environment definition file (`console.conf.update`) | Defines communication processing (timeout period) among JP1/IM - Manager, the viewer, and the `jcochstat` command. |
| | | Health check definition file (`jcohc.conf`) | Defines whether the health check function is to be enabled. |
| | | Web-based operation definition file (`console.html`) | Defines the operation of Web-based JP1/IM - View. |
| | | Event guide information file (`jco_guide.txt`) | Defines event guide information for JP1 events that occur in the system and create problems. |
| | | Status event definition file (`processupdate.conf`) | Defines whether a JP1 event is to be issued when the action status changes. |
| | | Correlation event generation system profile (`egs_system.conf`) | Defines the start and stop operations for the Event Generation Service. |
| | | Correlation event generation definition file | Defines the JP1 event conditions that result in generation of correlation events and the correlation events that are generated when the JP1 event conditions are satisfied. |
| | | Correlation event generation environment definition file | Defines the size and number of correlation event generation history files. |
| | | Severity changing definition file (`jcochsev.conf`) | Defines conditions for changing the severity of JP1events and the new severity level. |
| | | File that defines which items are displayed for event conditions (`attr_list.conf`) | Specifies the items to be displayed in the **Attribute name** field in the Action Parameter Detailed Definitions window. |
| | | Configuration file for converting information (`event_info_replace.conf`) | Specifies the conversion rules for the automated action event inheriting function. |
| | | Item file | Specifies the JP1 event attributes that are to be output during output of event reports. |

| Product name | | Definition file name | Description |
|---|---|---|---|
| | | Filter file | Defines filter conditions to be applied during output of event reports. |
| | | Definition file for extended event attributes | Defines extended attributes of JP1 events. |
| | | Definition file for object types | Defines the object types of the extended attributes of JP1 events. |
| | Central Scope | Host information file (`jcs_hosts`) | Defines the host information that is managed by JP1/IM - Manager (JP1/IM - Central Scope). |
| | | Guide information file (`jcs_guide.txt`)[#1] | Defines guide information about the JP1 events that trigger a change in monitoring object status. |
| | | Settings file for the maximum number of status change events (`evhist_warn_event_xxx.conf`)[#2] | Defines whether a JP1 event is to be issued when the number of status change events for a monitoring object exceeds a maximum value. |
| | | Settings file for the completed-action linkage function (`action_complete_xxx.conf`)[#2] | Defines whether the completed-action linkage function is to be enabled. |
| | | Definition file for automatic delete mode of status change event | Defines whether the function that automatically deletes the status change events when a JP1 event's status becomes `Processed` is to be enabled. |
| | | Definition file for monitoring object initialization mode | Defines whether the function that initializes monitoring objects when a specific JP1 event is received is to be enabled. |
| | | Automatic backup and recovery settings file for the monitoring object database (`auto_dbbackup_xxx.conf`)[#2] | Defines whether the function that protects the monitoring object database from corruption caused by OS shutdown or cluster system switching during monitoring tree update processing is to be enabled. |
| | | Definition file for on memory mode of status change condition | Specifies whether the memory-resident status change condition function is to be enabled. |
| | | Definition file for opening monitor windows | Defines settings for opening monitor windows. |

| Product name | | Definition file name | Description |
|---|---|---|---|
| | IM Configuration Management | Operation definition file for IM Configuration Management - View (`jcfview.conf`) | Specifies the operation of IM Configuration Management - View. |
| | IM database | Setup information file (`jimdbsetupinfo.conf`) | Specifies setup information, such as the size of the IM database and the directory for storing data for the IM database, when the integrated monitoring database and IM Configuration Management database are set up. |
| | | Cluster setup information file (`jimdbclustersetupinfo.conf`) | Specifies setup information, such as the size of the IM database and the directory for storing data for the IM database, when the integrated monitoring database and IM Configuration Management database are set up in a cluster environment. |
| JP1/IM - View | | Communication environment definition file (`view.conf.update`) | Defines timeout periods for communication between JP1/IM - View and JP1/IM - Manager (JP1/IM - Central Console). |
| | | Communication environment definition file (`tree_view.conf.update`) | Defines timeout periods for communication between JP1/IM - View and JP1/IM - Manager (JP1/IM - Central Scope). |
| | | IM-View settings file (`tuning.conf`) | Defines the operation of JP1/IM - View, such as the number of connected-host log entries in the Login window and the operation when the Event Console window is displayed. |
| | | Web page call definition file (`hitachi_jp1_product-name.html`) | Used for calling another product's Web page from the Tool Launcher window. |
| | | Start program definition file (`!JP1_CS_APP0.conf`) | Defines the start path for a program that is added to the toolbar in the Monitoring Tree window. |
| | | Toolbar definition file (`!JP1_CS_FTOOL0.conf`) | Defines the order of programs that are added to the toolbar in the Monitoring Tree window. |

| Product name | Definition file name | Description |
|---|---|---|
| | Icon operation definition file (`!JP1_CS_FTREE0.conf`) | Defines the operation of icons that are added to the toolbar in the Monitoring Tree window. |
| | Configuration file for monitoring tree | Defines the configuration of the monitoring tree that is displayed in the Monitoring Tree window. |
| | Definition file for executing applications | Defines the IDs and paths of applications that are executed by the viewer. |
| | Definition file for the Tool Launcher window | Defines the tree that is to be displayed in the Tool Launcher window. |

#1: The guide information file used in the UNIX version of JP1/IM - Manager depends on the language used by the JP1/IM - Manager. The *xxx* part of the guide information file (`jcs_guide.txt`) is explained later in this chapter in the section on the guide information file.

#2: There are two settings files for the maximum number of status change events, two settings files for the completed-action linkage function, and two automatic backup and recovery settings files for the monitoring object database. Either `on` or `off` is set in *xxx*.

# Format of definition file explanations

This section describes the format of the definition file explanations.

The description of a definition file consists of the items described below. Note that some of the items shown below may be omitted in some definition file explanations.

## Format

Describes the format of the definition file.

## File

Shows the name of the definition file.

## Storage directory

Describes the definition file's storage location.

## Description

Describes the use of the definition file.

## When the definitions are applied

Describes when the definition file's contents are applied.

## Information that is specified

Describes the information that is specified in the definition file.

## Example definition

Provides an example of the definition file.

# Definition files for displaying user-specific event attributes

You can extend the functions for linking JP1/IM to other applications by customizing JP1/IM definition files. Extending functions enables you to do the following:

- Display user-specific event attributes
- Display the monitor window from JP1 events displayed in JP1/IM - View
- Add new menus to the Tool Launcher window

For details about the functions, see *3.8 Displaying user-defined event attributes* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

## Overview of definition files

In a definition file, blocks that specify definitions are related to each other. Moreover, the definition files are related to each other. The following figure shows these relationships.

*Figure 2-1:* Relationships between definition blocks and definition files
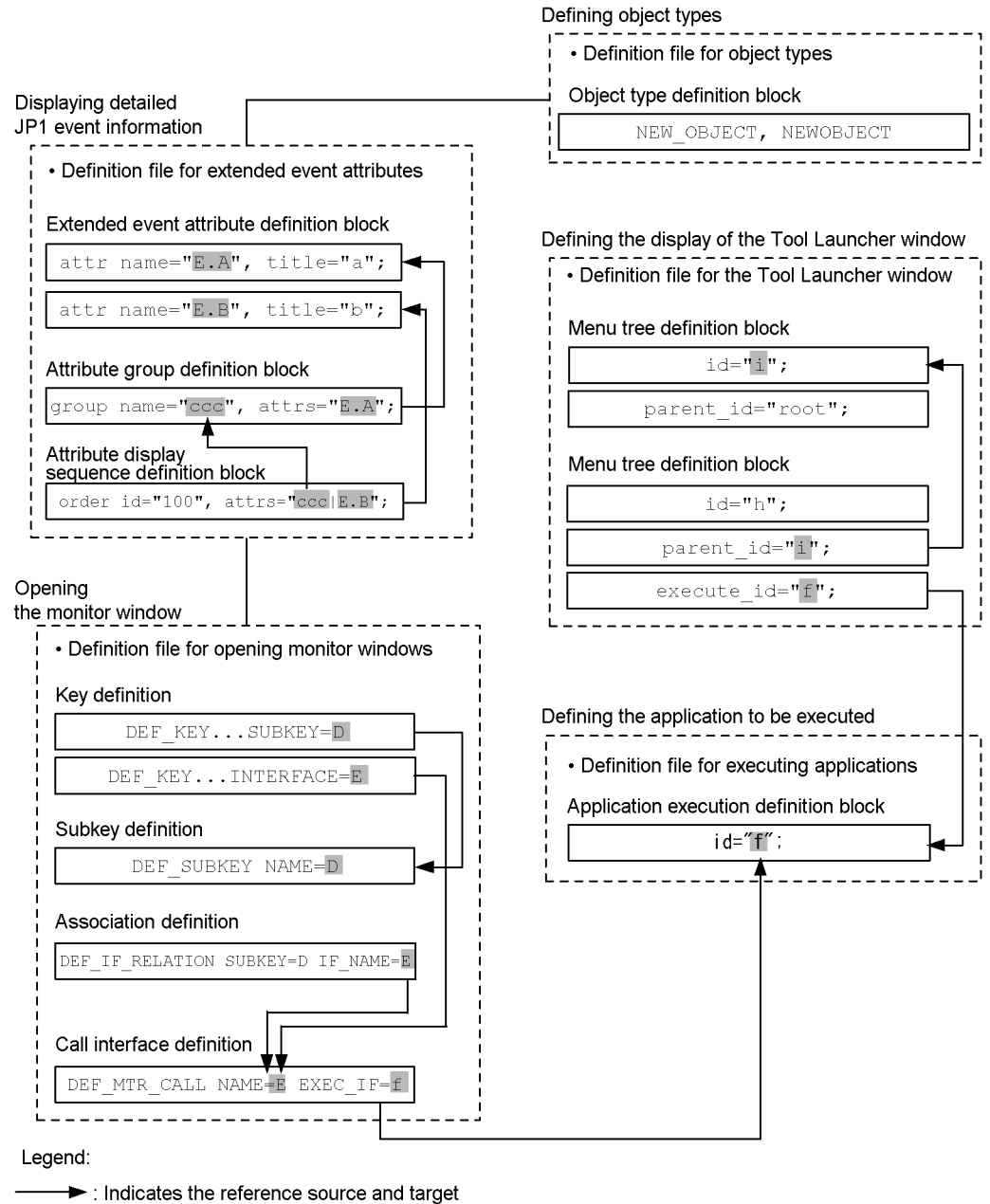
## Naming rules for definition files

The following shows the naming rules for definition files.

*Table 2-2:* Naming rules for definition files

| Definition file | Naming rule |
|---|---|
| Definition file for extended event attributes | *company-name_product-name*_attr_en.conf |
| Definition file for object types | *company-name_product-name*_obj.en |
| Definition file for executing applications | *company-name_product-name*_app.conf |
| Definition file for opening monitor windows | *company-name_product-name*_mon_en.conf |
| Definition file for the Tool Launcher window | *company-name_product-name*_tree.conf |

Note that *product-name* may also be specified as *series-name_product-name*. We recommend that for JP1 event issuance you use as the file name the value specified in PRODUCT_NAME, with the forward slash (/) replaced by the underscore (_). Because hitachi is used as the default file name, use a name other than hitachi for *company-name*.

## Storage locations for definition files

The following shows the storage location for each definition file.

*Table 2-3:* Storage locations for definition files

| Definition file | Storage location |
|---|---|
| Definition file for extended event attributes | Machine where JP1/IM - Manager is installed |
| Definition file for opening monitor windows | Machine where JP1/IM - Manager is installed |
| Definition file for object types | Machine where JP1/IM - Manager is installed |
| Definition file for executing applications | Machine where JP1/IM - View is installed |
| Definition file for the Tool Launcher window | Machine where JP1/IM - View is installed |

## Structures of definition files

This section provides information that is common to the JP1/IM definition files that

can be customized in order to link with the Event Console window and Tool Launcher window.

The information provided in this section is applicable to the following three definition files:

- Definition file for extended event attributes
- Definition file for executing applications
- Definition file for the Tool Launcher window

The definition file for object types and the definition file for opening monitor windows have different structures.

## Components of definition files

The principal components of a definition file are the statement, blocks, and comments. A definition file begins with the statement that represents the attributes of the entire file (definition information header), followed by blocks that describe the details of the definition and any comments.

The following describes these components of a definition file.

■ Statement

*Structure of a statement*

A statement consists of multiple components that form a single meaning. A statement always begins at the beginning of a line and ends with a semicolon ( ; ), followed by a linefeed code.

*Types of statements*

Statements are classified as in-file statements and in-block statements.

*In-file statements*

An in-file statement indicates attributes of the definition file. There are two types of in-file statements: statements for the definition information header, and statements for block control. Each statement in a file is prefixed with @.

*In-block statements*

An in-block statement indicates attributes of a block. All statements that can be specified between the start-of-block statement (`@define-block`) and the end-of-block statement (`@define-block-end`) are in-block statements, except for comments. The in-block statements that can be specified depend on the block.

In-block statements are not prefixed (i.e., there is no @).

■ Block

*Structure of a block*

A block consists of a set of statements. The set of statements includes a statement that declares the start of the block (`@define-block`), statements within the block that describe the actual definitions, comments, and a statement that declares the end of the block (`@define-block-end`).

Nested blocks are not allowed in a definition file.

*Block type*

A block's type is specified in the `type=` parameter of the start-of-block statement (`@define-block`). For details about the types of blocks, see *@define-block statement*.

*Block priority*

A block contains a key item that must be unique within the definition. If the definition contains multiple key items, one of the blocks is selected according to a priority ranking. The block priorities are as follows:

1. Block in the last file when file names are sorted in ascending order

2. Last block specified in the file

In other words, when definition files are linked into a single file in ascending order of the file names, the last block in the linked file has priority.

■ Comment

A comment is a line beginning with a hash mark (`#`) or a line consisting of only spaces, tabs, or a linefeed code. Comments do not contain definition information.

A comment is processed as a single statement. Because comments are evaluated by line, there is no need to delineate comments with a semicolon (`;`). If a comment ends with a semicolon (`;`), the semicolon is treated as part of the comment.

■ Rules for generating common statements

The two types of in-file statements are statements for the definition information header and statements for block control.

The following table lists and describes the in-file statements.

*Table 2-4:* List of in-file statements

| Statement name | Description | Type |
|---|---|---|
| `@file` | Declares the definition version and character encoding. | For the definition information header |

| Statement name | Description | Type |
|---|---|---|
| @product | Declares program product information in the definition. | For the definition information header |
| @define-block | Declares the beginning of a block. | For block control |
| @define-block-end | Declares the end of a block. | For block control |

In these statements, a statement for the definition information header defines attributes that are common to the entire definition file. The available statements for the definition information header depend on the definition file. The parameters for the statements for the definition information header also depend on the definition file.

A statement for block control is used to declare a block unit that is defined in the definition file. The rules for generating statements for block control are common to all definition files. These rules are described below.

For the rules for generating statements for the definition information header, see the descriptions of the individual definition files.

*@define-block statement*

> *Syntax*
>
>> @define-block type="*block-type*";
>
> *Function*
>
>> Declares the beginning of a block. Statements from this statement to the @define-block-end statement are treated as a single definition block.
>
> *Parameter*
>
>> - type="*block-type*"
>>
>>   Specifies the type of definition block. The following lists the block types that can be specified.

*Table 2-5:* List of block types

| Block name | Value in the parameter |
|---|---|
| Event attribute definition block | "event-attr-def" |
| Event attribute group definition block | "event-attr-group-def" |
| Event display sequence definition block | "event-attr-order-def" |
| Application execution definition block | "application-execution-def" |
| Menu tree definition block | "function-tree-def" |

If an invalid block type is specified, the entire block is ignored and a warning is displayed, but file analysis processing continues.

*Note:*

Nested definition blocks are not allowed.

*Example definition*

See the description of the `@define-block-end` statement.

*@define-block-end statement*

*Syntax*

```
@define-block-end;
```

*Function*

Declares the end of a definition block that begins with `@define-block`.

*Note:*

If there is no corresponding `@define-block` statement, file analysis processing is canceled.

*Example definition*

This example includes `@define-block` and `@define-block-end` statements:

```
@define-block type="event-attr-def";
block lang="English", platform="base";
attr name="E.SEVERITY", title="Severity";
attr name="B.TIME", title="Registered time";
attr name="B.SOURCESERVER", title="Registration host";
attr name="E.USER_NAME", title="User name";
@define-block-end;
```

## Configuration definition file (jbs_route.conf)

### Format

```
[manager-host-1]
managed-host
managed-host
     :
[manager-host-2]
managed-host
     :
```

### File

jbs_route.conf (configuration definition file)

jbs_route.conf.model (model file for the configuration definition file)

### Storage directory

In Windows
*Base-path*\conf\route\
*shared-folder*\jp1base\conf\route\ *(logical host)*

In UNIX
/etc/opt/jp1base/conf/route/
*shared-directory*/jp1base/conf/route/ *(logical host)*

### Description

This file defines the system hierarchy that is to be managed by JP1/IM.

JP1/IM operates under a hierarchical system configuration that consists of managers that manage the system and agents. There can be a hierarchy under each manager, which enables JP1/IM to manage systems of various sizes.

The system hierarchy is managed by JP1/Base, which is the prerequisite product that provides the core functionality of JP1/IM.

Based on the hierarchy information that is defined in this file, the JP1/IM functions operate as follows:

- JP1 event forwarding

  Important JP1 events are forwarded from lower-level hosts to higher-level hosts, as defined in the configuration definition information (when the default settings are used).

241

- Automated actions and command execution

  Automated action and command execution requests can be issued to hosts specified in the configuration definition information.

You must enter a linefeed on the last line of the file.

## When the definitions are applied

The specified configuration definition information takes effect when the following commands are executed for applying the definitions:

- `jbsrt_distrib` (distributes definition information)
- `jbsrt_sync` (synchronizes definition information at the highest manager)
- `jbsrt_del` (deletes definition information)

## Information that is specified

[*manager-host*]

Specifies the host name of a manager.

Express the host name using from 1 to 255 alphanumeric characters, the hyphen (`-`), and the period (`.`).

If you divide the system configuration definition, place an asterisk (`*`) immediately before the host name that is duplicated in (continued to) another configuration definition file.

The manager is the host where JP1/IM - Manager is installed.

*managed-host*

- Specifies the name of a host that is managed by the specified manager.

- Express the host name using from 1 to 255 alphanumeric characters, the hyphen (`-`) and the period (`.`).

- If you divide the system configuration definition, place an asterisk (`*`) immediately before the host name that is duplicated in (continued from) another configuration definition file.

- JP1/Base must be installed on a managed host. A managed host cannot be defined under more than one manager.

- Specify a host name that is registered in the `hosts` file or DNS, or a host name that is defined in `jp1hosts`.

- If you specify an asterisk (`*`) as part of the host name, which is not permitted, the `jbsrt_distrib` command will not delete the configuration definition information that follows that host name.

- If you use alias names for hosts, do not specify in the definition file more than one alias for a host. If multiple aliases are specified for the same host, each alias is treated as the name of a different host.

- If you use the automated action function or the command execution function, specify for a managed host the same host name that is specified in the command execution or automated action function. If the host is a physical host, specify the host name that is returned by the `hostname` command or an alias of that host name. Do not specify an alias name for a host running under Windows 2000, Windows XP Professional, or Windows Server 2003. (The restrictions applicable to alias names are the same as for managers).

## Example definition

The following describes examples of configuration definition files for a JP1/IM system based on the system hierarchy shown in the table below. The first example is of a batch definition; the second example is of divided definitions.

*Table  2-6:* JP1/IM system hierarchy (example)

| Integrated manager | Site manager | Agents |
|---|---|---|
| jp1sv1 | jp1sv2 | jp1ag1, jp1ag2 |
| | jp1sv3 | jp1ag3, jp1ag4, jp1ag5 |

*Example of a batch definition:*

To create a batch definition, edit the configuration definition file at the integrated manager as follows (there is no need to edit the files at the site managers or agents):

Configuration definition file for integrated manager `jp1sv1`:

```
[jp1sv1]
jp1sv2
jp1sv3
[jp1sv2]
jp1ag1
jp1ag2
[jp1sv3]
jp1ag3
jp1ag4
jp1ag5
```

*Example of divided definitions:*

To create divided definitions, edit a configuration definition file at the integrated manager and at each site manager as follows (there is no need to edit files at the agents):

243

Configuration definition file for integrated manager `jp1sv1`:
```
[jp1sv1]
*jp1sv2
*jp1sv3
```

Configuration definition file for site manager `jp1sv2`:
```
[*jp1sv2]
jp1ag1
jp1ag2
```

Configuration definition file for site manager `jp1sv3`:
```
[*jp1sv3]
jp1ag3
jp1ag4
jp1ag5
```

# Environment variable file

## Format

```
environment-variable-name-1=variable-value-1
[environment-variable-name-2=variable-value-2]
      :
      :
```

## File

Use any file.

## Storage directory

In Windows

Any folder on the host where commands are executed

In UNIX

Any directory on the host where commands are executed

## Description

This file defines environment variables to be used when commands are executed at managed hosts in JP1/IM.

When you use automated actions and JP1/IM - View to execute commands at managed hosts in JP1/IM, you can specify environment variables as part of the execution environments for the commands. You can set environment variables by using environment variable files that are specified in the format described here.

An environment variable file can have any name. By creating multiple environment variable files, you can specify an appropriate file for each command that is to be executed.

If no applicable environment variable file is specified in a Windows environment, the system's environment variables are used for command execution.

You must enter a linefeed code at the end of each line.

Do not specify character strings that are not in the format *environment-variable-name=variable-value*. If a specification is invalid, the command might terminate abnormally, depending on the OS on the host where the command is executed.

## When the definitions are applied

An environment variable file is referenced when execution of a command begins.

## Information that is specified

*environment-variable-name*

Specifies the name of an environment variable.

An environment variable cannot include a linefeed character as part of its name.

If you specify a system environment variable, enclose its environment variable name in the character sequences `<-` and `->`, such as `<-variable->`.

*variable-value*

Specifies a value for the environment variable.

# Host group definition file

## Format

```
host-group-name
{
host-name-1
host-name-2
     :
     :
}
```

## File

Use any file.

## Storage directory

In Windows

Any folder

In UNIX

Any directory

## Description

This file defines a group of managed hosts in JP1/IM.

When a command is to be executed in JP1/IM by means of an automated action or a JP1/IM - View operation, you can set a group of hosts where the command is to be executed and then execute the command on all of those hosts in the batch mode.

## When the definitions are applied

The specified information takes effect after you execute the `jcocmddef` command.

If you set a logical host in a cluster configuration, set the file at both the primary and secondary nodes.

## Information that is specified

*host-group-name*

Specifies a name for identifying the host group.

Express a host group name using from 1 to 32 alphanumeric characters. The space character cannot be used.

You execute a command on a host group by specifying the name of the host group. For example, you can specify a host group name in

d=*execution-host-name-or-group-name* in the automated action definition file or in **Target host** in the Execute Command window.

*host-name*

Specifies the name of a host that is to be a member of the group.

Express a host name using from 1 to 255 alphanumeric characters. The space character cannot be used.

Note that only a monitored host defined in a configuration definition file can be specified here.

## Deleting a host group

To delete a host group, create an empty definition with the name of the host group that is to be deleted from the host group definition file, and then execute the `jcocmddef` command.

## Editing a host group

To edit an existing host group definition, re-create the host group definition file using the same host group name, and then execute the `jcocmddef` command.

## Automated action environment definition file (action.conf.update)

### Format

```
[logical-host-name\JP1CONSOLEMANAGER\ACTION]
"ACTIONINFSIZE"=dword:hexadecimal-value
"EVENTALIVEPERIOD"=dword:hexadecimal-value
"ACTIONEXECUSER"="JP1-user-name"
"ACTIONDEFFILE"="file-name"
"HOSTINEVENT"="{remote | local}"
"ACTIONINFFILE"="file-name"
"ACTIONLIMIT"=dword:hexadecimal-value
"SENDABLE_EVENT"="event-ID"
"REGEXP"="{JP1|EXTENDED}"
"ACTIONPRIORITY"="{DEFAULT|V8COMPATIBLE}"

[logical-host-name\JP1CONSOLEMANAGER\LOG_CONTROL\JCAMAIN]
"LOGSIZE"=dword:hexadecimal-value
```

This is the format of the parameters in the common definition information. Do not edit any other parameters because they are used internally.

### File

`action.conf.update` (model file for the automated action environment definition file)

### Storage directory

In Windows
  *Console-path*\default\

In UNIX
  /etc/opt/jp1cons/default/

### Description

This file defines an execution environment for automated actions.

The required definitions are provided as a model file. To change the settings, copy the model file and then edit the copy.

To reduce the size of the action information file

Make a backup of the action information file, delete the action information file, and then change the settings.

### When the definitions are applied

The specified definitions take effect when JP1/IM - Manager starts after you have

executed the `jbssetcnf` command to apply the definitions to the JP1 common definition information.

You can also apply the following parameters by reloading them with the `jco_spmd_reload` command:

- EVENTALIVEPERIOD
- ACTIONEXECUSER
- HOSTINEVENT
- SENDABLE_EVENT

## Information that is specified

[*logical-host-name*\JP1CONSOLEMANAGER\ACTION]

Specifies a key name for the action execution environment settings.

For *logical-host-name*, specify JP1_DEFAULT for a physical host and *logical-host-name* for a logical host.

"ACTIONINFSIZE"=dword:*hexadecimal-value*

Specifies the size of the action information file as a hexadecimal value (kilobytes).

The permitted value is from dword:00000001 to dword:00001000 (1 to 4,096 kilobytes). The default value is dword:00000272 (626 kilobytes).

The action information file stores automated action execution information. The file is referenced when an action is referenced from the event console or by the `jcashowa` command as well as when an action status notification event is issued.

This is a wrap-around file that is overwritten when the specified ACTIONINFSIZE value is reached. Once overwritten, old action information might no longer be viewable in the event console or with the `jcashowa` command and action status notification events might no longer be issued. If you will reference past action execution results or issue action information notification events, you must estimate the size of the action information that you will want to reference and then set that value in ACTIONINFSIZE.

For details about how to estimate the size of the action information file, see the Release Notes for JP1/IM - Manager.

When you set the action information file size to the default value, you can reference information equivalent to 10,000 actions.

"EVENTALIVEPERIOD"=dword:*hexadecimal-value*

Specifies the AND event storage period in minutes.

The permitted value is from 1 to 1,440 (minutes), expressed as a hexadecimal

value. The default is `dword:0000003c` (60 minutes).

`"ACTIONEXECUSER"="`*JP1-user-name*`"`

Specifies a JP1 user as the default user who executes actions.

Express the JP1 user as a character string of no more than 15 bytes. The default is `""` (none). If this parameter is omitted, `jp1admin` is assumed.

When no execution user is specified in an automated action definition, the action will be executed by the JP1 user defined here.

`"ACTIONDEFFILE"="`*file-name*`"`

Specifies a name for the automated action definition file.

The default is `actdef.conf`; you cannot change this default value.

Use this automated action definition file to define conditions for executing actions by the automated action function and the commands to be executed.

`"HOSTINEVENT"="{`remote` | `local`}"`

Specifies the method to be used to acquire the host name at the event source.

The permitted values are `remote` and `local`. The default is `remote`.

- When `remote` is set, the event attribute *event-issuing server name* is used as the event source host name.

- When `local` is specified, the host name obtained from the event attribute *event source IP address* by using `gethostbyaddr` on JP1/IM - Manager is used as the event source host name. If the host name cannot be obtained, the IP address is used as the event source host name.

`"ACTIONINFFILE"="`*file-name*`"`

Specifies a name for the action information file.

The default is `actinf.log`. You cannot change this default value.

`"ACTIONLIMIT"=dword:`*hexadecimal-value*

Specifies the number of commands to be pre-loaded.

If you use JP1/Base version 06-51 or earlier at the automated action execution host, specify the number of commands that are to be pre-loaded at the execution host. The default is `dword:0000000a` (10).

If you use JP1/Base version 06-71 or later at the automated action execution host, set the number of pre-loaded commands in JP1/Base at the execution host. In this case, use the `jcocmddef` command at the execution host to set the number of pre-loaded commands. The default is 1,024 commands.

`"SENDABLE_EVENT"="`*event-ID*`"`

251

Specifies an automated action issuance event (JP1 event whose event ID is 20A0, 20A1, 20A2, 20A3, or 20A4).

The permitted values are 20A0, 20A1, 20A2, 20A3, and 20A4. To specify multiple event IDs, separate them with the space.

The default is "20A0 20A3 20A4".

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

"REGEXP"="{JP1|EXTENDED}"

Specifies the type of regular expressions to be used.

The permitted values are JP1 and EXTENDED. The default is EXTENDED.

If you specify JP1, you can use JP1-specific regular expressions to define automated actions. If you specify EXTENDED, you can use extended regular expressions to define automated actions.

Note that this parameter is applicable to Windows only.

"ACTIONPRIORITY"="{DEFAULT|V8COMPATIBLE}"

Specifies the priority order for actions.

The permitted values are DEFAULT and V8COMPATIBLE. These values are case sensitive. The default when no value is set is DEFAULT.

If this parameter is omitted altogether, V8COMPATIBLE is assumed.

- If DEFAULT is specified and multiple action definitions are specified for the same parameter, the first action definition specified in the automated action definition file takes effect.

- If V8COMPATIBLE is specified, the same priority order is applied as is used for the automated action function in JP1/IM - Manager versions earlier than 09-00. In other words, if multiple action definitions are specified for the same parameter, an action definition with an event ID specified takes precedence over an action definition for all events, and an action definition with an event ID that is specified closest to the beginning of the automated action definition file takes precedence over all other action definitions with event IDs specified.

[*logical-host-name*\JP1CONSOLEMANAGER\LOG_CONTROL\JCAMAIN]

Specifies a key name for the automated action log definition.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"LOGSIZE"=dword:*hexadecimal-value*

Specifies the maximum size of an automated action trace log (1 file).

The permitted value is from 65,536 to 104,857,600 bytes, expressed in bytes as a hexadecimal value. The default is `dword:00500000` (5,242,880 bytes (5 megabytes)).

The default value will not cause wrap-around in the file even when 300 commands with a maximum length of 100 bytes per command are executed for actions. To change the log size, see the Release Notes for JP1/IM - Manager and then estimate the log size.

## Example definition

```
[JP1_DEFAULT\JP1CONSOLEMANAGER\ACTION]
"ACTIONINFSIZE"=dword:00000010
"EVENTALIVEPERIOD"=dword:0000003c
"ACTIONEXECUSER"="JP1USER"
"ACTIONDEFFILE"="actdef.conf"
"HOSTINEVENT"="remote"
"ACTIONINFFILE"="actinf.log"
"SENDABLE_EVENT"="20A0 20A3 20A4"
"REGEXP"="JP1"

[JP1_DEFAULT\JP1CONSOLEMANAGER\LOG_CONTROL\JCAMAIN]
"LOGSIZE"=dword:00100000
```

Make sure that the end of the file is at the beginning of the last line.

# Automated action definition file (actdef.conf)

## Format

```
[#automated-action-definition-file-version]
[DESC_VERSION=version-information]

[#automated-action-status-monitoring-parameter]
cmn
     [sta true|false]
end-cmn

[#automated-action-definition-parameter]
act action-name
     [prm parameter-group]
     [cmt comment]
     eid event-ID

     cnd
          event-conditions
     end-cnd

     [usr user-name]
     [hst execution-host-name|group-name]
     [cmd action]|[rul]
     [var environment-variable-file-name]

     [det suppress-period]
     [ret delay-monitoring-period]
end-act
```

## File

actdef.conf (automated action definition file)

actdef.conf.model (model file for the automated action definition file)

## Storage directory

In Windows
Console-path\conf\action\
shared-folder\jp1cons\conf\action\ (logical host)

In UNIX
/etc/opt/jp1cons/conf/action/
shared-directory/jp1cons/conf/action/ (logical host)

## Description

This file defines conditions for executing actions by the automated action function of

JP1/IM and the commands to be executed as the actions. To use the language encoding that is used by JP1/IM - Manager, specify this file.

The maximum size of an automated action definition file is 22 megabytes (23,068,672 bytes).

The automated action function automatically executes a specified command on the basis of the definition specified in this file when a JP1 event satisfying specified conditions is received.

Each line of action definition information is called a *parameter*. There are three types of parameters in an automated action definition file:

- Automated action definition file version

  Defines the format version of the automated action definition file.

- Automated action status monitoring parameter (common block)

  Specify the cmn parameter in the common block to define whether the status of automated actions is to be monitored.

- Automated action definition parameters (action block)

  Specify parameters, such as prm and cmt, in the action block to define conditions for executing an action and the command to be executed as the action.

You must specify the automated action definition file version and the automated action status monitoring parameter before the automated action definition parameters. If you specify the automated action definition file version and/or the automated action status monitoring parameter after the automated action definition parameters, the specified definition is ignored.

If you specify the automated action definition file version or the automated action status monitoring parameter more than once, the first definition specified takes effect and subsequent definitions are ignored.

*Definition specification*

- Use the space or the tab to separate the words in a parameter.

- Spaces or tabs preceding the first parameter name on a line are ignored.

- A line beginning with hash mark (#) is regarded as a comment except when the hash mark (#) is preceded by a character string.

- Use lower-case letters to specify the parameter names in action definitions. A specified parameter name that contains upper-case letters is treated as being invalid and results in a definition error.

*Action priority*

If a received JP1 event satisfies the execution conditions in multiple automated

action definitions, only the automated action that has the highest priority is executed (for each parameter group discussed below). The automated action priority order is determined by the following rule:

- The first action specified in the automated action definition file (in GUI, the first action displayed in the Action Parameter Definitions) takes precedence over the other actions.

You can change the action priority order in the common definition. For details about the priority order of automated actions, see *5.3.2 Precedence of execution conditions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

*Parameter groups and AND conditions*

Each automated action definition parameter belongs to a *parameter group*. A parameter group is a unit for checking the conditions for executing an automated action. Use of parameter groups enables you to specify complex conditions, such as when multiple actions are to be executed for a single JP1 event or when an action is to be executed only when multiple conditions are satisfied.

When a single JP1 event arrives at the manager host of JP1/IM, the automated action definition parameters and execution conditions are compared for each parameter group in order of priority. When execution conditions that are satisfied are found, only the automated action definition parameter that has the highest priority is executed for each parameter group.

If you specify an ampersand (`&`) in a parameter group, an AND condition with the automated action definition parameter defined on the preceding line is created. When automated action definition parameters are specified in an AND condition, the corresponding action is executed when all the conditions are satisfied.

*Checking the specified information*

Use the `jcamakea` command to check the information specified in the definition file.

## When the definitions are applied

The definition of an automated action takes effect when the definition is applied by clicking the **Apply** button in the Action Parameter Definitions window in JP1/IM - View when JP1/IM - Manager is started, as well as when the `jcachange` command is executed to re-load the definition.

## Information that is specified (automated action definition file version)

This subsection describes the information to be specified as the automated action definition file version.

`DESC_VERSION=`*version-information*

Defines the format version of the automated action definition file. Specify this definition on the first line of the automated action definition file (the first line in the file excluding null lines and comment lines). If this information is specified on a line other than the first line, a definition error results.

*Table 2-7:* Automated action definition file format version information

| Version information | Description |
|---|---|
| 1 | Not used. The value 2 is assumed for reading the file. |
| 2 | Automated action definition file version is 08-01 or later. |
| 3 | Automated action definition file version is 09-00. |

If this parameter is omitted or 1 is specified, the value 2 is assumed for reading the file. When the **Apply** button is clicked in the Action Parameter Definitions window in JP1/IM - View, the value 2 is set.

If a value other than 1, 2, or 3 is specified in this parameter, an error is output to the integrated trace log and the value 2 is assumed as the version information for reading the file.

In such a case, the Action Parameter Definitions window cannot be displayed in JP1/IM - View. To change the version information, directly edit the definition file.

Because the format of an old automated action definition file version is compatible with the automated action definition file format for version 08-01 or later, the format for version 08-01 or later is assumed for reading the file.

If this parameter is specified on a line that is subsequent to a line containing an automated action definition parameter, the Action Parameter Definitions window can no longer be displayed in JP1/IM - View.

Use the `jcamakea` command to check the contents of the automated action definition file.

## Information that is specified (automated action status monitoring parameter)

This subsection describes the information to be specified in the automated action status monitoring parameter.

`cmn` to `end-cmn`

These are the start and end parameters for the block that specifies a parameter that is applicable to all action definitions. The portion between `cmn` and `end-cmn` is called a common block. This block must be specified before the automated action definition parameters. Specify this parameter only once in the automated action definition file. Specification of this block is optional. If this block is omitted,

false is assumed for the sta parameter.

[sta true|false]

Specifies whether the action status is to be monitored.

Specify either true or false. To monitor the action status, specify true. To not monitor the action status, specify false. The default is false.

## Information that is specified (automated action definition parameters)

This subsection describes each item that is specified in the automated action definition parameters.

act *action-name* to end-act

Specifies the start and end parameters of an automated action definition. There is no limit to the number of actions that can be defined between act and end-act; however, at least one action must be specified. The portion between act *action-name* and end-act is called an action block.

After act, specify an action name, expressed using from 1 to 50 bytes of characters. The permitted characters are all characters other than the control characters (from 0x00 to 0x1F and from 0x7F to 0x9F).

Each action name must be unique among the action names specified in all the action blocks. The parameters that can be specified in the action block are as follows:

prm, cmt, eid, cnd to end-cnd, usr, hst, cmd, rul, var, det, ret

prm *parameter-group*

Specifies a number for the parameter group. If this parameter is omitted, 0 is assumed.

You can specify a single numeric digit (from 0 to 9) or the ampersand (&). If you specify a numeric digit, you cannot omit the action name. If you specify an ampersand (&), this parameter becomes part of an AND condition with the immediately preceding action block, which means that the automated action definition parameter in this action block belongs to the same parameter group as the immediately preceding action block. When an ampersand (&) is specified, the action name cannot be specified.

Following an action block for which the ampersand is not specified, you can specify a maximum of 9 action blocks as members of an AND condition (for a total of 10 action blocks including the first action block).

Within the same parameter group, the first action block specified (in the GUI, the top action block displayed in the Action Parameter Definitions window) has precedence over the other action blocks. When a JP1 event arrives at the manager, it is matched against the event conditions in the action block for each parameter

group in the order of priority. When event conditions are found that match the JP1 event, the action in the action block that has the highest priority is executed for the parameter group and no more matching is performed for the action blocks that follow the executed action block. Events are matched in ascending order of parameter groups. For details about the priority order of automated actions, see *5.3.2 Precedence of execution conditions* in the *Job Management Partner 1/ Integrated Management - Manager Overview and System Design Guide*.

cmt *comment*

> Specifies a comment about the action block. This parameter is optional. Specify a comment using from 1 to 1,040 bytes of characters. All characters are permitted. If a comment exceeds 1,040 bytes in length, the portion in excess of 1,040 bytes is deleted.

eid *event-ID*

> Specifies the event ID for the action conditions. This parameter is mandatory and can be specified only once.

> An event ID consists of a base part and an extension part. Express each part of an event ID as a string of from 1 to 8 hexadecimal characters, and separate the base part from the extension part with a colon (:). An event ID is not case sensitive. The extension part can be omitted. To specify any event ID, use an asterisk (*). When an asterisk is specified, all events become subject to the action. If JP1 events occur frequently, a large number of actions will be implemented, in which case execution may be delayed. When you specify an asterisk, you should narrow down the applicable events by using other conditions (such as a message, basic event information, detailed event information, and extended event information).

> The following shows an example:
> ```
> Example: Specify event ID A:
> eid a
> eid A
> eid 0000000a
> eid 0000000A
> eid 0000000A:0
> eid 0000000A:00000000
> ```

> Example: Specify any event ID:
> ```
> eid *
> ```

cnd *event-conditions* to end-cnd

> Specifies the start and end parameters of the block that specifies event conditions for executing an action. Specification of an event condition block is mandatory. Specify only one event condition block within an action block. You can specify from 0 to 256 event conditions in an event condition block.

*event-conditions*

Specifies the event conditions in the following format:

*attribute-name  comparison-keyword  operand* [ *operand*] . . .

Note that a line consisting of only spaces or tabs is ignored during processing.

*attribute-name*

Specifies the name of an attribute that you want to compare. To specify a basic attribute, place `B.` immediately before the name. To specify an extended attribute (common information or user-specific information), place `E.` immediately before the name. Attribute names are case sensitive.

*comparison-keyword*

Specifies one of `BEGIN` (begins with), `IN` (matches), `NOTIN` (does not match), `SUBSTR` (includes), `NOTSUBSTR` (does not include), or `REGEX` (regular expression) as the comparison keyword. The comparison keyword is case sensitive.

*operand*

Specifies a character string as the value that is to be compared with the attribute value by the specified comparison keyword. Operands are case sensitive.

To specify multiple operands, separate them with one or more consecutive spaces or a tab. The OR condition is applied to the specified operands. Note that when a regular expression is specified, only one operand can be specified.

To use a space, tab, linefeed code (CR or LF), or `%` as part of an operand value, you must specify a value shown below:

| No. | Value to be used | What to specify |
|-----|------------------|-----------------|
| 1 | Tab (`0x09`) | `%09` |
| 2 | Space (`0x20`) | `%20` |
| 3 | `%` (`0x25`) | `%25` |
| 4 | Linefeed code LF (`0x0a`) | `%0a` |
| 5 | Linefeed code CR (`0x0d`) | `%0d` |

During maximum value checking for the definition format, `%20` and `%25` are each treated as a single character. The following shows an example of

defining ID matches `100` and `200`, which selects multiple operands:

`B.ID`△`IN`△`100`△`200`

Legend:

△ : Space (`0x20`)


You can specify a maximum of 4,096 bytes of operands per event condition and per event condition block (total length in bytes of all operands that are specified in the event condition block).

*Basic event information*

If you specify `B.BASIC` as the attribute name, you can set the same conditions as for basic event information in the automated action definition file (for conversion).

When you specify `B.BASIC` as the attribute name, you must specify `REGEX` as the comparison keyword.

You can specify the operands in the same format as is used for basic event information in the automated action definition file (for conversion). Note that to use a space, tab, linefeed code (CR or LR), or percent sign (`%`), specify `%`. Specify a forward slash (/) as /; there is no need to specify it as \/.

*Detailed event information*

If you specify `B.DETAIL` as the attribute name, you can set the same conditions as for detailed event information in the automated action definition file (for conversion).

When you specify `B.DETAIL` as the attribute name, you must specify `REGEX` as the comparison keyword.

You can specify the operands in the same format as is used for detailed event information in the automated action definition file (for conversion). Note that to use a space, tab, linefeed code (CR or LR), or percent sign (`%`), specify `%`. Specify a forward slash (/) as /; there is no need to specify it as \/.


The following table lists and describes the attribute names, comparison keywords, and operands that can be specified in an event condition.

*Table 2-8:* Attribute names, comparison keywords, and operands that can be specified in an event condition

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 1 | Event ID | B.ID | • Match <br> • Does not match <br> • Regular expression | Specifies an event ID. <br> • A maximum of 100 event IDs can be specified. However, if a regular expression is used, only one event ID is allowed. <br> • In the case of Match or Does not match, the event ID is not case sensitive. <br> • The permitted range is from 0 to 7FFFFFFF. <br> • In the case of a regular expression, the event ID of an event to be compared is treated as having the following format: <br> ● When the extended part of the event ID is 0: *basic-part-of-event-ID* (8-digit hexadecimal value consisting of upper-case letters and numbers) <br> ● When the extended part of the event ID is not 0: *basic-part-of-event-ID* (8-digit hexadecimal value consisting of upper-case letters and numbers)：*extended-part-of-event-ID* (8-digit hexadecimal value consisting of upper-case letters and numbers) <br> If the basic part or extended part of an event ID is a value that consists of fewer than 8 characters, leading 0s are added to obtain a string of 8 characters. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 2 | Source process ID | `B.PROCESSID` | • `Match`<br>• `Does not match`<br>• `Regular expression` | Specifies the process ID of the application program that issues the event.<br>• A maximum of 100 source process IDs can be specified. However, if a regular expression is used, only one source process ID is allowed.<br>• The permitted value range is from -2,147,483,648 to 2,147,483,647. |
| 3 | Registered time | `B.TIME` | `Regular expression` | Specifies the time the JP1 event was registered into the event database at the source host.<br>• A regular expression in the format *YYYYMMDDhhmmss* must be used. |
| 4 | Arrived time | `B.ARRIVEDTIME` | `Regular expression` | Specifies the time the JP1 event arrived at the event database at the source host.<br>• A regular expression in the format *YYYYMMDDhhmmss* must be used. |
| 5 | Source user ID | `B.USERID` | • `Match`<br>• `Does not match`<br>• `Regular expression` | Specifies the user ID (numeric value) of the source process.<br>• A maximum of 100 source user IDs can be specified. However, if a regular expression is used, only one source user ID is allowed.<br>• The permitted value range is from -2,147,483,648 to 2,147,483,647. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|-----|------|----------------|---------------------|---------|
| 6 | Source group ID | B.GROUPID | • Match<br>• Does not match<br>• Regular expression | Specifies the group ID (numeric value) of the source process.<br>• A maximum of 100 source group IDs can be specified. However, if a regular expression is used, only one source user ID is allowed.<br>• The permitted value range is from -2,147,483,648 to 2,147,483,647. |
| 7 | Source user name | B.USERNAME | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the user name of the source process.<br>• A maximum of 100 source user names can be specified. However, if a regular expression is used, only one source user name is allowed. |
| 8 | Source group name | B.GROUPNAME | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the group name of the source process.<br>• A maximum of 100 source group names can be specified. However, if a regular expression is used, only one source group name is allowed. |
| 9 | Source IP address | B.SOURCEIPADDR | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the IP address of the event-issuing server.<br>• A maximum of 100 source IP addresses can be specified. However, if a regular expression is used, only one source IP address is allowed. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 10 | Event-issuing server name | `B.SOURCESERVER` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the host name of the host (event server name) where the JP1 event occurred.<br>• A maximum of 100 event-issuing server names can be specified. However, if a regular expression is used, only one event-issuing server name is allowed. |
| 11 | Message | `B.MESSAGE` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the message for a basic attribute of the event.<br>• A maximum of 100 messages can be specified. However, if a regular expression is used, only one message is allowed. |
| 12 | Detailed information | `B.DETAIL` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies detailed information for a basic attribute of the event.<br>• A maximum of 100 detailed information items can be specified. However, if a regular expression is used, only one detailed information item is allowed.<br>• If binary data is set in the detailed information for the JP1 event, the detailed information is treated as being the null character " " (0 bytes) for performing comparison.<br>• Available for compatibility purposes. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 13 | Reason for registration | B.REASON | • Match<br>• Does not match<br>• Regular expression | Specifies a reason for registration.<br>• A maximum of 100 reasons for registration can be specified. However, if a regular expression is used, only one reason for registration is allowed. |
| 14 | Start time | E.START_TIME | Regular expression | Specifies the execution start or restart time.<br>• This item cannot be specified more than once.<br>• Specify the absolute time in seconds using a regular expression. |
| 15 | End time | E.END_TIME | Regular expression | Specifies the execution end time.<br>• This item cannot be specified more than once.<br>• Specify the absolute time in seconds using a regular expression. |
| 16 | Product name | E.PRODUCT_NAME | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the name of the product that issued the JP1 event.<br>• A maximum of 100 product names can be specified. However, if a regular expression is used, only one product name is allowed. |
| 17 | Object type | E.OBJECT_TYPE | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the type of object.<br>• A maximum of 100 object types can be specified. However, if a regular expression is used, only one object type is allowed. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 18 | Object name | E.OBJECT_NAME | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the object name of the JP1 event.<br>• A maximum of 100 object names can be specified. However, if a regular expression is used, only one object name is allowed. |
| 19 | Root object type | E.ROOT_OBJECT_TYPE | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the root object type of the JP1 event.<br>• A maximum of 100 root object types can be specified. However, if a regular expression is used, only one root object type is allowed. |
| 20 | Root object name | E.ROOT_OBJECT_NAME | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the root object name of the JP1 event.<br>• A maximum of 100 root object names can be specified. However, if a regular expression is used, only one root object name is allowed. |
| 21 | Object ID | E.OBJECT_ID | • Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• First characters<br>• Regular expression | Specifies the object ID of the JP1 event.<br>• A maximum of 100 object IDs can be specified. However, if a regular expression is used, only one object ID is allowed. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|-----|------|----------------|---------------------|---------|
| 22 | Occurrence | `E.OCCURRENCE` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the occurrence of the JP1 event.<br>• A maximum of 100 occurrences can be specified. However, if a regular expression is used, only one occurrence is allowed. |
| 23 | User name | `E.USER_NAME` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the user name of the user who issued the JP1 event.<br>• A maximum of 100 user names can be specified. However, if a regular expression is used, only one user name allowed. |
| 24 | Termination code | `E.RESULT_CODE` | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the termination code.<br>• A maximum of 100 termination codes can be specified. However, if a regular expression is used, only one termination code is allowed. |
| 25 | Severity | `E.SEVERITY` | • `Match`<br>• `Regular expression` | Specifies the severity of the JP1 event.<br>• The following severity levels can be specified: `Emergency`, `Alert`, `Critical`, `Error`, `Warning`, `Notice`, `Information`, or `Debug`.<br>• Multiple severity values can be specified. However, if a regular expression is used, only one severity value is allowed. |
| 26 | Basic event information | `B.BASIC` | `Regular expression` | You can specify basic event information for compatibility with version 8 or earlier. |

| No. | Item | Attribute name | Comparison keywords | Operand |
|---|---|---|---|---|
| 27 | Program-specific extended attribute | -- | • `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `First characters`<br>• `Regular expression` | Specifies the attribute name of a program-specific extended attribute.<br>• You can specify a name with a maximum length of 32 bytes that begins with an upper-case letter and consists of upper-case letters, numeric characters, and the underscore (_).<br>• A maximum of 100 extended attribute names can be specified. However, if a regular expression is used, only one extended attribute name is allowed. |

Legend:

--: None

usr *user-name*

Specifies the user name of the JP1 user who executes the action. The `usr` parameter is optional. If this parameter is omitted, the system assumes the JP1 user name specified as the default action execution user in the definition of the automated action execution environment. If the default action execution user is also omitted, `jp1admin` is assumed.

Express the user name using from 1 to 31 bytes of characters. A user name cannot contain the space character. You can specify a variable for the user name. You specify a variable when you want to set information contained in the received JP1 event as the user name.

You can set event information for the user name.

When the action is executed, the JP1 user specified here is mapped to the OS user at the execution host that will execute the command, according to the JP1/Base definition. In UNIX, the shell environment of the mapped OS user is used for execution. Note that this parameter cannot be specified together with the `rul` parameter.

hst *execution-host-name*|*group-name*

Specifies the name of the host or host group that is to execute the action. For a host name, specify a name set as a managed host in the system configuration

definition. The `hst` parameter is optional. If it is omitted, the local host is assumed.

Express the execution host name or host group name using from 1 to 255 bytes of characters. The execution host name or host group name cannot contain the space character. You can specify a variable for the execution host name or host group name. You specify a variable when you want to set information contained in the received JP1 event as the execution host name or host group name. For example, to execute the action on the host that issues the event, specify `$EVHOST`.

You can set event information for the execution host name or host group name.

Note that this parameter cannot be specified together with the `rul` parameter.

`cmd` *action*

Specifies the command that is to be executed as the action. For details about the specifiable commands, see *5. Command Execution by Automated Action* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

The `cmd` parameter is optional. If this parameter is omitted, no action is taken even when conditions for action execution are satisfied.

Note that if any of the following parameters is omitted, omitting the `cmd` parameter results in a definition error:

`usr, var, hst, det, ret`

The `cmd` parameter cannot be specified more than once. Specify the parameter using from 1 to 4,096 bytes of characters. Any tabs or spaces preceding the action are deleted, but spaces following the action are not deleted.

This parameter cannot be specified together with the `rul` parameter.

You can set event information for the action.

You can use a variable to specify information contained in the received JP1 event. For example, if the execution host is UNIX, the following specification sets the name of the host that issued the JP1 event in the `HOSTNAME` environment variable:
`HOSTNAME="$EVHOST"` *action*
  *xxx*`_BASIC="$EVBASE"` *xxx*`_MESSAGE="$EVMSG"` *action*


*Notes about the length of an action command*

The maximum length of a command that can be executed as an action is 4,096 bytes including the information obtained after converting variables to be used in the action definition (such as `$EVMSG`). If the command length exceeds 4,096 bytes, the execution status becomes `Fail`, in which case the command is not executed. In such a case, the message `KAVB4421-W Cannot execute action`

because `command line is too long` is displayed in the **Message** field in the Action Log Details window.

The length of a command that can be executed as an action also depends on the system where JP1/IM - Manager and JP1/Base are running.

If any of the hosts on the automated action execution route (including the source manager host and target execution host) runs JP1/IM - Manager or JP1/Base version 6 or version 7, the maximum length of a command must not exceed 1,024 bytes. For notes about the length of a command, see *11.4(2) Notes* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

*Notes about codes that cannot be recognized as characters in an action*

If an action contains a code that cannot be recognized as a character, the action may not be executed by the shell at the execution host or may result in an error when the action attempts to execute. In such a case, the action results in terminated status, not an execution failure. Even though there might be no invalid code in the definition file, an invalid code might be generated when a variable used in the action definition is replaced with the actual value. For details about the correct specification of variables in an action definition, consult the documentation for the products that issue action-related events.

rul

Specifies that a rule startup request to JP1/IM - RL is to be set. This parameter cannot be specified together with the `var`, `cmd`, `usr`, or `hst` parameter.

var *environment-variable-file-name*

Specifies the full path name of the environment variable file that specifies environment variables for the command that is to be executed as the action. This parameter is optional. If this parameter is omitted, it is assumed that there is no environment variable file. For details about the format of an environment variable file, see *Environment variable file*.

Express the environment variable file name using from 1 to 255 bytes of characters. You can set event information for the environment variable file name. You can specify a variable for the environment variable file name. You specify a variable when you want to set information contained in the received JP1 event as the environment variable file name. For example, to set the JP1 event extended attribute named `ENVFILE` as the environment variable file name, specify `$EV"ENVFILE"`.

Note that this parameter cannot be specified together with the `rul` parameter. Spaces before and after the environment variable file name are not deleted. Only one tab or one space character following `var` is deleted.

271

det *suppress-period*

Specifies a period during which action execution is to be suppressed. The action for the action conditions is suppressed if it would otherwise occur during the period specified in this parameter. This parameter is optional. If this parameter is omitted, the action is not suppressed. The permitted value range for the suppression period is from 1 to 3,600 (seconds). This parameter cannot be specified when you have specified & for the parameter group. In the case of AND conditions, specify the suppression period in the first automated action definition parameter that is defined for the AND conditions.

ret *delay-monitoring-period*

Specifies a period during which monitoring for the action execution is performed. If the amount of time specified in this parameter expires before a command control action termination message is received from the execution host after a JP1 event arrived at JP1/Base at the manager, a delay of action is reported by using a method such as JP1 event issuance or command execution. This parameter is optional. If this parameter is omitted, no monitoring for action delay is performed. The permitted value range for the delay monitoring period is from 1 to 86,400 (seconds).

#*comment-statement*

A line beginning with a hash mark (#) is treated as a comment. Note that if you set an action definition from JP1/IM - View, comment lines with the # mark are deleted.

## Variables that can be used in the action definition

In a definition of automated action definition parameters, you can use variables in the usr, var, hst, and cmd parameters to specify information contained in the JP1 events.

When the action is executed, the variables are replaced with the actual information in the JP1 event.

To specify a variable in an automated action definition parameter, use a format such as $EVID.

The following table lists the describes the available variables.

*Table  2-9:*  Variables that can be used in action definitions

| Type of information | Variable name | Description |
|---|---|---|
| Information contained in the basic attributes of JP1 events | EVBASE | Entire basic event information |
| | EVID | Event ID (*basic-code*:*extended-code*) |
| | EVDATE | Event generation date (*YYYY*/*MM*/*DD*) |

| Type of information | Variable name | Description |
|---|---|---|
| | EVTIME | Event generation time (*hh*:*mm*:*ss*) |
| | EVPID | Event source process ID |
| | EVUSRID | User ID of the event source process |
| | EVGRPID | Group ID of the event source process |
| | EVUSR | Event source user name |
| | EVGRP | Event source group name |
| | EVHOST | Event source host name |
| | EVIPADDR | Event source IP address |
| | EVSEQNO | Serial number |
| | EVARVDATE | Event arrival date (*YYYY*/*MM*/*DD*) |
| | EVARVTIME | Event arrival time (*hh*:*mm*:*ss*) |
| | EVSRCNO | Serial number at the event source |
| | EVMSG | Entire message text |
| | EVDETAIL | Entire detailed event information |
| Information contained in the extended attributes of JP1 events | EVSEV | Severities in extended event information (`Emergency`, `Alert`, `Critical`, `Error`, `Warning`, `Notice`, `Information`, `Debug`) |
| | EV"*extended-attribute-name*" | Any extended attribute |
| Other | ACTHOST | Manager host name at the action request source |
| | EVENV1 to EVENV9 | Data obtained by specifying "`( )`" in a regular expression in the specification of an action execution condition (applicable only when an extended regular expression is used at the manager host) |

The value of the variable for an invalid item is NULL. Depending on the type of JP1 event, an action may not be executable or may result in an error if it is executed with a missing variable or with a code in the attribute information that cannot be recognized as a character. Consult the documentation for the products that issue JP1 events beforehand for correct specification of the information.

*Notes about specifying variables*

- If you specify a character, such as an alphanumeric character or an underscore (_), immediately after the variable name, the variable will not be converted correctly. In such a case, enclose the variable name in curly brackets ({ }), as shown in the examples below. These examples assume that `100:0` is specified as the event ID (`$EVID`) and `ABC` is specified as the extended attribute EX (`$EV"EX"`).

Examples:

| *action-definition* | → | *information-after-conversion* |
|---|---|---|
| `$EVID abc` | → | `100:0 abc` |
| `$EVIDabc` | → | `$EVIDabc` *(in Windows),* `none` *(in UNIX)* |
| `${EVID}abc` | → | `100:0abc` |
| `$EVID_abc` | → | `$EVID_abc` *(in Windows),* `none` *(in UNIX)* |
| `${EVID}_abc` | → | `100:0_abc` |
| `$EV"EX" abc` | → | `ABC abc` |
| `$EV"EX"abc` | → | `ABCabc` |

- If the source character information contains any of the control characters shown below, the control character is converted to a space (`0x20`).

  Control characters that are converted to a space: `0x01` to `0x1F` (excluding tab (`0x09`)), `0x7F`

  For example, if the message acquired by specifying `$EVMSG` contains a linefeed code (`0x0A`), the linefeed code (`0x0A`) is converted to the space (`0x20`).

  Example: If the action `echo $EVMSG` is set and the character string "*line-1* `0x0A` *line-2*", which contains a linefeed code, is received as the message for the event, the command "`echo` *line-1*△*line-2*" is executed as the action.

- In UNIX, the final expansion depends on the interpretation by the shell. If the expanded data contains a character that has a special meaning in the shell, such as `*`, it is replaced by the corresponding data. To prevent such characters from being converted, enclose the entire variable in double-quotation marks (`"`), such as `"$EVMSG"`.

## Regular expressions in an action definition

This subsection describes how to use regular expressions to specify attributes of JP1 events (message text, basic attributes, and detailed information) in an event monitoring condition of an automated action definition.

The supported regular expressions depend on the OS. The regular expressions supported by Windows and UNIX are described below.

If you share the same action definitions among different OSs, specify conditions using expressions that are supported by all the OSs because interpretation of regular expressions depends on the OS. Regular expressions supported by all OSs are

presented in *G. Regular Expressions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*. Consult this information to determine the regular expressions that can be used.

*Regular expressions for the Windows version*

For the Windows version, you can set the supported regular expressions to either JP1-specific regular expressions or extended regular expressions. The default is extended regular expressions. For details about how to specify JP1-specific regular expressions, see *Automated action environment definition file (action.conf.update)* in *2. Definition Files*.

*Regular expressions for the UNIX version*

For the UNIX version, use the extended regular expressions. For details about the supported regular expressions, see the OS-provided *regexp(5)*.

## Example definition

This example executes `Act.exe` and `\test\sample.exe` when the two events shown below occur (the example does not monitor the action status).

*Table 2-10:* Example definitions in the automated action definition file

| Event ID | Severity | Object name |
|---|---|---|
| 555 | Unspecified | Unspecified |
| 100 | Critical, Error | /ACTION |

```
DESC_VERSION=3
cmn
    sta false
end-cmn
act action-1
    prm 0
    eid 555
    cnd
    end-cnd
    cmd Act.exe
end-act

act
    prm &
    eid 100
    cnd
        E.SEVERITY IN Critical Error
        E.OBJECT_NAME IN /ACTION
    end-cnd
```

```
        cmd \test\sample.exe
    end-act
```

# Automated action definition file (actdef.conf) (for conversion)

## Format

```
[#automated-action-definition-file-version]
[DESC_VERSION=version-information]

[#automated-action-status-monitoring-parameter]
Δ₀[: state_watch={true | false}]

[#automated-action-definition-parameter]
Δ₀[ {+parameter-group-number|&} Δ₁] {$event-ID|*} Δ₁
[/message/] [,[/basic-event-information/] [,[/detailed-event-information/]
[,[/event-levels-of-extended-event-information/] ] ] ] Δ₁[attribute-name-of-extended-event-information=/
attribute-value/
[,attribute-name-of-extended-event-information-2=/attribute-value/][,...] ] Δ₀
: Δ₀[u=user-name Δ₁] [e=environment-variable-file-name Δ₁]
[d=execution-host-name|group-name Δ₁] [dt=suppress-period Δ₁]
[rt=delay-monitoring-period Δ₁] [action]
    :
```

## File

actdef.conf (automated action definition file) (for conversion)

## Storage directory

In Windows
*Console-path*\conf\action\
*shared-folder*\jp1cons\conf\action\ *(logical host)*

In UNIX
/etc/opt/jp1cons/conf/action/
*shared-directory*/jp1cons/conf/action/ *(logical host)*

## Description

This file defines (for conversion) conditions for executing actions by the automated action function of JP1/IM and the commands to be executed as the actions. Use the language encoding that is used by JP1/IM - Manager to specify this file.

When a JP1 event satisfying specified conditions is received, the automated action function executes automatically a specified command based on the definition specified in this file.

Each line of action definition information is called a *parameter*. There are three types of parameters in an automated action definition file:

- Automated action definition file version

  Defines the format version of the automated action definition file.

- Automated action status monitoring parameter

  Defines whether the status of automated actions is to be monitored.

- Automated action definition parameters

  Define conditions for executing an action and the command to be executed as the action.

You must specify the automated action definition file version and the automated action status monitoring parameter before the automated action definition parameters. If you specify the automated action definition file version and/or the automated action status monitoring parameter after any automated action definition parameters, the specified definition is ignored.

If you specify the automated action definition file version or the automated action status monitoring parameter more than once, the first definition specified takes effect and subsequent definitions are ignored.

*Definition specification*

The automated action status monitoring parameter and the automated action definition parameters specify one definition per line. A definition that will not fit on one line can be continued onto the next line.

An automated action definition parameter is specified in the format *event-monitoring-condition*：*action-execution-definition*, consisting of two components separated by a colon (：).

- The maximum length of one automated action definition parameter is 5,706 bytes.

  Spaces are counted, but the \ in a linefeed code or in a continuation line indicator is not counted.

- An automated action definition parameter that will not fit on one line can continue onto the next line.

  To continue a definition onto the next line, specify \ immediately before the linefeed code at the end of the line. If there is any character, including a space, between \ and the linefeed code, the \ will be regarded as data.

- A line containing a hash mark (#) in column 1 is regarded as a comment line.

  A comment must be specified on a single line. If a comment consists of multiple lines, all but the first line will be discarded when the GUI is used for specifying the definition. Any hash marks (#) in columns other than column 1 or on continuation lines are treated as data, not as a comment.

*Priority order of event monitoring conditions*

If a received JP1 event satisfies the execution conditions in multiple automated action definitions, only the automated action that has the highest priority level is executed (for each parameter group discussed below). The automated action priority order is determined by the following rules:

- For automated actions with an event ID specified, an automated action that is applied to all event IDs takes precedence.

- The first action specified in the automated action definition file (in GUI, the first action displayed in the Action Parameter Definitions) takes precedence.

*Parameter groups and AND conditions*

Each automated action definition parameter belongs to a parameter group. A parameter group is a unit for checking the conditions for executing an automated action. Use of parameter groups enables you to specify complex conditions, such as when multiple actions are to be executed for a single JP1 event or when an action is to be executed only when multiple conditions are satisfied.

When a single JP1 event arrives at the manager of JP1/IM, the automated action definition parameters and execution conditions are compared for each parameter group in order of priority. When execution conditions that are satisfied are found, only the automated action definition parameter that has the highest priority is executed for each parameter group.

If you specify an ampersand (`&`) in a parameter group, an AND condition with the automated action definition parameter defined on the preceding line is created. When automated action definition parameters are specified in an AND condition, the corresponding action is executed when all the conditions are satisfied.

*Checking the size of an automated action definition parameter*

The following lists the items whose size is checked and the respective maximum sizes:

- The maximum size of an automated action definition parameter is 5,706 bytes.

- In an automated action definition parameter, the maximum size of the event monitoring conditions is 1,040 bytes.

- In an automated action definition parameter, the maximum size of an action is 4,096 bytes.

If a maximum size is exceeded, a message is displayed when the definition is applied and the corresponding automated action definition parameter is ignored.

*Checking the specified information*

Use the `jcamakea` command to check the information specified in the definition file.

## When the definitions are applied

The definition of an automated action takes effect when the definition is applied by clicking the **Apply** button in the Action Parameter Definitions window in JP1/IM - View when JP1/IM - Manager is started, as well as when the jcachange command is executed to re-load the definition.

## Information that is specified (automated action definition file version)

This subsection describes the information to be specified as the automated action definition file version.

DESC_VERSION=*version-information*

Defines the format version of the automated action definition file.

*Table 2-11:* Automated action definition file format version information

| Version information | Description |
|---|---|
| 1 | Not used. The value 2 is assumed for reading the file. |
| 2 | Automated action definition file version is 08-01 or later. |
| 3 | Automated action definition file version is 09-00. |
| Other | |

If this parameter is omitted or 1 is specified, the value 2 is assumed for reading the file. When the **Apply** button is clicked in the Action Parameter Definitions window in JP1/IM - View, the value 2 is set.

If a value other than 1, 2, or 3 is specified in this parameter, the file is read as an automated action definition file for version 09-00.

Because the format of an old automated action definition file version is compatible with the automated action definition file format for version 08-01 or later, the format for version 08-01 or later is assumed for reading the file.

If this parameter is specified on a line that is subsequent to a line containing an automated action definition parameter, the Action Parameter Definitions window can no longer be displayed in JP1/IM - View.

Use the jcamakea command to check the contents of the automated action definition file.

## Information that is specified (automated action status monitoring parameter)

This subsection describes the information to be specified in the automated action status monitoring parameter.

state_watch={true | false}

Specifies whether the action status is to be monitored.

Specify either `true` or `false`. The default is `false`.

If `true` is specified, the Action Parameter Definitions window cannot be displayed in JP1/IM - View version 07-01 or earlier.

This parameter is effective only if it is specified before the automated action definition parameters.

If this parameter is specified on a line that is subsequent to a line containing an automated action definition parameter, the Action Parameter Definitions window can no longer be displayed in JP1/IM - View.

You should use the `jcamakea` command to check the contents of the automated action definition file.

When JP1/IM - View version 08-01 or later is connected to JP1/IM - Central Console version 08-01 or later, the automated action status monitoring parameter will always be output to the automated action definition file even when the action status is not to be monitored.

## Information that is specified (automated action definition parameters)

This subsection describes each item that is specified in the automated action definition parameters. For details about the JP1 events, see *3. JP1 Events*. Regular expressions and variables that can be specified in the definition are described later.

*Event monitoring conditions*

The items to be specified as the execution conditions in an automated action definition parameter are described below. The maximum length of a parameter that can be defined as execution conditions is 1,040 bytes.

{+*parameter-group-number* | &}

Specifies the parameter group number to which the automated action definition parameter on this line belongs, expressed as a single-digit number (from 0 to 9) preceded by a plus sign (+). If this information is omitted, 0 is assumed.

If you specify an ampersand (&), this parameter becomes part of an AND condition with the immediately preceding definition line, which means that the automated action definition parameter on this line belongs to the same parameter group as the parameter on the immediately preceding line.

Note that the parameter group number has nothing to do with the priority order for checking execution conditions or the sequence of executing actions.

$*event-ID*

Specifies the event ID preceded by the dollar sign ($). The specification format of an event ID is as follows:

> *basic-part*[:*extended-part*]

Specify the basic and extended parts each using from 1 to 8 hexadecimal numbers (from 0 to 7FFFFFFF). Alphabetic characters must be specified as lower-case letters.

*

Specifies that the target is all event IDs. When an asterisk (*) is specified, all events become subject to the action. If JP1 events occur frequently, a large number of actions will be implemented, in which case execution may be delayed. When you specify an asterisk, you should narrow down the applicable events by using other conditions (such as a message, basic event information, detailed event information, and extended event information).

*message*

Specifies as an execution condition a message text associated with the JP1 event. You can use a regular expression for the condition. When you use a regular expression, specify the message text without control codes.

To express / in a regular expression, specify \/.

*basic-event-information*

Specifies information about JP1 event basic attributes that are to be used as an execution condition. You can use a regular expression to specify this information.

To express / in a regular expression, specify \/. For details about regular expressions, see *G. Regular Expressions* in the *Job Management Partner 1/ Integrated Management - Manager Overview and System Design Guide*.

The basic event information is passed as information about JP1 event basic attributes in the format shown below. Use this format to specify a condition for executing an action.

*event-ID* Δ *event-source-user-name* Δ *event-source-user-ID* Δ *event-source-group-name* Δ *event-source-group-ID* Δ *event-issuing-server-name* Δ *event-source-process-ID* Δ *event-registration-year-month-day* Δ *event-registration-time* Δ *event-source -host-IP-address*

For details about the information included in the JP1 event basic attributes, see *3. JP1 Events*.

*detailed-event-information*

Specifies information about detailed attributes in the JP1 event basic attributes that is to be used as an execution condition.

You can use a regular expression to specify this information.

To express / in a regular expression, specify \/. For details about regular expressions, see *G. Regular Expressions* in the *Job Management Partner 1/ Integrated Management - Manager Overview and System Design Guide*.

The detailed attributes in the JP1 event basic attributes consist of additional JP1 event information. The details and format of this information depend on the JP1 event. If the detailed attribute information is specified in binary format, it is treated as no information (NULL).

- Remarks: The detailed attributes in the JP1 event basic attributes are used principally to record detailed information provided by products that issue events that are compatible with the JP1/SES format of version 5 or earlier. Most products whose version is 6 or later use the JP1 event extended attributes to record detailed information.

*event-levels-of-extended-event-information*

Specifies the severity levels in the extended attributes of the JP1 events that are to be set as an execution condition. Specify the event levels (severities) by combining the applicable characters in the following format:

```
-------E   Event level:Emergency
------A-   Event level:Alert
-----C--   Event level:Critical
----E---   Event level:Error
---W----   Event level:Warning
--N-----   Event level:Notice
-I------   Event level:Information
D-------   Event level:Debug
```

For example, to set as a condition all severities at the Error and higher event levels, specify /----ECAE/.

*attribute-name-of-extended-event-information=/attribute-value/*

Specifies a combined name and value of the JP1 event extended attribute used to form an execution condition. You can use a regular expression to specify this information.

To express / in a regular expression, specify \/.

You can specify a maximum of 100 pairs of attribute name and attribute

value combinations.

For an attribute name, you can specify from 1 to 32 bytes of upper-case letters, numeric characters, and the underscore (_). The attribute name cannot contain a colon (:) or an equal sign (=). Specify an attribute name in a form such as PRODUCT_NAME or OBJECT_NAME. Unlike the settings in other functions, this attribute name is not prefixed with E..

If you specify an event level in this item (item name SEVERITY), specify the attribute value as a character string, such as Emergency or Alert.

### *Action execution definition*

The following describes the items in an automated action definition parameter that can be used to specify an action execution definition.

u=*user-name*

Specifies the user name of the JP1 user who executes the action.

Express the user name using from 1 to 31 bytes of characters. A user name cannot contain a space.

If this parameter is omitted, the system assumes the JP1 user name specified as the default action execution user in the definition of the automated action execution environment. If the default action execution user is also omitted, jp1admin is assumed.

You can use a variable to specify information contained in the received JP1 event as the JP1 user name.

When the action is executed, the JP1 user specified here is mapped to the OS user at the execution host that will execute the command, according to the JP1/Base definition. In UNIX, the shell environment of the mapped OS user is used for execution.

If <RULE> is specified in *action*, this item cannot be specified.

e=*environment-variable-file-name*

Specifies the full path name of the environment variable file that specifies environment variables for the command that is to be executed as the action.

The file name can be a character string with a maximum size of 255 bytes. If the file name contains a space, enclose the entire name in double-quotation marks (" ").

You can use a variable to specify information contained in the received JP1 event as the file name. For example, to set the JP1 event extended attribute named ENVFILE as the environment variable file name, specify $EV"ENVFILE".

For details about the format of the environment variable file, see *Environment variable file* in *2. Definition Files*.

If <RULE> is specified in *action*, this item cannot be specified.

d=*execution-host-name*|*group-name*

Specifies the name of the host or host group that is to execute the action. For a host name, specify a name set as a managed host in the system configuration definition. A host name or host group name cannot contain a space.

If this parameter is omitted, the action is executed at the local host (the host that contains the automated action definition file).

You can use a variable to specify information contained in the received JP1 event as the host name or group name. For example, to execute the action on the host that issued the event, specify $EVHOST.

If <RULE> is specified in *action*, this item cannot be specified.

dt=*suppress-period*

Specifies a period during which action execution is to be suppressed. The action for the action conditions is suppressed if it would occur during the period specified in this parameter. If this parameter is omitted, the action is not suppressed. Express the suppression period using from 1 to 4 bytes of numeric characters. The permitted value range is from 1 to 3,600 (seconds).

When this parameter is specified, JP1/IM - View version 07-01 or earlier cannot display the Action Parameter Definitions window.

Note that this parameter cannot be specified in the following case:

- & is specified.

rt=*delay-monitoring-period*

Specifies a period during which monitoring for the action execution is performed. If the amount of time specified in this parameter expires before a command control action termination message is received from the execution host after a JP1 event arrived at JP1/Base at the manager, a delay of action is reported by using a method such as JP1 event issuance or command execution. This parameter is optional. If this parameter is omitted, no monitoring for action delay is performed.

Express the delay monitoring period using a maximum of five bytes of numeric characters. The permitted value range for the delay monitoring period is from 1 to 86,400 (seconds).

When this parameter is specified, JP1/IM - View version 07-01 or earlier cannot display the Action Parameter Definitions window.

*action*

Specifies the command that is to be executed as the action.

For details about the specifiable commands, see *5. Command Execution by Automated Action* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

If this parameter is omitted, no action is taken even when conditions for action execution are satisfied.

You can use a variable to specify information contained in the received JP1 event as the command parameter.

If the host where the automated action is defined is UNIX, you can use a variable to specify information contained in the received JP1 event as the command environment variable. For example, `MESSAGE="$EVMSG"` `command arg1 arg2` can be specified.

Note that the colon (`:`) in the automated action definition parameter is followed by the action to be executed. If you simply specify `u=`, `e=`, `d=`, `dt=`, or `rt=`, it is treated as being part of the previous information, such as a user name. If you specify information such as `u=` and omit the action, an error will result.

The maximum length of a command that can be executed as an action is 4,096 bytes, including the information obtained after converting variables to be used in the action definition (such as `$EVMSG`). If the command length exceeds 4,096 bytes, the execution status becomes `Fail`, in which case the command is not executed. In such a case, the message `KAVB4421-W Cannot execute action because command line is too long` is displayed in the **Message** field in the Action Log Details window.

If an action contains a code that cannot be recognized as a character, the action might not be executed by the shell at the execution host or might result in an error when the action attempts to execute. In such a case, the action results in terminated status, not an execution failure. Even though there might be no invalid code in the definition file, an invalid code might be generated when a variable used in the action definition is replaced with the actual value. For details about the correct specification of variables in an action definition, consult the documentation for the products that issue action-related events.

To set a rule startup request to JP1/IM - Rule Operation, specify `<RULE>`. When `<RULE>` is specified, *user-name*, *execution-host-name*, and *environment-variable-file-name* cannot also be specified. If one of these items is specified together with `<RULE>`, the `KAVB4550-W` message is displayed and the automated action definition parameter is not output to the standard output.

*Notes about the length of an action command*

The maximum length of a command that can be executed as an action depends on the system where JP1/IM - Manager and JP1/Base are running.

If any of the hosts on the automated action execution route (including the source manager host and target execution host) runs JP1/IM - Manager or JP1/Base version 6 or version 7, the maximum length of a command must not exceed 1,024 bytes. For notes about the length of a command, see *11.4(2) Notes* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

## Variables that can be used in the action definition

In a definition of automated action definition parameters, you can use variables in the specification of the action to be executed (specification following a colon (:)) to set information contained in the JP1 event. When the action is executed, the variables are replaced with the actual information in the JP1 event.

To specify a variable in an automated action definition parameter, use a format such as $EVID.

The following table lists the describes the available variables.

*Table 2-12:* Variables that can be used in the action definition

| Type of information | Variable name | Description |
|---|---|---|
| Information contained in the basic attributes of JP1 events | EVBASE | Entire basic event information |
| | EVID | Event ID (*basic-code*:*extended-code*) |
| | EVDATE | Event generation date (*YYYY*/*MM*/*DD*) |
| | EVTIME | Event generation time (*hh*:*mm*:*ss*) |
| | EVPID | Event source process ID |
| | EVUSRID | User ID of the event source process |
| | EVGRPID | Group ID of the event source process |
| | EVUSR | Event source user name |
| | EVGRP | Event source group name |
| | EVHOST | Event source host name |
| | EVIPADDR | Event source IP address |

| Type of information | Variable name | Description |
|---|---|---|
| | EVSEQNO | Serial number |
| | EVARVDATE | Event arrival date (*YYYY*/*MM*/*DD*) |
| | EVARVTIME | Event arrival time (*hh*:*mm*:*ss*) |
| | EVSRCNO | Serial number at the event source |
| | EVMSG | Entire message text |
| | EVDETAIL | Entire detailed event information |
| Information contained in the extended attributes of JP1 events | EVSEV | Severities in extended event information (Emergency, Alert, Critical, Error, Warning, Notice, Information, Debug) |
| | EV"*extended-attribute-name*" | Any extended attribute |
| Other | ACTHOST | Manager host name at the action request source |
| | EVENV1 to EVENV9 | Data obtained by specifying "( )" in a regular expression in the specification of an action execution condition (applicable only when an extended regular expression is used at the manager host) |

The value of the variable for an invalid item is NULL. Depending on the type of JP1 event, the action might not be executable or might result in an error if it is executed with a missing variable or with a code in the attribute information that cannot be recognized as a character. Consult the documentation for the products that issue JP1 events beforehand for correct specification of the information.

*Notes about specifying variables*

- If you specify a character, such as an alphanumeric character or an underscore (_), immediately after the variable name, the variable will not be converted correctly. In such a case, enclose the variable name in curly brackets ({ }), as shown in the examples below. These examples assume that 100:0 is specified as the event ID ($EVID) and ABC is specified as the extended attribute EX ($EV"EX").

Examples:

| *action-definition* | $\rightarrow$ | *information-after-conversion* |
|---|---|---|
| $EVID abc | $\rightarrow$ | 100:0 abc |
| $EVIDabc | $\rightarrow$ | $EVIDabc *(in Windows),* none *(in UNIX)* |
| ${EVID}abc | $\rightarrow$ | 100:0abc |
| $EVID_abc | $\rightarrow$ | $EVID_abc *(in Windows),* none *(in UNIX)* |

288

```
${EVID}_abc    →   100:0_abc
$EV"EX" abc    →   ABC abc
$EV"EX"abc     →   ABCabc
```

- If the source character information contains any of the control characters shown below, the control character is converted to a space (`0x20`).

  Control characters that are converted to a space: `0x01` to `0x1F` (excluding tab (`0x09`)), `0x7F`

  For example, if the message acquired by specifying `$EVMSG` contains a linefeed code (`0x0A`), the linefeed code (`0x0A`) is converted to the space (`0x20`).

  Example: If the action `echo $EVMSG` is set and the character string "*line-1* `0x0A` *line-2*", which contains a linefeed code, is received as the message for the event, the command "`echo` *line-1* Δ *line-2*" is executed as the action (Δ indicates a space).

- In UNIX, the final expansion depends on the interpretation by the shell. If the expanded data contains a character that has a special meaning in the shell, such as `*`, it is replaced by the corresponding data. To prevent such characters from being converted, enclose the entire variable in double-quotation marks (`"`), such as `"EVMSG"`.

## Regular expressions in the action definition

This subsection describes how to use regular expressions to specify the attributes of JP1 events (message text, basic attributes, and detailed information) in an event monitoring condition of an automated action definition.

The supported regular expressions depend on the OS. The regular expressions supported by Windows and UNIX are described below.

If you share the same action definitions among different OSs, specify conditions using expressions that are supported by all the OSs because interpretation of regular expressions depends on the OS. Regular expressions supported by all OSs are presented in *G. Regular Expressions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*. Consult this information to determine the regular expressions that can be used.

*Regular expressions for the Windows version*

For the Windows version, you can set the supported regular expressions to either JP1-specific regular expressions or extended regular expressions. The default is extended regular expressions. For details about how to use the JP1-specific regular expressions, see *Automated action environment definition file (action.conf.update)* in *2. Definition Files*.

In the case of automated actions in JP1/IM, you can also use the extended notations shown below, in addition to the OS's regular expressions:

\/, \\

> Even in an expression enclosed in brackets, / and \ are treated as characters. This method is used to specify / and \ in regular expressions.

*Regular expressions for the UNIX version*

For the UNIX version, use the extended regular expressions. For details about the supported regular expressions, see the OS-provided *regexp(5)*.

In the case of automated actions in JP1/IM, you can also use the extended notations shown below, in addition to the OS's regular expressions:

\/, \\

> Even in an expression enclosed in brackets, / and \ are treated as characters. This method is used to specify / and \ in regular expressions.

*Specifying the basic and detailed attributes using regular expressions*

This subsection describes how to use regular expressions to specify basic attributes and detailed information about JP1 events in the event monitoring conditions.

The basic attributes of a JP1 event are expressed in the automated action definition parameters in the following format:

*event-ID*[#1] Δ *event-source-user-name* Δ *event-source-user-ID* Δ *event-source-group-name* Δ *event-source-group-ID* Δ *event-issuing-server-name*[#2] Δ *event-source-process-ID* Δ *event-registration-year-month-day*[#3] Δ *event-registration-time*[#4] Δ *event-source-host -IP-address*


#1

> The event ID is expressed in the format *basic-code*:*extended-code*. The basic code and extended code are each an 8-digit hexadecimal number (characters from A to F must be upper case). Any leading zeros in the ID are omitted. If the extended code is 00000000, the event ID is expressed as *basic-code*:0.

#2

> In the event that the server name differs from the host name and the method for acquiring the event issuing host name is set to local, the host name is used, not the event server name.

#3

> Expressed in the format *YYYY/MM/DD*.

#4

The event registration time is expressed in the format *hh:mm:ss*.

The detailed information about a JP1 event is expressed in the following format:

*information-1* Δ *information-2* Δ *information-3* Δ . . . Δ *information-n* Δ

Note:

Depending on the program, the detailed information might not be in this format or it might contain codes that cannot be recognized as characters, such as when only one byte of a multi-byte character is included because of fixed-length requirements. For details about the format, see the documentation for each program.

For both basic attributes and detailed information, each item in the information is separated by a space.

When there is no corresponding information, the item is treated as NULL and multiple consecutive delimiter spaces are displayed. Note that in the future more information might be added after the last item due to functionality extensions.

How to specify each item in the basic attributes and the detailed information is described below.

When you specify the first item in the basic attributes and detailed information, use a caret (`^`) to indicate the start of a character string. For example, the following specifies the JP1 event whose event ID is `00003A80`:

`^3A80`

In specifying the second and subsequent items, use `.*` (indicating any character string or space) to skip each unneeded item. For example, to specify the event issuing host name, which is the 6th item in the basic event attributes, repeat `.*` five times, as follows:

`^.*`Δ`.*`Δ`.*`Δ`.*`Δ`.*`Δ`host01`

The following are examples of specifying event information:

Example 1: JP1 event sent from the user whose user name begins with `JP1USER`:
  `^.*`Δ`JP1USER.*$`

Example 2: JP1 event issued at `host01` to `host05` (when an extended regular expression is used):
  `^.*`Δ`.*`Δ`.*`Δ`.*`Δ`.*`Δ`host0[1-5]`Δ`.*$`

Example 3: JP1 event registered from 08:00 to 08:10 at `host02` (when a extended regular expression is used):

```
^.*Δ.*Δ.*Δ.*Δ.*Δhost02Δ.*Δ.*Δ08:(10|0[0-9]).*Δ.*$
```

Example 4: JP1 event whose third item begins with prn in the detailed information:
```
^.*Δ.*Δprn.*$
```

Note: For the format of detailed information, see the documentation of the program that issues the JP1 events.

*Notes about regular expressions*

- To use extended regular expressions by extending JP1-specific regular expressions (Windows), you must re-evaluate the existing definition settings and redefine them for extended regular expressions in order to avoid any malfunction that might be caused by the extension.

- The handling of control codes (such as linefeeds and tabs) might vary depending on the product and OS. If you use a regular expression to specify a message as a condition, specify only the message text without the control codes.

- If you use many instances of .* in a regular expression to indicate all characters, the search processing might take a considerable amount of time. For data such as a long message, use .* only where it is needed.

  In an environment that supports extended regular expressions, you can use [^ ]* instead of .* to match any character other than the space. By using [^ ]* instead of .*, you can reduce the time required for search processing.

- The vertical bar |, which is a special character, represents the OR condition. When you use this OR condition in regular expressions, note the following:

  Because the vertical bar | indicating an OR condition has a low priority level, you must explicitly specify the range of the OR condition. Omitting the range might result in no operation or a malfunction. To specify the range of an OR condition, enclose it in parentheses (). The example below specifies an OR condition for the event-issuing server name.

  Example: JP1 event issued at gyoumu or host:

  ```
  ^.*Δ.*Δ.*Δ.*Δ.*Δ(gyoumu|host)Δ.*$
  ```

## Example definition

This example executes Act.exe and \test\sample.exe when the two events shown below occur (the example does not monitor the action status):

*Table  2-13:*  Example definition in the automated action definition file

| Event ID | Event level | Object name |
|----------|-------------|-------------|
| 555,100 | Critical,Error | /ACTION |

```
DESC_VERSION=2
:state_watch=false
$555 :Act.exe
& $100 /KAVB.*-E/,,,/----EC--/ OBJECT_NAME=/\/ACTION/
:\test\sample.exe
```

## Automatic action notification definition file (actnotice.conf)

### Format

```
[STATE_WATCH]
EVENT={true | false}
COMMAND=command
[End]
[DELAY_WATCH]
EVENT={true | false}
COMMAND=command
[End]
```

### File

actnotice.conf (automatic action notification definition file)

actnotice.conf.model (model file for the automatic action notification definition file)

### Storage directory

In Windows

*Console-path*\conf\action\

*shared-folder*\jp1cons\conf\action\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/action/

*shared-directory*/jp1cons/conf/action/ *(logical host)*

### Description

This file defines whether a notification is to be issued when automated action status monitoring or delay monitoring detects an error in an automated action. The notification can be to issue a JP1 event or to execute a notification command. Specify this file by using the language encoding that is used by JP1/IM - Manager.

When you specify in this definition file that notification is to be performed in the event of an automated action error, you will be able to detect an automated action that terminates abnormally in Fail, Error, or Fail (Miss) status by monitoring the automated action status. In such a case, you can specify that a JP1 event is to be issued or that a notification command is to be executed to prompt the operator to take appropriate action for the erroneous automated action. The automated action delay monitoring function enables you to detect an automated action that does not terminate within a specified amount of time (the delay monitoring period) and to issue a JP1

event or execute a notification command to prompt the operator to take appropriate action for the automated action that is in delayed status.

If you have deleted the automatic action notification definition file (`actnotice.conf`), copy the model file for automatic action notification definition file (`actnotice.conf.model`) under the name `actnotice.conf` and change the definitions as necessary.

## When the definitions are applied

The settings in the automatic action notification definition file take effect at the following times

- When JP1/IM - Manager starts
- When the file is reloaded by the `jco_spmd_reload` command

## Information that is specified

`[STATE_WATCH]`

Defines whether to provide notification about an automated action error that is detected during automated action status monitoring by issuing a JP1 event or executing a notification command.

`EVENT={`<u>`true`</u>` | false}`

Specifies whether a JP1 event (event ID: `2011`) is to be issued when an error is detected during automated action status monitoring.

Specify either `true` or `false`. If you want to issue a JP1 event when an error is detected, specify `true`; otherwise, specify `false`. The default is `true`. When `true` is specified, a JP1 event (event ID: `2016` or `2021`) is also issued in the following cases:

- Suppression of notification to the action status monitoring function is released (JP1 event with event ID `2016` is issued).
- An erroneous action wraps around in the action information file during action status monitoring (JP1 event with event ID `2021` is issued).

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

`COMMAND=`*command*

Specifies the notification command that is to be executed when an error is detected during automated action status monitoring.

You can execute the following types of commands:

When the host executing the command is Windows:

- Executable file (`.com`, `.exe`)

295

- Batch file (`.bat`)
- JP1/Script script file (`.spt`)

  (An appropriate association must have been set so that an `.spt` file can be executed.)

When the host executing the command is UNIX:

- Executable file (with execution permissions)
- Shell script (with execution permissions)
- If neither of the above applies or there is no definition, the default value `unspecified` is assumed.

The following notes apply to defining a notification command:

- Everything from `COMMAND=` to the linefeed code is defined as a single command.

- The maximum length of a command is 1,023 bytes.

  If the character string obtained by expanding variables exceeds 1,023 bytes, the command will not execute.

  In such a case, the message `KAVB4409-E The notification command (`*command*`) could not be executed.`: *maintenance-information* is output to the integrated trace log.

- The maximum length in bytes includes spaces, but does not include the linefeed code.

- If you specify a variable, specify it immediately after `$`. For details about the variables that can be specified, see *Table 2-14 Variables that can be specified in the automatic action notification definition file*.

- The notification command specified in `COMMAND` inherits the execution environment of JP1/IM - Manager.

- The notification command is executed with the execution permissions of JP1/IM - Manager (Windows: `SYSTEM` user; UNIX: `root`).

- Specify in `COMMAND` the full path of the notification command.

- Specify for a notification command a command that will always terminate. If you set a batch file (Windows) or a shell script (UNIX), make sure that it will terminate with `exit 0`. If the specified command does not terminate or uses the GUI, processes of the executed notification command will remain unresolved.

- To use `$`, specify `$$`.

[DELAY_WATCH]

Defines whether an automated action error that is detected during automated action delay monitoring is to be notified by issuing a JP1 event or by executing a notification command.

`EVENT={`<u>`true`</u>` | ``false``}`

Specifies whether a JP1 event (event ID: `2010`) is to be issued when an error is detected during automated action delay monitoring.

Specify either `true` or `false`. If you wish to issue a JP1 event when an error is detected, specify `true`; otherwise, specify `false`. The default is `true`. When `true` is specified, a JP1 event (event ID: `2015` or `2020`) is also issued in the following cases:

- Suppression of notification to the action delay monitoring function is released (JP1 event with event ID `2015` is issued).

- The erroneous action wraps around in the action information file during action delay monitoring (JP1 event with event ID `2020` is issued).

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

`COMMAND=`*command*

Specifies the notification command that is to be executed when an error is detected during automated action delay monitoring.

You can execute the following types of commands:

When the host executing the command is Windows:

- Executable file (`.com, .exe`)

- Batch file (`.bat`)

- JP1/Script script file (`.spt`)

  (An appropriate association must have been set so that an `.spt` file can be executed.)

When the host executing the command is UNIX:

- Executable file (with execution permissions)

- Shell script (with execution permissions)

- If neither of the above applies or there is no definition, the default value `unspecified` is assumed.

The following notes apply to defining the notification command:

- Everything from `COMMAND=` to the linefeed code is defined as a single command.

- The maximum length of a command is 1,023 bytes.

If the character string obtained by expanding variables exceeds 1,023 bytes, the command will not execute.

In such a case, the message KAVB4409-E The notification command (*command*) could not be executed.: *maintenance-information* is output to the integrated trace log.

- The maximum length in bytes includes spaces, but does not include the linefeed code.

- If you specify a variable, specify it immediately after $. For details about the variables that can be specified, see *Table 2-14 Variables that can be specified in the automatic action notification definition file*.

- The notification command specified in COMMAND inherits the execution environment of JP1/IM - Manager.

- The notification command is executed with the execution permissions of JP1/IM - Manager (Windows: SYSTEM user; UNIX: root).

- Specify in COMMAND the full path of the notification command.

- Specify for a notification command a command that will always terminate. If you set a batch file (Windows) or a shell script (UNIX), make sure that it will terminate with exit 0. If the specified command does not terminate or uses the GUI, processes of the executed notification command will remain unresolved.

- To use $, specify $$.

*Table 2-14:* Variables that can be specified in the automatic action notification definition file

| Variable name | Description |
|---|---|
| ACTSEQNO | Serial number of the action that was placed in delayed or error status.<br>When status monitoring is specified and the action in error status wraps around in the action information file, (----) is displayed. |
| EVID | Event ID of the action triggering event that was placed in delayed or error status (*basic-code* (8 hexadecimal characters)：*extended-code* (8 hexadecimal characters)).<br>If the action that was placed in delayed or error status wraps around in the action information file, (----:----) is displayed. |
| EVARVTIME | Event arrival time (*YYYY/MM/DD  hh:mm:ss*) of the action triggering event that was placed in delayed or error status.<br>If the action that was placed in delayed or error status wraps around in the action information file, (----/--/-- --:--:--) is displayed. |

298

| Variable name | Description |
|---|---|
| ACTSTAT | Action status of the action that was placed in delayed or error status.<br>One of the following character strings indicating the action execution status is displayed:<br>• running (running)<br>• ended (terminated)<br>• fail (not executable)<br>• error (execution failed)<br>• unknown (status unknown)<br>• wait (waiting for transmission)<br>• send (transmitting)<br>• queue (queuing)<br>• cancel (canceled)<br>• kill (terminated forcibly)<br>If you cancel the action from JP1/IM - View, the cancellation status is displayed after the above status.<br>While cancellation processing is underway:<br>• running (canceling)<br>• send (canceling)<br>• queue (canceling)<br>• wait (canceling)<br>When cancellation processing failed:<br>• running (miss)<br>• send (miss)<br>• queue (miss)<br>• wait (miss)<br>• ended (miss)<br>• error (miss) |

| Variable name | Description |
|---|---|
| | If the command is re-executed when the Automatic Action Service is restarted or is output to the action re-execution file, the above status is suffixed with `-R` (example: `ended-R`).<br>If the command is re-executed from JP1/IM - View, the above status is suffixed with `-RU` (example: `ended-RU`).<br>If a suppressed action is re-executed from JP1/IM - View, the above status is suffixed with `-RUD` (example: `ended-RUD`).<br>If a suppressed action is re-executed from JP1/IM - View and then re-executed again due to a restart (including system switching) of the Automatic Action Service during re-execution processing, or is output to the action re-execution file, the above status is suffixed with `-RD` (example: `ended-RD`).<br>If a suppressed action is placed in `fail` status (not executable), the above status is suffixed with `-D` (example: `fail-D`).<br><br>If delay monitoring is used and a delayed action wraps around in the action information file, `(----)` is displayed.<br><br>If status monitoring is used and the action placed in error status wraps around in the action information file, one of the following character strings is displayed:<br>• `fail` (not executable)<br>• `error` (execution failed) |
| ACTSTARTTIME | Action start time of the action that was placed in delayed status (*YYYY/MM/DD hh:mm:ss*).<br>This time is displayed only when delay monitoring is used.<br>If status monitoring is used, `(----/--/-- --:--:--)` is displayed.<br>If delay monitoring is used and the delayed action wraps around in the action information file, `(----/--/-- --:--:--)` is displayed. |
| ACTENDTIME | Action end time of the action that was placed in error status (*YYYY/MM/DD hh:mm:ss*).<br>This time is displayed only when status monitoring is used.<br>If delay monitoring is used, `(----/--/-- --:--:--)` is displayed.<br>If status monitoring is used and the action that was placed in error status wraps around in the action information file, `(----/--/-- --:--:--)` is displayed. |
| ACTHOST | Execution host name for the action that was placed in delayed or error status.<br>If delay monitoring is used and the delayed action wraps around in the action information file, `(----)` is displayed.<br>If status monitoring is used and the action issued by an action definition in which *execution-host-name* is not specified is placed in `Fail` status, `(----)` is displayed. |

| Variable name | Description |
|---|---|
| ACTUSR | JP1 user name executing the action that was placed in delayed or error status. This is the user name registered at the execution host. |
| | If delay monitoring is used and the delayed action wraps around in the action information file, (----) is displayed. |
| | If status monitoring is used and the action issued by an action definition in which *execution-host-name* is not specified is placed in Fail status, (----) is displayed. |

## Example definition

This example issues a JP1 event and executes the notification command statenotice01.exe (for status monitoring) or delaynotice01.exe (for delay monitoring) when an error is detected during status monitoring or delay monitoring of automated actions:

```
[STATE_WATCH]
EVENT=true
COMMAND=C:\Command\statenotice01.exe
[End]
[DELAY_WATCH]
EVENT=true
COMMAND=C:\Command\delaynotice01.exe
[End]
```

301

# File that defines which items are displayed for event conditions (attr_list.conf)

## Format

```
#  comment-line
attribute-name
attribute-name
attribute-name
      .
      .
      .
attribute-name
```

## File

attr_list.conf (file that defines which items are displayed for event conditions)

attr_list.conf.model (model file for the file that defines which items are displayed for event conditions

## Storage directory

In Windows
*Console-path*\conf\action\attr_list
*shared-folder*\jp1cons\conf\action\attr_list

In UNIX
/etc/opt/jp1cons/conf/action/attr_list
*shared-directory*/jp1cons/conf/action/attr_list

## Description

This file defines the items to be displayed in the **Attribute name** field in the Action Parameter Detailed Definitions window. The Action Parameter Detailed Definitions window displays the items in the **Attribute name** field in the order they are specified in this file.

## When the definitions are applied

The file that defines which items are displayed for event conditions is loaded when Central Console is started or when the jco_spmd_reload command is executed. When JP1/IM - View displays the Action Parameter Definitions window, it acquires the contents of the file that defines the items and which was loaded by Central Console, and then applies the file's contents to the Action Parameter Detailed Definitions window.

302

## Information that is specified

*attribute-name*

Specifies an item to be displayed in the **Attribute name** field of the Action Parameter Detailed Definitions window. Specify the attribute name of each item that is to be displayed with one item per line. You can specify from 0 to 256 items.

An attribute name is case sensitive. Any space or tab character immediately preceding or following the attribute name will be ignored.

The table below lists the attribute names that can be specified.

If you specify SEPARATOR, a horizontal line, such as - - - - - - - - - - - - - - - - - - -, is displayed in the **Attribute name** field of the Action Parameter Detailed Definitions window. You can use SEPARATOR to separate the items that are used often from the items that are used infrequently.

If you specify only SEPARATOR, only a horizontal line is displayed in the **Attribute name** field. In such a case, no event condition can be set by selecting the separator line and then adding an event condition.

*Table  2-15:*  List of items that can be displayed

| No. | Display item | Attribute name |
|---|---|---|
| 1 | Source host | B.SOURCESERVER |
| 2 | Event level | E.SEVERITY |
| 3 | Object type | E.OBJECT_TYPE |
| 4 | Object name | E.OBJECT_NAME |
| 5 | Root object type | E.ROOT_OBJECT_TYPE |
| 6 | Root object name | E.ROOT_OBJECT_NAME |
| 7 | Occurrence | E.OCCURRENCE |
| 8 | User name | E.USER_NAME |
| 9 | Message | B.MESSAGE |
| 10 | Product name | E.PRODUCT_NAME |
| 11 | Event ID | B.ID |
| 12 | Start time | E.START_TIME |
| 13 | End time | E.END_TIME |
| 14 | Registered time | B.TIME |

| No. | Display item | Attribute name |
|---|---|---|
| 15 | Arrived time | B.ARRIVEDTIME |
| 16 | Program-specific extended attribute | OTHER_EXTENDED_ATTRIBUTE |
| 17 | Reason for registration | B.REASON |
| 18 | Source process ID | B.PROCESSID |
| 19 | Source user name | B.USERNAME |
| 20 | Source user ID | B.USERID |
| 21 | Source group name | B.GROUPNAME |
| 22 | Source group ID | B.GROUPID |
| 23 | Source IP address | B.SOURCEIPADDR |
| 24 | Object ID | E.OBJECT_ID |
| 25 | Termination code | E.RESULT_CODE |
| 26 | Basic event information | B.BASIC |
| 27 | Detailed event information | B.DETAIL |
| 28 | -------------------- | SEPARATOR |

Note:

If an attribute name has already been specified, subsequent specifications of the same name are ignored.

If a read error occurs in the file that defines the items to be displayed for event conditions such that there are no valid display items, the default values are displayed for Nos. 1 through 25 in the table above.

#*comment-statement*

A line beginning with a hash mark (#) is treated as a comment.

# Example definition

```
B.SOURCESERVER
E.SEVERITY
E.OBJECT_TYPE
E.OBJECT_NAME
E.ROOT_OBJECT_TYPE
E.ROOT_OBJECT_NAME
E.OCCURRENCE
```

```
E.USER_NAME
B.MESSAGE
E.PRODUCT_NAME
B.ID
E.START_TIME
E.END_TIME
B.TIME
B.ARRIVEDTIME
OTHER_EXTENDED_ATTRIBUTE
B.REASON
B.PROCESSID
B.USERNAME
B.USERID
B.GROUPNAME
B.GROUPID
B.SOURCEIPADDR
E.OBJECT_ID
E.RESULT_CODE
```

## Configuration file for converting information (event_info_replace.conf)

### Format

*character-before-conversion=character-string-after-conversion*
*character-before-conversion=character-string-after-conversion*
    :
*character-before-conversion=character-string-after-conversion*

### File

event_info_replace.conf

### Storage directory

In Windows
    *Console-path*\conf\action
    *shared-folder*\jp1cons\conf\action

In UNIX
    /etc/opt/jp1cons/conf/action
    *shared-directory*/jp1cons/conf/action

### File permissions

The following permissions are needed to use the configuration file for converting information:

In Windows

The Administrators group and SYSTEM users must be able to reference the file.

In UNIX

Users with the root permissions must be able to reference the file.

### Description

This file specifies the conversion rules for the automated action event inheriting function. The event inheritance information conversion function for automated action converts specific ASCII characters contained in the event inheritance information to specified character strings according to conversion rules defined in the configuration file for converting information.

### When the definitions are applied

The contents of the configuration file for converting information take effect when JP1/ IM - Manager starts, when the **Apply** button is clicked on the Action Parameter

Definitions window of JP1/IM - View, and when the `jcachange` command is executed to reload the definition.

## Information that is specified

*character-before-conversion=character-string-after-conversion*

Define in the configuration file for converting information conversion rules for the event inheritance information conversion function. Each rule consists of a *character-before-conversion* and a *character-string-after-conversion*. You can specify from 0 to 32 conversion rules.

A line in the configuration file for converting information that consists of only spaces, a tab, or a linefeed code is ignored. Specify one conversion rule per line. Separate the character before conversion from the character string after conversion with an equal sign (=).

A defined line that is not in the format *character-before-conversion=character-string-after-conversion* is ignored and processing continues. If no character string after conversion is specified, the function assumes that the specified character before conversion is to be deleted from the event inheritance information.

There can be only one conversion rule for the same character before conversion. If more than one conversion rule is specified for the same character before conversion, the first conversion rule specified takes effect and the subsequent conversion rules for that character are ignored.

*character-before-conversion*

Specifies a character to be converted as one ASCII character (from `0x00` to `0x7F`), excluding alphabetic characters, numeric characters, and the space.

The table below lists the ASCII characters that can be specified as the character before conversion.

*Table 2-16:* ASCII characters

| Character | Hexadecimal value |
|:---:|:---|
| ! | 0x21 |
| " | 0x22 |
| # | 0x23 |
| $ | 0x24 |
| % | 0x25 |
| & | 0x26 |

| Character | Hexadecimal value |
|:---:|:---|
| ' | 0x27 |
| ( | 0x28 |
| ) | 0x29 |
| * | 0x2a |
| + | 0x2b |
| - | 0x2c |
| . | 0x2d |
| / | 0x2e |
| : | 0x2f |
| ; | 0x3b |
| < | 0x3c |
| = | 0x3d |
| > | 0x3e |
| ? | 0x3f |
| @ | 0x40 |
| [ | 0x5b |
| \ | 0x5c |
| ] | 0x5d |
| ^ | 0x5e |
| _ | 0x60 |
| { | 0x7b |
| \| | 0x7c |
| } | 0x7d |
| ~ | 0x7e |

*character-string-after-conversion*

Specifies the character string to which the character before conversion is to be converted. The specification can consist of any 0 to 2 ASCII characters

(from `0x00` to `0x7F`), including alphabetic characters, numeric characters, the space, the tab, symbols, and the characters that can be specified as the character before conversion.

## Extended startup process definition file (jp1co_service.conf)

### Format

*process-name*|*startup-options*|*whether-restartable*|*restart-count*|*retry-interval*|*restart-count-reset-time*|

### File

jp1co_service.conf (extended startup process definition file)

jp1co_service.conf.model (model file for the extended startup process definition file)

### Storage directory

In Windows
*Console-path*\conf\
*shared-folder*\jp1cons\conf\ *(logical host)*

In UNIX
/etc/opt/jp1cons/conf/
*shared-directory*/jp1cons/conf/ *(logical host)*

### Description

This file defines process information for the functions that constitute JP1/IM - Manager.

JP1/IM - Manager uses the process management function to control restart in the event of abnormal termination of a process. The process management function controls processes according to the definition in the extended startup process definition file.

Do not specify in this file any unneeded characters, such as spaces. Edit numeric values for only those parameters on which editing is permitted.

Customize only the applicable parameters as appropriate to your operations. Normally, there is no need to change the settings for other parameters because appropriate values have already been set in them as the default values for each process.

In the case of a cluster configuration, if the extended startup process definition file is not found in the conf folder for the logical host when the a process management process is started at the logical host, the extended startup process definition file for the physical host is copied.

### When the definitions are applied

The contents of the definition file take effect when JP1/IM - Manager starts and when the jco_spmd_reload command is executed to reload the definition. A change in the

310

*startup-options* parameter takes effect only when JP1/IM - Manager starts.

## Information that is specified

*process-name*

Specifies the name of a process that is to be started and terminated by the process management function of JP1/IM - Manager.

JP1/IM - Manager's process name is already specified, and must not be edited.

The name specified here must be a process name displayed by the `jco_spmd_status` command.

*startup-options*

Specifies startup options for the process.

The `evtcon` process of JP1/IM - Manager requires startup options.

The `-Xmx` parameter of the `evtcon` process sets the size of the heap area that is used by the `evtcon` process of JP1/IM - Manager. A value of 512 megabytes is set as the initial value for the heap area size.

The size of the heap area used by the `evtcon` process might exceed the initial value, depending on user settings. If the estimated heap area size that is required exceeds 512 megabytes, you must change the `-Xmx` parameter's value. For details about how to estimate the heap area size, see the Release Notes for JP1/IM - Manager.

*Notes about startup options*

- If you change the heap area size for the `evtcon` process of JP1/IM - Manager, check by performing appropriate tests that the change will not cause problems. Even if the value is within the permissible range for the heap area size, a memory shortage might occur and JP1/IM - Manager might terminate or information might not be updated in the Event Console window, resulting in unstable operation. If this occurs, revise as necessary the **Event buffer** and **Num. of events to acquire in 1 search** settings by referencing the formula for estimating the heap area size.

- The maximum memory size cited in the Release Notes for JP1/IM - Manager is a logical value. It might not be possible to allocate the set heap area depending on the OS, the environment in use, and the applications that run concurrently. If the heap area cannot be allocated or the set value is less than the initial value (512 megabytes), problems might occur, such as a JP1/IM - Manager startup error.

The following example changes the heap area size from 512 to 1,024 megabytes in Windows:

Example:

Before the heap area size is changed to 1,024 megabytes (from an initial size of 512 megabytes):
```
evtcon||-Xmx512m|0|3|3|3600|
```

After the heap area size has been changed to 1,024 megabytes:
```
evtcon||-Xmx1024m|0|3|3|3600|
```

*whether-restartable*

Specifies whether the process is to be restarted if it terminates abnormally.

Specify 0 to not restart the process and 1 to restart the process.

The default is 0.

*restart-count*

Specifies the number of times process restart is to be attempted.

The permitted value range is from 0 to 99. The default is 3.

Note that if 0 is specified in the *whether-restartable* field, this field is ignored even if a value is specified.

*retry-interval*

Specifies in seconds the interval between process restart attempts.

The permitted value range is from 0 to 3,600. The default is 3.

Note that if 0 is specified in the *whether-restartable* field, this field is ignored even if a value is specified.

*restart-count-reset-time*

Specifies in seconds the amount of time that is to elapse before the restart count will be reset after the process has restarted.

The permitted value range is from 3,600 to 2,147,483,647 (seconds). The default is 3,600.

The restart count is reset when the specified amount of time has elapsed after the process has restarted. If the process terminates abnormally again after this amount of time has elapsed, the restart count starts again from 1. If the process terminates abnormally again within the specified amount of time after it has restarted, the previous restart count is inherited.

Note that if 0 is specified in the *whether-restartable* field, this field is ignored even if a value is specified.

## Example definition

The following shows an example of an extended startup process definition file:

```
evflow||0|3|3|3600|
jcamain||0|3|3|3600|
evtcon|-Xmx512m|0|3|3|3600|
evgen||0|3|3|3600|
jcsmain||0|3|3|3600|
jcfmain||0|3|3|3600|
```

## IM parameter definition file (jp1co_param_V7.conf)

### Format

```
[logical-host-name\JP1CONSOLEMANAGER]
"SEND_PROCESS_TERMINATED_ABNORMALLY_EVENT"=dword:value
"SEND_PROCESS_RESTART_EVENT"=dword:value
```

### File

jp1co_param_V7.conf (IM parameter definition file)

jp1co_param_V7.conf.model (model file for the IM parameter definition file)

### Storage directory

In Windows
  *Console-path*\conf\
  *shared-folder*\jp1cons\conf\ *(logical host)*

In UNIX
  /etc/opt/jp1cons/conf/
  *shared-directory*/jp1cons/conf/ *(logical host)*

### Description

This file defines whether a JP1 event is to be issued when JP1/IM - Manager processes fail or when JP1/IM - Manager processes are recovered automatically from abnormal termination. The following lists the JP1/IM - Manager processes and the JP1 events that can be issued.

- JP1/IM - Manager processes

  - Event Console Service (evtcon)

  - Event Base Service (evflow)

  - Automatic Action Service (jcamain)

  - Central Scope Service (jcsmain)

  - Event Generation Service (evgen)

- JP1 events that can be issued

  - JP1 event whose event ID is 3F90: This event can be issued when a process terminates abnormally.

  - JP1 event whose event ID is 3F91: This event can be issued when a timeout

314

occurs during process startup.

- JP1 event whose event ID is 3F92: This event can be issued when a process that terminated abnormally has successfully completed restart processing.

By issuing a JP1 event when a process recovers automatically from a process error or abnormal termination, you can manage the history of JP1/IM - Manager failures. For this reason, we recommend that you use this definition file to set issuance of such JP1 events.

The required definitions are provided as a model file. To change the settings, copy the model file and then edit the copy.

## When the definitions are applied

The contents of the file take effect when JP1/IM - Manager is restarted by execution of the `jbssetcnf` command with this definition file specified in an argument.

## Information that is specified

[*logical-host-name*\JP1CONSOLEMANAGER]

Specifies the key name for the JP1/IM - Manager environment settings.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"SEND_PROCESS_TERMINATED_ABNORMALLY_EVENT"=dword:*value*

When 1 is set in *value*, a JP1 event is issued in the following cases:

- A process terminates abnormally (JP1 event whose event ID is 3F90 is issued).

- A timeout occurs during startup processing without a startup notification (JP1 event whose event ID is 3F91 is issued).

The default is 0, in which case no JP1 event is issued.

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

"SEND_PROCESS_RESTART_EVENT"=dword:*value*

When 1 is set in *value*, a JP1 event is issued in the following case:

- Restart processing of a process that terminated abnormally is completed successfully (JP1 event whose event ID is 3F92 is issued).

The default is 0, in which case no JP1 event is issued.

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

## Example definition

[JP1_DEFAULT\JP1CONSOLEMANAGER]

315

```
"SEND_PROCESS_TERMINATED_ABNORMALLY_EVENT"=dword:0
"SEND_PROCESS_RESTART_EVENT"=dword:0
```

Make sure that the end of the file is at the beginning of the last line.

```
"SEND_PROCESS_TERMINATED_ABNORMALLY_EVENT"=dword:0
"SEND_PROCESS_RESTART_EVENT"=dword:0
```

## System profile (.system)

### Format

```
DESC_VERSION=1
      :
[ServerDefine]
InvalidateTime = 1440
EventCount = event-buffer-count
Debug = true
[End]
      :
[RetryInfo]
RetryCount = retry-count
RetryInterval = retry-interval
[End]
[LocaleInformation]
Language=English
[End]
```

### File

.system (system profile)

.system.model (model file for the system profile)

### Storage directory

In Windows

*Console-path*\conf\console\profile\

*shared-folder*\jp1cons\conf\console\profile\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/console/profile/

*shared-directory*/jp1cons/conf/console/profile/ *(logical host)*

### Description

This file defines the basic operation of the event console.

There is a system profile for each manager (JP1/IM - Manager). The file defines information about the system environment for the event console (such as the number of event buffers and a retry count for connecting to the event service during event search). The information defined in this profile affects all instances of JP1/IM - View that are connected to the manager to which this profile is applicable.

### When the definitions are applied

The definition takes effect when JP1/IM - Manager starts or when the **Apply** button is

clicked in the System Environment Settings window.

## Information that is specified

EventCount = *event-buffer-count*

Specifies the maximum number of events that can be buffered at the manager when events are extracted from the event service.

The permitted value range is from 10 to 2,000. The default is 500.

RetryCount = *retry-count*

Specifies the maximum number of times automatic connection establishment can be retried after connection with the event service has failed or the connection has been lost during event search.

The permitted value range is from 0 to 100. The default is 3.

RetryInterval = *retry-interval*

Specifies in milliseconds the retry interval between attempts to establish connection after connection with the event service has failed or the connection has been lost during event search.

The permitted value range is from 1 to 86,400,000. The default is 10,000.

## Notes

- Specify the settings in the System Environment Settings window, unless otherwise necessary.

- Be attentive to the values that you set because the contents of the system profile affect all event console operations. Do not change any attribute or attribute value that is not explained here. If such an attribute or attribute value is changed, the event console might not function correctly.

- You must terminate JP1/IM - View before you edit the system profile.

- There is one system profile for each manager. Therefore, if you have changed the manager for logging in, you must change the system profile at the connection destinations.

- When you intend to edit the contents of the .system file, we recommend that you make a backup before editing the file.

- If the system profile contains an error, such as an attribute value that is outside the permitted range of values, the event console might not function correctly.

## Example definition

```
DESC_VERSION=1
     :
```

```
[End]
[ServerDefine]
InvalidateTime = 1440
EventCount = 500
Debug = true
[End]
     :
[RetryInfo]
RetryCount = 3
RetryInterval = 10000
[End]
[LocaleInformation]
Language=English
[End]
```

## User profile (defaultUser | profile_user-name)

### Format

```
DESC_VERSION=file-version
[DisplayItemContainer]
     :
[DisplayItemInformation]
ValidTab=All
Visible=whether-visible
AttrName=JP1-event-attribute-name
AttrOrder=sort-order
ColumnSize=column-width
[End]
[End]
     :
```

### File

defaultUser (default user profile)

defaultUser.model (model file for the default user profile)

profile_*user-name* (user profile for an individual JP1 user)

### Storage directory

In Windows

*Console-path*\conf\console\profile\

*shared-folder*\jp1cons\conf\console\profile\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/console/profile/

*shared-directory*/jp1cons/conf/console/profile/ *(logical host)*

### Description

This file defines environment information about how the Event Console window is displayed for each user.

At the manager, there is a user profile for each user. A user profile defines a user environment for the event console (principally, environment information about the window display). A user profile can be created for each user under the name profile_*user-name* (using the JP1 user's user name). There is also a default profile, defaultUser, that can be used as the default profile for any user. If you edit the defaultUser profile, the new contents become the default profile for user profiles that are created in the future.

320

You can define profile_*user-name* in the Preferences window. If there are any errors in the user profile, the Event Console window might not display correctly. For this reason, we recommend that you use the Preferences window of JP1/IM - View to define user profiles.

## When the definitions are applied

The definition takes effect when you re-log in to JP1/IM - Manager (JP1/IM - Central Console).

## Information that is specified

DESC_VERSION=*file-version*

Specifies the version of the user profile being created. The items that can be specified in [DisplayItemInformation] to [End] depend on the value specified for the file version. For program version 09-00 or later, specify 11 for the file version. If the file version specified is 10 or earlier, do not attempt to change the file version.

The following operations update all instances of profile_*user-name* to the most recent file version:

- Saving the Preferences window from JP1/IM - View

- Saving the column width of the items that are displayed in the list of events on a page in the Event Console window during logout from JP1/IM - View

To set defaultUser (default user profile) to file version 11, overwrite defaultUser with defaultUser.model (model file for the default user profile), and then edit the file.

[DisplayItemInformation] to [End]

Specify the attributes of JP1 events that are to be displayed in the Event Console window.

[DisplayItemInformation] through [End] constitute a single definition block. The contents of this definition block take effect on all three pages of the Event Console window. To add a definition block, insert it between [DisplayItemContainer] and [End].

The parameters that can be specified in [DisplayItemInformation] through [End] are described below.

You must not edit the parameters in [DisplayItemInformation] through [End] for a definition block in which AttrOrder=0 is specified, because such definition blocks are used by the system.

ValidTab = All

This is a fixed character string that must not be changed.

321

`Visible = ` *whether-visible*

Specifies whether the information for the attribute specified in `AttrName` is to be displayed. If you specify `true` in *whether-visible*, information about the attribute specified in `AttrName` is displayed. If `false` is specified, information about the attribute specified in `AttrName` is not displayed. When `false` is specified, the corresponding item is displayed in **Available items** in the Preferences window. If you specify `false`, you must specify `-1` in `AttrOrder`.

`AttrName = ` *attribute-name-to-be-displayed*

Specifies the attribute name of the JP1 event. Information about the attribute specified here is displayed in the Event Console window.

The following table lists the attributes that can be set.

*Table 2-17:* List of attributes that can be set in attribute-name-to-be-displayed

| No. | Specifiable attribute name | Attribute | DESC_VERSION | |
|-----|-----|-----|-----|-----|
| | | | 1-10[#1] | 11 |
| 1 | `IM.EVENT_TYPE` | Type | Y | Y |
| 2 | `B.SEQNO` | Serial number | Y | Y |
| 3 | `B.IDBASE` | Event ID | Y | Y |
| 4 | `B.PROCESSID` | Source process ID | Y | Y |
| 5 | `B.TIME` | Registered time | Y | Y |
| 6 | `B.ARRIVEDTIME` | Arrived time | Y | Y |
| 7 | `B.USERID` | Source user ID | Y | Y |
| 8 | `B.GROUPID` | Source group ID | Y | Y |
| 9 | `B.USERNAME` | Source user name | Y | Y |
| 10 | `B.GROUPNAME` | Source group name | Y | Y |
| 11 | `B.SOURCESERVER` | Source host | Y | Y |
| 12 | `B.SOURCESEQNO` | Source serial number | Y | Y |
| 13 | `B.MESSAGE` | Message | Y | Y |
| 14 | `E.SEVERITY` | Event level | Y | Y |
| 15 | `E.USER_NAME` | User name | Y | Y |
| 16 | `E.PRODUCT_NAME` | Product name | Y | Y |

322

| No. | Specifiable attribute name | Attribute | DESC_VERSION | |
|---|---|---|---|---|
| | | | 1-10[#1] | 11 |
| 17 | E.OBJECT_TYPE | Object type | Y | Y |
| 18 | E.OBJECT_NAME | Object name | Y | Y |
| 19 | E.OBJECT_ID | Object ID | Y | Y |
| 20 | E.ROOT_OBJECT_TYPE | Root object type | Y | Y |
| 21 | E.ROOT_OBJECT_NAME | Root object name | Y | Y |
| 22 | E.OCCURRENCE | Occurrence | Y | Y |
| 23 | E.START_TIME | Start time | Y | Y |
| 24 | E.END_TIME | End time | Y | Y |
| 25 | E.@JP1IM_ACTCONTROL | Action | N | Y |
| 26 | E.@JP1IM_ACTTYPE | Action type | N | Y |
| 27 | E.@JP1IM_ORIGINAL_SEVERITY | Original severity level | N | Y |
| 28 | E.@JP1IM_CHANGE_SEVERITY | New severity level | N | Y |
| 29 | E.@JP1IM_MEMO | Memo | N | Y |
| 30 | E.ACTION_TARGET[#2] | Action | Y | N |
| 31 | IM.ACTION_TYPE[#2] | Action type | Y | N |

Legend:

Y: Can be specified

N: Cannot be specified

#1

There are no differences in the items that can be specified for file versions 1 through 10.

#2

These items are compatible with version 8. If DESC_VERSION is 10 or earlier (definition for version 8 or earlier), these attributes are converted as follows:

E.ACTION_TARGET → E.@JP1IM_ACTCONTROL

IM.ACTION_TYPE → E.@JP1IM_ACTTYPE

AttrOrder = *sort-order*

> Specifies the display column location relative to the left margin. If you specify 1, the attribute is displayed as the first (leftmost) item in the list of events. Do not specify the same value for more than one item.
>
> Do not specify 0 because it is used by the system.
>
> If there are any errors in the user profile, the Event Console window might not display correctly. For this reason, we recommend that you use the Preferences window of JP1/IM - View to define user profiles.

ColumnSize = *column-width*

> Specifies the column width. The permitted value range is from 1 to 1,000.

## Notes

- Specify each user profile carefully because the contents of this file affect overall event console operation. Do not change any attribute or attribute value that is not explained here. If such an attribute or attribute value is changed, the event console might not function correctly.

- Because a user profile might be overwritten during JP1/IM - View operation or termination processing, make sure that you terminate JP1/IM - View before editing a user profile.

- There is one user profile for each manager. Therefore, if you have changed the manager for logging in, you must change the profile at the connection destinations.

- When you intend to edit the contents of the defaultUser file, you must make a backup before editing the file.

- Using JP1/Base's user management to delete a user does not delete the user profile for that user.

- If you use JP1/Base's user management to rename a user, the user's existing user profile is not inherited.

- If a user profile contains an error, such as an attribute value outside the permitted range of values, the event console might not function correctly.

## Communication environment definition file (console.conf.update)

### Format

```
[logical-host-name\JP1CONSOLEMANAGER\EVCONS]
"COM_SO_TIMEOUT"=dword:hexadecimal-value

[logical-host-name\JP1CONSOLE_CMD]
"COM_SO_TIMEOUT"=dword:hexadecimal-value
"COM_RETRY_COUNT"=dword:hexadecimal-value
"COM_RETRY_INTERVAL"=dword:hexadecimal-value
"COM_RMI_TIMEOUT"=dword:hexadecimal-value
```

### File

console.conf.update (model file for the communication environment definition file)

### Storage directory

In Windows

Console-path\default\

In UNIX

/etc/opt/jp1cons/default/

### Description

This file defines communication processing (timeout period) among JP1/IM - Manager, the viewer, and the jcochstat command.

When a low-speed line is used in the network for communication between the viewer and JP1/IM - Manager or when the viewer's workload is high, timeouts might occur during the viewer's communication processing, resulting in communication errors. You can prevent such communication errors by modifying the timeout period.

When the jcochstat command is used from another manager to change the action status of a JP1 event at the local host, a communication error might occur due to a timeout during communication processing. Modifying the timeout period and the connection retry count might resolve the problem, preventing a recurrence of the communication error.

If you are using JP1/IM - View (event console), you must also change the communication environment definition file for JP1/IM - View (event console) (view.conf.update).

If you are using a Web-based version, you must also change the Web-based operation

325

definition file (`console.html`).

The required definition is provided as a model file. To change the settings, copy the model file and then edit the copy.

## When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the `jbssetcnf` command.

## Information that is specified

[*logical-host-name*`\JP1CONSOLEMANAGER\EVCONS`]

Specifies the key name for Event Console Service environment settings.

For *logical-host-name*, specify `JP1_DEFAULT` for the physical host and *logical-host-name* for a logical host.

`"COM_SO_TIMEOUT"=dword:`*hexadecimal-value*

Specifies as a hexadecimal value the timeout period in milliseconds. The default is `dword:000009C4` (2,500 milliseconds).

[*logical-host-name*`\JP1CONSOLE_CMD`]

Specifies the key name for the `jcochstat` command environment settings.

For *logical-host-name*, specify `JP1_DEFAULT` for the physical host and *logical-host-name* for a logical host.

`"COM_SO_TIMEOUT"=dword:`*hexadecimal-value*

Specifies as a hexadecimal value the timeout period in milliseconds. The default is `dword:0000EA60` (60,000 milliseconds).

`"COM_RETRY_COUNT"=dword:`*hexadecimal-value*

Specifies as a hexadecimal value the retry count to be applied in the event of a communication error. The default is `dword:00000003` (3 times).

`"COM_RETRY_INTERVAL"=dword:`*hexadecimal-value*

Specifies as a hexadecimal value the wait time in milliseconds between retry attempts. The default is `dword:00000BB8` (3,000 milliseconds).

`"COM_RMI_TIMEOUT"=dword:`*hexadecimal-value*

Specifies as a hexadecimal value the timeout period in milliseconds for the event action status to change. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds). The default is `dword:0000EA60` (60,000 milliseconds).

If the `KAVB1205-E` message is displayed frequently, set a longer timeout period.

## Example definition

```
[JP1_DEFAULT\JP1CONSOLEMANAGER\EVCONS]
"COM_SO_TIMEOUT"=dword:000009C4

[JP1_DEFAULT\JP1CONSOLE_CMD]
"COM_SO_TIMEOUT"=dword:0000EA60
"COM_RETRY_COUNT"=dword:00000003
"COM_RETRY_INTERVAL"=dword:00000BB8
```

Make sure that the end of the file is at the beginning of the last line.

327

## Health check definition file (jcohc.conf)

### Format

```
[HEALTHCHECK]
ENABLE={true | false}
FAILOVER={true | false}
EVENT={true | false}
COMMAND=command
NO_RESPONSE_TIME=no-response-time
ERROR_THRESHOLD=no-response-count-treated-as-error
BASE_NO_RESPONSE_TIME=no-response-time
BASE_ERROR_THRESHOLD=no-response-count-treated-as-error
[End]
```

### File

jcohc.conf (health check definition file)

jcohc.conf.model(model file for the health check definition file)

### Storage directory

In Windows

*Console-path*\conf\health\

*shared-folder*\jp1cons\conf\health\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/health/

*shared-directory*/jp1cons/conf/health/ *(logical host)*

### Description

This file defines whether the health check function is to be enabled. If you enable the health check function, you can also define whether errors are to be notified by issuing a JP1 event or by executing a notification command.

You must specify this definition file by using the character encoding supported by JP1/ IM - Manager.

If you have deleted the health check definition file (jcohc.conf), copy the model file for the health check definition file (jcohc.conf.model) under the name jcohc.conf and then edit the definition in the copy, if necessary.

The health check function cannot monitor Central Scope Service (jcsmain).

When you enable the health check function by using this definition file, you gain the

capability to check whether each process of JP1/IM - Manager and the event service of JP1/Base on the local host is running normally.

The health check function can detect errors in the following processes:

- Event Console Service (`evtcon`)
- Automatic Action Service (`jcamain`)
- Event Base Service (`evflow`)
- Event Generation Service (`evgen`)
- Event service (`jevservice`)

If any of these processes hang up[#] or terminate abnormally, the health check function can issue a JP1 event or execute a specified notification command to prompt the operator to recover the process.

\#

A process hang-up is a status in which a process can no longer accept processing requests due to deadlock or looping.

## When the definitions are applied

The settings in the health check definition file take effect at the following times:

- When JP1/IM - Manager is started.
- When the file is reloaded by the `jco_spmd_reload` command.

## Information that is specified

ENABLE={true | <u>false</u>}

Specifies whether the health check function is to be enabled.

Specify either `true` or `false`. To enable the health check function, specify `true`; to disable the function, specify `false`. The default is `false`.

When the health check function has been enabled and it detects an error, a message (`KAVB8060-E` or `KAVB8062-E`) is output to the integrated trace and the Windows event log (`syslog`) reporting whether the `EVENT` setting in the health check definition file is `true` or `false`.

FAILOVER={true | <u>false</u>}

Specifies whether a JP1/IM - Manager operation is to be performed when an error is detected by the health check function when you are operating in a cluster system. Specify `true` if the operation is to be performed, or specify `false` if the operation is not to be performed. The default is `false`. If you do not use a cluster system, do not change the default setting.

- In Windows

  When `true` is specified, JP1/IM - Manager is terminated when an error is detected. When `false` is specified, JP1/IM - Manager is not terminated when an error is detected. If the primary server is terminated because an error has been detected by the health check function, failover to the secondary server can occur.

- In UNIX

  When `true` is specified, the JP1/IM - Manager process in which the error was detected is terminated. When `false` is specified, the process is not terminated. If an error is detected by the health check function and the processes constituting JP1/IM - Manager are terminated forcibly by the `jco_killall.cluster` command at the primary server, failover to the secondary server can take place.

EVENT={<u>true</u> | false}

Specifies whether JP1 events (event ID: `2012` and `2013`) are to be issued when an error is detected by the health check function.

Specify either `true` or `false`. If JP1 events are to be issued, specify `true`; otherwise, specify `false`.

The default is `true`. When `true` is specified, a JP1 event (event ID: `2014`) is also issued in the following case:

- The health check function detects abnormal recovery.

For details about JP1 events, see *3.2.2 Details of JP1 events*.

COMMAND=*command*

Specifies the notification command that is to be executed when an error is detected by the health check function.

You can execute the following types of commands:

When the host executing the command is Windows:

- Executable file (`.com`, `.exe`)

- Batch file (`.bat`)

- JP1/Script script file (`.spt`)

  (An appropriate association must have been set so that an `.spt` file can be executed.)

When the host executing the command is UNIX:

- Executable file (with execution permissions)

- Shell script (with execution permissions)

The following notes apply to defining a notification command:

- Everything from COMMAND= to the linefeed code is defined as a single command.

- The maximum length of a command is 1,023 bytes. This length includes spaces, but does not include the linefeed code. If the length exceeds 1,023 bytes, the default value is assumed. If you specify variables and the character string obtained by expanding variables exceeds 1,023 bytes, the command will not execute. In such a case, the message KAVB8072-E The notification command *command* could not be executed. : *maintenance-information* is output to the integrated trace log.

- If you specify a variable, specify it immediately after $. The following table lists and describes the variables that can be specified.

*Table 2-18:* Variables that can be specified in the health check definition file

| Variable name | Description |
|---|---|
| HCHOST | Name of host resulting in the error |
| HCFUNC | Name of function resulting in the error<br>(evflow, jcamain, evtcon, evgen, or jevservice) |
| HCPNAME | Name of process resulting in the error<br>(evflow, jcamain, evtcon, evgen, or jevservice) |
| HCPID | Process ID of process resulting in the error<br>(process ID of evflow, jcamain, evtcon, evgen, or jevservice[#]) |
| HCDATE | Date the error occurred (*YYYY/MM/DD*) |
| HCTIME | Time the error occurred (*hh:mm:ss*) |

#: If the error occurred in jevservice, the process ID value is replaced with -1.

- For the notification command, specify a command that will always terminate. If you set a batch file (Windows) or shell script (UNIX), make sure that it will terminate with exit 0. If the specified command does not terminate or uses the GUI, processes of the executed notification command will remain unresolved.

- The notification command specified in COMMAND inherits the execution environment of JP1/IM - Manager.

- The notification command is executed with the execution permissions of JP1/IM - Manager (Windows: SYSTEM user; UNIX: root).

- Specify in COMMAND the full path of the notification command.

Use the jcohctest command to test thoroughly whether the set notification command functions successfully. For details about the jcohctest command, see *jcohctest* in *1. Commands*.

- The default is COMMAND=, in which case no notification command is executed.

- To use $, specify $$.

NO_RESPONSE_TIME=*no-response-time*

Specifies in seconds the amount of time to wait for a response to be sent from the JP1/IM - Manager process. The permitted value range is from 60 to 3,600 seconds. The default is 60 seconds.

If the value that is specified is outside the permitted value range or the definition is omitted, the default value (60 seconds) is assumed.

ERROR_THRESHOLD=*no-response-count-treated-as-error*

Specifies the number of times to wait for the set no-response time to elapse before assuming that an error has occurred in the JP1/IM - Manager process. The permitted value range is from 1 to 60 times. The default is 3 times.

If the value that is specified is outside the permitted value range or the definition is omitted, the default value (3 times) is assumed.

BASE_NO_RESPONSE_TIME=*no-response-time*

Specifies in seconds the interval for checking the JP1/Base process for the set no-response time. The permitted value range is from 60 to 3,600 seconds. The default is 300 seconds.

If the value that is specified is outside the permitted value range or the definition is omitted, the default value (300 seconds) is assumed.

BASE_ERROR_THRESHOLD=*no-response-count-treated-as-error*

Specifies the number of times to wait for the set no-response time to elapse before assuming that an error has occurred in the JP1/Base process. The permitted value range is from 1 to 60 times. The default is 2.

If the value that is specified is outside the permitted value range or the definition is omitted, the default value (2 times) is assumed.

## Example definition

Issue a JP1 event and execute the jcohc01.exe notification command when an error is detected by the health check function:

```
[HEALTHCHECK]
ENABLE=true
FAILOVER=false
EVENT=true
COMMAND=C:\Command\jcohc01.exe
NO_RESPONSE_TIME=60
ERROR_THRESHOLD=3
BASE_NO_RESPONSE_TIME=300
BASE_ERROR_THRESHOLD=2
[End]
```

## Web-based operation definition file (console.html)

### Format

```
<html>

<head>
<title>JP1/Integrated Management - View</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
</head>

<body bgcolor="#FFFFFF" text="#000000" link="#000000" vlink="#000000" alink="#000000"
>
    :
<param name="LANGUAGE" value="ENGLISH">
<param name="PORT" value="port-number">
<param name="SO_TIMEOUT" value="socket-timeout-value">
<param name="TRACE_LEVEL" value="30">
<param name="DEBUG" value="NO">
<param name="RMI_TIMEOUT" value="server-processing-timeout-value">
</applet>
</font>
</body>

</html>
```

### File

console.html (Web-based operation definition file)

console.html.model (model file for the Web-based operation definition file)

### Storage directory

In Windows

*Console-path*\www\

In UNIX

/opt/jp1cons/www/

### Description

This file is used when the Web-based JP1/IM - View is started. By editing this file, you can set the operation of the Web-based JP1/IM - View (such as a communication timeout value and the port number to be used).

When a low-speed line is used in the network for communication between the viewer and JP1/IM - Manager or when the viewer's workload is high, timeouts may occur during the viewer's communication processing, resulting in communication errors. You can prevent such communication errors by changing the timeout period.

If you have changed the port number (20115) used by JP1/IM - Manager, you must also change the port number that is used to connect to JP1/IM - Manager.

Do not change the values of the parameters that are not explained here.

## When the definitions are applied

The definition takes effect when you re-log in to JP1/IM - Manager (JP1/IM - Central Console).

## Information that is specified

`<param name="PORT" value="`*port-number*`">`

Specifies the port number for the event console (`jp1imevtcon`) when the default port number (20115) has been changed. The default value is 20115.

`<param name="SO_TIMEOUT" value="`*socket-timeout-value*`">`

Specifies the amount of time in milliseconds to wait for the arrival of reception data (socket timeout value). The default is 2,500 milliseconds.

We recommend that you specify a larger value in an environment where a low-speed line is used or event traffic is heavy.

`<param name="RMI_TIMEOUT" value="`*server-processing-timeout-value*`">`

Specifies in milliseconds the timeout value (server processing timeout value) for login, logout, automatic refresh, event status change, event search, user environment setting, severe event setting, automated action setting, filter setting, and command execution operations.

The permitted value range is from 60,000 to 3,600,000 milliseconds; the default is 60,000 milliseconds.

## Example definition

```
<!-- Copyright(C)2003,Hitachi,LTD. -->

<html>

<head>
<title>JP1/Integrated Management - View</title>
<meta http-equiv="Content-Type" content="text/html;
charset=iso-8859-1">
</head>

<body bgcolor="#FFFFFF" text="#000000" link="#000000"
vlink="#000000" alink="#000000" >
<table border="0" cellpadding="0" cellspacing="0" width="700"
align="center">
<tr>
```

```
<td><img src="image/login/splash.gif" width="700"
height="324"></td>
</tr>
</table>

<font size="3">
<applet code="JP/co/Hitachi/soft/jp1/im/console/client/start/
JCoViewApplet.class" archive="jcoview.jar,hntrlib2j.jar"
width="0" height="0">
<param name="LANGUAGE" value="ENGLISH">
<param name="PORT" value="20115">
<param name="SO_TIMEOUT" value="2500">
<param name="TRACE_LEVEL" value="30">
<param name="DEBUG" value="NO">
<param name="RMI_TIMEOUT" value="60000">
</applet>
</font>
</body>

</html>
```

# Event guide information file (jco_guide.txt)

## Format

```
DESC_VERSION=file-version

[EV_GUIDE_event-guide-number]
EV_COMP=attribute-name:attribute-value
EV_GUIDE=event-guide-message
[END]
[EV_GUIDE_event-guide-number]
EV_COMP=attribute-name:attribute-value
EV_COMP=attribute-name:attribute-value
EV_FILE=event-guide-message-file-name
[END]
    :
```

## File

sample_jco_guide.txt (sample file of the event guide information file)

sample_jco_guide.txt.model (model file for the event guide information sample file)

## Storage directory

In Windows
   *Console-path*\conf\guide\
   *shared-folder*\jp1cons\conf\guide\ *(logical host)*

In UNIX
   /etc/opt/jp1cons/conf/guide/
   *shared-directory*/jp1cons/conf/guide/ *(logical host)*

## Description

This file defines event guide information for JP1 events. The information specified in this file is displayed in the Event Details window of JP1/IM - View.

The maximum size of an event guide information file is 1 megabyte.

Use the language encoding supported by JP1/IM - Manager to specify the event guide information file.

You must create an event guide information file under the name jco_guide.txt. Copy the sample file (sample_jco_guide.txt) and then rename it to jco_guide.txt before you start using the file. Store the event guide information file in the same directory that stores the sample file. Note that the event guide information

file cannot have a user-selected name, unlike the file specified in the EV_FILE parameter (event guide message file).

If an issued JP1 event matches multiple event guide information items, the first item specified in the event guide information file is effective.

When # is specified, any text following # is treated as a comment. Note that a comment cannot be specified after the start tag, attribute information, or the end tag. An error results if a comment is specified following the start tag or the end tag. A comment that is specified following an attribute value is treated as part of the attribute value.

To use \, specify \\. If \ is used in a character combination other than \n or \$, a log is output and the line containing \ is ignored.

The event guide information file and event guide message file are not checked for HTML syntax errors.

## When the definitions are applied

Once the event guide information file has been edited, the definitions in the file take effect when JP1/IM - Manager is restarted or when the jco_spmd_reload command is executed. If there is no display area for event guide information in the Event Details window when you log in to JP1/IM - View, apply the definitions and then re-log in to JP1/IM - View. The display area should appear.

After you have edited the event guide message file, you can display the new information by reloading the Event Details window.

## Information that is specified

DESC_VERSION=*file-version*

Specifies the file version of the event guide information file. The value must be 1.

[EV_GUIDE_*event-guide-number*]

This is the start tag for event guide information. The information from the [EV_GUIDE_*event-guide-number*] to the [END] tag constitutes a single definition block. Between this parameter and [END], specify a comparison condition for determining the JP1 events that are to be displayed in the Event Details window and the message to be displayed. For *event-guide-number*, specify a decimal number in the range from 1 to 9999.

When there are multiple definition blocks, the event guide numbers need not be in numerical order. However, an error results if the same event guide number is specified more than once, in which case the definition block with the duplicated event guide number is ignored. Note that [EV_GUIDE_1] and [EV_GUIDE_0001] are different.

Specify a unique character string in each EV_GUIDE_*event-guide-number*. If an invalid character string is specified, a log is output and the corresponding

338

specification is ignored.

If an attribute specified for EV_GUIDE_*event-guide-number* is not permitted, the corresponding specification is ignored.

EV_COMP=*attribute-name*:*attribute-value*

Specify this parameter for each attribute that is to be used for comparison with JP1 events. When multiple attributes are specified, they are assumed to be connected by the AND condition. For example, if the EV_COMP parameter is specified twice, the event guide message is displayed in the Event Details window only when both of the conditions are satisfied.

If you specify an event ID for the attribute name in an EV_COMP parameter, you can specify either B.ID or B.IDBASE. In B.ID, specify the 16-digit attribute value in the format *basic-part*:*extended-part*. In B.IDBASE, specify the 8-digit basic part.

Example:

- EV_COMP=B.ID:00004107:00000000

- EV_COMP=B.IDBASE:00004107

You can specify a maximum of 100 EV_COMP conditions. For an example of using more than one EV_COMP condition, see the example definition below.

*attribute-name*

Specifies one of the following as the attribute:

- JP1 event basic attribute: If you specify this attribute, use the format B.*attribute-name*.

- JP1 event extended attribute: If you specify this attribute, use the format E.*attribute-name*.

Note that the reason for registration (B.REASON) and code set (B.CODESET) cannot be specified.

*attribute-value*

Specifies as a regular expression the value of the attribute specified in *attribute-name*. For the regular expression, use an extended regular expression. For details about regular expressions, see *G. Regular Expressions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

By default, the specified regular expression is compared with the entire attribute value of the JP1 event. The condition is satisfied only if they match exactly.

To accept a partial match, execute the jbssetcnf command specifying a

file that contains the common definition information shown below in an argument and then restart JP1/IM - Manager to apply the definition. When you create the definition file, make sure that the end of the file is at the beginning of the last line.

- For a physical host

  `[JP1_DEFAULT\JP1CONSOLEMANAGER]`

  `"GUIDE_EV_COMP"="find"`

- For a logical host

  `[`*logical-host-name*`\JP1CONSOLEMANAGER]`

  `"GUIDE_EV_COMP"="find"`

To reset the definition to a complete match (default), specify `match` for the value of the `GUIDE_EV_COMP` common definition information.

If the common definition information is missing or the specified value is invalid, the system assumes `match` for a complete match.

Note that the common definition information is not set at the time of installation.

`EV_GUIDE=`*event-guide-message*

Specifies a character string that is to be displayed as the event guide information. The specified character string is displayed in the event guide information area in the Event Details window (in **Guide** under **Message**).

Note that you can specify this parameter only once between `[EV_GUIDE_`*event-guide-number*`]` and `[END]`.

If you specify `EV_GUIDE=`*event-guide-message* and `EV_FILE=`*event-guide-message-file-name* together, the specification of `EV_FILE=`*event-guide-message-file-name* takes precedence.

To use \ in the message, specify \\. To use $, specify \$. To use a linefeed code in the message, specify \n.

You can use HTML tags and specify variables for JP1 event attributes in *event-guide-message*.

- Specifying HTML tags

  If you use HTML tags, you can display the event guide message in HTML format in the Event Details window (for details about the HTML tags that can be specified, see *Table 2-21 HTML tags that can be used in the event guide message file*, in the description of `EV_FILE`.

- Specifying variables for JP1 event attributes

If you specify $B.*attribute-name*△ or $E.*attribute-name*△ in the message, the attribute value corresponding to the JP1 event attribute name is expanded in the message (△ indicates a space). Note that the reason for registration (B.REASON) and code set (B.CODESET) cannot be specified. If there is no corresponding attribute, the attribute is replaced with blanks.

The table below lists the attribute names that can be specified in messages. For details about the attributes of JP1 events, see *3.1 Attributes of JP1 events*.

*Table  2-19:*  List of attribute names that can be specified in messages

| JP1 event attribute | | Specification in message |
|---|---|---|
| Basic attributes | Serial number | B.SEQNO |
| | Event ID | Specify either of the following:<br>1.  B.ID<br>2.  B.IDBASE |
| | Source process ID | B.PROCESSID |
| | Registered time | B.TIME |
| | Arrived time | B.ARRIVEDTIME |
| | Source user ID | B.USERID |
| | Source group ID | B.GROUPID |
| | Source user name | B.USERNAME |
| | Source group name | B.GROUPNAME |
| | Event-issuing server name | B.SOURCESERVER |
| | Target event server name | B.DESTSERVER |
| | Source serial number | B.SOURCESEQNO |
| | Message | B.MESSAGE |
| Extended attributes | Event level | E.SEVERITY |
| | User name | E.USER_NAME |
| | Product name | E.PRODUCT_NAME |
| | Object type | E.OBJECT_TYPE |
| | Object name | E.OBJECT_NAME |
| | Root object type | E.ROOT_OBJECT_TYPE |
| | Root object name | E.ROOT_OBJECT_NAME |

341

| JP1 event attribute | | Specification in message |
|---|---|---|
| | Object ID | `E.OBJECT_ID` |
| | Occurrence | `E.OCCURRENCE` |
| | Start time | `E.START_TIME` |
| | End time | `E.END_TIME` |
| | Termination code | `E.RESULT_CODE` |
| | Other extended attribute | `E.`*xxxxxx*[#] |

#: You can also specify JP1 product-specific extended attributes. For example, the product-specific extended attribute for the JP1/AJS job execution host is `E.C0`. For details about the product-specific extended attributes, consult the documentation for the products that issue JP1 events.

You can specify for an event guide message a maximum of 196,608 characters. If more than 196,608 characters are specified, the portion in excess of 196,608 characters will not be displayed in the Event Details window.

`EV_FILE=`*event-guide-message-file-name*

Specifies the full path name of a file that contains the text for the event guide message that is to be displayed in the Event Details window. You can specify this parameter only once between [`EV_GUIDE_`*event-guide-number*] and [`END`]. If this parameter is omitted, the system assumes that the following file is specified:

*Table 2-20:* Event guide message file assumed when the parameter is omitted

| OS | Name of event guide message file that is assumed |
|---|---|
| Windows | *Console-path*`\conf\guide\EV_GUIDE_`*event-guide-number*`.txt` |
| | *shared-folder*`\jp1cons\conf\guide\EV_GUIDE_`*event-guide-number*`.txt` |
| UNIX | `/etc/opt/jp1cons/conf/guide/EV_GUIDE_`*event-guide-number*`.txt` |
| | *shared-directory*`/jp1cons/conf/guide/EV_GUIDE_`*event-guide-number*`.txt` |

Express the file name using from 1 to 1,024 characters, including the path. If the specified file name exceeds 1,024 characters, an error results when JP1/IM - Manager starts or when the event guide message file is called from JP1/IM - View.

You can specify any file name and extension for the event guide message file. We recommend that you select a file name that is easy to manage; for the extension, use `.txt` if the event guide message is in TXT format and `.html` or `.htm` if the event guide message is in HTML format.

Example: `jco_guidemes001_AJS2.txt` or `jco_guidemes001_AJS2.htm`

*Event guide message file*

Specify in the event guide message file in TXT or HTML format the information that you want to be displayed in the Event Details window. The information that you can specify in the event guide information file is the same as for `EV_GUIDE`. In other words, you can use HTML tags and variables for the attributes of JP1 events.

However, `EV_GUIDE` can be used only to specify a one-line message, whereas with the event guide message file you can use linefeed codes for a formatted message.

You can store the created event guide message file in any folder.

The maximum size of an event guide message file is 1 megabyte. If the file size exceeds 1 megabyte, an error occurs when the event guide message file is loaded into the Event Details window of JP1/IM - View.

The table below lists and describes the HTML tags and attributes that can be used when you create an event guide message file in HTML format. If any other HTML tags are used, the operational results cannot be guaranteed.

*Table  2-21:*  HTML tags that can be used in the event guide message file

| Tag | Attribute | Description |
|---|---|---|
| HTML | -- | Declares that this is an HTML text. This tag is mandatory. |
| HEAD | -- | Declares the header for the HTML text.<br>This tag is mandatory. |
| BODY | -- | Declares the body of the HTML text.<br>This tag is mandatory. |
| A | HREF="*URL*" | Specifies a linkage-target URL. If a relative path or a URL beginning with `mailto:` is specified, the integrity of the operation is not guaranteed.<br>The link specified here is displayed in the Event Details window (HTML format). Clicking the link starts a Web browser and accesses the specified URL. |
| H1, H2, H3, H4, H5, H6 | -- | Specifies headers. |

| Tag | Attribute | Description |
|---|---|---|
| FONT | SIZE="*font-size*" | Specifies the font size. The permitted values are from 1 to 7. |
|  | COLOR="*font-color*" | Specifies the font color. You can specify the following 16 colors:<br>black, silver, gray, white, maroon, red, purple, fuchsia, green, lime, olive, yellow, navy, blue, teal, aqua<br>If you specify any other font color, the operation is not guaranteed. |
| B | -- | Specifies boldface type. |
| I | -- | Specifies italics type. |
| HR | -- | Specifies an underscore. |
| BR | -- | Specifies a forced linefeed. |

Legend:

--: None

[END]

Specifies the end tag for the event guide information. This item is not case sensitive.

## Example definition

```
# JP1/IM-CC Guide Information File.

DESC_VERSION=1
[EV_GUIDE_001]
EV_COMP=B.ID:00004107:00000000
EV_COMP=E.SEVERITY:Error
EV_GUIDE=The job terminated abnormally.\nCheck whether an error
has occurred on the $E.C0 host.
[END]
```

## Definition file for extended event attributes

### Format

```
[@encode character-encoding]
@file type="definition-file-type", version="definition-format-version";
@product name="product-name";
@define-block type="event-attr-def";
block lang = "language-type", platform="platform-type"
attr name="attribute-name", title="display-item-name"[, type="attribute-display-type"];
...
@define-block-end;
@define-block type="event-attr-group-def";
block platform="platform-type"
group name="group-name", attrs="list-of-attribute-names";
...
@define-block-end;
@define-block type="event-attr-order-def";
block platform="platform-type"
order id="event-ID-definition-character-string", attrs="list-of-attribute-names";
...
@define-block-end;
```

### File

default.conf (default definition file for extended event attributes)

hitachi_*xxxx*.conf (definition file for extended event attributes for a linked product)

*company-name_product-name*_attr.conf (user-defined definition file for extended event attributes)

*company-name* can be changed to *series-name_product-name*. We recommend that you use the value specified for PRODUCT_NAME at the time of JP1 event issuance as the file name, with the forward slash (/) replaced by the underscore (_). Because, hitachi is used for the default file name, use a name other than hitachi for *company-name*.

### Storage directory

In Windows

*Console-path*\conf\console\attribute\
*shared-folder*\JP1Cons\conf\console\attribute\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/console/attribute/
*shared-directory*/jp1cons/conf/console/attribute/ *(logical host)*

## Description

A definition file for extended event attributes defines the order for sorting the event attributes and the attribute names that are to be displayed in the Event Details window.

The following table describes the three types of definition files for extended event attributes.

*Table 2-22:* Types of definition files for extended event attributes

| No. | Type | Description |
|---|---|---|
| 1 | Default file | Definition of detailed event information about the basic attributes common to all events and the common information of extended attributes |
| 2 | File provided by a linked product | Definition of program-specific information about the extended attributes of a linked product that issues JP1 events |
| 3 | User-defined file | User-specific information about user-defined extended attributes |

The first two types of files (Nos. 1 and 2) are stored in the definition file storage directory of JP1/IM. These are system standard definition files and cannot be added to, changed, or deleted by the user.

To add new user-specific information about extended attributes of JP1 events, you can create a user-defined definition file (No. 3 above) and store it in the storage directory.

## Creation timing

The following shows when the different types of definition files for extended event attributes are created.

| No. | File type | When created |
|---|---|---|
| 1 | `default.conf` | When JP1/IM - Manager is installed |
| 2 | `hitachi_xxxx.conf` | When JP1/IM - Manager is installed |
| 3 | *company-name_product-name*`_attr.conf` | When the user adds the file |

## When the definitions are applied

The definitions take effect after JP1/IM - Manager is restarted.

## Information that is specified

A definition file for extended event attributes defines the order for sorting event attributes and the attribute names that are to be displayed in the Event Details window.

There are three types of definition files for extended event attributes:

- File for definition of detailed event information about the basic attributes

common to all events and the common information for extended attributes (file included with the product: `default.conf`)

- File for definition of program-specific information about the extended attributes of a linked product that issues JP1 events (file included with the product: `hitachi_xxxx.conf`)

- File for definition of user-specific information about user-defined extended attributes (created by the user)

The first two types of files are provided as standards and are stored in the definition file storage directory of JP1/IM. These files are system standard definition files and cannot be added to, changed, or deleted by the user.

To add new user-specific information about extended attributes of JP1 events, you can create a definition file according to the naming rules described in *Table 2-2 Naming rules for definition files* and then store the file in the same definition file storage directory.

You should note the following about creating such a definition file:

- If you mistakenly define basic attributes or common information for extended attributes in a user-defined definition file, those definitions will be displayed together with the provided standard definitions when the Event Details window is displayed.

JP1/IM provides the `jcoattrfcheck` command for checking the contents of a definition file for extended event attributes. For details about this command, see *1. Commands*.

You can specify the statements and blocks described in the table below in a definition file for extended event attributes.

*Table 2-23:* Statements and blocks that can be specified in a definition file for extended event attributes

| Statement or block | Description |
|---|---|
| `@file` statement | Declares the definition file type and version |
| `@product` statement | Declares product information in the definition |
| Definition block for extended event attributes | Defines the display of event attributes |
| Definition block for attribute groups | Defines event attribute groups |
| Definition block for the attribute display order | Defines ID the order in which attributes are displayed in the Event Details window |

## Information that is specified (specification of character encoding)

@encode

Specifies the character encoding that is to be used in the definition file for extended event attributes. This item is optional.

The specifiable character encoding depends on the OS, as shown below.

*Table 2-24:* Specifiable character encoding

| Character encoding | OS | |
|---|---|---|
| | **Windows Server 2003, Windows Server 2008** | **Solaris, AIX** |
| C | Y | Y |

Legend:

Y: Can be specified

N: Cannot be specified

An error is output in the following cases:

- A character encoding other then C is specified.

- The definition file does not begin with @encode.

- @encode is not followed by a character encoding value.

## Information that is specified (rules for generating in-file statements)

@file *statement*

Declares that this is a definition file for extended event attributes and that the version of the definition specification format is 0300. This statement is mandatory.

This statement must be on the first line of the file. If the statement is not specified on the first line, the integrity of operations cannot be guaranteed.

*Syntax*
```
@file type="extended-attributes-definition",
version="0300";
```

@product *statement*

Defines product information for the statements defined in the file.

When you specify this statement, note the following:

- The specified value must match the `PRODUCT_NAME` JP1 event extended attribute. If this specification is omitted, the integrity of operations cannot be guaranteed.

- Prohibited characters and formatting irregularities are not checked during parsing; instead, the specified character string is used as is.

*Syntax*

```
@product name="product-name";
```

`name="product-name"`

The product name is a string of alphanumeric characters separated by a forward slash. It must be specified in one of the following formats:

- /*company-name*/*series-name*/*product-name*

- /*company-name*/*product-name*

*Example definition*

The following shows an example of definition information header statements:

```
@file type="extended-attributes-definition",
version="0300";
@product name="/HITACHI/JP1/CentralConsole";
@define-block type="event-attr-def";
block lang="English", platform="NT";
attr name="E.SAMPLE_TIME", title="Sample time";
attr name="E.SAMPLE_HOST", title="Sample host";
attr name="E.SAMPLE_USER", title="Sample user";
@define-block-end;
```

## Information that is specified (rules for generating blocks in the definition file for extended event attributes)

This subsection describes the blocks that can be specified in a definition file for extended event attributes. If an invalid statement is specified in a block, an error is output but only the statement with the error is ignored.

*Definition block for extended event attributes*

In the Event Details window, an event attribute name is associated with the display item name (in English). You can specify this block more than once in the definition file unless the blocks have the same key attribute (value specified in the `block` statement discussed below).

*Types of statements that can be specified*

You can specify the following statements in this block:

- `block` statement

- `attr` statement

*Definition block for attribute groups*

This block groups event attributes that are defined in the definition blocks for extended event attributes. If you group multiple event attributes, you can avoid defining `order` statements repeatedly in the definition blocks for the attribute display order.

This block is optional.

*Types of statements that can be specified*

You can specify the following statements in this block:

- `block` statement
- `group` statement

*Definition block for the attribute display order*

Defines the order in which event attributes and attribute names are to be displayed when the details of each event are displayed.

*Types of statements that can be specified*

You can specify the following statements in this block:

- `block` statement
- `order` statement

## Information that is specified (rules for generating statements in a definition block for extended event attributes)

`block` statement

Defines block attributes. You can specify this statement only once at the beginning of a block.

*Syntax*
    `block lang=`*language-type*`, platform=`*platform-type*`;`

`lang`

Declares the language used for the definition block for extended event attributes. You can specify the following language:

- `"English"`

  Indicates that this is a definition for an English language environment.

`platform`

Specifies the platform to which the definition in the block is to be applied.

350

You can specify the following values:

- `"base"`

  The definition is applicable to all platforms.

- `"user-defined"`

  The definition is applicable to a user-defined platform. You must specify for *user-defined* a character string of alphanumeric characters. Note that this character string is not checked for errors.

The platform name specified in the `platform` parameter is compared with the `PLATFORM` JP1 event extended attribute; if they match, the specified information is subject to detailed information processing. If the platform name specified here is not found in the `PLATFORM` JP1 event extended attribute, the specified information is not processed. Note that if the `PLATFORM` extended attribute is not set at the time of JP1 event issuance, the system assumes that `base` is specified and executes file parsing.

*Example definition*

See the example definition for the `attr` statement below.

### `attr` statement

Specifies an item name that is to be displayed in the attribute name column in the Event Details window and the type of the attribute value. You can specify this statement more than once in a block.

Note that this statement can be used to define only user-specific extended attribute information; the basic attributes and the common information of extended attributes are excluded. If the specified information is not user-specific extended attribute information, processing continues without outputting an error, but the specified information is displayed together with the provided standard definition information. For details about the standard definitions included with the product, see *Example definition* below.

*Syntax*
```
attr name=attribute-name,
title=display-item-name[,type="elapsed_time/
date_format:CLIENT"];
```

`name`

Defines a name for the extended attribute. The format is as follows:
`"E.extended-attribute-name"`

`title`

Specifies the character string that is to be displayed in the attribute name

column in the Event Details window; the language specified in the `block` statement will be used.

`type="elapsed_time/date_format:CLIENT"`

Specifies the type and display format of the attribute value. The attribute value `elapsed_time` is a decimal character string indicating the elapsed time in seconds since UTC 1970-01-01 00:00:00. The display format `date_format:CLIENT` means that the value is to be displayed in the time format by using the time specified in the local time zone of the target viewer.

*Example definition*

This subsection presents an example of user-specific extended attribute information for JP1 events. This is an example of a definition block for extended event attributes that displays four extended attributes (user-specific information) for the platform `W2K`.

*Table 2-25:* Example definition of a definition block for extended event attributes

| Name displayed in the window | Extended attribute name (user-specific information) |
|---|---|
| SAMPLE common attribute 1 | COMMON_ATTR1 |
| SAMPLE common attribute 2 | COMMON_ATTR2 |
| SAMPLE start attribute 1 | START_ATTR1 |
| SAMPLE start attribute 2 | START_ATTR2 |

```
@define-block type="event-attr-def";
block lang="English", platform="w2k";
attr name="E.COMMON_ATTR1",    title="SAMPLE common
attribute 1";
attr name="E.COMMON_ATTR2",    title="SAMPLE common
attribute 2";
attr name="E.START_ATTR1",     title="SAMPLE start
attribute 1";
attr name="E.START_ATTR2",     title="SAMPLE start
attribute 2";
@define-block-end;
```

## Information that is specified (rules for generating statements in a definition block for attribute groups)

`block` statement

Defines block attributes. You can specify this statement only once at the beginning of a block.

When you define this statement, note the following:

- This block cannot contain the `lang` parameter.

*Syntax*
```
block platform=platform-type;
```

platform

Specifies the platform to which the definition in the block is to be applied. You can specify the following values:

- `"base"`

  The definition is applicable to all platforms.

- `"user-defined"`

  The definition is applicable to a user-defined platform. You must specify for *user-defined* a character string of alphanumeric characters. Note that this character string is not checked for errors.

The platform name specified in the `platform` parameter is compared with the `PLATFORM` JP1 event extended attribute; if they match, the specified information is subject to detailed information processing. If the platform name specified here is not found in the `PLATFORM` JP1 event extended attribute, the specified information is not processed. Note that if the `PLATFORM` extended attribute is not set at the time of JP1 event issuance, the system assumes that `base` is specified and executes file parsing.

*Example definition*

See the example definition for the `group` statement below.

group statement

Groups attributes by assigning a name to a list of attributes that are to be displayed in the Event Details window. You can specify this statement more than once in a block.

*Syntax*
```
group name=group-name, attrs=list-of-attribute-names;
```

name

Specifies a name for the list of attribute names. Express the name using from 1 to 32 alphanumeric characters. This name is not case sensitive. You can use this name in the `order` block in the definition file.

attrs

Specifies a list of one or more attributes that are to be grouped. When multiple attributes are listed in this parameter, they are displayed in the Event Details window in the order specified here. The specification format is as follows:

- To specify only one attribute: `attrs="E.A0"`

- To specify multiple attributes: `attrs="E.A0|E.A1"`

Note that you can specify only user-specific extended attribute information. If you have specified a basic attribute or a common information item for an extended attribute, the specified attribute value is displayed more than once in the Event Details window.

*Example definition*

This example shows the definitions of basic attributes and user-specific information for JP1 event extended attributes. These definitions are provided as standard in the definition file for extended event attributes.

```
@define-block type="event-attr-group-def";
block platform="unix";
group name="BASE",
attrs="B.GROUPID|B.GROUPNAME|B.IDBASE|B.PROCESSID|B.SEQ
NO|B.SOURCEIPADDR|
B.SOURCESEQNO|B.SOURCESERVER|B.TIME|B.USERID|B.USERNAME
|B.ARRIVEDTIME";
group name="COMMON",
attrs="E.SEVERITY|E.USER_NAME|E.PRODUCT_NAME|E.OBJECT_T
YPE|E.OBJECT_NAME|
E.ROOT_OBJECT_TYPE|E.ROOT_OBJECT_NAME|E.OBJECT_ID|E.OCC
URRENCE|
E.START_TIME|E.END_TIME|E.RESULT_CODE";
@define-block-end;
```

## Information that is specified (rules for generating statements in a definition block for the attributes display order)

block statement

Defines the block attribute that depends on the definition block for the attribute display order. You can specify this statement only once at the beginning of a block.

When you define this statement, note the following:

- This block cannot contain the `lang` parameter.

*Syntax*

354

```
block platform=platform-type;
```

platform

Specifies the platform to which the definition in the block is to be applied. You can specify the following values:

- `"base"`

  The definition is applicable to all platforms.

- `"user-defined"`

  The definition is applicable to a user-defined platform. You must specify for *user-defined* a character string of alphanumeric characters. Note that this character string is not checked for errors.

The platform name specified in the `platform` parameter is compared with the `PLATFORM` JP1 event extended attribute; if they match, the specified information is subject to detailed information processing. If the platform name specified here is not found in the `PLATFORM` JP1 event extended attribute, the specified information is not processed. Note that if the `PLATFORM` extended attribute is not set at the time of JP1 event issuance, the system assumes that `base` is specified and executes file parsing.

*Example definition*

See the example definition for the `order` statement below.

order statement

Defines by ID the attributes to be displayed in the Event Details window and their sort order. You can specify this statement more than once in a block.

*Syntax*
```
order id=event-ID-definition-character-string,
attrs=list-of-attribute-names;
```

id

Specifies the event IDs for which attributes are to be displayed in the order specified in the `attrs` parameter.

The specification format is as follows:

- To specify only one event ID: `id="200"`

- To specify multiple event IDs: `id="100|101|102"`

Express an event ID using from 1 to 8 hexadecimal characters. If a specified event ID consists of fewer than 8 characters, there is no need to add leading zeros to pad it out to 8 characters. The alphabetic characters in the

hexadecimal character string (a to f) are not case sensitive.

A range of IDs cannot be specified.

attrs

Specifies a list of the attributes, the groups, or both that are to be displayed. When multiple items are specified in this parameter, they are displayed in the Event Details window in the order specified here.

The specification format is as follows:

- To specify only one item: attrs="E.A0"

- To specify multiple items: attrs="E.A0|E.A1|GROUP1"

As is the case with the group statement, you can specify only user-specific extended attributes. If you have specified a basic attribute or common extended attribute, the specified attribute value will be displayed more than once in the Event Details window.

*Example definition*

This example definition displays the BASE and COMMON groups for event ID 00001000:

```
@define-block type="event-attr-order-def";
block platform="unix";
order id="00001000", attrs="BASE|COMMON"
@define-block-end;
```

## Example definition of a definition file for extended event attributes

```
@file type="extended-attributes-definition",version="0300";
@product name="/HITACHI/JP1/SAMPLE";
@define-block type="event-attr-def";
block platform="base", lang="English";
attr name="E.SAMPLE_CLUSTER_NAME", title="Cluster name";
attr name="E.SAMPLE_PRINT_SERVER_NAME", title="Print server
name";
attr name="E.SAMPLE_PRINTER_NAME", title="Printer name";
attr name="E.SAMPLE_PORT_NAME", title="Port name";
@define-block-end;
@define-block type="event-attr-group-def";
block platform="unix";
group name="_PRINTER_INFO",
attrs="E.SAMPLE_PRINT_SERVER_NAME|E.SAMPLE_PRINTER_NAME";
group name="_CLUSTER_INFO",
attrs="E.SAMPLE_CLUSTER_NAME|E.SAMPLE_PORT_NAME";
@define-block-end;
@define-block type="event-attr-order-def";
```

```
block platform="unix";
order id="00003100",attrs="_PRINTER_INFO";
order id="00003101",attrs="_CLUSTER_INFO";
order id="00003102", attrs="_PRINTER_INFO|_CLUSTER_INFO";


@define-block-end;
```

## Definition file for extended event attributes that is included with the product

Shown below are the definitions of the basic attributes and the common information for extended attributes for JP1 events. These definitions are included with the product as the definition file for extended event attributes.

```
@define-block type="event-attr-def";
block lang="English", platform="base";
attr name="B.GROUPID",          title="Source group ID";
attr name="B.GROUPNAME",        title="Source group name";
attr name="B.IDBASE",           title="Event ID";
attr name="B.PROCESSID",        title="Source process ID";
attr name="B.SEQNO",            title="Serial number";
attr name="B.SOURCEIPADDR",     title="Source IP address";
attr name="B.SOURCESEQNO",      title="Source serial number";
attr name="B.SOURCESERVER",     title="Event-issuing server
name";
attr name="B.TIME",             title="Registered time",
type="elapsed_time/date_format:CLIENT";
attr name="B.USERID",           title="Source user ID";
attr name="B.USERNAME",         title="Source user name";
attr name="B.ARRIVEDTIME",      title="Arrival time",
type="elapsed_time/date_format:CLIENT";
attr name="E.SEVERITY",         title="Event level";
attr name="E.USER_NAME",        title="User name";
attr name="E.PRODUCT_NAME",     title="Product name";
attr name="E.OBJECT_TYPE",      title="Object type";
attr name="E.OBJECT_NAME",      title="Object name";
attr name="E.ROOT_OBJECT_TYPE", title="Root object type";
attr name="E.ROOT_OBJECT_NAME", title="Root object name";
attr name="E.OBJECT_ID",        title="Object ID";
attr name="E.OCCURRENCE",       title="Occurrence";
attr name="E.START_TIME",       title="Start time",
type="elapsed_time/date_format:CLIENT";
attr name="E.END_TIME",         title="End
time",type="elapsed_time/date_format:CLIENT";
attr name="E.RESULT_CODE",      title="Termination code";
@define-block-end;
```

## Status event definition file (processupdate.conf)

### Format

```
[PROCESSUPDATE]
PROCESS_UPDATE_EVENT_OPTION={true | false}
[End]
```

### File

processupdate.conf (status event definition file)

processupdate.conf.model (model file for the status event definition file)

### Storage directory

In Windows

*Console-path*\conf\processupdate\

*shared-folder*\jp1cons\conf\processupdate\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/processupdate/

*shared-directory*/jp1cons/conf/processupdate/ *(logical host)*

### Description

This file defines whether a JP1 event is to be issued when the action status changes.

### When the definitions are applied

The setting specified in the status event definition file takes effect at the following time:

- When JP1/IM - Manager starts

### Information that is specified

PROCESS_UPDATE_EVENT_OPTION={true | false}

Specifies whether a JP1 event (event ID: 3F11) is to be issued when the action status changes. The value is not case sensitive.

Specify true if a JP1 event is to be issued when the action status changes.

Specify false if a JP1 event is not to be issued when the action status changes. The default is false.

If this parameter is omitted or an invalid value is specified, false is assumed.

358

For details about JP1 events, see *3.2.2 Details of JP1 events*.

**Note**

- If you specify that a JP1 event is to be issued, one instance of the JP1 event with ID `3F11` will be issued for each JP1 event for which an action is taken. For example, if you select multiple JP1 events on the **Severe Events** page on the Event Console window and their action status changes, as many JP1 events with ID `3F11` will be issued as there are JP1 events whose action status has changed.

  You should not enable this function when the action status of a large number of JP1 events will be changed by processing in the batch mode.

359

- If you specify that a JP1 event is to be issued, one instance of the JP1 event with ID `3F11` will be issued for each JP1 event for which an action is taken. For example, if you select multiple JP1 events on the **Severe Events** page on the

## Correlation event generation system profile (egs_system.conf)

### Format

```
VERSION=1

START_OPTION={cold | warm}
```

### File

egs_system.conf (correlation event generation system profile)

egs_system.conf.model (model file for the correlation event generation system profile)

### Storage directory

In Windows

*Console-path*\conf\evgen\profile\

*shared-folder*\jp1cons\conf\evgen\profile\ *(logical host)*

In UNIX

/etc/opt/jp1cons/conf/evgen/profile/

*shared-directory*/jp1cons/conf/evgen/profile/ *(logical host)*

### Description

This file defines the start and stop operations for the Event Generation Service.

### When the definitions are applied

The settings in the correlation event generation system profile take effect at the following times:

- When JP1/IM - Manager starts
- When the file is reloaded by the jco_spmd_reload command

### Information that is specified

VERSION=1

Specifies the file version. There is no need to edit this parameter. If this parameter is omitted or a numeric value other than 1 is specified, VERSION=1 is assumed.

START_OPTION={cold | warm}

Specifies the startup option for the Event Generation Service.

Specify the value that corresponds to the operation to be performed during startup and stop processing. The permitted values are `cold` and `warm`. The default is `warm`. This value is not case sensitive. If the parameter is omitted or an invalid value is specified, `warm` is assumed.

The table below describes the operation of the Event Generation Service during startup and stop processing depending on whether `cold` or `warm` is specified. Change the value as appropriate to your operations.

*Table 2-26:* Operation of the Event Generation Service during startup and stop processing depending on the start option

| Start option | Operation of Event Generation Service | |
| --- | --- | --- |
| | **Operation during startup processing**[#1] | **Operation during stop processing** |
| `cold` | When the start option was set to `cold` during the previous stop processing: JP1 events registered after the Event Generation Service started are subject to generation processing. | All correlation events under generation processing fail and are output to the correlation event generation history file. |
| | When the start option was set to `warm` during the previous stop processing: All correlation events under generation processing fail and the JP1 events acquired since the Event Generation Service started are subject to generation processing. | |
| `warm` | When the start option was set to `cold` during the previous stop processing: JP1 events are subject to generation processing beginning with the one that immediately follows the last JP1 event acquired by the Event Generation Service during the previous stop processing. | Information about the last JP1 event acquired before the service stopped, details of the generation processing, and the correlation event generation definition information are output to internal logs and saved. |
| | When the start option was set to `warm` during the previous stop processing: The correlation event generation processing performed during the previous stop processing is inherited, and JP1 events are subject to generation processing beginning with the one that immediately follows the last JP1 event acquired by the Event Generation Service during the previous stop processing.[#2] | |

361

#1

When the Event Generation Service starts for the first time, it functions as follows, regardless of the start option value:

• The Event Generation Service acquires JP1 events that are registered after the Event Generation Service starts.

• The Event Generation Service loads the correlation event generation definition and starts processing according to the definition.

Note that the default is that correlation events are not generated because the correlation event generation definition has not been set.

#2

If the correlation event generation definition used when JP1/IM - Manager stopped differs from the definition used the next time JP1/IM - Manager starts, all correlation events under generation processing fail. After the contents are cleared, JP1 events are subject to generation processing again starting with the one that immediately follows the JP1 event acquired during the previous stop processing.

If you run JP1/IM - Manager in a cluster system, change the setting to warm.

In the event of failover, products are stopped and started in the following order: stopping JP1/IM - Manager → stopping JP1/Base → starting JP1/Base → starting JP1/IM - Manager. If failover occurs while the parameter is set to cold, the system cannot acquire JP1 events that occur during the period of stopping JP1/IM - Manager → stopping JP1/Base and during the period of starting JP1/Base → starting JP1/IM - Manager. Therefore, if you leave the parameter set to cold, some JP1 events that are subject to generation processing might be missed.

# Correlation event generation definition file

## Format

```
VERSION={1 | 2}

#comment-statement
 [generation-condition-name]
TARGET=filtering-condition-for-the-correlation-target-range
CON=event-condition
TIMEOUT=timeout-period
TYPE=event-correlation-type
SAME_ATTRIBUTE=duplicate-attribute-value-condition
CORRELATION_NUM=maximum-correlation-number
SUCCESS_EVENT=correlation-approval-event
FAIL_EVENT=correlation-failure-event

 [generation-condition-name]
TARGET=filtering-condition-for-the-correlation-target-range
CON=event-condition
TIMEOUT=timeout-period
TYPE=event-correlation-type
SAME_ATTRIBUTE=duplicate-attribute-value-condition
CORRELATION_NUM=maximum-correlation-number
SUCCESS_EVENT=correlation-approval-event
FAIL_EVENT=correlation-failure-event
          :
```

## File

Use any file. However, the following limitations apply:

- The extension must be .conf.

- The file name can consist of only alphanumeric characters and the underscore (_).

## Storage directory

In Windows

Any folder

In UNIX

Any directory

## Description

This file defines JP1 event conditions that result in generation of correlation events and the correlation events that are generated when the JP1 event conditions are satisfied. Use the language encoding that is used by JP1/IM - Manager to specify this file.

## When the definitions are applied

The definitions take effect after the correlation event generation definitions are applied by the jcoegschange command.

## Information that is specified

VERSION={<u>1</u> | 2}

Specifies the version of the correlation event generation definition file.

Specify either 1 or 2.

If you specify 1, none of the parameters listed below can be specified. To specify all the parameters described here, specify 2 in the VERSION parameter.

*Table 2-27:* Parameters that cannot be specified

| Version | Parameter |
|---|---|
| 1 | TARGET |
| | SAME_ATTRIBUTE |
| | CORRELATION_NUM |
| 2 | None |

Any zeros that are specified preceding the value are ignored. For example, VERSION=0001 is the same as VERSION=1. If this parameter is omitted, VERSION=1 is assumed.

If the specified value is neither 1 nor 2, a definition error results. Specifying VERSION more than once also results in a definition error.

#*comment-statement*

A line beginning with a hash mark (#) is treated as a comment.

[*generation-condition-name*]

This is the start tag for a definition block that defines a correlation event generation condition. The information from the [*generation-condition-name*] tag to the information immediately before the next [*generation-condition-name*] tag constitutes one definition block. This tag cannot be omitted. You can define a maximum of 1,000 correlation event generation conditions. If more than 1,000 correlation event generation conditions are defined, a definition error occurs.

You must enclose the generation condition name in square brackets ([ ]). The generation condition name can consist of from 1 to 32 alphanumeric characters, the hyphen (-). underscore (_), and forward slash (/).

This name is case sensitive. For example, [JP1_HAKKOUZYOUKEN] is treated as

being different from `[jp1_hakkouzyouken]`.

Each generation condition name specified in the correlation event generation definition file must be unique. If the same generation condition name is specified more than once, the first name specified in the file is effective. A generation condition name cannot begin with `IM_` (whether upper- or lower-case letters are used). If such a name is specified, a definition error occurs.

If you wish to specify a comment immediately following [*generation-condition-name*], use the format [*generation-condition-name*] #*comment-on-generation-condition*.

`TARGET=`*filtering-condition-for-the-correlation-target-range*

Specifies a filtering condition to narrow the range of JP1 events that are to be subject to generation of correlation events. If this parameter is omitted, all JP1 events that are acquired are subject to correlation event generation processing.

You can specify only one filtering condition for the correlation target range for each correlation event generation condition. If multiple filtering conditions are specified, a definition error results.

The following is the format:

- `TARGET=`*event-attribute-condition-1* [`,` *event-attribute-condition-2* `...`]

Separate multiple event attribute conditions with the comma (`,`). When multiple event attribute conditions are specified, it is assumed that they are connected with the AND condition, in which case the condition is satisfied only when a JP1 event that satisfies all the specified event attribute conditions is issued.

Specify an event attribute condition in the following format:

*attribute-name comparison-condition attribute-value*

The following table lists and describes the items that can be set for an event attribute condition.

*Table  2-28:*  Items to be set for an event attribute condition

| No. | Item | Description |
|-----|------|-------------|
| 1 | *attribute-name* | Specifies a JP1 event basic or extended attribute. Prefix a basic attribute with `B.` and an extended attribute with `E.`. For example, to specify a message, specify `B.MESSAGE`.<br>If you specify an extended attribute, express the character string that follows `E.` using from 1 to 32 bytes of characters. The following rules apply:<br>• The character string must begin with an upper-case letter.<br>• The character string beginning with byte 2 must be expressed using upper-case alphanumeric characters and the underscore (_).<br>For details about the specifiable attribute names, see *Table 2-29 List of attribute names that can be specified in the filtering condition for the correlation target range*. |
| 2 | *comparison-condition* | Specifies a comparison condition. The supported comparison conditions and their meanings are listed below. If any other comparison condition is used, a definition error results.<br>• `==`: Match<br>• `!=`: Does not match<br>• `^=`: First characters<br>• `>=`: Is contained<br>• `<=`: Is not contained<br>• `*=`: Regular expression<br>Note: For details about regular expressions, see *G. Regular Expressions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*. |

366

| No. | Item | Description |
|-----|------|-------------|
| 3 | *attribute-value* | Specifies the value to be compared. You can specify a maximum of 1,023 bytes of characters. If more than 1,023 bytes of characters are specified, a definition error results. |
| | | If you specify multiple event attribute conditions, the total length of the attribute values for all the conditions cannot exceed 1,280 bytes. If this length is exceeded, a definition error results. |
| | | For example, if you specify five event attribute conditions, the combined length of all five attribute values must consist of no more than 1,280 bytes. |
| | | Separate multiple attribute values with the semicolon (;). Any number of consecutive semicolons between attribute values is treated as a single semicolon (;). For example, `B.ID==A;;;;;B` is the same as `B.ID==A;;B`. |
| | | Example: If `E.XXX==A;B` is specified, the condition is satisfied when `E.XXX` matches `A` or `B`. |
| | | To specify a comma (,), space, or semicolon (;) in an attribute value, enclose it in double-quotation marks ("). |
| | | To specify a double-quotation mark (") or a backslash sign (\) in an attribute value, prefix it with a backslash sign (\). |

- If you specify multiple attribute values for a single attribute name, the condition is satisfied as shown in the following examples:

  Example 1: If `E.xxx==A;B` is specified, the condition is satisfied when `E.xxx` matches `A` or `B`.

  Example 2: If `E.xxx!=A;B` is specified, the condition is satisfied when `E.xxx` matches neither `A` nor `B`.

  Example 3: If `E.xxx^=A;B` is specified, the condition is satisfied when `E.xxx` begins with `A` or `B`.

  Example 4: If `E.xxx>=A;B` is specified, the condition is satisfied when `E.xxx` contains either `A` or `B`.

  Example 5: If `E.xxx<=A;B` is specified, the condition is satisfied when `E.xxx` contains neither `A` nor `B`.

  Example 6: If `E.xxx*=A;B` is specified, the condition is satisfied when `E.xxx` matches the regular expression of either `A` or `B`.

- Be careful about specifying the same attribute name more than once in the same attribute condition. The following combinations result in a definition error:

  - A combination that never matches

- The message (B.MESSAGE) begins with KAVB and does not include KAVB.

  • Redundant combinations

- The message (B.MESSAGE) begins with KAVB and contains KAVB.

• The system ignores any space (space and ASCII codes from 0x01 to 0x1F) between an attribute name, a comparison condition, and an attribute value, at both ends of an attribute value separated by a semicolon, and at both ends of an event attribute condition.

Example: The message matches KAJV*xxxx*-I Δ Executed or Error.

A space is ignored if it is specified at the location of Δ below:

ΔB.MESSAGE Δ == Δ "KAJV*xxxx*-I Δ Executed"; Δ Error Δ

The following specifications are the same as the above example:

B.MESSAGE==KAJV*xxxx*-I Δ Executed;Error

B.MESSAGE=="KAJV*xxxx*-I Δ Executed";Error

• If you specify the event ID (B.ID) as the attribute name, the comparison condition must be a complete match (==).

The following table lists the attribute names that can be specified in the filtering condition for the correlation target range.

*Table 2-29:* List of attribute names that can be specified in the filtering condition for the correlation target range

| No. | Attribute name | Item |
|-----|----------------|------|
| 1 | B.SOURCESERVER | Event-issuing server name |
| 2 | B.DESTSERVER | Target event server name |
| 3 | B.MESSAGE | Message |
| 4 | B.ID | Event ID |
| 5 | B.REASON | Reason for registration |
| 6 | B.USERID | Source user ID |
| 7 | B.GROUPID | Source group ID |
| 8 | B.USERNAME | Source user name |
| 9 | B.GROUPNAME | Source group name |

| No. | Attribute name | Item |
|---|---|---|
| 10 | E.*xxxxxxx*# | Extended attribute (common information, user-specific information) |

\#

> You can also specify a JP1 product-specific extended attribute. For example, the program-specific extended attribute for the JP1/AJS job execution host is E.C0. For details about the product-specific extended attributes, consult the documentation for the products that issue JP1 events.

CON=*event-condition*

> Defines the targets of correlation event generation processing or a condition for JP1 events that are to be excluded as targets. You can specify multiple event conditions. There must be at least one definition in each correlation event generation condition. You can define a maximum of 10 event conditions. If no event condition is defined or the specified definition is invalid, a definition error results.
>
> The following is the specification format:
>
> CON={NOT|[CID:*n*]},*event-attribute-condition-1* [, *event-attribute-condition-2*[, *event-attribute-condition-3* ...] ]
>
> If you specify multiple event attribute conditions, separate them with the comma (,). When multiple event attribute conditions are specified, they are assumed to be connected with the AND condition, in which case the condition is satisfied only when a JP1 event that satisfies all the specified event attribute conditions is issued.
>
> The following table lists and describes the items to be set for the event condition.
>
> *Table 2-30:* Items to be set for the event condition

| No. | Item | Description |
|---|---|---|
| 1 | NOT | Specifies that JP1 events are to be excluded as targets of correlation event generation processing. When you specify NOT as an event condition, that condition is applied first, regardless of the sequence in which the event conditions (CON statements) are defined. |

| No. | Item | Description |
|-----|------|-------------|
| 2 | CID:*n* | Specifies an ID for the condition. Specify this item to use a variable to pass the correlation source event information to another parameter (SAME_ATTRIBUTE, SUCCESS_EVENT). The permitted values are the integers in the range from 1 to 999. |
| | | For example, if the correlation source event consists of multiple JP1 events and the $EVn_B.MESSAGE variable is specified in the SUCCESS_EVENT parameter, message information for the correlation source event can be passed to the correlation event. |
| | | If this parameter is omitted, information cannot be passed to another parameter. If the specified value is preceded by zeros or the same CID is specified more than once, a definition error results. |
| 3 | *event -attribute-condition* | Specifies the event attribute condition in the following format: Format: *attribute-name comparison-condition attribute-value* *attribute-name* Specifies a JP1 event basic or extended attribute. Prefix a basic attribute with B. and an extended attribute with E.. For example, to specify the message, specify B.MESSAGE. If you specify an extended attribute, express the character string that follows E. using from 1 to 32 bytes of characters. The following rules apply: • The character string must begin with an upper-case letter. • The character string beginning in byte 2 must be expressed using upper-case alphanumeric characters and the underscore (_). For details about basic and extended attributes, see *3.1 Attributes of JP1 events*. To specify a product-specific extended attribute, consult the documentation for that product. If you specify product-specific extended attributes, consult the documentation for the products that issue the JP1 events. *comparison-condition* and *attribute value* The rules for specifying the comparison condition and attribute value are the same as for specifying the event attribute condition in TARGET. See *Table 2-28 Items to be set for an event attribute condition* and the information following Table 2-28. |

TIMEOUT=*timeout-period*

Specifies the timeout period for the correlation event generation condition. The permitted value range is from 1 to 86,400 (seconds). If this parameter is omitted, 60 seconds is assumed.

TYPE=*event-correlation-type*

Specifies the event correlation type.

The three event correlation types that can be specified are `sequence`, `combination`, and `threshold`, which are explained below:

- `sequence`

  The correlation event generation condition is satisfied if the JP1 events that satisfy the defined event condition are issued in the order defined.

- `combination`

  The correlation event generation condition is satisfied if a JP1 event that satisfies the combination of defined event conditions is issued regardless of the sequence.

- `threshold:`*n*

  The correlation event generation condition is satisfied if the number of JP1 events that satisfy the defined event condition reaches the threshold. If multiple event conditions are defined, the correlation event generation condition is satisfied if the total number of JP1 events that satisfy any of the defined conditions reaches the threshold.

  The value permitted for the threshold is from 1 to 100 (count). For example, if the threshold is 10, specify as follows:

  `threshold:`10

This parameter is not case sensitive. If the event correlation type is omitted, `combination` is assumed.

SAME_ATTRIBUTE=*duplicate-attribute-value-condition*

Specifies the duplicate attribute value condition.

Define this parameter to group the JP1 events (correlation source events) that satisfy the event condition for an attribute value and to generate a correlation event for the group.

You can define a maximum of 3 duplicate attribute value conditions per correlation event generation condition. This parameter is optional.

The following shows the format:

- SAME_ATTRIBUTE=*attribute-name* | {$EV*n*_*attribute-name* | $EV*n*_ENV*o*} [, {$EV*n*_*attribute-name* | $EV*n*_ENV*o*} ...]

The following table lists and describes the items to be set for the duplicate attribute value condition.

*Table 2-31:* Items to be set for the duplicate attribute value condition

| No. | Item | Description |
|---|---|---|
| 1 | *attribute-name* | Specifies a JP1 event basic or extended attribute.<br>The attribute value of the correlation source event that corresponds to the attribute name specified here becomes the grouping key.<br>You can specify only one *attribute-name* per *duplicate-attribute-value-condition*.<br>Prefix a basic attribute with `B.` and an extended attribute with `E.`. If you specify an extended attribute, express the character string that follows `E.` using from 1 to 32 bytes of characters. The following rules apply:<br>• The character string must begin with an upper-case letter.<br>• The character string beginning in byte 2 must be expressed as upper-case alphanumeric characters and the underscore (_).<br>For details about the specifiable attributes names, see *Table 2-32 List of attribute names that can be specified in the duplicate attribute value condition*. |
| 2 | Variable<br>`$EVn_attribute-name` | Specify this parameter if the attribute value to be used as the grouping key belongs to an attribute that varies for each correlation source event.<br>For example, specify this parameter to use attribute `A'` of correlation source event `A` and attribute `B'` of correlation source event `B` as the grouping key.<br>You can specify a maximum total of 10 `$EVn_attribute-name` and `$EVn_ENVo` parameters per duplicate attribute value condition.<br>For details, see *(1)(a) Using an attribute value of the correlation source event as the duplicate attribute value condition*. |
| 3 | Variable<br>`$EVn_ENVo` | Specify this parameter to use part of the attribute value of a correlation source event as the duplicate attribute value condition.<br>For example, specify this parameter to use part of the message (`B.MESSAGE`) as the grouping key.<br>You can specify a maximum total of 10 `$EVn_ENVo` and `$EVn_attribute-name` parameters per duplicate attribute value condition.<br>For details, see *(1)(b) Using part of an attribute value of the correlation source event as the duplicate attribute value condition*. |

- The attribute name and the value that is replaced with a variable (attribute value or part of an attribute value) are case sensitive. Only a completely matching value becomes the duplicate attribute value condition.

- If the attribute name and the value that is replaced with a variable (attribute value or part of an attribute value) are not in the correlation source event, they are replaced with the null character (0 byte). This means that the null character is used as the grouping key. If this occurs, the following character string is output to the correlation event generation history file:

```
A JP1 event that matches the correlation event generation condition occurred
and correlation event generation processing started, but the event attribute
defined in that attribute value condition was not found in the JP1 event.
(generation-condition-name(generation-processing-number) serial-number attribute-name)
```

- If you specify SAME_ATTRIBUTE=*duplicate-attribute-value-condition* more than once, a correlation event is generated for each duplicate attribute value condition.

  For example, to issue a correlation event for each host name (B.SOURCESERVER) and user name (B.USERNAME), define as follows:

  > :

  SAME_ATTRIBUTE=B.SOURCESERVER

  SAME_ATTRIBUTE=B.USERNAME

  > :

- If you specify multiple variables in the duplicate attribute value condition, separate them with the comma ( , ). A correlation event is generated for each attribute value that is replaced with a variable.

- The system ignores any space (space and ASCII codes from 0x01 to 0x1F) between an attribute name and a variable ($EV*n*_*attribute-name*, $EV*n*_ENV*o*) and at both ends of a duplicate attribute value condition ( Δ in the following example):

  Example:

  Δ SAME_ATTRIBUTE Δ = Δ $EV1_ENV1 Δ , Δ $EV2_ENV2 Δ

The following table lists the attribute names that can be specified in the duplicate attribute value condition

*Table 2-32:* List of attribute names that can be specified in the duplicate attribute value condition

| No. | Attribute name | Item |
|-----|----------------|------|
| 1 | B.SOURCESERVER | Event-issuing server name |
| 2 | B.DESTSERVER | Target event server name |
| 3 | B.MESSAGE | Message |
| 4 | B.ID | Event ID |
| 5 | B.REASON | Reason for registration |

| No. | Attribute name | Item |
|-----|----------------|------|
| 6 | B.USERID | Source user ID |
| 7 | B.GROUPID | Source group ID |
| 8 | B.USERNAME | Source user name |
| 9 | B.GROUPNAME | Source group name |
| 10 | E.*xxxxxxx*[#] | Extended attribute (common information, user-specific information) |

#

> You can also specify a JP1 product-specific extended attribute. For example, the product-specific extended attribute for the JP1/AJS job execution host is E.C0. For details about the product-specific extended attributes, consult the documentation for the products that issue JP1 events.

CORRELATION_NUM=*maximum-correlation-number*

Specifies the maximum number of JP1 event sets that can be held by the correlation event generation condition. Only one maximum correlation number can be defined for a single correlation event generation condition.

The permitted value range is from 1 to 1,024 (sets). If this parameter is omitted, 10 sets is assumed.

*Note:*

> Specifying the maximum correlation number for many correlation event generation conditions and also specifying a large value for the maximum correlation number is not recommended, because doing so will increase the number of JP1 event sets that need to be processed concurrently by the Event Generation Service, resulting in an increase in the amount of memory required and a reduction in processing speed.

> The maximum number of JP1 event sets that can be issued concurrently by all correlation event generation conditions is 20,000 sets. When 20,000 sets have been issued concurrently, a JP1 event (event ID: 00003F28) is output; until the number of sets drops below 20,000, no more processing is performed even if new JP1 events that satisfy the event conditions are issued.

SUCCESS_EVENT=*correlation-approval-event*

Defines the JP1 event (correlation event) that is to be issued when the correlation event generation condition results in correlation approval. Only one correlation approval event can be defined for a correlation event generation condition. For details about the conditions that result in correlation approval, see *3.3.6(1)*

*generation condition satisfied* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

If you have defined FAIL_EVENT=*correlation-failure-event* in the correlation event generation condition, you can omit this parameter. When this parameter is omitted, no correlation approval event is issued, even when the correlation event generation condition results in correlation approval.

Specify the correlation approval event in the following format:

*attribute-name*:*attribute-value*

The following describes each item.

*attribute-name*

Specifies a JP1 event basic or extended attribute (correlation source event). Prefix a basic attribute with B. and an extended attribute with E. If you specify an extended attribute, express the character string that follows E. using from 1 to 32 bytes of characters. The following rules apply:

• The character string must begin with an upper-case letter.

• The character string beginning in byte 2 must be expressed as upper-case alphanumeric characters and the underscore (_).

You can specify any value for the following attributes:

• Event ID (B.ID)

• Message (B.MESSAGE)

• Extended attributes, except for those listed in the table below.

*Table 2-33:* Extended attributes for which a value cannot be specified

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Common information | Product name | E.PRODUCT_NAME | /HITACHI/JP1/IM/ GENERATE_EVENT |
| | Object type | E.OBJECT_TYPE | SERVICE |
| | Object name | E.OBJECT_NAME | EGS |
| | Occurrence | E.OCCURRENCE | SUCCESS |

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| User-specific information | Relation event database sequence number | `E.JP1_GENERATE_SOURCE _SEQNO` | Stores the serial numbers of the correlation source events separated by the space:<br><br>*serial-number-1* Δ *serial-number-2* Δ *serial-number-3 . . . serial-number-n*<br><br>The maximum value of *n* is 100. |
| | Correlation event generation condition name | `E.JP1_GENERATE_NAME` | Name of correlation event generation condition that is satisfied |
| | Reserved word | Extended attribute beginning with `E.JP1_` | Extended attribute reserved by JP1/IM - Manager |

If you want to pass the attribute value of a correlation source event to the correlation event, specify a variable. Specify *correlation-approval-event* in the following format:

> *attribute-name* : $EV*n_attribute-name*

In this case, specify the correlation source event to be inherited by `CID` of the event condition and then specify the value of `CID` in *n*. Specify a variable to the right of the colon.

For details, see *(2)(a) Passing an attribute value of the correlation source event to an attribute value of the correlation event*.

If you want to specify a threshold (`threshold`) as the event correlation type and pass an attribute value of the correlation source event to the correlation event, specify *correlation-approval-event* in the following format:

> *attribute-name* : $EV*n_m_attribute-name*

In this case, specify the correlation source event to be inherited by `CID` and then specify in *n* the value of `CID`. Specify a variable to the right of the colon. Also, specify in *m* the location of the correlation source event whose attribute value is to be passed.

For details, see *(2)(b) Passing an attribute value of the correlation source event to an attribute value of the correlation event (when the event correlation type is threshold)*.

If you wish to pass a portion of an attribute value of the correlation source event to the correlation event, specify the $EV*n_*ENV*o* variable. Use a regular expression to specify

the event condition and enclose the portion of the attribute value to be acquired in parentheses.

Specify *correlation-approval-event* in the following format:

> *attribute-name*:$EV*n*_ENV*o*

In this case, specify the correlation source event to be passed to CID and specify the value of CID in *n*. In *o* of ENV*o*, specify the acquisition order.

For details, see *(2)(c) Passing part of an attribute value of the correlation source event to the correlation event*.

For details about basic and extended attributes, see *3.1 Attributes of JP1 events*. If you specify product-specific extended attributes, consult the documentation for the products that issue JP1 events.

- You can specify multiple items in *correlation source event* by separating them with the comma (,).

- Make sure that you specify the event ID of a basic attribute (B.ID). The permitted range of event IDs is from 0 to 1FFF and from 7FFF8000 to 7FFFFFFF. If the event ID is not specified, 0 is set as the event ID.

- The maximum length of a single correlation approval event is 8,192 bytes. The maximum length of B.MESSAGE is 1,023 bytes. These maximum lengths include spaces but do not include linefeed codes.

- The system ignores any space (space and ASCII codes from 0x01 to 0x1F) between an attribute name and an attribute value and at both ends of SUCCESS_EVENT=*correlation-approval-event* (the space is represented by Δ in the following example).

  Example:

  > Δ SUCCESS_EVENT Δ = Δ B.ID Δ : Δ 1 Δ

- To use a comma (,) or a space in an attribute value, enclose it in double-quotation marks (").

- To use a double-quotation mark (") or a backslash sign (\) in an attribute value, prefix it with a backslash sign (\).

- If you omit an attribute value, nothing is set when a correlation event is generated. If you omit the attribute value of an attribute name (B.ID), 0 is set.

- To specify a setting following the $EV*n*_*attribute-name* variable, specify a space (indicated by Δ in the example below) after the variable.

  Example:

```
SUCCESS_EVENT=B.MESSAGE:"$EVn_B.ID△$EVn_B.TIME..."
```

- If you use a variable and there is no matching attribute name, the variable is replaced with a space. If the variable would be replaced when the correlation event is generated with an attribute value that exceeds the permitted maximum value, the correlation event is not generated.

FAIL_EVENT=*correlation-failure-event*

Defines a JP1 event (correlation event) that is to be issued when the correlation event generation condition results in a correlation failure. You can define only one correlation failure event per correlation event generation condition. For details about the conditions that result in a correlation failure, see *3.3.6(2) generation condition fails* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

If you have specified SUCCESS_EVENT=*correlation-approval-event* in the correlation event generation conditions, you can omit this parameter. When this parameter is omitted, no correlation failure event is issued even if a correlation event generation condition results in a failure.

Specify *correlation-failure-event* in the same format as used for a correlation approval event. For details, see *SUCCESS_EVENT=correlation-approval-event*.

## (1) Using a variable in the duplicate attribute value condition (SAME_ATTRIBUTE)

This subsection describes how to use a variable ($EVn or $EVn_ENVo) in the duplicate attribute value condition (SAME_ATTRIBUTE).

■ (a) Using an attribute value of the correlation source event as the duplicate attribute value condition

To use an attribute value of the correlation source event as the duplicate attribute value condition, use the $EVn_*attribute-name* variable. The format is as follows:

- SAME_ATTRIBUTE=$EVn_*attribute-name*

For *n*, specify the value that corresponds to the condition ID (CID) of the event condition. For *attribute-name*, specify the attribute name that is to be used as the grouping key. For details about the specifiable attributes names, see Table *2-32 List of attribute names that can be specified in the duplicate attribute value condition*.

For example, the following definition associates JP1 events that have attribute values whose host information is different, such as a JP1 event of Windows log trapping (event ID: 00003A71) and a JP1 event issued by JP1/AJS (event ID: 00004107), and generates a correlation event for each host:

378

```
CON=CID:1,B.ID==3A71,E.A0==host1;host2
CON=CID:2,B.ID==4107,E.C0==host1;host2
         :
SAME_ATTRIBUTE=$EV1_E.A0,$EV2_E.C0
         :
```

■ (b) Using part of an attribute value of the correlation source event as the duplicate attribute value condition

To use part of the attribute value of a correlation source event as the duplicate attribute value condition, use the $EV*n*_ENV*o* variable. The format is as follows:

- SAME_ATTRIBUTE=$EV*n*_ENV*o*

When you specify $EV*n*_ENV*o*, use a regular expression (`*=`) to specify the event condition and enclose the part of the attribute value that is to be acquired in parentheses. For *n*, specify the value that corresponds to the condition ID (CID) of the event condition.

In *o* of ENV*o*, specify the acquisition order. The acquisition order is based on the order of the parentheses in the right-hand term of the event condition, counting the pairs of parentheses from left to right. The following figure shows the correspondence between the event condition (CON) and the part that is acquired by $EV*n*_ENV*o*.

*Figure 2-2:* Correspondence between the event condition (CON) and the part that is acquired by $EVn_ENVo
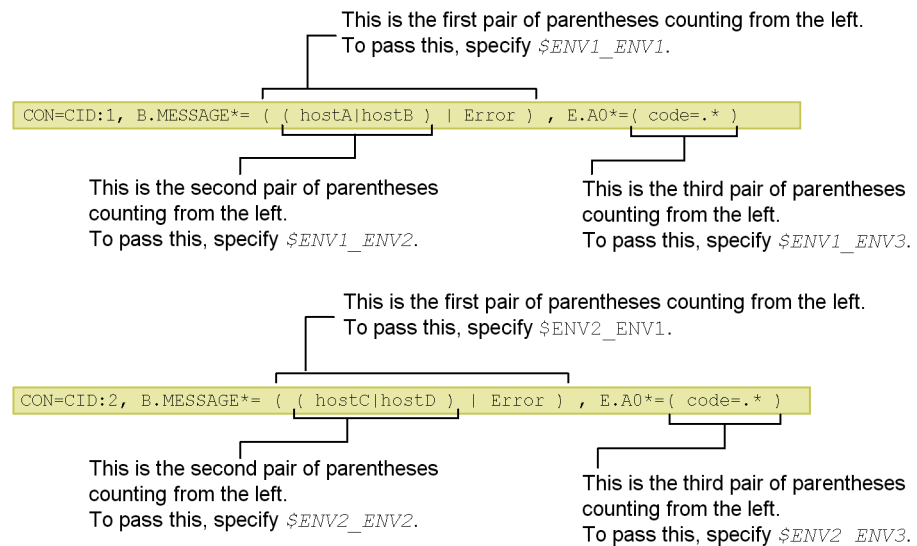


If there are multiple event attribute conditions that specify regular expressions in a single event condition (CON), count the pairs of parentheses from left to right and set

in *o* the order of the pair enclosing the attribute value that is to be acquired.

The following example generates a correlation event for each event that has the same host name in the message in the correlation source event:

```
CON=CID:1, B.ID==1001, B.MESSAGE*=.*HOST=(.*\\))
TYPE=threshold:5
SAME_ATTRIBUTE=$EV1_ENV1
            :
```

## (2) Using a variable in the correlation approval event (SUCCESS_EVENT)

To pass an attribute value of the correlation source event to the correlation event, use a variable in the correlation approval event (SUCCESS_EVENT).

■ (a) Passing an attribute value of the correlation source event to an attribute value of the correlation event

To pass an attribute value of the correlation source event to an attribute value of the correlation event, use the $EV*n_attribute-name* variable. The format is as follows:

- SUCCESS_EVENT=*attribute-name*:$EV*n_attribute-name*

For *n*, specify the condition ID (CID) that was specified in the event condition. For the right-hand *attribute-name*, specify the attribute that is to be passed from the correlation source event. Note that if the event ID (B.ID) is specified in the left-hand *attribute-name*, an attribute value of the correlation source event cannot be passed.

The following table lists the attribute names that can be specified in the variable.

*Table 2-34:* List of attribute names that can be specified in the variable

| No. | Attribute name | Item | Format |
|-----|----------------|------|--------|
| 1 | B.SEQNO | Serial number | Numeric value |
| 2 | B.ID | Event ID | *basic-part*:*extended-part* in hexadecimal notation |
| 3 | B.PROCESSID | Source process ID | Numeric value |
| 4 | B.TIME | Registered time | *YYYY/MM/DD hh:mm:ss*[#1] |
| 5 | B.ARRIVEDTIME | Arrived time | *YYYY/MM/DD hh:mm:ss*[#1] |
| 6 | B.REASON | Reason for registration | Character string |
| 7 | B.USERID | Source user ID | Numeric value |
| 8 | B.GROUPID | Source group ID | Numeric value |

| No. | Attribute name | Item | Format |
|---|---|---|---|
| 9 | B.USERNAME | Source user name | Character string |
| 10 | B.GROUPNAME | Source group ID | Character string |
| 11 | B.SOURCESERVER | Event-issuing server name | Character string |
| 12 | B.DESTSERVER | Target event server name | Character string |
| 13 | B.SOURCESEQNO | Source serial number | Numeric value |
| 14 | B.MESSAGE | Message | Character string |
| 15 | E.SEVERITY | Event level | Character string |
| 16 | E.USER_NAME | User name | Character string |
| 17 | E.PRODUCT_NAME | Product name | Character string |
| 18 | E.OBJECT_TYPE | Object type | Character string |
| 19 | E.OBJECT_NAME | Object name | Character string |
| 20 | E.ROOT_OBJECT_TYPE | Root object type | Character string |
| 21 | E.ROOT_OBJECT_NAME | Root object name | Character string |
| 22 | E.OBJECT_ID | Object ID | Character string |
| 23 | E.OCCURRENCE | Occurrence | Character string |
| 24 | E.START_TIME | Start time | *YYYY/MM/DD hh:mm:ss*[1] |
| 25 | E.END_TIME | End time | *YYYY/MM/DD hh:mm:ss*[1] |
| 26 | E.*xxxxxx*[2] | Other extended attribute | Character string |

#1

This value is obtained by converting the JP1 event's time in GMT to the time zone of JP1/IM - Manager.

#2

You can also specify a JP1 product-specific extended attribute. For example, the program-specific extended attribute for the JP1/AJS job execution host is E.C0. For details about the product-specific extended attributes, consult the documentation for the products that issue JP1 events.

The following figure shows an example of passing an attribute value from the correlation source event.

*Figure 2-3:* Example of using a variable to pass an attribute value to the correlation approval event

Contents of JP1 events that are issued (example)
- JP1 event issued by JP1/AJS2

```
SEVERITY = Error
MESSAGE  = An error occurred in job A.
```

- JP1 event issued by JP1/Base

```
SEVERITY = Error
MESSAGE  = hostA has stopped.
```

Definition in the correlation event generation definition file

```
CON=CID:1,E.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/AJS2
CON=CID:5,E.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/Base

SUCCESS_EVENT=E.SEVERITY: $EV1_E.SEVERITY ,B.MESSAGE: $EV1_B.MESSAGE △ $EV5_B.MESSAGE
```

*Italics* indicate the attribute values that are passed.

Matching of JP1 events and the correlation event generation definition
- JP1 event issued by JP1/AJS2

```
SEVERITY = Error
MESSAGE  = An error occurred in job A.
```

- JP1 event issued by JP1/Base

```
SEVERITY = Error
MESSAGE  = An application error occurred on hostA.
```

```
CON=CID:1,E.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/AJS2
CON=CID:5,E.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/Base

SUCCESS_EVENT=E.SEVERITY: $EV1_E.SEVERITY ,B.MESSAGE: $EV1_B.MESSAGE △ $EV5_B.MESSAGE
```
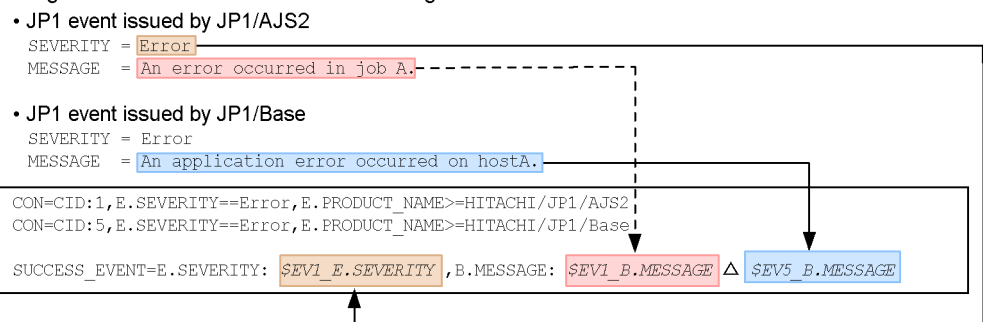
Correlation event that is generated:

```
SEVERITY= Error
MESSAGE= An error occurred in job A. An application error occurred on hostA.
```

Legend:
  △ : Single-byte space

In this example, the event levels issued by JP1/AJS and JP1/Base associate the JP1 event for an error, resulting in generation of a correlation event.

This example defines *correlation-approval-event* as follows:

- For the event level, the correlation event passes the event level of the JP1 event issued by JP1/AJS.

- For the message, the correlation event passes the messages for the JP1 events issued by JP1/AJS and JP1/Base.

■ (b) Passing an attribute value of the correlation source event to an attribute value of the correlation event (when the event correlation type is threshold)

This subsection describes how to define a correlation approval event using a variable when the event correlation type is threshold.

When the event correlation type is threshold, multiple JP1 events can satisfy a single event condition (`CON`). The following figure shows an example.

*Figure  2-4:*  When the event correlation type is threshold

Example:
Generate a correlation event if a JP1 event containing `Login error` in the message is issued three times.

Issued JP1 events (example)

| | | Issuance order |
|---|---|---|
| Event 1 | Message: Login error user ID (10000000) does not have permissions. | ...1 |
| Event 2 | Message: Login error (second time) user ID (10000000) does not have permissions. | ...2 |
| Event 3 | Message: Login error (third time) user ID (10000000) is an unauthorized user. | ...3 |

Definition in the correlation event generation definition file

```
CON=CID:1,B.MESSAGE*="Login△error"
TYPE=threshold:3
SUCCESS_EVENT=B.ID:A00,△E.SEVERITY:Error,△B.MESSAGE:$EV1_B.MESSAGE
```

*Italics* indicate the attribute values that are passed.

Because three JP1 events match *$EV1_B.MESSAGE*, the messages that are passed (event 1, event 2, or event 3) must be specified.

Legend:
   △ : Single-byte space

As shown in this figure, three JP1 events (`Event 1`, `Event 2`, and `Event 3`) match `$EV1_B.MESSAGE`. Therefore, the message to be passed must be specified.

In this case, specify the correlation approval event in the following format:

- `SUCCESS_EVENT=`*attribute-name*`:$EV`*n*`_`*m*`_attribute-name*

For *n*, specify the condition ID (`CID`) that was specified in the event condition as described above. For the right-hand *attribute-name*, specify the attribute that is to be

passed from the correlation source event. Note that if the event ID (B.ID) is specified in the left-hand *attribute-name*, an attribute value of the correlation source event cannot be passed.

In *m*, specify the order in which the JP1 events (correlation source events) are processed. To pass the attribute value of the third JP1 event that was processed, specify 3 in *m*. If the value of *m* is greater than the value specified in the threshold (threshold:*n*), a definition error results.

The following figure shows an example of passing attribute values when the event correlation type is threshold.

*Figure 2-5:* Example of passing attribute values when the event correlation type is threshold

Example:
Issue a correlation event if a JP1 event containing `Login error` in the message is issued three times.

Issued JP1 events (example)
<div align="right">Issuance order</div>

```
Event 1  Message: Login error user ID (10000000) does not have permissions.
```
...1

```
Event 2  Message: Login error (second time) user ID (10000000) does not have
                  permissions.
```
...2

```
Event 3  Message: Login error (third time) user ID (10000000) is an unauthorized user.
```
...3

Definition in the correlation event generation definition file

```
CON=CID:1,B.MESSAGE*="Login△error"
TYPE=threshold:3
SUCCESS_EVENT=B.ID:A00,△E.SEVERITY:Error,△B.MESSAGE:$EV1_3_B.MESSAGE
```

*Italics* indicate the attribute values that are passed.

Matching of JP1 events and the correlation event generation definition

Issued JP1 events (example)
<div align="right">Issuance order</div>

```
Event 1  Message: Login error user ID (10000000) does not have permissions.
```
...1

```
Event 2  Message: Login error (second time) user ID (10000000) does not have
                  permissions.
```
...2

```
Event 3  Message: Login error (third time) user ID (10000000) is an unauthorized user.
```
...3

Definition in the correlation event generation definition file

```
CON=CID:1,B.MESSAGE*="Login△error"
TYPE=threshold:3
SUCCESS_EVENT=B.ID:A00,△E.SEVERITY:Error,△B.MESSAGE:$EV1_3_B.MESSAGE
```

Correlation event that is generated
```
ID=A00
SEVERITY= Error
Message=Login error (third time) user ID (10000000) is an unauthorized user.
```

Legend:
△ : Single-byte space

You can omit both *n* and *m* in *attribute-name*:$EV*n*_*m*_*attribute-name*. The following examples describe how attribute values are passed when *n* and *m* are omitted.

*Example 1:*

If a JP1 event containing `Login error` in the message is issued three times, generate a correlation event that receives the message in the correlation source event.

*Definition in the correlation event generation definition file*

```
[ex.1]
CON=CID:1,B.MESSAGE*="Login error"
TYPE=threshold:3
SUCCESS_EVENT=B.ID:A00,E.SEVERITY:Error,B.MESSAGE:setting
```

*Table 2-35:* Conditions to be satisfied and settings (in Example 1)

| No. | Condition to be satisfied | Setting |
|-----|---------------------------|---------|
| 1 | Pass to the correlation event the message in the first JP1 event that satisfies the event condition | `$EV1_1_B.MESSAGE` or `$EV_1_B.MESSAGE` |
| 2 | Pass the message in the second JP1 event that satisfies the event condition | `$EV1_2_B.MESSAGE` or `$EV_2_B.MESSAGE` |
| 3 | Pass the message in the third (last) JP1 event that satisfies the event condition | `$EV1_3_B.MESSAGE,` `$EV1_B.MESSAGE,` `$EV_3_B.MESSAGE,` or `$EV_B.MESSAGE` |

*Example 2:*

If a JP1 event that satisfies either of the conditions listed below is issued 10 times, generate a correlation event that receives the message in the correlation source event.

- Event ID is `100` and the message contains `Warning`.

- Event ID is `200` and the message contains `Warning` or `Error`.

*Definition in the correlation event generation definition file:*

```
[ex.2]
CON=CID:100,B.ID==100,B.MESSAGE*="Warning"
CON=CID:200,B.ID==200,B.MESSAGE*="Warning";"Error"
TYPE=threshold:10
SUCCESS_EVENT=B.ID:B00,E.SEVERITY:Error,B.MESSAGE:setting
```

*Table 2-36:* Conditions to be satisfied and settings (in Example 2)

| No. | Condition | Setting |
|-----|-----------|---------|
| 1 | Pass to the correlation event the message in the first JP1 event that satisfies the event condition (condition ID: 100) | $EV100_1_B.MESSAGE |
| 2 | Pass to the correlation event the message in the fifth JP1 event that satisfies the event condition (condition ID: 100) | $EV100_5_B.MESSAGE |
| 3 | Pass to the correlation event the message in the 10th JP1 event that satisfies the event condition (condition ID: 100) | $EV100_10_B.MESSAGE |
| 4 | Pass to the correlation event the message in the first JP1 event processed, regardless of the event conditions | $EV_1_B.MESSAGE |
| 5 | Pass to the correlation event the message in the fifth JP1 event processed, regardless of the event conditions | $EV_5_B.MESSAGE |
| 6 | Pass to the correlation event the message in the 10th (last) JP1 event processed, regardless of the event conditions | $EV_10_B.MESSAGE or $EV_B.MESSAGE |

The following summarizes the processing:

*When n is omitted:*

> If *n* is omitted, only the correlation source event with the order specified in *m* is used for checking the conditions. For example, if 3 is specified in *m*, the attribute value of the third correlation source event processed is passed to the correlation event.

*When m is omitted:*

> If *m* is omitted, the last correlation source event processed is the target, regardless of the order. For example, if the threshold is 10, the attribute value of the 10th correlation source event processed is passed.

> If *n* is specified, the attribute value of the last correlation source event processed by the event condition is passed.

*When n and m are both omitted:*

> If *n* and *m* are both omitted, the last correlation source event processed is the target, regardless of the event conditions or the order of processing.

Note that regardless of whether *n* or *m* is specified, if no (source) JP1 event satisfies the conditions, the variable is replaced with the null character (0 bytes).

■ (c) Passing part of an attribute value of the correlation source event to the correlation event

To pass part of an attribute value of the correlation source event to the correlation event, use the $EV*n*_ENV*o* variable. In this case, use a regular expression (*=) to

specify the event condition and enclose the part of the attribute value that is to be acquired in parentheses.

Specify *correlation-approval-event* in the following format:

```
SUCCESS_EVENT=attribute-name:$EVn_ENVo
```

Specify the correlation source event to be received by `CID` and specify the value of `CID` in *n*. In *o* of `ENVo`, specify the acquisition order. The following figure shows an example of receiving part of an attribute value.

*Figure 2-6:* Example of receipt by the correlation approval event when the $EVn_ENVo variable is used

Example:
Acquire the error code contained in the message in the issued event and set it in the message that is received by the correlation event.

Issued JP1 event (example)

```
Event 1 Event level: Error  Message: KAxx-E Error occurred ErrorCode=1111 2006/11/11/16:10:52
```

```
Event 2 Event level: Critical Message: KAxx-E Fatal error occurred ErrorCode=2000 2006/11/11/16:12:30
```

Definition in the correlation event generation definition file

```
CON=CID:1,E.SEVERITY==Error,B.MESSAGE*=ErrorCode=(....).*$
CON=CID:2,E.SEVERITY==Critical,B.MESSAGE*=ErrorCode=(....).*$
SUCCESS_EVENT=B.ID:C00,△E.SEVERITY:Alert,
△B.MESSAGE: Error code $EV1_ENV1△$Error occurred in△$EV2_ENV1
```

*Italics* indicate the attribute values that are received.

Matching of JP1 events and the correlation event generation definition

Issued JP1 event (example)

```
Event 1  Event level: Error  Message: KAxx-E Error occurred ErrorCode= 1111 2006/11/11/16:10:52
```

```
Event 2  Event level: Critical  Message: KAxx-E Fatal error occurred ErrorCode= 2000 2006/11/11/16:12:30
```

Definition in the correlation event generation definition file

```
CON=CID:1,E.SEVERITY==Error,B.MESSAGE*=ErrorCode=(....).*$
CON=CID:2,E.SEVERITY==Critical,B.MESSAGE*=ErrorCode=(....).*$
SUCCESS_EVENT=B.ID:C00,△E.SEVERITY:Alert,
△B.MESSAGE: Error code $EV1_ENV1△Error occurred in△$EV2_ENV1
```

Correlation event that is generated

```
ID=C00
SEVERITY= Alert
MESSAGE=Error code 1111 Error occurred in 2000
```

Legend:
△ : Single-byte space

This example uses parentheses to acquire the right-hand term of `ErrorCode=` from the correlation source event that is specified by the conditions of condition ID (`CID`) =1 and condition ID (`CID`) =2.

If you use the $EVn\_ENVo$ variable, when a correlation source event that has an attribute value containing a specific character string is issued, you can generate a correlation event, and then pass the portion of the character string contained in the attribute value to the correlation event.

In this case, specify in *o* of ENV*o* the numeric value that determines the parentheses pair that follows the regular expression (`*=`) specified in the event conditions. In other words, count parentheses pairs from left to right for the attribute value in the correlation source event that follows the regular expression (`*=`) in the event conditions, and then specify in *o* the location that is to be passed.

The part acquired by $EVn\_ENVo$ is the same as when $EVn\_ENVo$ is specified in the duplicate attribute value condition. For details, see Figure *2-2 Correspondence between the event condition (CON) and the part that is acquired by $EVn\_ENVo$*.

The example shown below generates a correlation event if a correlation source event with an attribute value that contains a specific character string is issued, and passes part of the character string contained in that attribute value to the correlation event.

*Figure 2-7:* Example of passing part of a character string contained in an attribute value to the correlation event

Example:
Acquire part of the message in a correlation source event that has multiple sets of parentheses in the attribute value and then pass it to the correlation event.

Issued JP1 event (example)

```
Event   Event level: Error
        Message: KAxx-E Error occurred  host=AGENT_A ErrorCode=1111 2006/11/11/16:10:52
```

Definition in the correlation event generation definition file

```
CON=CID:1,△E.SEVERITY==Error,△B.MESSAGE*=host=(MANAGER_A△
|AGENT_(A|B|C)).*ErrorCode=(....).*$
SUCCESS_EVENT=B.ID:C00,△E.SEVERITY:Alert,
△B.MESSAGE: Error with error code $EV1_ENV3△ occurred at the host $EV1_ENV1△
```

*Italics* indicate the attribute values that are passed.

Matching JP1 events and the correlation event generation definition

Issued JP1 event (example)

```
Event   Event level: Error
        Message: KAxx-E Error occurred  host=AGENT_A ErrorCode=1111 2006/11/11/16:10:52
```

Definition in the correlation event generation definition file

```
CON=CID:1,△E.SEVERITY==Error,△B.MESSAGE*=host=(MANAGER_A△
|AGENT_(A|B|C)).*ErrorCode=(....).*$
SUCCESS_EVENT=B.ID:C00,△E.SEVERITY:Alert,
△B.MESSAGE: Error with error code $EV1_ENV3△ occurred at the host $EV1_ENV1△
```

Correlation event that is generated

```
B.ID : C00
E.SEVERITY : Alert
B.MESSAGE : Error with error code 1111 occurred at the host AGENT_A
```

Legend:
　　△ : Single-byte space

This example specifies the definition in such a manner that whenever a correlation

source event that satisfies the conditions listed below is generated, an attribute value is passed from it to the correlation event:

- `host=` is followed by `MANAGER_A`, `AGENT_A`, `AGENT_B`, or `AGENT_C`.

- `ErrorCode=` is followed by a character string of at least 4 characters.[#]

#

- If the character string consists of more than four characters, only the first four characters are passed.

  For example, in the case of `ErrorCode=12345678`, `1234` is passed.

- If the character string consists of fewer than four characters, the necessary number of characters that follow `ErrorCode=` *character-string* are included so that four characters are passed.

  For example, in the case of `ErrorCode=1 2006/11/11`, `1 20` is passed.

If the character string that follows `ErrorCode=` consists of fewer than 4 characters, no correlation event is generated.

## Example definition

Example 1: Generate a correlation event for any JP1 event whose event level is `Error` or higher:

```
VERSION=2

#Generate a correlation event for any a JP1 event
#whose event level is Error or higher
[filter_over_error]
CON=CID:1,B.ID==1,E.SEVERITY==Error;Critical;Alert;Emergenc
y
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE
```

Example 2: Generate a correlation event for any JP1 event whose event level is `Error` or higher and for any JP1 event issued by JP1/AJS whose event level is `Error`:

If the following definition is specified and JP1/AJS issues a JP1 event whose event level is `Error`, two correlation events will be generated because the JP1 event satisfies the two correlation event generation conditions `over_error` and `ajs2_over_error`:

```
VERSION=2

#Generate a correlation event for any JP1 event whose
#event level is Error or higher.
[over_error]
CON=CID:1,E.SEVERITY==Error;Critical;Alert;Emergency
```

```
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE

#Generate a correlation event for any JP1 event issued by
#JP1/AJS@ whose event level is Error.
[ajs2_over_error]
CON=CID:1,E.SEVERITY==Error,E.PRODUCT_NAME==/HITACHI/JP1/
AJS2
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE
```

To generate only one correlation event when JP1/AJS issues a JP1 event whose event level is Error, specify the first correlation event generation condition as follows:

```
VERSION=2

#Generate a correlation event for any JP1 event whose
#event level is Error or higher.
#Exclude events issued by JP1/AJS2.
[over_error_and_not_ajs2]
CON=NOT,E.SEVERITY==Error,E.PRODUCT_NAME==/HITACHI/JP1/AJS2
CON=CID:1,E.SEVERITY==Error;Critical;Alert;Emergency
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE

#Generate a correlation event for any JP1 event issued by
#JP1/AJS2 whose event level is Error.
[ajs2_over_error]
CON=CID:1,E.SEVERITY==Error,E.PRODUCT_NAME==/HITACHI/JP1/
AJS2
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE
```

Example 3: Define a timeout period:

```
VERSION=2

[condition]
CON=NOT,E.SEVERITY==Error,E.PRODUCT_NAME==/HITACHI/JP1/AJS2

CON=CID:1,B.ID==1,B.MESSAGE==TEST,E.SEVERITY==Warning
CON=CID:2,B.ID==1,B.MESSAGE==TEST,E.SEVERITY==Error
CON=CID:3,B.ID==1,B.MESSAGE==TEST,E.SEVERITY==Critical

TIMEOUT=10
SUCCESS_EVENT=E.SEVERITY:Emergency,B.MESSAGE:$EV1_B.MESSAGE
```

Example 4: Generate a single correlation event that combines the messages in JP1 events issued by JP1/AJS2 and JP1/Base and whose event level is Error:

```
VERSION=2

[cond1]

CON=CID:1,E.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/
AJS2
CON=CID:5,B.SEVERITY==Error,E.PRODUCT_NAME>=HITACHI/JP1/
Base

SUCCESS_EVENT=E.SEVERITY:$EV1_E.SEVERITY,B.MESSAGE:"$EV1_B.
MESSAGE $EV5_B.MESSAGE"
```

Example 5: Acquire a value by using the $EV*n*_ENV*o* variable:

This example acquires the detail code error Δ code Δ = Δ *n* Δ that is included in the message and then places it in the message in the correlation event (*n*: any character string; Δ : Space).

```
VERSION=2

[SAMPLE]

CON=CID:100, B.MESSAGE*=(error Δ code Δ = .* Δ )
SUCCESS_EVENT=B.ID:100,E.SEVERITY:Emergency,B.MESSAGE:
error-information [$EV100_ENV1 Δ ]
```

Example 6: Narrow down the target range for correlation by the host and generate a correlation event for each user with the maximum correlation number set to 20:

```
VERSION=2

[condition2]
TARGET=B.SOURCESERVER==host1;host2;host3
CON=NOT, E.SEVERITY==Error, E.PRODUCT_NAME==/HITACHI/JP1/
AJS2

CON=CID:1, B.ID==1, B.MESSAGE==TEST, E.SEVERITY==Warning
CON=CID:2, B.ID==1, B.MESSAGE==TEST, E.SEVERITY==Error
CON=CID:3, B.ID==1, B.MESSAGE==TEST, E.SEVERITY==Critical

SAME_ATTRIBUTE=E.USERNAME
CORRELATION_NUM=20
TIMEOUT=10
SUCCESS_EVENT=B.MESSAGE:$EV1_B.MESSAGE
```

# Correlation event generation environment definition file

## Format

```
[logical-host-name\JP1CONSOLEMANAGER\EVGEN]
"OPERATION_LOG_SIZE"=dword:hexadecimal-value
"OPERATION_LOG_NUM"=dword:hexadecimal-value
```

## File

Use any file.

## Storage directory

In Windows
*Console-path*\default\

In UNIX
/etc/opt/jp1cons/default/

## Description

This file defines the size and number of correlation event generation history files.

When this file is updated, the definition information is updated for all processes managed by JP1/IM - Manager.

## When the definitions are applied

The definition takes effect when JP1/IM - Manager is restarted or the jco_spmd_reload command is executed after the jbssetcnf command has been executed to apply the definition to the common definition information.

## Information that is specified

[*logical-host-name*\JP1CONSOLEMANAGER\EVGEN]

Specifies the key name for the JP1/IM - Manager environment settings.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"OPERATION_LOG_SIZE"=dword:*hexadecimal-value*

Specifies in hexadecimal notation the size of one correlation event generation history file. The permitted value range is from 00010000 to 06400000 (from 64 kilobytes to 100 megabytes). The default is 00A00000.

"OPERATION_LOG_NUM"=dword:*hexadecimal-value*

Specifies in hexadecimal notation the number of correlation event generation history files. The permitted value range is from 00000003 to 00000064 (from 3 to 100 files). The default is `00000003` (3 files).

## How to determine the size and number of correlation event generation history files

If it is necessary to adjust the size and number of correlation event generation history files, estimate the size of the correlation event generation history file required for one day and multiply that value by the number of days the files are to be retained. Set a value that is larger than the estimated value.

For details about the estimation, see the Release Notes for JP1/IM - Manager.

# Host information file (jcs_hosts)

## Format

```
IP-address  host-name-1  host-name-2  host-name-3  . . .  host-name-8
IP-address  host-name-1  host-name-2  host-name-3  . . .  host-name-8
               :
```

## File

jcs_hosts (host information file)

jcs_hosts.model (model file for the host information file)

## Storage directory

In Windows
*Scope-path*\conf\
*shared-folder*\jp1scope\conf\ *(logical host)*

In UNIX
/etc/opt/jp1scope/conf/
*shared-directory*/jp1scope/conf/ *(logical host)*

## Description

This file defines the host information that is managed by JP1/IM - Manager (JP1/IM - Central Scope).

The host information file is used to specify the host information that is used for automatic generation of a monitoring tree and for Host name Comparison during JP1 event collation processing for changing the status of monitoring objects. The format of the host information file is the same as for the hosts file.

If # is specified, any text following # is treated as a comment.

## When the definitions are applied

The contents of the host information file take effect when JP1/IM - Manager is restarted or the jco_spmd_reload command is executed after the jcshostsimport command has been executed.

If you use the jcshostsimport command to store the contents of the host information file in the host information database, the host names become all lower case. Therefore, the host names output by jcshostsexport are also in lower case.

The jcshostsimport command does not store comments in the host information file.

## Information that is specified

*IP-address host-name-1  host-name-2  host-name-3  ...  host-name-8*

Specifies an IP address from the beginning of the line (other than spaces), and then specifies host names or alias names after one or more spaces or tabs.

The maximum length of the IP address is 63 bytes. IP addresses of IP V6 are not supported.

The maximum length of a host name or alias name is 255 bytes.

You can specify a maximum of 8 host names for one IP address and a maximum of 8 IP addresses for one host name.

If the same IP address is specified more than once, the first IP address defined is effective.

If there is a line that contains only an IP address, an error occurs during `jcshostsimport` command execution.

A host name is not case sensitive. An IP address can also be expressed in hexadecimal notation.

## Example definition

```
#
# jcs_hosts
#
# Internet Address Hostname
100.100.10.10     samplehost1  samplehost2
```

# Guide information file (jcs_guide.txt)

## Format 1

```
DESC_VERSION=1

[EV_GUIDE_number]
NUM=number
EV_COMP_number=attribute-specification:regular-expression
EV_TITLE=character-string
EV_GUIDE=message
[END]
[EV_GUIDE_number]
NUM=number
EV_COMP_number=attribute-specification:regular-expression
EV_TITLE=character-string
EV_GUIDE=message
[END]
    :
```

## Format 2

```
DESC_VERSION=2

[EV_GUIDE_number]
NUM=number
EV_COMP_number=attribute-specification:regular-expression
EV_TITLE=character-string
EV_FILE=guide-message-file
[END]
[EV_GUIDE_number]
NUM=number
EV_COMP_number=attribute-specification:regular-expression
EV_TITLE=character-string=character-string
EV_FILE=guide-message-file
[END]
    :
```

### File

The guide information file (jcs_guide.txt) to be edited depends on the language encoding supported by JP1/IM. The following table shows the correspondence between the language encodings supported by JP1/IM and the guide information files to be edited.

399

*Table 2-37:* Correspondence between language encodings supported by JP1/IM and the guide information files

| OS | Language encoding supported by JP1/IM | File to be edited |
|---|---|---|
| UNIX | English | `jcs_guide.txt` (guide information file) |
| | | `jcs_guide.txt.model` (model file for the guide information file) |

Use the guide information file appropriate to the language encoding.

## Storage directory

In Windows
*Scope-path*`\conf\`
*shared-folder*`\jp1scope\conf\` *(logical host)*

In UNIX
`/etc/opt/jp1scope/conf/`
*shared-directory*`/jp1scope/conf/` *(logical host)*

## Description

This file defines guide information about the JP1 events that trigger a change in monitoring object status.

The information specified in this file is displayed in the Guide window of JP1/IM - View.

The maximum size of the guide information file is 1 megabyte.

Format 2 is used to import a user-created TXT or HTML file as the guide-message file and then display it in the Guide window.

If there are multiple matching guide information items, the first item specified in the guide information file is effective.

If # is specified, any text following # is treated as a comment. Note that a comment cannot be specified after the start tag, attribute information, or end tag. An error results if a comment is specified following the start and end tags. If a comment is specified following an attribute value, that comment is treated as part of the attribute value.

To use \, specify \\. If \ is used in other than \n or \$, a log is output and the line containing \ is ignored.

## When the definitions are applied

After the guide information file is edited, the definitions in the file take effect when JP1/IM - Manager is restarted or when the `jco_spmd_reload` command is executed.

## Information that is specified

DESC_VERSION=1 │ 2

Specifies the version of the guide information file. The permitted values are 1 and 2.

If you specify the EV_FILE parameter to call a guide-message file, you must specify 2 in this parameter.

If you specify DESC_VERSION=1, EV_GUIDE=*message*, and EV_FILE=*guide-message-file* together, the specification of EV_FILE=*guide-message-file* will be ignored.

If you specify DESC_VERSION=2 and also specify both EV_GUIDE=*message* and EV_FILE=*guide-message-file*, the specification of EV_FILE=*guide-message-file* will take precedence.

[EV_GUIDE_*number*]

This is the start tag for the guide information. The information from the [EV_GUIDE_*number*] tag to the [END] tag constitutes a single definition block. Between this parameter and [END], specify a condition for JP1 events that are to be displayed in the Guide window and the message that is to be displayed. The number begins with 1 and increments by 1 up to the number of guides.

The specification in each instance of the EV_GUIDE_*number* tag must be unique. If an invalid character string is specified, a log is output and the corresponding specification is ignored.

If an attribute specified in the EV_GUIDE_*number* tag is not permitted, the corresponding specification is ignored.

NUM=*number*

Specifies the total number of EV_COMP_*number* entries.

EV_COMP_*number*=*attribute-specification*:*regular-expression*

Specifies an attribute to be compared. Specify this parameter for each attribute that is to be compared. The specification in *number* begins with 1 and increments by 1. When multiple parameters have been specified and the AND condition among them is completely satisfied, the message specified in the EV_GUIDE parameter is displayed in the Guide window.

The value specified in EV_COMP_*number* is ignored if it is less than 1 or greater than the value specified in NUM=*number*.

Express the event ID as 8 digits. If you specify B.ID as an attribute specification for EV_COMP_*number* and you set only the base part of the event ID in the matching condition, you can omit specification of the extended part.

Example:

`EV_COMP_1=B.ID:00004107:00000000` or `EV_COMP_1=B.ID:00004107`

*attribute-specification*

Specifies an attribute of one the following types:

- JP1 event basic attribute: If you specify this type of attribute, use the format `B.`*attribute-name*.

- JP1 event extended attribute: If you specify this type of attribute, use the format `E.`*attribute-name*.

- Monitoring node attribute: If you specify this type of attribute, you can use the format `T.MONNODEID` (monitoring node ID), with the monitoring node ID expressed as 8 hexadecimal characters.

*regular-expression*

Specifies a value of the attribute specified in *attribute-specification* using a regular expression. For the regular expression, use an extended regular expression. For details about regular expressions, see *G. Regular Expressions* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*.

`EV_TITLE=`*character-string*

Specifies the character string that is to be displayed as the title of the Guide window. You can specify this parameter only once between `[EV_GUIDE_`*number*`]` and `[END]`.

`EV_GUIDE=`*message*

Specifies the character string that is to be displayed as a guide message in the Guide window. If you use HTML tags, you can display the guide message in HTML format in the Guide window (for details about the supported HTML tags, see *Table 2-38 HTML tags that can be used in guide messages* in the description of `EV_FILE`). Note that you can specify this parameter only once between `[EV_GUIDE_`*number*`]` and `[END]`.

Express the message as a maximum of 10,240 bytes of characters. If the specified message consists of more than 10,240 bytes, the portion of the message in excess of 10,240 bytes is not displayed in the Guide window.

To use \ in the message, specify \\. To use $, specify \$. If $`B.`*attribute-name*△ or $`E.`*attribute-name*△ is specified in the message, the attribute value corresponding to the JP1 event attribute name is expanded (△ indicates a space). The monitoring node ID replaces $`T.MONNODEID`△ (△ indicates a space). If there is no corresponding attribute, the attribute is replaced with blanks.

To use a linefeed code in the message, specify \n.

EV_FILE=*guide-message-file*

Specifies the full path or relative path (from *Scope-path*\conf\guide\ or /etc/opt/jp1scope/conf/guide/) of the file that contains the guide message to be displayed in the Guide window. Note that you can specify this parameter only once between [EV_GUIDE_*number*] and [END].

Express the file name using a maximum of 1,024 bytes of characters. If the specified file name exceeds 1,024 bytes, an error occurs when JP1/IM - Manager starts or the guide message file is called from JP1/IM - View.

When you specify this parameter, you must specify 2 as the value of DESC_VERSION.

The file specified as *guide-message-file* can have any file name and extension. We recommend that you use a file name that is easy to manage, and that you use the extension .txt if the guide messages are in TXT format and the extension .html or .htm if the guide messages are in HTML format.

Examples: guide001_AJS2.txt, guide001_AJS2.htm

*Guide-message file*

Specify in the guide-message file in TXT or HTML format the information that you want to display in the Guide window. The information that you can specify is the same as for EV_GUIDE in the guide information file. In the case of a guide-message file, you can edit the formatting by inserting linefeed codes.

The contents and syntax of the guide-message file are not checked.

You can store the created guide-message file in any folder. However, when you are operating in a cluster configuration, you should store it in the following folder for purposes of system failover:

- In Windows

  *shared-folder*\jp1scope\conf\guide\

- In UNIX

  *shared-directory*/jp1scope/conf/guide/

The maximum size of a guide-message file is 1 megabyte. If the file size exceeds 1 megabyte, an error occurs when the guide-message file is loaded from the Guide window of JP1/IM - View.

The table below lists and describes the HTML tags and attributes that can be used to create a guide-message file in HTML format.

403

*Table 2-38:* HTML tags that can be used in guide messages

| Tag | Attribute | Description |
|---|---|---|
| HTML | -- | Declares that this is an HTML text. This tag is mandatory. |
| HEAD | -- | Declares the header of the HTML text. This tag is mandatory. |
| BODY | -- | Declares the body of the HTML text. This tag is mandatory. |
| A | HREF="URL" | Specifies a link-target URL. If a relative path or a URL beginning with mailto: is specified, the integrity of the operation is not guaranteed. The link specified here is displayed in the Guide window (HTML format). Clicking the link starts a Web browser and accesses the specified URL. |
| H1, H2, H3, H4, H5, H6 | -- | Specifies headers. |
| FONT | SIZE="*font-size*" | Specifies the font size. The permitted values are from 1 to 7. |
| | COLOR="*font-color*" | Specifies the font color. You can specify the following 16 colors: black, silver, gray, white, maroon, red, purple, fuchsia, green, lime, olive, yellow, navy, blue, teal, aqua If you specify any other font color, the operation is not guaranteed. |
| B | -- | Specifies boldface type. |
| I | -- | Specifies italics type. |
| HR | -- | Specifies an underscore. |
| BR | -- | Specifies a forced linefeed. |

Legend:

--: None

If any other HTML tags are used, the integrity of operations is not guaranteed.

[END]

Specifies the end tag for the guide information.

## Example definition

```
# JP1/IM-CS Guide Information File.

DESC_VERSION=1
[EV_GUIDE_1]
NUM=2
EV_TITLE=JP1/AJS2  Abnormal termination of job A
EV_COMP_1=T.MONNODEID:0000000A
EV_COMP_2=B.ID:00000111
EV_GUIDE=The job terminated abnormally. \nCheck whether an error
has occurred on the $E.C0 host.
[END]
[EV_GUIDE_2]
NUM=1
EV_COMP_1=B.ID:00004107
EV_GUIDE=The job terminated abnormally. \nCheck whether an error
has occurred on the $E.C0 host.\nAs an example of failure, a job
failed at host A due to a memory shortage in the past. Use the
vmstat command to check the available memory capacity.
[END]
```

## Settings file for the maximum number of status change events (evhist_warn_event_xxx.conf)

### Format

```
[logical-host-name\JP1SCOPE\BMS\EVHISTORY]
"EVHIST_WARN_EVENT"=dword:value
```

### File

evhist_warn_event_on.conf (used to enable monitoring of the maximum number of status change events)

evhist_warn_event_off.conf (used to disable monitoring of the maximum number of status change events)

### Storage directory

In Windows
*Scope-path*\conf\
*shared-folder*\jp1scope\conf\ *(logical host)*

In UNIX
/etc/opt/jp1scope/conf/
*shared-directory*/jp1scope/conf/ *(logical host)*

### Description

This file defines whether a JP1 event is to be issued when the number of status change events exceeds the maximum value (100 events).

When you have enabled this function, a JP1 event is issued when the number of status change events for a monitoring object exceeds 100. The JP1 event that is issued is a warning event whose event ID is 3FB1.

When JP1/IM - Manager is newly installed, this function is enabled as the default (the JP1 event is issued), but when JP1/IM - Manager is upgraded, the function is disabled (the JP1 event is not issued). Determine whether this function is to be enabled or disabled according to your operations.

### When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the jbssetcnf command.

## Information that is specified

[*logical-host-name*\JP1SCOPE\BMS\EVHISTORY]

Specifies the key name for the JP1/IM environment settings.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"EVHIST_WARN_EVENT"=dword:*value*

- The value of evhist_warn_event_on.conf is 00000001 (JP1 event with event ID 3FB1 is issued).

- The value of evhist_warn_event_off.conf is 00000000 (JP1 event with event ID 3FB1 is not issued).

Do not edit this parameter.

For details about the JP1 events, see *3.2.2 Details of JP1 events*.

## Settings file for the completed-action linkage function (action_complete_xxx.conf)

### Format

```
[logical-host-name\JP1SCOPE\BMS]
"ACTION_COMPLETE_MODE"=dword:value
```

### File

action_complete_on.conf (used to enable the completed-action linkage function)

action_complete_off.conf (used to disable the completed-action linkage function)

### Storage directory

In Windows
*Scope-path*\conf\
*shared-folder*\jp1scope\conf\ *(logical host)*

In UNIX
/etc/opt/jp1scope/conf/
*shared-directory*/jp1scope/conf/ *(logical host)*

### Description

This file defines whether the completed-action linkage function is to be enabled.

When the function is enabled, the status of a monitoring object changes on Central Scope according to the JP1 event action status at Central Console.

When JP1/IM - Manager is newly installed, this function is enabled as the default, but when JP1/IM - Manager is upgraded, the function is disabled.

Determine whether this function is to be enabled or disabled according to your operations.

### When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the jbssetcnf command.

### Information that is specified

[*logical-host-name*\JP1SCOPE\BMS]

408

Specifies the key name for the JP1/IM environment settings.

For *logical-host-name*, specify `JP1_DEFAULT` for the physical host and *logical-host-name* for a logical host.

`"ACTION_COMPLETE_MODE"=dword:`*value*

- The value of `action_complete_on.conf` is `00000001`.

- The value of `action_complete_off.conf` is `00000000`.

Do not edit this parameter.

# Definition file for automatic delete mode of status change event

## Format

```
[logical-host-name\JP1SCOPE\BMS\EVHISTORY]
"EVPROCESSED_MODE"=dword:value
```

## File

Use any file.

## Storage directory

In Windows

Any folder

In UNIX

Any directory

## Description

This definition file is used to enable the function that automatically deletes the status change events when a JP1 event's action status becomes **Processed**.

When JP1/IM - Manager is newly installed, this function is disabled as the default.

## When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the jbssetcnf command.

## Information that is specified

[logical-host-name\JP1SCOPE\BMS\EVHISTORY]

Specifies the key name for the JP1/IM environment settings.

For logical-host-name, specify JP1_DEFAULT for the physical host and logical-host-name for a logical host.

"EVPROCESSED_MODE"=dword:value

Specifies 1 to enable the function that automatically deletes status change events and 0 to disable the function.

410

# Definition file for monitoring object initialization mode

## Format

```
[logical-host-name\JP1SCOPE\BMS]
"AUTO_INITIALIZE_MODE"=dword:value
```

## File

Use any file.

## Storage directory

In Windows

Any folder

In UNIX

Any directory

## Description

This definition file is used to enable the function that automatically initializes monitoring objects when a specific JP1 event is received.

When JP1/IM - Manager is newly installed, this function is disabled as the default.

## When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the jbssetcnf command.

## Information that is specified

[*logical-host-name*\JP1SCOPE\BMS]

Specifies the key name for the JP1/IM environment settings.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"AUTO_INITIALIZE_MODE"=dword:*value*

Specifies 1 to enable the function that automatically initializes monitoring objects and 0 to disable the function.

411

## Automatic backup and recovery settings file for the monitoring object database (auto_dbbackup_xxx.conf)

### Format

```
[logical-host-name\JP1SCOPE\BMS]
"AUTO_DB_BACKUP_RECOVERY"=dword:value
```

### File

auto_dbbackup_on.conf (used to enable the backup and recovery functions for the monitoring object database)

auto_dbbackup_off.conf (used to disable the backup and recovery functions for the monitoring object database)

### Storage directory

In Windows
   *Scope-path*\conf\
   *shared-folder*\jp1scope\conf\ *(logical host)*

In UNIX
   /etc/opt/jp1scope/conf/
   *shared-directory*/jp1scope/conf/ *(logical host)*

### Description

This file defines whether to enable the function that protects the monitoring object database from corruption that may be caused by OS shutdown or cluster system switching during monitoring tree update processing (automatic backup and recovery functions for the monitoring object database).

If enabled, this function backs up the existing monitoring object database when the monitoring tree is updated, and performs recovery from the backup of the monitoring object database in the event of a failure (if update processing finishes without a failure occurring, the backup data is automatically deleted).

When JP1/IM - Manager is newly installed, this function is enabled as the default, but when JP1/IM - Manager is upgraded, the function is disabled. Determine whether the function is to be enabled or disabled according to your operations.

When you are operating in a cluster operation system, you must enable this function.

### When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted by executing the

jbssetcnf command.

## Information that is specified

[*logical-host-name*\JP1SCOPE\BMS]

Specifies the key name for the JP1/IM environment settings.

For *logical-host-name*, specify JP1_DEFAULT for the physical host and *logical-host-name* for a logical host.

"AUTO_DB_BACKUP_RECOVERY"=dword:*value*

- The value of auto_dbbackup_on.conf is 00000001.

- The value of auto_dbbackup_off.conf is 00000000.

Do not edit this parameter.

## Coding example

This example enables the automatic backup and recovery functions for the monitoring object database of JP1/IM - Manager on the HostA logical host:

```
[HostA\JP1SCOPE\BMS\JCSDB] "AUTO_DB_BACKUP_RECOVERY"=dword:0000
0001
```

# Definition file for object types

## Format

```
[comment]
[ObjectType]
definition-block  [comment]
[End]
[comment]
```

## File

*company-name_product-name_company-name_product-name_*obj.en (definition file for object types)

*company-name* can be changed to *series-name_product-name*. We recommend that you use the value specified for PRODUCT_NAME at the time of JP1 event issuance as the file name, with the forward slash (/) replaced by the underscore (_). Because hitachi is used for the default file name, use a name other than hitachi for *company-name*.

## Storage directory

In Windows
*Console-path*\conf\console\object_type\
*shared-folder*\jp1cons\conf\console\object_type\ *(logical host)*

In UNIX
/etc/opt/jp1cons/conf/console/object_type/
*shared-directory*/jp1cons/conf/console/object_type/ *(logical host)*

## Description

This file defines the object types and root object types that are displayed in **Object type** and **Root object type** in the windows of JP1/IM - View (such as the Severe Event Definitions window and the Event Acquisition Settings window).

If multiple files contain the same object type, the integrity of operations is not guaranteed.

## When the definitions are applied

The definition takes effect after JP1/IM - View is restarted.

## Information that is specified

[*comment*]

Specifies a comment as a character string that begins with a hash mark (#) and does not contain a linefeed code.

414

[ObjectType]

> Specify [ObjectType] and [End] as is, including the square brackets.

*definition-block* [*comment*]

> A definition block consists of an extended attribute value and a list display character string. The extended attribute value is a character string that is stored in the object type or root object type. The list display character string is a character string that is displayed in a list drop-down list.

[End]

> Specify [End] as is, including the square brackets.

When you define this information, note the following:

- The object type (extended attribute value) cannot contains spaces.

- For the list display character string, specify the extended attribute value itself.

## Example definition

The following shows an example of a definition file for object types:

```
[ObjectType]
# Extended attribute value,  List display character string
Comment
ACTION,         ACTION          // action
ACTIONFLOW,     ACTIONFLOW      // action flow
BATCHQUEUE,     BATCHQUEUE      // batch queue
JOB,            JOB             // job
JOBNET,         JOBNET          // jobnet
MEDIA,          MEDIA           // media
PRINTER,        PRINTER         // printer
PRINTJOB,       PRINTJOB        // print job
PRINTQUEUE,     PRINTQUEUE      // pipe queue
PROCESS,        PROCESS         // process
RESTORE,        RESTORE         // restore
[End]
```

# Definition file for executing applications

## Format

```
@file type="definition-file-type", version="definition-format-version";
@define-block type="application-execution-def";
id="application-execution-definition-identifier";
path="command-path";
@define-block-end;
```

## File

!JP1_CC_APP0.conf.model (model file for the definition file for executing applications)

## Storage directory

*View-path*\conf\appexecute\en\

## Description

This file defines the IDs and paths of executable files, such as applications that are started from the Event Console window.

JP1/IM provides the jcoappexecfcheck command, which checks the contents of the definition file for executing applications. For details about this command, see *1. Commands*.

## When the definitions are applied

The definition takes effect after JP1/IM - View is restarted.

## Information that is specified

@file type="application-execution-definition";

Declares that this is the definition file for executing applications. This statement is mandatory.

This statement must be specified on the first line of the file.

*Application execution definition block*

Defines the path of an executable file, such as an application that is started from the Event Console window, and assigns an ID for purposes of linkage from other definition files.

You can specify the following statements in this block:

- id statement

416

- `path` statement
- `description` statement

If any other statement is specified, an error is output but only the corresponding statement is ignored.

The following describes the statements.

`id="`*application-execution-definition-identifier*`";`

Specifies an identifier that is to be assigned to the command path that is specified in this block. This statement is mandatory. You can specify this statement only once in a block.

If the file to be analyzed contains multiple blocks with the same `id`, their priority is determined as follows and only the block that has the highest priority is effective:

1. Last block when the file names are sorted in ascending order

2. Last block in the file

All the other blocks are ignored.

The application execution definition identifier is a character string consisting of no more than 32 alphanumeric characters. This character string must be unique within the definition. To achieve uniqueness, observe the following naming convention:

*company-name_product-name*[*_function-name-(or-window-name)*]

This cannot be a character string that begins with `jco_` or the character string `default_browser` because they are reserved as application execution definition identifiers.

`path="`*command-path*`";`

Defines the path of the executable file that is to be associated with the application execution definition identifier specified in the `id` statement. This statement is mandatory. You can specify the `path` statement more than once in the same block. Express the executable file that is to be started as a full path. You can also use a substitute keyword discussed below to assemble a path from data such as the registry.

If you specify this statement more than once, the paths are searched in the order specified and the first path found is used.

In the `path` statement, you can specify an `.exe` or `.bat` file as the executable file.

The current directory is undefined during command execution. A command

that uses a relative path from the current directory cannot be specified. Execute such a command after you have executed the `cd` command by using a file such as a `.bat` file.

The search processing executes only when JP1/IM - View starts. Therefore, if you have installed an application to be started while JP1/IM - View is running, you must restart JP1/IM - View.

- Alternate string

  In the `path` statement, you can specify an alternate string that can be replaced during execution.

- Alternate keyword string

  If the specified definition contains an alternate keyword string, the character string is replaced according to the specified keyword. The format is as follows:

%*alternate-keyword*%

The following table lists the alternate keywords.

*Table 2-39:* List of alternate keywords

| Keyword | Substitute data |
|---|---|
| JCO_JP1USER | JP1 user who logged in to JP1/IM - Manager |
| JCO_INSTALLPATH | Name of the JP1/IM - View installation folder |

- Alternate registry string

  If the specified definition contains an alternate registry string, the value is acquired from the specified registry to replace the character string. The format of an alternate registry string is as follows:

[\\*registry-key*\\*registry-key*\\ . . . \\*registry-value*]

In an alternate registry string, you can specify the registry-only substitute keyword `%UPPER%`. If you use `%UPPER%`, the character string for the key name is compared within the same hierarchy in the registry key. The purpose of this keyword is to always acquire the most recent version when the key is classified by the version in the registry key.

You can specify `%UPPER%` only once in a registry string. The following example specifies the registry of JP1/SAMPLE using `%UPPER%`:

```
[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\SAMPLE\%UPPER%\PA
THNAME\PATH00]
```

In this example, `%UPPER%` is replaced with the most recent version, so that the most recent executable file is always obtained.

For example, if there are the following two registry keys, the value is acquired from the registry `0700` because `0700` is greater than `0671`:

```
[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\SAMPLE\0671\PATHN
AME\PATH00]
[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\SAMPLE\0700\PATHN
AME\PATH00]
```

description="*description-of-application-execution*";

Adds a description to the application execution definition in the block. You can specify this statement only once in a block.

There is no limit to the number of characters, but we recommend that you specify no more than 50 characters.

The following shows an example of an application execution definition block:
```
@define-block type="application-execution-def";
id="HITACHI_JP1_SAMPLE";
path="C:\Program Files\HITACHI\JP1\bin\sample.exe";
description="Hitachi Sample Program";
@define-block-end;
```

## Example definition

The following shows an example of a definition file for executing applications:

```
@file type="application-execution-definition", version="0300";
#----------------------------------------
@define-block type="application-execution-def";
id="jco_notepad";
path="C:\winnt40\system32\notepad.exe";
@define-block-end;
#----------------------------------------
@define-block type="application-execution-def";
id="jco_dmp";
path="[\HKEY_LOCAL_MACHINE\SOFTWARE\HITACHI\NETM/DM/P\0521/
     A\PathName\Path00]\bin\DMPSTS.exe";
@define-block-end;
```

## Definition file for on memory mode of status change condition

### Format

```
[logical-host-name\JP1SCOPE\BMS]
"EVENT_MATCH_MODE"=dword:value
```

### File

> Use any file.

### Storage directory

> In Windows
>
>> Any folder
>
> In UNIX
>
>> Any directory

### Description

> This definition file is used to enable the memory-resident status change condition function.
>
> When JP1/IM - Manager is newly installed, the default is that this function is disabled.

### When the definitions are applied

> The definition takes effect after JP1/IM - Manager is restarted by executing the `jbssetcnf` command.

### Information that is specified

> [*logical-host-name*\JP1SCOPE\BMS]
>
>> Specifies the key name for the JP1/IM environment settings.
>>
>> For *logical-host-name*, specify `JP1_DEFAULT` for the physical host and *logical-host-name* for a logical host.
>
> "EVENT_MATCH_MODE"=dword:*value*
>
>> To enable the memory-resident status change condition function, specify `1`; to disable the function, specify `0`.

420

# Severity changing definition file (jcochsev.conf)

## Format

```
DESC_VERSION=version-information

#severity-changing-definition-parameter

def definition-name-1
    cnd
        event-condition
    end-cnd
    sev event-level
end-def

def definition-name-2
    cnd
        event-condition
    end-cnd
    sev event-level
end-def
```

## File

jcochsev.conf (severity changing definition file)

jcochsev.conf.model (model file for the severity changing definition file)

## Storage directory

In Windows
*Console-path*\conf\chsev\
*shared-folder*\jp1cons\conf\chsev\ *(logical host)*

In UNIX
/etc/opt/jp1cons/conf/chsev/
*shared-directory*/jp1cons/conf/chsev/ *(logical host)*

## Description

This file defines conditions for changing the event level of JP1 events and the new event level. The event severity changing function changes the event level of a JP1 event if it satisfies an event condition defined in this file. Specify this file using the language encoding that is used by JP1/IM - Manager.

The maximum size of this file is 17 megabytes (17,825,792 bytes).

There are two types of parameters in the severity changing definition file:

421

- Severity changing definition file version

  Defines the format version of the severity changing definition file.

- Severity changing definition parameter

  Defines a condition for JP1 events whose event level is to be changed and the new event level.

## When the definitions are applied

The definition takes effect when the event severity changing function has been enabled and one of the following occurs:

- JP1/IM - Manager is started.

- The `jco_spmd_reload` command is executed.

## Information that is specified (severity changing definition file version)

DESC_VERSION

Specifies the file version that determines the format of this severity changing definition file. The file version of severity changing definition file version 09-00 is 1. If DESC_VERSION is omitted, 1 is assumed as the file version.

Specify DESC_VERSION on the first line of the definition file (the first line in the file excluding any null lines and comment lines). If there is no file version on the first line, the system assumes 1 as the file version.

## Information that is specified (severity changing definition parameter)

def to end-def (definition block)

These are the start and end parameters for a severity changing definition. The block from def to end-def can be omitted, in which case the system assumes that the event level is not to be changed for any JP1 events. After def, specify the names of severity changing definitions. If you specify def...*definition-1*...*definition-2*..., then *definition-1*, *definition-2*, ... are treated as the definition names.

For a definition name, specify a character string of from 1 to 50 bytes. Each definition name must be unique within the severity changing definition file. The permitted characters are all characters other than the control characters (from 0x00 to 0x1F and 0x7F to 0x9F).

cnd to end-cnd (event condition block)

These are the start and end parameters for the block that specifies a condition for the JP1 events whose event level is to be changed. You must specify one event condition block in a definition block. The event condition block cannot be omitted. If a received JP1 event satisfies multiple event conditions, the definition

block closest to the beginning of the severity changing definition file is effective. Tabs and spaces before and after the `cnd` and `end-cnd` parameters are ignored.

*event-condition*

Specifies a condition for the JP1 events whose event level is to be changed. You can specify from 1 to 256 event conditions per event condition block. When multiple event conditions are specified, it is assumed that they are connected with the AND condition. Specify an event condition in the following format:

*attribute-name comparison-keyword operand* [ *operand*] `...`

Note that a line consisting of only spaces or tabs is ignored during processing.

*attribute-name*

Specifies the name of the attribute that you want to compare. To specify a basic attribute, place `B.` immediately before the name to specify an extended attribute (common information or user-specific information), place `E.` immediately before the name. The attribute names are case sensitive.

The following table lists and describes the combinations of attribute names and comparison keywords and the operands that can be specified.

*Table 2-40:* Combinations of attribute names and comparison keywords and the operands that can be specified

| No. | Item | Attribute name | Comparison keyword | Operand |
|-----|------|----------------|--------------------|---------|
| 1 | Event ID | `B.ID` | • `Match`<br>• `Does not match` | A maximum of 100 event IDs can be specified. Specify event IDs in hexadecimal notation. Event IDs are not case sensitive. The permitted range is from `0` to `7FFFFFFF`. |
| 2 | Reason for registration | `B.REASON` | • `Match`<br>• `Does not match` | A maximum of 100 reasons for registration can be specified. |
| 3 | Source process ID | `B.PROCESSID` | • `Match`<br>• `Does not match` | A maximum of 100 source process IDs can be specified. The permitted value range is from -2,147,483,648 to 2,147,483,647. |

| No. | Item | Attribute name | Comparison keyword | Operand |
|---|---|---|---|---|
| 4 | Source user ID | B.USERID | • Match<br>• Does not match | A maximum of 100 source user IDs can be specified.<br>The permitted value range is from -2,147,483,648 to 2,147,483,647. |
| 5 | Source group ID | B.GROUPID | • Match<br>• Does not match | A maximum of 100 source group IDs can be specified.<br>The permitted value range is from -2,147,483,648 to 2,147,483,647. |
| 6 | Source user name | B.USERNAME | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 source user names can be specified. However, if a regular expression is used, only one source user name is allowed. |
| 7 | Source group name | B.GROUPNAME | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 source group names can be specified. However, if a regular expression is used, only one source group name is allowed. |
| 8 | Event-issuing server name (source host) | B.SOURCESERVER | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 event-issuing server names can be specified. However, if a regular expression is used, only one event-issuing server name is allowed. |

| No. | Item | Attribute name | Comparison keyword | Operand |
|---|---|---|---|---|
| 9 | Target event server name | `B.DESTSERVER` | • `First characters`<br>• `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `Regular expression` | A maximum of 100 target event server names can be specified. However, if a regular expression is used, only one target event server name is allowed. |
| 10 | Message | `B.MESSAGE` | • `First characters`<br>• `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `Regular expression` | A maximum of 100 messages can be specified. However, if a regular expression is used, only one message is allowed. |
| 11 | Severity | `E.SEVERITY` | • `Match` | Multiple severity values can be specified. However, if a regular expression is used, only one severity value is allowed. The following are the specifiable values: `Emergency`, `Alert`, `Critical`, `Error`, `Warning`, `Notice`, `Information`, or `Debug`. |
| 12 | User name | `E.USER_NAME` | • `First characters`<br>• `Match`<br>• `Does not match`<br>• `Is contained`<br>• `Is not contained`<br>• `Regular expression` | A maximum of 100 user names can be specified. However, if a regular expression is used, only one user name is allowed. |

| No. | Item | Attribute name | Comparison keyword | Operand |
|-----|------|----------------|--------------------|---------|
| 13 | Product name | E.PRODUCT_NAME | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 product names can be specified. However, if a regular expression is used, only one product name is allowed. |
| 14 | Object type | E.OBJECT_TYPE | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 object types can be specified. However, if a regular expression is used, only one object type is allowed. |
| 15 | Object name | E.OBJECT_NAME | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 object names can be specified. However, if a regular expression is used, only one object name is allowed. |
| 16 | Root object type | E.ROOT_OBJECT_TYPE | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | A maximum of 100 root object types can be specified. However, if a regular expression is used, only one root object type is allowed. |

| No. | Item | Attribute name | Comparison keyword | Operand |
|---|---|---|---|---|
| 17 | Root object name | E.ROOT_OBJECT_NAME | <ul><li>First characters</li><li>Match</li><li>Does not match</li><li>Is contained</li><li>Is not contained</li><li>Regular expression</li></ul> | A maximum of 100 root object names can be specified. However, if a regular expression is used, only one root object name is allowed. |
| 18 | Object ID | E.OBJECT_ID | <ul><li>First characters</li><li>Match</li><li>Does not match</li><li>Is contained</li><li>Is not contained</li><li>Regular expression</li></ul> | A maximum of 100 object IDs can be specified. However, if a regular expression is used, only one object ID is allowed. |
| 19 | Occurrence | E.OCCURRENCE | <ul><li>First characters</li><li>Match</li><li>Does not match</li><li>Is contained</li><li>Is not contained</li><li>Regular expression</li></ul> | A maximum of 100 occurrences can be specified. However, if a regular expression is used, only one occurrence is allowed. |
| 20 | Termination code | E.RESULT_CODE | <ul><li>First characters</li><li>Match</li><li>Does not match</li><li>Is contained</li><li>Is not contained</li><li>Regular expression</li></ul> | A maximum of 100 termination codes can be specified. However, if a regular expression is used, only one termination code is allowed. |

| No. | Item | Attribute name | Comparison keyword | Operand |
|---|---|---|---|---|
| 21 | Program-specific extended attribute | E.*xxxxxxx*[#] | • First characters<br>• Match<br>• Does not match<br>• Is contained<br>• Is not contained<br>• Regular expression | For the attribute name, you can specify a name with a maximum length of 32 bytes that begins with an upper-case letter and consists of upper-case letters, numeric characters, and the underscore (_).<br>A maximum of 100 extended attributes can be specified. However, if a regular expression is used, only one extended attribute is allowed. |

#

You can also specify a JP1 product-specific extended attribute. For example, the program-specific extended attribute for the JP1/AJS job execution host is E.C0. For details about the product-specific extended attributes, consult the documentation for the products that issue JP1 events.

*comparison-keyword*

Specifies one of BEGIN (begins with), IN (matches), NOTIN (does not match), SUBSTR (includes), NOTSUBSTR (does not include), or REGEX (regular expression) as the comparison keyword. The comparison keyword is case sensitive.

*operand*

Specifies a character string as the value that is to be compared with the attribute value by the specified comparison keyword. Operands are case sensitive.

Separate multiple operands with one or more consecutive spaces or a tab. The OR condition is applied to the specified operands. Note that if a regular expression is specified, only one operand can be specified.

To specify a space, a tab, linefeed code (CR or LF), or % as part of an operand, specify as follows:

| No. | Value to be set | How to specify |
|---|---|---|
| 1 | Tab (0x09) | %09 |
| 2 | Space (0x20) | %20 |
| 3 | % (0x25) | %25 |

| No. | Value to be set | How to specify |
|:---:|---|---|
| 4 | Linefeed code LF (`0x0a`) | `%0a` |
| 5 | Linefeed code CR (`0x0d`) | `%0d` |

During maximum value checking for the definition format, `%20` and `%25` are each treated as a single character. The following shows an example of defining ID matches `100` and `200`, which selects multiple operands:

`B.ID`△`IN`△`100`△`200`

Legend:

△ : Space (`0x20`)

You can specify a maximum of 4,096 bytes of operands per event condition and per event condition block (total length in bytes of all operands that are specified in the event condition block).

sev

Specifies the new event level after the change.

You must specify one `sev` parameter in a definition block. This parameter cannot be omitted.

You can specify in the `sev` parameter `Emergency`, `Alert`, `Critical`, `Error`, `Warning`, `Notice`, `Information`, or `Debug`.

#*comment-statement*

A line beginning with a hash mark (#) is treated as a comment.

## Example definition

Change the event level to `Emergency` when the event ID is `100` or `200`, the existing event level is `Warning`, and the source host is `hostA`, `hostB`, or `hostC`:

```
DESC_VERSION=1
def Event level change 1
    cnd
        B.ID IN 100 200
        E.SEVERITY IN Warning
        B.SOURCESERVER IN hostA hostB hostC
    end-cnd
    sev Emergency
end-def
```

## Communication environment definition file (view.conf.update)

### Format

```
[JP1_DEFAULT\JP1CONSOLEVIEW]
"COM_SO_TIMEOUT"=dword:hexadecimal-value
"COM_RMI_TIMEOUT"=dword:hexadecimal-value
```

### File

view.conf.update (model file for the communication environment definition file)

### Storage directory

*View-path*\default\

### Description

This file defines timeout periods for communication between JP1/IM - View and JP1/IM - Manager (JP1/IM - Central Console).

When a low-speed line is used in the network or when the viewer's workload is high, timeouts might occur during the viewer's communication processing, resulting in communication errors. You can prevent such communication errors by modifying timeout periods. If you set a timeout period, you must also specify the same setting at the JP1/IM - Manager (JP1/IM - Central Console) that is connected.

If you change any value in this definition file, you must also change the value in the communication environment definition file for JP1/IM - Manager (JP1/IM - Central Console).

The required definition is provided as a model file. To change the settings, copy the model file and then edit the copy.

### When the definitions are applied

The definitions take effect after the jbssetcnf command is executed and JP1/IM - View is restarted.

### Information that is specified

[JP1_DEFAULT\JP1CONSOLEVIEW]

Specifies the key name for the JP1/IM - View environment settings.

In JP1/IM - View, this parameter is fixed.

"COM_SO_TIMEOUT"=dword:*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the amount of time to wait for

the arrival of reception data (socket timeout value). The default is `dword:000009C4` (2,500 milliseconds).

In an environment in which a low-speed line is used or event traffic is heavy, specify a larger value.

`"COM_RMI_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the timeout period for communication processing during the following operations or settings:

- Login
- Logout
- Manual and automatic refreshing of the Event Console window
- Changing the event action status
- Deletion of server events
- Event search
- User environment setting
- Severe event setting
- Automated action setting
- Filter setting
- Command execution
- Function status notification recovery operation

The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0000EA60` (60,000 milliseconds).

## Coding example

```
[JP1_DEFAULT\JP1CONSOLEVIEW]
"COM_SO_TIMEOUT"=dword:000009C4
"COM_RMI_TIMEOUT"=dword:0000EA60
```

## Communication environment definition file (tree_view.conf.update)

### Format

```
[JP1_DEFAULT\JP1CONSOLEVIEW]
"SOV_LOGIN_TIMEOUT"=dword:hexadecimal-value
"SOV_GETTREE_TIMEOUT"=dword:hexadecimal-value
"SOV_SETTREE_TIMEOUT"=dword:hexadecimal-value
"SOV_MAKETREE_TIMEOUT"=dword:hexadecimal-value
"SOV_GETMAP_TIMEOUT"=dword:hexadecimal-value
"SOV_SETMAP_TIMEOUT"=dword:hexadecimal-value
"SOV_GETPROFILE_TIMEOUT"=dword:hexadecimal-value
"SOV_SETPROFILE_TIMEOUT"=dword:hexadecimal-value
"SOV_DEF_TIMEOUT"=dword:hexadecimal-value
```

### File

tree_view.conf.update (model file for the communication environment definition file)

### Storage directory

*View-path*\default\

### Description

This file defines timeout periods for communication between JP1/IM - View and JP1/IM - Manager (JP1/IM - Central Scope).

When a low-speed line is used in the network or when the viewer's workload is high, timeouts might occur during the viewer's communication processing, resulting in communication errors. You can prevent such communication errors by modifying timeout periods.

The required definition is provided as a model file. To change the settings, copy the model file and then edit the copy.

### When the definitions are applied

The definition takes effect after the jbssetcnf command is executed and JP1/IM - View is restarted.

### Information that is specified

[JP1_DEFAULT\JP1CONSOLEVIEW]

Specifies the key name for the JP1/IM - View environment settings.

In JP1/IM - View, this parameter is fixed.

`"SOV_LOGIN_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for login and logout processing. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0002BF20` (180,000 milliseconds).

`"SOV_GETTREE_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for acquisition of the status of monitoring objects, updating of the monitoring tree, and performance of display processing for the Monitoring Tree (Editing) window. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0036EE80` (3,600,000 milliseconds).

`"SOV_SETTREE_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for changing of the status of monitoring objects, setting of monitoring targets, and performance of tree update processing. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0036EE80` (3,600,000 milliseconds).

`"SOV_MAKETREE_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for performance of automatic generation of the monitoring tree. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0036EE80` (3,600,000 milliseconds).

`"SOV_GETMAP_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for performance of display processing for the visual monitoring list and for the Visual Monitoring window. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0002BF20` (180,000 milliseconds).

`"SOV_SETMAP_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for creation, deletion, and copying of visual monitoring maps, and for performance of visual monitoring update processing. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0002BF20` (180,000 milliseconds).

`"SOV_GETPROFILE_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for acquisition of user environment settings and system environment settings for the

Monitoring Tree window. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0002BF20` (180,000 milliseconds).

`"SOV_SETPROFILE_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for performance of reflection processing of user environment settings and system environment settings for the Monitoring Tree window. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:0002BF20` (180,000 milliseconds).

`"SOV_DEF_TIMEOUT"=dword:`*hexadecimal-value*

Specifies in milliseconds as a hexadecimal value the server response wait time for acquisition and setting of monitoring object properties, acquisition of a list of login users, and acquisition of automatically generated configuration selections. The permitted value range is from `0000EA60` to `0036EE80` (from 60,000 to 3,600,000 milliseconds), and the default is `dword:001B7740` (1,800,000 milliseconds).

## Example definition

```
[JP1_DEFAULT\JP1CONSOLEVIEW]
"SOV_LOGIN_TIMEOUT"=dword:0002BF20
"SOV_GETTREE_TIMEOUT"=dword:0002BF20
"SOV_SETTREE_TIMEOUT"=dword:0002BF20
"SOV_MAKETREE_TIMEOUT"=dword:0036EE80
"SOV_GETMAP_TIMEOUT"=dword:0002BF20
"SOV_SETMAP_TIMEOUT"=dword:0002BF20
"SOV_GETPROFILE_TIMEOUT"=dword:0002BF20
"SOV_SETPROFILE_TIMEOUT"=dword:0002BF20
"SOV_DEF_TIMEOUT"=dword:0002BF20
```

## IM-View settings file (tuning.conf)

### Format

```
LOGIN_HISTORY_MAX=number-of-connectes-host-log-entries
MENU_AUTO_START={ON | OFF}
ACTIONLIST_AUTO_START={ON | OFF}
WWW_BROWSER_PATH=start-path-of-browser
CLIPBOARD_OUTPUT={ON | OFF}
```

### File

tuning.conf (IM-View settings file)

tuning.conf.model (model file for the IM-View settings file)

### Storage directory

*View-path*\conf\

### Description

This file defines the operation of JP1/IM - View, such as the number of connected-host log entries in the Login window, the operation when the Event Console window is displayed, and whether data can be copied to the clipboard.

Specify each item in the tuning.conf file in the format *parameter-name=value*. The following lines are ignored in the definition file:

- A line consisting only of spaces

- A line beginning with a hash mark (#) or a hash mark preceded by any number of spaces (comment line)

### Information that is specified

LOGIN_HISTORY_MAX=*number-of-connected-host-log-entries*

Specifies the number of entries (hosts to which connection has been made) that are to be displayed in the **Host to connect** list box in the login window.

The permitted value range is from 0 to 20. If 0 is specified, no history of connected hosts is displayed. If this parameter is omitted, 5 is assumed. The default is 5.

MENU_AUTO_START={ON | OFF}

Specifies whether the Tool Launcher is to be started when the Event Console window is displayed. If you specify ON, the Tool Launcher window is opened when the Event Console window is displayed. If you specify OFF, the Tool

435

Launcher window is not opened when the Event Console window is displayed. If this parameter is omitted, OFF is assumed. The default is OFF.

ACTIONLIST_AUTO_START={ON | OFF}

Specifies whether the List of Action Results window is to be displayed when the Event Console window is displayed. If you specify ON, the List of Action Results window is opened when the Event Console window is displayed. If you specify OFF, the List of Action Results window is not opened when the Event Console window is displayed. If this parameter is omitted, OFF is assumed. The default is OFF.

WWW_BROWSER_PATH=*start-path-of-browser*

Specifies the start path of the Web browser that is to be used to open the Tool Launcher and monitor windows. The default is that this parameter is not specified. If you specify this parameter, you must add a parameter in the definition file.

When you specify a path, express \ as \\. Do not enclose the start path name in double-quotation marks ("). Make sure that the specified Web browser is supported by the Tool Launcher and the application that is started when monitor windows are opened.

If this parameter is omitted, the Web browser associated with files of the .html file type on the host is used. Specify this parameter in order to use a Web browser that is not associated with files of the .html file type (including a different version of the same Web browser).

CLIPBOARD_OUTPUT={ON | OFF}

Specifies whether the function for copying JP1 event information, action results, and command execution results to the clipboard is to be enabled.

Specifying ON enables the function for copying to the clipboard. When it is enabled, you use this function by selecting the information in the JP1/IM - View window that you want to copy, and then pressing the **Ctrl** and **C** keys to copy it in CSV format to the clipboard. In the Event Console window, **Copy** is displayed in the **Edit** menu.

Specifying OFF disables the function for copying to the clipboard.

If this parameter is omitted, ON is assumed.

## Example definition

```
#
*************************************************************
# * JP1/Integrated Management - View   Tuning definition file *
#
*************************************************************
```

```
# Input history maximum number in connected hostname input field
on log in screen
LOGIN_HISTORY_MAX=5
# Tool Launcher is automatically started at log in whether (ON)
(OFF).
MENU_AUTO_START=OFF
# List of Action Result is automatically started at log in
whether (ON) (OFF).
  ACTIONLIST_AUTO_START=OFFCLIPBOARD_OUTPUT=ON
```

## Definition file for opening monitor windows

### Format

```
@encode  character-encoding
DESC_VERSION=0300
key-definition
subkey-definition
association-definition
call-interface-definition
```

### File

*company-name_product-name*_mon_en.conf

*company-name_series-name_product-name*_mon_en.conf

### Storage directory

In Windows
*Console-path*\conf\console\monitor\
*shared-folder*\jp1cons\conf\console\monitor\ *(logical host)*

In UNIX
/etc/opt/jp1cons/conf/console/monitor/
*shared-directory*/jp1cons/conf/console/monitor/ *(logical host)*

### Description

This definition file is used to define settings for calling monitor windows (such as a monitor window at an event source) from the Event Console window. Use this file to create a key from information such as the event ID and attributes, and a command line parameter from the event attributes.

In this definition file, hitachi cannot be specified in *company-name*.

JP1/IM provides the jcomonitorfcheck command for checking the contents of the definition file for opening monitor windows. For details about this command, see *1. Commands*.

### When the definitions are applied

The definition takes effect after JP1/IM - Manager is restarted.

### Information that is specified

@encode

Specifies the character encoding that is to be used in the definition file for opening monitor windows. This item is optional.

438

The specifiable character encoding depends on the OS, as shown below.

*Table  2-41:*  Specifiable character encoding

| Character encoding | OS | |
|---|---|---|
| | Windows Server 2003, Windows Server 2008 | Solaris, AIX |
| C | Y | Y |

Legend:

Y: Can be specified

N: Cannot be specified

An error is output in the following cases:

- A character encoding other then C is specified.

- The definition file does not begin with @encode.

- @encode is not followed by a character encoding specification.

DESC_VERSION=0300

This is the table version record.

*key-definition*

Defines a fixed key in the event attributes that is to be used when a monitor window is opened. The key consists of three items:

- Event ID

- Product name

- Version

The combination of these attributes defines a link to operations and subkeys.

Format

```
DEF_KEY PRODUCT_NAME="product-name"
        EVENT_ID=event-ID
        [VERSION=version|ALL]
        {SUBKEY=subkey
       |INTERFACE=interface-name}
```

Arguments

- PRODUCT_NAME="*product-name*"

439

Specifies a product name as a character string, such as /HITACHI/
JP1/AJS. This value must be the same as a value that is set in a
PRODUCT_NAME extended attribute.

- EVENT_ID=*event-ID*

  Specifies only the base part of an event identifier, expressed as eight
  hexadecimal characters. The extended part is ignored. If you need to
  include the extended part set for a JP1/SES event, use a subkey.

- VERSION=*version*

  Specifies a version. The version specified in this argument is compared
  with the ACTION_VERSION JP1 event extended attribute. The version
  can be expressed in numeric characters (from 0 to 9), alphabetic
  characters (A to Z), the forward slash (/), and the hyphen (-). The
  alphabetic characters are not case sensitive.

  Specify a single version as a string of no more than 8 bytes. To specify
  a range of versions, separate the start version from the end version with
  a hyphen (-). In this case, there must be at least one space preceding and
  following the hyphen.

  The version specified here cannot duplicate any version specified in any
  other key definition.

- SUBKEY=*subkey*

  Specifies the name of a subkey. This parameter and the INTERFACE
  parameter are mutually exclusive.

- INTERFACE=*interface-name*

  Specifies an interface name. For the defined key, specify only one
  interface that is to be used when the monitor window is opened. This
  parameter and the SUBKEY parameter are mutually exclusive.

Notes:

- The versions are compared in ascending order. If the start version is
  greater than the end version, that key definition is ignored even though
  no error is issued.

- The value specified in PRODUCT_NAME must be the same as the value
  specified in a PRODUCT_NAME JP1 event extended attribute.

*subkey-definition*

When the monitor window is opened, the subkey definition is linked from the
fixed key and registers the event attributes as the key.

Format

```
DEF_SUBKEY
NAME=subkey-name
        KEYS=attribute-name-1 [,
attribute-name-2[,attribute-name-3[,attribute-name-4]]]
```

Arguments

- NAME=*subkey-name*

  Specifies a name for the subkey, expressed using from 1 to 16 alphanumeric characters; no spaces or control characters can be used. This name is not case sensitive.

- KEYS=*attribute-name-1* [,*attribute-name-2* [,*attribute-name-3* [,*attribute-name-4*]]]

  Specifies attribute names. The following table shows the specification formats of the attribute names.

*Table  2-42:*  Specification formats of the attribute names

| Specification format | Value format | Description |
|---|---|---|
| B.ARRIVEDTIME | 13-digit decimal character string | Arrived time (time in milliseconds since UTC 1970-01-01 at 00:00:00) |
| B.DESTSERVER | Character string | Target event server name |
| B.GROUPNAME | Character string | Source group name |
| B.IDBASE | 8 hexadecimal characters | Base part of the event ID |
| B.IDEXT | 8 hexadecimal characters | Extended part of the event ID |
| B.PROCESSID | Decimal character string | Source process ID |
| B.SEQNO | Decimal character string | Sequence number in the database |
| B.SOURCESEQNO | Decimal character string | Sequence number by source |
| B.SOURCESERVER | Character string | Event-issuing server name |
| B.TIME | 13-digit decimal character string | Registered time (time in milliseconds since UTC 1970-01-01 at 00:00:00) |
| B.USERNAME | Character string | Source user name |
| B.MESSAGE | Character string | Message |
| E.*extended-attribute-name* | Character string | Extended attribute |

*association-definition*

Defines the association between subkey values and the interface.

Format

```
DEF_IF_RELATION
SUBKEY_NAME=subkey-name
        {  VALUE1="attribute-value-1"[[
VALUE2="attribute-value-2"]...]
        |KEY_DEFAULT  }
        IF_NAME=interface-name
```

Arguments

- SUBKEY_NAME=*subkey-name*

  Specifies the name of the subkey. Express the name using from 1 to 16 alphanumeric characters; no spaces or control characters can be used. This name is not case sensitive.

- VALUE*n*="*attribute-value*"

  Specifies an attribute value and its sort order. Specify for *n* an integer in the range from 1 to 4 representing the sort order among the attributes specified in the KEYS parameter in the subkey definition. The key values must match exactly. A regular expression cannot be used for the value. For a list of the specifiable attributes and their specification formats, see the explanation of *subkey-definition*.

  If any of the attributes, such as VALUE1, VALUE2, . . ., does not match, the interface specified in KEY_DEFAULT is used for the corresponding JP1 event.

- KEY_DEFAULT

  Specify this argument instead of VALUE1, VALUE2, . . ., in order to create an association with the interface when there is not an exact match with the values specified in VALUE1, VALUE2, . . . .

- IF_NAME=*interface-name*

  Specifies the name of the interface that is to be called when the subkey values match. Express the interface name using from 1 to 16 alphanumeric characters; no spaces or control characters can be used. This name is not case sensitive.

*call-interface-definition*

Defines the interface to be used when a monitor window is opened.

442

Format

```
DEF_MTR_CALL
        NAME=interface-name
        EXEC_ID=application-execution-definition-identifier
        PATH="command-arguments"
        [PARAM=attribute-name-1[,attribute-name-2...]]
```

Arguments

- NAME=*interface-name*

  Specifies a name for the interface. Express the name using from 1 to 16 alphanumeric characters; no spaces or control characters can be used. This name is not case sensitive.

- EXEC_ID=*application-execution-definition-identifier*

  Specifies the identifier for an application execution definition. You must specify an identifier defined in the definition file for executing applications on the viewer.

  Note that a character string beginning with jco_ cannot be used because it is reserved as the application execution definition identifier.

- PATH="*command-arguments*"

  Specifies command arguments that are to be passed to the executable file specified in EXEC_ID. The command line is formed by the name of the executable file specified in EXEC_ID and the arguments specified here. For example, you would specify arg1 and arg2 in the PATH parameter to form the following command line:

  `"app.exe arg1 arg2"`

  You can also specify in the PATH parameter reserved keywords that will be replaced with values from the viewer's operating environment attributes and event attributes. The following lists and describes the specifiable substitute keywords.

*Table 2-43:* Specifiable substitute keywords

| Keyword | Substituted value |
|---------|-------------------|
| %JCO_JP1USER% | Central Console's login user name |
| %JCO_INSTALLPATH% | Name of the viewer installation folder |
| %IM_EVC_PARAMETER_*n*% | Event attribute value specified in PARAM (*n*: integer of 1 or greater) |

| Keyword | Substituted value |
|---|---|
| `%IM_EVC_LANGUAGE%` | Language environment `English` |

- PARAM=*attribute-name-1* [,*attribute-name-2*...]

Specifies the names of event attributes whose values are to be set. Sequential numbers that begin with 1 are assigned to the attribute names. This sequence corresponds to *n* in the substitute keywords.

Separate multiple event attributes with the comma, as shown in the example below:

`B.EXTID,E.A0`

You can specify some of the basic attributes and extended attributes. For details about the specifiable attributes and their specification formats, see the explanation of *subkey-definition*.

## Example definition

This example opens a monitor window from the JP1 event that traps the Windows event log:

Note:

In this example, a line number is assigned at the beginning of each line for explanatory purposes.

```
1  DESC_VERSION=0300
2  #/HITACHI/JP1/NTEVENT_LOGTRAP 0600 TO
3  # Operating version
4  # 0600 FROM NT VERSION JP1/NTEVENT_LOGTRAP 0600 TO
5  DEF_KEY PRODUCT_NAME="/HITACHI/JP1/NTEVENT_LOGTRAP/NETMDM" EVENT_ID=00003A71 SUBKEY=SAMPLE
6  DEF_SUBKEY NAME=SAMPLE KEYS=E.A5
7  DEF_IF_RELATION SUBKEY_NAME=SAMPLE VALUE="8010" IF_NAME=NETM_DM
8  DEF_MTR_CALL NAME=NETM_DM EXEC_ID=HITACHI_NETM_DM PATH="netmdm_argument"
```

Line 1

`DESC_VERSION=0300` means that the description format version of this file is `0300`.

Lines 2 to 4

These are comment lines. We recommend that you include the scope of the operating version.

Line 5

This is a key definition record. It means that if the product name is `/HITACHI/`

444

JP1/NTEVENT_LOGTRAP and the event ID is 00003A71, then the subkey SAMPLE is used to determine which monitor window is opened.

Line 6

This is a subkey definition record. It declares that the extended attributes PRODUCT_NAME and A5 (Windows event log ID) are used with the subkey name SAMPLE.

Line 7

This is an association definition record. It means that if the value of subkey E.A5 matches 8010, the interface NETM_DM is used to display the monitor window.

Line 8

This is a call interface definition record. It means that the interface name is NETM_DM and the argument netmdm_argument is passed to the command whose application execution definition identifier is HITACHI_NETM_DM, which is then executed.

# Web page call definition file (hitachi_jp1_product-name.html)

## Format

```
<HTML>
<HEAD>
<META HTTP-EQUIV="refresh" CONTENT="0;URL=URL-of-other-product's-web-page">
</HEAD>
</HTML>
```

## File

hitachi_jp1_*product-name*.html (Web page call definition file)

hitachi_jp1_*product-name*.html.model (model file for the Web page call definition file)

## Storage directory

*View-path*\conf\webdata\en\

## Description

This file is used for calling another product's Web page from the Tool Launcher.

When another product's Web page is to be called from the Tool Launcher, the Web page call definition file is referenced first and then its URL defined in this file is accessed. If you plan to call some other product's web page from the Tool Launcher, you must set its URL by editing this file as appropriate to your environment.

If you attempt to display a Web page from the Tool Launcher without having set its URL, a page describing the setting method is displayed.

*List of Web page call definition files*

JP1/IM provides the definition files listed in the table below.

*Table 2-44:* List of Web page call definition files that correspond to item names in the Tool Launcher window

| Item in the Tool Launcher window | | | Web page call definition file name | Product name |
|---|---|---|---|---|
| Folder name | Subfolder name | Function name | | |
| Network Management | -- | Network Node Manager | hitachi_jp1_cm2.html | HP NNM Version 7.5 or earlier |

446

| Item in the Tool Launcher window | | | Web page call definition file name | Product name |
|---|---|---|---|---|
| **Folder name** | **Subfolder name** | **Function name** | | |
| `Inventory/ Software Distributi on` | -- | `Integrated Asset Management` | `hitachi_jp1_assetinfo mationmanager.html` | JP1/Asset Information Manager |
| | -- | `Inventory/ Software Distribution`[#] | `hitachi_jp1_netmdm.ht ml` | JP1/Software Distribution Manager |

Legend:

--: None

#: The Windows Vista and Windows Server 2008 versions of JP1/IM - View cannot link to the Web-based JP1/Software Distribution Manager.

By changing the URLs specified in these HTML files to the URLs of individual products' Web pages, you can access those products' Web pages from the Tool Launcher window.

## When the definitions are applied

The definition takes effect when JP1/IM - View is restarted.

## Information that is specified

```
<META HTTP-EQUIV="refresh"
CONTENT="0;URL=URL-of-other-product's-web-page">
```

Specifies the URL of another product's Web page.

If you attempt to display another product's Web page from the Tool Launcher without setting its URL, a page describing the setting method is displayed (*View-path*`\conf\webdata\en\webconfig_hitachi_jp1_`*product-name*`. html`). You can specify the URL by following the instructions provided on the displayed page.[#]

#

- The URL set on this page is the default value. With some products, the user can customize the URL. Check the URLs used by other products beforehand.

  Sometimes, the URL of a product will have changed, for a reason such as upgrading. If no window opens at the specified URL, check the applicable product's documentation.

447

- In *host name*, specify the host name or IP address of the machine where the product corresponding to the Web page is installed.

## Example definition

```
<HTML>
<HEAD>
<META HTTP-EQUIV="refresh" CONTENT="0;URL=http://hostA/OvCgi/
ovlaunch.exe">
</HEAD>
</HTML>
```

# Definition file for the Tool Launcher window

## Format

```
@file type="definition-file-type", version="definition-format-version";
@define-block type="function-tree-def";
folder-definition
function-definition
@define-block-end;
```

## File

!JP1_CC_FTREE0.conf.model (model file for the definition file for the Tool
Launcher window)

## Storage directory

View-path\conf\function\en\

## Description

This file defines tree and item information to be displayed in the Tool Launcher
window of JP1/IM - View.

JP1/IM provides the jcofuncfcheck command for checking the contents of the
definition file for the Tool Launcher window. For details about this command, see *1.
Commands*.

## When the definitions are applied

The definition takes effect after JP1/IM - View is restarted.

## Information that is specified

@file="function-definition"

Declares that this is a definition file for the Tool Launcher window. This statement
is mandatory.

This statement must be on the first line of the file.

*Menu tree definition block*

Creates folders or functions that are to be displayed in the Tool Launcher window
and specifies application execution definition identifiers to associate the
application that is to be executed when a function is chosen.

The functions are displayed in the Tool Launcher window in the order of their file
names. Within the same file, the functions are displayed in the order of their
definition blocks. You can change the display order of menu items by changing

449

the order of the file names or definition blocks.

The statements that can be specified in this block depend on whether folders or functions are being defined:

- When folders are defined

- `id` statement

- `parent_id` statement

- `name` statement

- When functions are defined

- `id` statement

- `parent_id` statement

- `name` statement

- `execute_id` statement

- `icon` statement

- `arguments` statement

If any other statement is specified, an error is output but only the extraneous statement is ignored.

The following describes these statements.

`id="`*menu-identifier*`";`

Defines a menu identifier for the menu tree definition block. This statement is mandatory. This statement can be specified only once in a block.

If the file to be analyzed contains multiple blocks with the same `id`, their priority is determined as follows and only the block that has the highest priority is effective:

1. Last block when the file names are sorted in ascending order

2. Last block in the file

All other blocks are ignored.

Express a menu identifier using from 1 to 32 alphanumeric characters. This character string must be unique within the definition file for the Tool Launcher window. To achieve uniqueness, observe the following naming rules:

- When defining folders

  *company-name*[*_product-name*]

- When defining functions

  *company-name_product-name*[*_function-name-(or-window-name)*]

If an appropriately named folder name already exists, do not add a new folder; use the definition file storage location folder already specified in the other definition file.

`"root"` cannot be used because it is reserved for the highest menu identifier.

A character string beginning with `jco_` cannot be used because it is reserved as an application execution identifier.

`parent_id="`*parent-menu-identifier*`";`

Specifies `root` or the menu identifier that is located above the local menu identifier in the tree configuration. You can specify a maximum of 3 hierarchical levels, including `root`. This statement is mandatory. This statement can be specified only once in a block.

You cannot specify multiple parent menu identifiers to create multiple higher folders.

`name="`*display-name*`";`

Defines the name that is to be displayed in the Tool Launcher window. This statement is mandatory. This statement can be specified only once in a block.

Specify in *display-name* the character string that is to be displayed in the Tool Launcher window; we recommend that you use a simple but readily understood name.

We recommend that you use a noun phrase, such as the character string `Command Execution Function`, because the specified value is displayed in the menu.

Although this value need not be unique in the definition, we recommend that you assign a unique name to eliminate possibilities for confusion.

`execute_id="`*application-execution-definition-identifier*`";`

Specifies the identifier for the application execution definition that is to be executed when the function displayed in the Tool Launcher window is double-clicked. If you specify a function, this statement is mandatory. You can specify this statement only once in a block.

If you are creating a folder, this statement is ignored if specified.

If the specified application execution definition identifier does not exist, the menu is not displayed.

Note that a character string beginning with `jco_` cannot be used, because it is reserved as the application execution definition identifier.

451

`icon="`*display-icon-file-name*`";`

> Specifies the file that contains the icon that is to be displayed in the Tool Launcher window. Specify the full path name of a GIF file. The recommended size for the GIF image is 16 x 16 pixels. If the specified icon image is not this size, it will be resized when the icon is displayed.
>
> You can specify this statement only when you are specifying a function.
>
> If you are creating a folder, this statement is ignored if specified.
>
> If this statement is omitted, the common icon is used.

`arguments="`*command-arguments*`";`

> Specifies arguments for the application specified in `execute_id`. You can use this statement only when you are specifying a function. You can specify this statement only once in a block.
>
> You can also set in `arguments` reserved keywords that will be replaced with the viewer's operating environment attributes or alternate strings for substitution from registry values. For details about alternate strings, see *Alternate string* in *Definition file for executing applications* in *2. Definition Files*.
>
> If you are creating a folder, this statement is ignored if specified.
>
> The full path of the executable file specified in `execute_id` is linked with the value of `arguments` obtained from the alternate string with a single space added. In this case, the command cannot be executed if its length exceeds 1,024 characters.

The following shows an example definition of a menu tree definition block:

```
@define-block type="function-tree-def";
id="hitachi_jp1";
parent_id="root";
name="Sample management";
@define-block-end;
@define-block type="function-tree-def";
id="hitachi_jp1_seihin_sample";
parent_id="hitachi_jp1";
name="Sample window";
icon="sample.gif";
execute_id="hitachi_jp1_seihin_sample_execute";
arguments="node_map";
@define-block-end;
```

## Example definition

The following shows an example of the definition file for the Tool Launcher window:

```
#
# All Rights Reserved, Copyright (C) 2000, Hitachi, Ltd.
#
@file type="function-definition", version="0300";
#----------------------------------------------------------
@define-block type="function-tree-def";
id="jco_folder_Network";
parent_id="root";
name="Network Management";
@define-block-end;
#----------------------------------------------------------
@define-block type="function-tree-def";
id="jco_JP1_Cm2";
parent_id="jco_folder_Network";
name="Network Management";
icon="%JCO_INSTALL_PATH%\image\menu\cm2_manager.gif";
execute_id="default_browser";
arguments="%JCO_INSTALL_PATH%\conf\webdata\en\hitachi_jp1_cm2.
html";
@define-block-end;
#----------------------------------------------------------
@define-block type="function-tree-def";
id="jco_folder_JobSystemOperation";
parent_id="root";
name="Job System Management";
@define-block-end;
#----------------------------------------------------------
@define-block type="function-tree-def";
id="jco_JP1_AJS2";
parent_id="jco_folder_JobSystemOperation";
name="Job System Management";
icon="%JCO_INSTALL_PATH%\image\menu\ajs2_manager.gif";
execute_id="jco_JP1_AJS2";
arguments="-t "%JCO_JP1TOKEN%"";
@define-block-end;
#----------------------------------------------------------
```

453

## Start program definition file (!JP1_CS_APP0.conf)

### Format

```
@define-block type="application-execution-def";
id="program-identifier";
path="start-program-path";
@define-block-end;
```

### File

!JP1_CS_APP0.conf (start program definition file)

!JP1_CS_APP0.conf.model (model file for the start program definition file)

### Storage directory

*View-path*\conf\sovtoolexec\en\

### Description

This file defines the start path for a program that is added to the toolbar in the Monitoring Tree window.

To add a program to the toolbar in the Monitoring Tree window and then be able to start the program from the toolbar, you must also edit the following definition files:

- Toolbar definition file
- Icon operation definition file

### When the definitions are applied

The definition takes effect when the Monitoring Tree window is re-opened.

### Information that is specified

From @define-block type to @define-block-end;

The information from @define-block type to @define-block-end; constitutes a single definition block. To add multiple programs to the toolbar in the Monitoring Tree window, specify this definition block as many times as there are programs to be added. You can specify the following parameters in this definition block:

id="*program-identifier*"

Specifies the identifier that indicates the program to be started. You can specify from 1 to 32 alphanumeric characters. This character string must be unique within the definition file. The program identifier specified in this parameter must be the same as a program identifier that is specified in the

icon operation definition file (`!JP1_CS_FTREE0.conf`).

path=*"start-program-path"*

Specifies the path of the program to be started. An executable file that can be specified must be an `.exe` or `.bat` file.

## Example definition

```
#
# All Rights Reserved. Copyright (C) 2003, Hitachi, Ltd.
#
@file type="application-execution-definition", version="0300";
#----------------------------------------------------------
@define-block type="application-execution-def";
id="app_notepad";
path="C:\WINNT\NOTEPAD.EXE";
@define-block-end;
#----------------------------------------------------------
```

# Toolbar definition file (!JP1_CS_FTOOL0.conf)

## Format

```
@define-block type="function-toolbar-def";
toolbar="sov_JP1_IM_Central_Console|sov_JP1_IM_Function_Tree|sov_JP1_IM_Visual_View|
sov_JP1_IM_Bmv_Help|icon-identifier...";
@define-block-end;
```

## File

!JP1_CS_FTOOL0.conf (toolbar definition file)

!JP1_CS_FTOOL0.conf.model (model file for the toolbar definition file)

## Storage directory

*View-path*\conf\sovtoolitem\en\

## Description

This file defines the order of programs that are added to the toolbar in the Monitoring Tree window.

To add a program to the toolbar in the Monitoring Tree window and then be able to start the program from the toolbar, you must also edit the following definition files:

- Start program definition file
- Icon operation definition file

## When the definitions are applied

The definition takes effect when the Monitoring Tree window is re-opened.

## Information that is specified

From `@define-block type` to `@define-block-end;`

The information from `@define-block type` to `@define-block-end;` constitutes a single definition block. This block can be specified only once in the definition file.

`toolbar="sov_JP1_IM_Central_Console|sov_JP1_IM_Function_Tre e|sov_JP1_IM_Visual_View|sov_JP1_IM_Bmv_Help|icon-identifier";`

Specifies the icon identifiers in the order they are to be displayed. The icon identifiers are separated by the vertical bar (|) and the icons are displayed from left to right in the Monitoring Tree window in the order they are specified here. An icon identifier is a character string consisting of no more

than 32 alphanumeric characters. Each icon identifier character string must be unique within the definition file. The icon identifiers specified in this parameter must be the same as icon identifiers specified in the icon operation definition file (`!JP1_CS_FTREE0.conf`).

## Example definition

```
#
# All Rights Reserved. Copyright (C) 2003, Hitachi, Ltd.
#
@file type="function-definition", version="0300";
#---------------------------------------------------------
@define-block type="function-toolbar-def";
toolbar="sov_JP1_IM_New_Info|sov_JP1_IM_Visual_View|sov_JP1_IM
_Function_Tree|sov_JP1_IM_Central_Console|sov_JP1_IM_Bmv_Help|
tool_notepad";
@define-block-end;
#---------------------------------------------------------
```

## Icon operation definition file (!JP1_CS_FTREE0.conf)

### Format

```
@define-block type="function-tree-def";
id="icon-identifier";
name="tooltip";
iconstandard="icon-storage-path";
icondown="icon-storage-path";
iconrollover="icon-storage-path";
icondisable="icon-storage-path";
execute_id="program-identifier";
arguments="argument";
@define-block-end;
```

### File

!JP1_CS_FTREE0.conf (icon operation definition file)

!JP1_CS_FTREE0.conf.model (model file for the icon operation definition file)

### Storage directory

*View-path*\conf\sovtoolitem\en\

### Description

This file defines the operation of icons that are displayed on the toolbar in the Monitoring Tree window.

To add a program to the toolbar in the Monitoring Tree window and then be able to start the program from the toolbar, you must also edit the following definition files:

- Start program definition file
- Toolbar definition file

### When the definitions are applied

The definition takes effect when the Monitoring Tree window is re-opened.

### Information that is specified

From @define-block type to @define-block-end;

Information from @define-block type to @define-block-end; constitutes a single definition block.

To add multiple programs to the toolbar in the Monitoring Tree window, specify this definition block as many times as there are programs to be added. In this definition block, you can specify the following parameters:

`id="`*`icon-identifier`*`";`

> Specifies the identifier that indicates the appropriate icon. You can specify from 1 to 32 alphanumeric characters. This character string must be unique within the definition file. The icon identifier specified in this parameter must be the same as an icon identifier that is specified in `!JP1_CS_FTOOL0.conf`.

`name="`*`tooltip`*`";`

> Specifies the tooltip that is to be displayed when the cursor is placed on the icon.

`iconstandard="`*`icon-storage-path`*`";`

> Specifies the full path of the icon that is to be displayed during normal operation.

`icondown="`*`icon-storage-path`*`";`

> Specifies the full path of the icon that is to be displayed when the icon is clicked.

`iconrollover="`*`icon-storage-path`*`";`

> Specifies the full path of the icon that is to be displayed when the cursor is moved onto the icon.

`icondisable="`*`icon-storage-path`*`";`

> Specifies the full path of the icon that is to be displayed when the corresponding program cannot be started.

`execute_id="`*`program-identifier`*`";`

> Specifies an identifier for the program that is to be started. You can specify from 1 to 32 alphanumeric characters. This character string must be unique within the definition file. The program identifier specified in this parameter must be the same as a program identifier that is specified in the start program definition file (`!JP1_CS_APP0.conf`).

`arguments="`*`arguments`*`";`

> Specifies arguments for the program to be started (start path) that is defined in the start program definition file (`!JP1_CS_APP0.conf`).

## Example definition

```
#----------------------------------------------------------
# Definition changed by 07-00.
@define-block type="function-tree-def";
id="tool_notepad";
name="Notepad";
iconstandard="%SOV_INSTALL_PATH%\image\sovtool\blank_standard.
gif";
icondown="%SOV_INSTALL_PATH%\image\sovtool\blank_down.gif";
iconrollover="%SOV_INSTALL_PATH%\image\sovtool\blank_over.gif"
;
icondisable="%SOV_INSTALL_PATH%\image\sovtool\blank_disable.gi
f";
execute_id="app_notepad";
arguments="C:\test.txt";
@define-block-end;
#----------------------------------------------------------
```

460

```
#----------------------------------------------------------
# Definition changed by 07-00.
@define-block type="function-tree-def";
id="tool_notepad";
name="Notepad";
iconstandard="%SOV_INSTALL_PATH%\image\sovtool\blank_standard.
```

# Configuration file for monitoring tree

## Format

```
TREE:BUILD=value;ID=value;[DATE=generation-date-and-time;]CSV_VER=08100000;MSCOPE=ON
(linefeed)
OBJ:monitoring-node-name, NID:monitoring-node-ID, ICO:icon-name, TYPE:monitoring-node-type,
CLASS:monitoring-object-type, STA:status-ID, CHDT:status-update-time, OBS:monitoring-status,
STD:basic-information(attribute-name-1=attribute-value-1), BKIMG=background-image-file-name,
POT:X=X-coordinate;Y=Y-coordinate;Z=Z-coordinate, CON:NAME=status-change-condition-name,
STA=change-status-ID, CID=common-condition-ID;common-condition-information,
GCON:NAME=status-change-condition-name, STA=change-status-ID, CSTA=child-node-status-ID,
NUM>=child-nodes-count, RATIO>=child-node-ratio,
(individual-condition-name==individual-condition-value), EVE:STA=status-ID,
RES:JP1-resource-group-name, OWN:monitoring-node-owner's-name,
OPE:list-of-operation-items(linefeed)
            :
```

Legend:

(linefeed): Location of a linefeed

*Italic type*: Item that can be edited (all other items cannot be edited)

## File

Any file (configuration file for monitoring tree)

## Storage directory

Any folder

## Description

This file defines the configuration of the monitoring tree that is displayed in the Monitoring Tree window.

By editing the configuration file for monitoring tree, you can change the information that is displayed in the monitoring tree, such as the names of monitoring nodes and attribute values of basic information. To create a configuration file for monitoring tree, save the tree configuration locally from the Monitoring Tree window or Monitoring Tree (Editing) window. Do not create a configuration file for monitoring tree by any other method. When you edit the configuration file for monitoring tree, make sure that you do not edit any values other than those described below.

If you have updated an uneditable value by mistake and a backup of the configuration file for monitoring tree is available, use the backup file to update the configuration file for monitoring tree again. If no backup file is available, use the jcsdbsetup or jcsdbimport command to set up the monitoring object database again.

461

It is preferable that you use the Monitoring Tree (Editing) window to edit the monitoring tree, unless otherwise necessary.

Do not enter an escape character.

## When the definitions are applied

The definition takes effect when it is applied to JP1/IM - Manager after this definition file has been opened in the Monitoring Tree (Editing) window.

## Information that is specified

TREE

The following parameters contained in TREE cannot be changed.

BUILD=*value*

*value* displays the tree generation number. This parameter value is changed by updating at the server.

ID=*value*

*value* displays the tree ID.

DATE=*generation-date-and-time*

*generation-date-and-time* displays the date and time the tree was generated. This parameter's value is updated when a server update is performed and when the status of a monitoring node changes.

CSV_VER=08100000

This is the CSV file format version.

MSCOPE={ON | OFF}

Displays whether the monitoring range settings are enabled or disabled. ON means that the monitoring range settings are enabled.

OBJ:*monitoring-node-name*

Displays the name of a monitoring node that is to be displayed in the monitoring tree. The user can change this information. You can specify a maximum of 255 alphanumeric characters. If you use a semicolon (;) in the monitoring node name, enter two consecutive semicolons.

If the monitoring node name contains a comma (,), enclose the entire OBJ item in double-quotation marks (").

Example:

To specify monitoring,node as the name of a monitoring node, specify as follows:

```
"OBJ:monitoring,node"
```

If you enclose the monitoring node name in double-quotation marks (`"`), you must enclose the monitoring node name in another set of double-quotation marks and then also enclose the entire `OBJ` item in double-quotation marks.

Example:

To enter `"monitoring,node"` as the monitoring node name, specify as follows:

```
"OBJ:""monitoring,node"""
```

`NID:`*monitoring-node-ID*

Displays the ID (8 hexadecimal characters) of the monitoring node that is to be displayed in the monitoring tree. The user can change this information.

Make sure that each monitoring node ID is unique. Specify a value in the range from `00000001` to `7FFFFFFF`.

`ICO:`*icon-name*

Displays a maximum of three icon names for the monitoring node, separated by the semicolon (`;`).

This parameter cannot be changed.

`TYPE:`*monitoring-node-type*

Displays the ID that identifies the monitoring group, monitoring object, and virtual root node. This parameter cannot be changed.

`CLASS:`*monitoring-object-type*

Displays the type of monitoring node. This parameter cannot be changed.

`STA:`*status-ID*

Displays the ID that indicates the status of the monitoring node. This parameter cannot be changed.

`CHDT:`*status-update-time*

Displays the time the status of the monitoring node was updated. This parameter cannot be changed.

`OBS:`*monitoring-status*

Displays the monitoring status of the monitoring node. This parameter cannot be changed.

`STD:`*attribute-name=attribute-value*

Displays the attribute name and attribute value when basic information has been

463

defined for the monitoring node. If multiple basic information items are specified, the items are separated by the semicolon (;).

You can change only *attribute-value*. You can specify a maximum of 1,023 bytes[#] of characters for the attribute value. If you use a semicolon (;) in the attribute value, enter two consecutive semicolons.

#: The total length of the field is a maximum of 1,280 bytes (for example, if five basic information items are set, the total length of all five attribute values must be no greater than 1,280 bytes).

If the attribute value contains a comma (,), enclose the entire STD item in double-quotation marks (").

Example:

> To specify `attribute,value` as the attribute value, specify as follows:
>
> `"STD:`*attribute-name*`=attribute,value"`

If you enclose the attribute value in double-quotation marks ("), you must enclose the attribute value in another set of double-quotation marks and then also enclose the entire STD item in double-quotation marks.

Example:

> To specify `"attribute value"` as the attribute value, specify as follows:
>
> `"STD:`*attribute-name*`=""attribute value"""`

BKIMG=*background-image-file-name*

Displays the name of the background image file that is set in the Visual Monitoring (Editing) window or that is set when the map is displayed in the Monitoring Tree (Editing) window. This parameter cannot be changed.

POT:X=*X-coordinate*;Y=*Y-coordinate*;Z=*Z-coordinate*

Displays the icon location information (coordinates) that is set in the Visual Monitoring (Editing) window or that is set when the map is displayed in the Monitoring Tree (Editing) window. This parameter cannot be changed.

CON

CON includes the parameters shown below. Note that if the value of TYPE is 1 (monitoring group), the CON parameter is not displayed.

NAME=*status-change-condition-name*

Displays the status change condition name. The user can change this information. You can specify a maximum of 63 alphanumeric characters. None of the following characters can be used: * " ' \ : ; | = + ? < . >. If the line contains more than one NAME parameter, the same status

change condition name cannot be used more than once on that line.

If the status change condition name contains a comma ( , ), enclose the entire `CON` item in double-quotation marks ( `"` ).

Example:

To specify `"status change,condition name"` as the status change condition name, specify as follows:

```
"CON:NAME=status change,condition name;

 STA=700;

individual condition name==individual condition value"
```

`STA=`*change-status-ID*

Displays the change status ID. This parameter cannot be changed.

`CID=`*common-condition-ID*`;`*common-condition-information*

Displays the common condition ID and the common condition information. For the common condition information, the common conditions that have been set in the Status-Change Condition Settings window, such as the ID and information needed by the system for management purposes, are displayed with the items separated by the semicolon ( `;` ). This parameter cannot be changed.

`GCON`

`GCON` includes the parameters described below.

Note that the `GCON` parameter is not displayed if the value of `TYPE` is `2` (monitoring object) or if no status change condition has been set for the monitoring group.

`NAME=`*status-change-condition-name*

Displays the status change condition name. The user can change this information. You can specify a maximum of 63 alphanumeric characters. None of the following characters can be specified: `*` `"` `'` `\` `:` `;` `|` `=` `+` `?` `<` `.` `>`. If the line contains more than one `NAME` parameter, the same status change condition name cannot be used more than once on that line.

If the status change condition name contains a comma ( , ), enclose the entire `GCON` item in double-quotation marks ( `"` ).

`STA=`*change-status-ID*

Displays the change status ID. This parameter cannot be changed.

`CSTA=`*child-node-status-ID*

Displays the status IDs of child nodes. This parameter cannot be changed.

NUM>=*child-nodes-count*

Displays the number of child nodes. This parameter cannot be changed. This parameter and the RATIO parameter are mutually exclusive.

RATIO>=*child-node-ratio*

Displays the ratio of child nodes. This parameter cannot be changed. This parameter and the NUM parameter are mutually exclusive.

*individual-condition-name==individual-condition-value*

Displays an individual condition if it has been set in the Status-Change Condition Settings window. If multiple individual conditions have been specified, they are separated by the semicolon (;). You can change only *individual-condition-value*. The == part depends on the setting in the GUI as shown below; do not change this part.

```
== (same as)
!= (not same as)
^= (starts with)
>= (includes)
<= (does not include)
*= (regular expression)
+= (host name comparison)
```

For *individual-condition-value*, you can specify a maximum of 1,023 bytes[#] of characters. If you use a semicolon (;) in an individual condition value, enter two consecutive semicolons.

\#: The total length of the field is a maximum of 1,280 bytes (for example, if five individual conditions are set, the total length of all five condition values must be no greater than 1,280 bytes).

If an individual condition value contains a comma (,), enclose the entire CON item in double-quotation marks (").

Example:

To specify "individual,condition value" as the individual condition value, specify as follows:

```
"CON:NAME=status change condition name;

 STA=700;

 individual condition name==individual,condition value"
```

If you enclose the individual condition value in double-quotation marks ("), you must enclose the individual condition value in another set of double-quotation marks and then also enclose the entire CON item in

double-quotation marks.

Example:

To specify `""individual condition value""` as the individual condition value, specify as follows:

```
"CON:NAME=status change condition name,;

 STA=700;

 individual condition name==""individual condition
name"""
```

`EVE:STA=`*status-ID*

Displays the status ID that was set in the event generation condition. This parameter cannot be changed.

`RES:`*JP1-resource-group-name*

Displays the JP1 resource group name of the monitoring node. This parameter cannot be changed.

`OWN:`*monitoring-node-owner's-name*

Displays the name of the monitoring node owner. This parameter cannot be changed.

`OPE:`*list-of-operation-items*

Displays a list of operation items that the login user has for the monitoring node. This parameter cannot be changed.

**Note**

- If you change the monitoring node ID, there may be adverse effects on the Visual Monitoring window. This is because the monitoring node IDs are used to manage the monitoring nodes that are displayed in the Monitoring Tree window and the Visual Monitoring window.

  If you have changed a monitoring node ID, make sure that there are no problems on the Visual Monitoring window.

## Operation definition file for IM Configuration Management - View (jcfview.conf)

### Format

```
jcfview.login.host.max=maximum-number-of-recorded-hosts
jcfview.login.user.max=maximum-number-of-recorded-users
jcfview.screen.history.enable=use-of-window-display-settings-history-function
jcfview.response.wait.time=response-wait-timeout-period
jcfview.imconfigreflect.response.wait.time=response-wait-timeout-period-for-reflection-of-system
hierarchy
```

### File

jcfview.conf (operation definition file for IM Configuration Management - View)

jcfview.conf.model (model file for the operation definition file for IM Configuration Management - View

### Storage directory

*View-path*\conf\jcfview\

### Description

This file specifies the operation of IM Configuration Management - View.

### When the definitions are applied

The definition takes effect when IM Configuration Management - View starts.

### Information that is specified

jcfview.login.host.max

Specifies as a decimal value the maximum number of hosts that can be logged in simultaneously. The permitted value range is from 0 to 20. The default is 5.

jcfview.login.user.max

Specifies as a decimal value the maximum number of users that can be logged in simultaneously. The permitted value is 0 or 1. The default is 1.

jcfview.screen.history.enable

Specifies whether the function that inherits the display position and size of the IM Configuration Management - View window, as well as the selection status of the displayed buttons that were in use the last time the screen was open, is to be used. This setting applies to the IM Configuration Management window, the Edit IM Configuration window, and the Display/Edit Properties window.

468

The permitted values are as follows:

- `0`: Do not use the window display settings history function.

- `1`: Use the window display settings history function (default value).

Note that if you specify `0` and then start IM - View, all the window display settings history files will be deleted.

`jcfview.response.wait.time`

Specifies in milliseconds in decimal notation the timeout period for waiting for a server response.

The permitted value range is from 60,000 to 3,600,000; the default is 1,800,000. If the specified value is less than the minimum value, greater than the maximum value, invalid, or undefined, the default value is used.

When a timeout occurs, the `KNAN20105-E` message is displayed. If the `KNAN20105-E` message is issued frequently, we recommend that you revise the timeout setting.

`jcfview.imconfigreflect.response.wait.time`

Specifies in milliseconds in decimal notation the timeout period for waiting for the system hierarchy to be applied. The permitted value range is from 60,000 to 36,000,000; the default is 18,000,000. If the specified value is less than the minimum value, greater than the maximum value, invalid, or undefined, the default value is used.

When a timeout occurs, the `KNAN20105-E` message is displayed. If the `KNAN20105-E` message is issued frequently, revise the timeout setting.

## Example definition

```
jcfview.login.host.max=5
jcfview.login.user.max=1
jcfview.screen.history.enable=1
jcfview.response.wait.time=1800000
jcfview.imconfigreflect.response.wait.time=18000000
```

# Setup information file (jimdbsetupinfo.conf)

## Format

```
#IM DATABASE SERVICE - DB Size
IMDBSIZE=value
#IM DATABASE SERVICE - Data Storage Directory
IMDBDIR=value
#IM DATABASE SERVICE - Port Number
IMDBPORT=value
#IM DATABASE SERVICE - DB Install Directory
IMDBENVDIR=value
```

## File

jimdbsetupinfo.conf (setup information file)

jimdbsetupinfo.conf.model (model file for the setup information file)

## Storage directory

In Windows
> *Manager-path*\conf\imdb\setup\

In UNIX
> /etc/opt/jp1imm/conf/imdb/setup/

## Description

This file specifies setup information, such as the size of the IM database and the directory for storing data for the IM database, when the integrated monitoring database and IM Configuration Management database are set up.

The setup information file is shared during setup of the integrated monitoring database and IM Configuration Management database. If you have set up one of the databases (integrated monitoring database or IM Configuration Management database) first and then are creating the other one, you must specify for the second database the same values as were specified for the first database.

The following table shows the sizes of the databases as specified in the setup information file and the actual sizes of the databases that are created.

*Table 2-45:* Sizes of databases that are created

| Size | System database area# (gigabytes) | Integrated monitoring database area# (gigabytes) | IMConfiguration Management database area# (gigabytes) | Total (gigabytes) |
|---|---|---|---|---|
| S | 1 | 9 | 1 | 11 |
| M | 2 | 33 | 1 | 36 |
| L | 8 | 96 | 10 | 114 |

#

The system database area, the integrated monitoring database area, and the IM Configuration Management database area are created immediately under the database storage directory (IMMDBDIR) specified in the setup information file. The capacity required for installation is 110 megabytes.

## When the definitions are applied

The contents of this file are loaded during setup and the IM database environment is configured based on the value specified for each item.

## Information that is specified

IMDBSIZE

Specifies the size of the IM database to be created as the upper-case letter S, M, or L. The default is S.

IMDBDIR

Specifies the absolute path of the directory in which data for the IM database is to be stored. JP1/IM creates the imdb directory immediately under the specified directory and then stores the IM database file (area). The default is as follows:

- In Windows: *Manager-path*\database

  An error results if a network drive or Windows reserved device file is specified. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

- In UNIX: /var/opt/jp1imm/database

  Specify a directory that is in mounted status. Do not specify a directory that is easily unmounted. If the directory is unmounted during operation, database startup and access will fail. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

The following explains the character string that can be used in the absolute path format:

- In Windows:

  A string of no more than 95 characters, consisting of alphanumeric characters, _, \, (, ), and . (period). This character string must begin with the drive name.

- In UNIX:

  A string of no more than 95 characters, consisting of alphanumeric characters, _, /, and . (period). This character string must begin with the path delimiter (/).

IMDBPORT

Specifies the port number used by the IM database. The permitted value range is from 5001 to 65535. The default is 20700.

This port number must be different from any of the following port numbers:

- Port numbers specified when other logical hosts were set up

- Port numbers specified in the services file[#]

- Port numbers used in other products' HiRDB installation

- Temporary port numbers used by other products and the OS

#: Make sure that you do not specify the port number set in IMDBPORT in the services file.

IMDBENVDIR

Specifies the absolute path of the directory in which the IM database is to be installed. JP1/IM creates a directory (JM0) immediately under the specified directory and then installs the IM database. The default is as follows:

- In Windows: *Manager-path*\dbms

  An error results if a network drive or Windows reserved device file is specified. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

- In UNIX: /var/opt/jp1imm/dbms

  Specify a directory that is in mounted status. Do not specify a directory that is easily unmounted. If the directory is unmounted during operation, database startup and access will fail. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

The following explains the character string that can be used in the absolute path format:

- In Windows:

  A string of no more than 195 characters, consisting of alphanumeric characters, _, \, (, ), and the space. This character string must begin with the drive name.

- In UNIX:

  A string of no more than 123 characters, consisting of alphanumeric characters, _, /, and . (period). This character string must begin with the path delimiter (/).

### Example definition

```
#IM DATABASE SERVICE - DB Size
IMDBSIZE= S
#IM DATABASE SERVICE - Data Storage Directory
IMDBDIR=Manager-path\database
#IM DATABASE SERVICE - Port Number
IMDBPORT= 20700
#IM DATABASE SERVICE - DB Install Directory
IMDBENVDIR=Manager-path\dbms
```

## Cluster setup information file (jimdbclustersetupinfo.conf)

### Format

```
#IM DATABASE SERVICE - Logical Host Number
LOGICALHOSTNUMBER=value
#IM DATABASE SERVICE - Logical Host Name
LOGICALHOSTNAME=value
#IM DATABASE SERVICE - DB Size
IMDBSIZE=S
#IM DATABASE SERVICE - Port Number
IMDBPORT=value
#IM DATABASE SERVICE - Data Storage Directory (Local Work Area)
IMDBDIR=Manager-path\db
#IM DATABASE SERVICE - Data Storage Directory (Shared Data Area)
SHAREDBDIR=shared-directory\db
#IM DATABASE SERVICE - Online Host Name
ONLINEHOSTNAME=value
#IM DATABASE SERVICE - DB Install Directory
IMDBENVDIR=Manager-path\dbms
```

### File

jimdbclustersetupinfo.conf (cluster setup information file)

jimdbclustersetupinfo.conf.model (model file for the cluster setup information file)

### Storage directory

In Windows
Manager-path\conf\imdb\setup\

In UNIX
/etc/opt/jp1imm/conf/imdb/setup/

### Description

This file specifies setup information, such as the size of the IM database and the directory for storing data for the IM database when the integrated monitoring database and IM Configuration Management database are set up in a cluster environment.

The cluster setup information file is shared during setup of the integrated monitoring database and IM Configuration Management database. If you have set up one of the databases (integrated monitoring database or IM Configuration Management database) first and then are creating the other one, you must specify for the second database the same values as were specified for the first database. If you are configuring a cluster environment, when you set up the secondary node, copy the cluster setup information file used for the primary node. If you set up multiple logical hosts on the

same host, you must copy `jimdbclustersetupinfo.conf` (cluster setup information file) under a different name and change the settings.

The following table shows the sizes of the databases as specified in the cluster setup information file and the actual sizes of the databases that are created.

*Table 2-46:* Sizes of databases that are created

| Size | System database area (local disk)[#1] (gigabytes) | System database area (shared disk)[#1] (gigabytes) | Integrated monitoring database area[#2] (gigabytes) | IM Configuration Management database area[#2] (gigabytes) | Total (gigabytes) |
|---|---|---|---|---|---|
| S | 0.05 | 0.95 | 9 | 1 | 11 |
| M | 0.1 | 1.9 | 33 | 1 | 36 |
| L | 0.6 | 7.4 | 96 | 10 | 114 |

#1

The system database area (local disk) is created immediately under the local database storage directory (`IMMDBDIR`) specified in the cluster setup information file.

#2

The system database area (shared disk), the integrated monitoring database area, and the IM Configuration Management database area are created immediately under the shared database storage directory (`SHAREDBDIR`) specified in the cluster setup information file. The capacity required for installation is 110 megabytes.

## When the definitions are applied

The contents of this file are loaded during setup and the IM database environment is configured based on the value specified for each item.

## Information that is specified

LOGICALHOSTNUMBER

Specifies the number used to identify the logical host for the IM database, expressed as a numeric value in the range from 1 to 9.

If you add a logical host, you must specify a different number. Specify the same number for both primary and secondary nodes.

LOGICALHOSTNAME

Specifies the name of the logical host. This must be a logical host name specified in the `jp1cohasetup` and `jp1cc_setup_cluster` commands. The permitted

value is a string of no more than 32 characters, consisting of alphanumeric characters, _, -, /, . (period), and @.

IMDBSIZE

Specifies the size of the IM database to be created as the upper-case letter S, M, or L. The default is S.

IMDBDIR

Specifies the absolute path of the directory in which data for the IM database is to be stored. JP1/IM creates the imdb directory immediately under the specified directory and then stores the IM database file (for local work area).

- In Windows:

  An error results if a network drive or Windows reserved device file is specified. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

- In UNIX:

  Specify a directory that is in mounted status. Do not specify a directory that is easily unmounted. If the directory is unmounted during operation, database startup and access will fail. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

The following shows the character string that can be used in the absolute path format:

- In Windows:

  A string of no more than 95 characters, consisting of alphanumeric characters, _, \, (, ), and . (period). This character string must begin with the drive name.

- In UNIX:

  A string of no more than 95 characters, consisting of alphanumeric characters, _, /, and . (period). This character string must begin with the path delimiter (/).

IMDBPORT

Specifies the port number used by the IM database. The permitted value range is from 5001 to 65535.

This port number must be different from any of the following port numbers:

- Port numbers specified when other logical hosts were set up

- Port numbers specified in the services file[#]

- Port numbers used in other products' HiRDB installation

- Temporary port numbers used by other products and the OS

#: Make sure that you do not specify the port number set in `IMDBPORT` in the `services` file.

SHAREDBDIR

Specifies the absolute path of the directory for storing data for the IM database that is shared by the primary and secondary nodes in the cluster configuration. JP1/IM creates the `imdb` directory directly under the specified directory and stores the IM database files (for the shared data area).

The following shows the character string that can be used in the absolute path format:

- In Windows:

  A string of no more than 95 characters, consisting of alphanumeric characters, `_`, `\`, `(`, `)`, and `.` (period). This character string must begin with the drive name.

  An error results if a network drive or Windows reserved device file is specified. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

- In UNIX:

  A string of no more than 95 characters, consisting of alphanumeric characters, `_`, `/`, and `.` (period). This character string must begin with the path delimiter (`/`).

  Specify a directory that is in mounted status. Do not specify a directory that is easily unmounted. If the directory is unmounted during operation, database startup and access will fail. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

ONLINEHOSTNAME

Specifies the host name of the primary node. The permitted value is a string of no more than 32 characters, consisting of alphanumeric characters, `_`, `-`, `/`, `.` (period), and `@`.

IMDBENVDIR

Specifies the absolute path of the directory in which the IM database is to be installed. JP1/IM creates a directory (JM*n*: *n* matches `LOGICALHOSTNUMBER`) immediately under the specified directory and then installs the IM database. The default is as follows

- In Windows: *Manager-path*\dbms

  An error results if a network drive or Windows reserved device file is specified. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

- In UNIX: /var/opt/jp1imm/dbms

  Specify a directory that is in mounted status. Do not specify a directory that is easily unmounted. If the directory is unmounted during operation, database startup and access will fail. If the specified directory does not exist, command execution fails. Make sure that you create the directory before you execute the command.

The following shows the character string that can be used in the absolute path format:

- In Windows:

  A string of no more than 195 characters, consisting of alphanumeric characters, _, \, (, ), and the space. This character string must begin with the drive name.

- In UNIX:

  A string of no more than 123 characters, consisting of alphanumeric characters, _, /, and . (period). This character string must begin with the path delimiter (/).

## Example definition

```
#IM DATABASE SERVICE - Logical Host Number
LOGICALHOSTNUMBER=1
#IM DATABASE SERVICE - Logical Host Name
LOGICALHOSTNAME=host1
#IM DATABASE SERVICE - DB Size
IMDBSIZE=S
#IM DATABASE SERVICE - Data Storage Directory (Local Work Area)
IMDBDIR=Manager-path\db
#IM DATABASE SERVICE - Port Number
IMDBPORT=20750
#IM DATABASE SERVICE - Data Storage Directory (Shared Data Area)
SHAREDBDIR=shared-directory\db
#IM DATABASE SERVICE - Online Host Name
ONLINEHOSTNAME=host_H1
#IM DATABASE SERVICE - DB Install Directory
IMDBENVDIR=Manager-path\dbms
```

## Item file

### Format

```
[@]item-name
# comment-statement
      :
```

### File

Use any file.

### Storage directory

In Windows

Any folder

In UNIX

Any directory

### Description

This file specifies the JP1 event attributes that are to be output during output of event reports.

The maximum size of this file is 32 kilobytes (32,768 bytes).

*Definition specification*

- A line consisting of only singe-byte spaces or tabs is ignored.

- Spaces and tabs preceding the first parameter name on each line and at the end of each line are ignored.

### When the definitions are applied

When the `jcoevtreport` command with the `-k` option specified is executed, the specified item file is loaded and the attribute values of JP1 events are output to event reports according to the item file.

### Contents of the file

*item-name*

Specifies the attribute name of a JP1 event that you want to have output to event reports. This file is created in text format. Specify `B.` for a basic attribute and `E.` for an extended attribute.

If you specify `@` at the beginning of an item name, the date and time item for the basic or extended attribute is also output, in the format *YYYYMMDDhhmmss*. If

the specified attribute contains a nonnumeric value, a value less than 0, or a value greater than 2,147,483,646, the value is output as is without being converted. If there is no corresponding attribute in a JP1 event, the null character is output.

#*comment-statement*

A line beginning with a hash mark (#) is treated as a comment.

# Example definition

```
B.SEQNO
B.ID
B.PROCESSID
B.TIME
  :
```

# Filter file

## Format

```
event-condition
      :
OR
event-condition
      :
EXCLUDE
event-condition
      :
```

## File

Use any file.

## Storage directory

In Windows

Any folder

In UNIX

Any directory

## Description

This file defines filter conditions to be applied during output of event reports. To load the file, execute the `jcoevtreport` command with the `-f` option specified.

The maximum size of this file is 256 kilobytes (262,144 bytes).

## When the definitions are applied

When the `jcoevtreport` command with the `-f` option specified is executed, the specified item file is loaded and the JP1 events that satisfy the specified condition are acquired from the integrated monitoring database and then output to an event report.

## Contents of the file

*pass-conditions group, exclusion-conditions group*

The `jcoevtreport` command outputs the JP1 events that do not satisfy any of the exclusion-conditions groups and that satisfy one of the pass-conditions groups. For the filter conditions, you can specify from 0 to 5 pass-conditions groups and from 0 to 5 exclusion-conditions groups.

In a pass-conditions group or exclusion-conditions group, you can specify from 0 to 50 event conditions. In the case of an extended attribute (user-specific

information), you can specify a maximum of 5 event conditions per pass-conditions group or exclusion-conditions group.

OR

> If you specify multiple condition groups, specify OR between the condition groups.

EXCLUDE

> Specify EXCLUDE between a pass-conditions group and an exclusion-conditions group. Any event condition that follows EXCLUDE is treated as an exclusion-conditions group. If no event condition follows EXCLUDE, only the pass-conditions groups take effect.

*event-condition*

Specifies an event condition in the following format:

> *attribute-name comparison-keyword operand* [ *operand*]...

Note that a line consisting of only spaces or tabs is ignored during processing.

*attribute-name*

> Specifies the name of the attribute that you want to compare. To specify a basic attribute, place B. immediately before the name; to specify an extended attribute (common information or user-specific information), place E. immediately before the name. Attribute names are case sensitive.

*comparison-keyword*

> Specifies one of BEGIN (begins with), IN (matches), NOTIN (does not match), SUBSTR (includes), NOTSUBSTR (does not include), or REGEX (regular expression) as the comparison keyword. The comparison keyword is case sensitive.

*operand*

> Specifies a character string as the value that is to be compared with the attribute value by the specified comparison keyword. Operands are case sensitive.

> Specify multiple operands by separating them with one or more consecutive spaces or a tab. The OR condition is applied to the specified operands. Note that if a regular expression is specified for the comparison keyword, only one operand can be specified.

> To specify a space, a tab, linefeed code (CR or LF), or % as a part of an operand, specify as follows:

| No. | Value to be specified | How to specify |
|---|---|---|
| 1 | Tab (`0x09`) | `%09` |
| 2 | Space (`0x20`) | `%20` |
| 3 | `%` (`0x25`) | `%25` |
| 4 | Linefeed code LF (`0x0a`) | `%0a` |
| 5 | Linefeed code CR (`0x0d`) | `%0d` |

During maximum value checking for the definition format, `%20` and `%25` are each treated as a single character. The following shows an example of defining ID matches `100` and `200`, which selects multiple operands:

`B.ID`△`IN`△`100`△`200`

Legend:

△ : Space (`0x20`)

You can specify a maximum of 4,096 bytes of operands per event condition and per event condition block (total length of operands in bytes that are specified in the event condition block).

## Example definition

```
B.ID IN 1
B.MESSAGE SUBSTR Warning
E.SOURCESERVER IN host1 host2 host3 host4
OR
B.ID IN 1
B.MESSAGE SUBSTR Error
E.SOURCESERVER IN host1 host2 host3 host4
EXCLUDE
E.SOURCESERVER IN host3
```

# Details of statements in definition files

This subsection lists the types and structures of and the values that can be specified in the statements that can be specified in some of the JP1/IM definition files.

*Note:*

The information provided in this subsection is applicable only to the following three definition files:

- Definition file for extended event attributes
- Definition file for executing applications
- Definition file for the Tool Launcher window

## Types of statements

*Table 2-47:* Types of statements

| Statement category | Statement types |
|---|---|
| In-file statements | Start-of-block statement<br>End-of-block statement<br>File attribute statement<br>Product statement |
| In-block statements | Definition statement for function menu command options<br>Event attribute definition statement<br>Block attribute definition statement<br>Definition file for function menu execution definition identifiers<br>Application description definition statement<br>Group definition statement<br>Function menu display icon definition statement<br>Definition statement for application execution definition identifiers<br>Function menu identifier definition statement<br>Function menu display name definition statement<br>Sequence definition statement<br>Function menu parent identifier definition statement<br>Application path definition statement |

## Structures of statements

*Table 2-48:* Structures of statements

| Statement type | Specification format |
|---|---|
| Start-of-block statement | `@define-block type=`*block-type* |
| End-of-block statement | `@define-block-end` |

| Statement type | Specification format |
|---|---|
| File attribute statement | `@file type=`*definition-file-type*`[,`<br>`version=`*definition-format-version*`]` |
| Product statement | `@product name=`*product-name* |
| Definition statement for function menu command options | `arguments=`*command-arguments* |
| Event attribute definition statement | `attr name=`*attribute-name*`, title=`*display-item-name*`[,`<br>`type=`*attribute-display-type*`]` |
| Block attribute definition statement | `block`<br>`lang=`*language-type*`\|platform=`*platform-type*`\|version=`*version-in-use* |
| Definition file for function menu execution definition identifiers | `execute_id=`*application-execution-definition-identifier* |
| Application description definition statement | `description=`*description-of-application-execution* |
| Group definition statement | `group name=`*group-name*`, attrs=`*list-of-attribute-names* |
| Function menu display icon definition statement | `icon=`*display-icon-file-name* |
| Definition statement for application execution definition identifiers | `id=`*application-execution-definition-identifier* |
| Function menu identifier definition statement | `id=`*function-menu-identifier* |
| Function menu display name definition statement | `name=`*display-name* |
| Sequence definition statement | `order id=`*event-ID-definition-character-string*`,`<br>`attrs=`*list-of-attribute-names* |
| Function menu parent identifier definition statement | `parent_id=`*parent-function-menu-identifier* |
| Application path definition statement | `path=`*command-path* |

## Rules for generating specification components in the statements

The table below lists the values that can be specified in the specification components of the statements.

*Table 2-49:* Values that can be specified in the specification components of the statements

| Specification components | Specifiable values |
|---|---|
| Hexadecimal characters | From `0` to `9` and `A` to `F` |
| Description of application execution | User-defined character string of from 1 to 50 bytes |
| Application execution definition | `application-execution-definition` |
| Application execution definition block | `application-execution-def` |
| Application execution definition identifier | From 1 to 32 alphanumeric characters |
| Event ID | From 1 to 8 bytes of hexadecimal characters |
| Event ID definition character string | *event-ID*\|*event-ID-definition-character-string enumeration-separator event-ID* |
| Event object type definition block | `event-object-def` |
| Event extended attribute definition | `extended-attributes-definition` |
| Event attribute group definition block | `event-attr-group-def` |
| Event attribute definition block | `event-attr-def` |
| Event display sequence definition block | `event-attr-order-def` |
| Interface name | From 1 to 32 alphanumeric characters |
| Group name | From 1 to 32 alphanumeric characters |
| Command path | File name |
| Command arguments | User-defined character string that serves as command arguments |
| Subkey name | From 1 to 32 alphanumeric characters |
| Forward slash | `/` |
| Forward slash-separated alphanumeric character string | *forward-slash*\|*alphanumeric-characters*\|*forward-slash-separated-alphanumeric-character-string forward-slash* \|*forward-slash-separated-alphanumeric-character-string alphanumeric-characters* |
| Default | `default` |
| Version | Version character string expressed using from 1 to 7 alphanumeric characters |
| Version symbolic character | `/`\|`.`\|`-` |

| Specification components | Specifiable values |
|---|---|
| Version range specification | *version space‑space version* |
| Version character | *upper-case-letters \| number \| version-symbolic-character* |
| File symbolic character | `. \| / \| \\ \| - \| _ \| ~` |
| File name | Character string that serves as a file path |
| File name character string | *file-symbolic-characters \| alphanumeric characters \| file-name-character-string file-symbolic-characters \| file-name-character-string alphanumeric-characters* |
| Platform type | `base` \| *alphanumeric-character-string* |
| Product name | Forward slash-separated alphanumeric character string |
| Block type | *event-attribute-definition-block \| event-attribute-group-definition-block \| event-display-sequence-definition-block \| application-execution-definition-block* |
| User-defined character | *alphanumeric-character \| symbol* |
| English | `English` |
| Alphabetic characters | Upper-case and lower-case alphabetic characters |
| Lower-case letters | From `a` to `z` |
| Alphanumeric characters | Alphabetic and numeric characters |
| Upper-case letters | From `A` to `Z` |
| Menu tree node definition block | `function-tree-def` |
| Integrated tree menu definition | `function-definition` |
| Function menu identifier | From 1 to 32 alphanumeric characters |
| Function menu identifier string | [*from-0-to-9-bytes-of-function-menu-identifier enumeration-separator*] *function-menu-identifier* |
| Language type | English |
| Parent function menu identifier | Function menu identifier |
| Numeric characters | From `0` to `9` |
| Description | From 1 to 50 bytes of user-defined characters |
| Attribute value | From 1 to 10,000 bytes of characters |

| Specification components | Specifiable values |
|---|---|
| Attribute value type | `elapsed_time` |
| Attribute display type | *attribute-value-type*/*display-format* |
| Attribute name | `(B|E).`*attribute-name-character-string* |
| Attribute name characters | *upper-case-letters*\|*numeric-characters*\|_ |
| Attribute name character string | Attribute name characters consisting of from 0 to 31 upper-case letters |
| Attribute name list | *attribute-name*\|*list-of-attribute-names*\\|*attribute-names* |
| Definition file type | *extended-event-attribute-definition*\|*application-execution-definition*\|*definition-for-opening-monitor-windows*\|*Tool-Launcher-definition* |
| Definition format version | `0300` |
| Supported version | `ALL`\|*version*\|*version-range-specification* |
| Date and time display format | `date_format:`*display-time-zone* |
| Display icon file name | *file-name* |
| Display time zone | `CLIENT` |
| Display format | Date and time display format |
| Display item character | *alphanumeric-characters*\|*space*\|-\|_\| |
| Display item character string | From 0 to 64 bytes of display item character string |
| Display item name | Display item character string |
| Display name | From 1 to 32 bytes of user-defined character string |
| Enumeration separator | `\|` |

**Chapter**

# 3. JP1 Events

This chapter describes the types and attributes of the JP1 events that are issued by JP1/IM.

## 3.1 Attributes of JP1 events

This section describes the attributes of JP1 events. The two types of JP1 event attributes are basic attributes and extended attributes.

All JP1 events have basic attributes. The extended attributes are assigned by individual programs that issue JP1 events.

### 3.1.1 Basic attributes

The table below lists and describes the basic attributes of JP1 events.

The basic attributes are sometimes identified by prefixing their names with `B.`, such as `B.ID`. When it is necessary to use the prefix `B.`, information to that effect is provided in the manual.

*Table 3-1:* Basic attributes of JP1 events

| Item | Attribute name | Description |
|------|----------------|-------------|
| Serial number | SEQNO | The order in which the JP1 event arrived at this event server, regardless of the source of the JP1 event. |
| Event ID | ID | An 8-byte value that indicates the source application program that issued the JP1 event and the nature of the event. |
| Reason for registration | REASON | Reason why this JP1 event was registered in this event server. |
| Source process ID | PROCESSID | Process ID of the source application program. |
| Registered time | TIME | Time the JP1 event was registered at the source event server. |
| Arrived time | ARRIVEDTIME | Time the JP1 event was registered at the local event server. |
| Source user ID | USERID | User ID of the source process. If this is an event from Windows, `-1` is set. |
| Source group ID | GROUPID | Group ID of the source process. If this is an event from Windows, `-1` is set. |
| Source user name | USERNAME | User name of the source process. |
| Source group name | GROUPNAME | Group name of the source process. If this is an event from Windows, a space is set. |
| Event-issuing server name | SOURCESERVER | Name of the event server that issued the event. If the event has been forwarded, such as from JP1/Base (agent) to JP1/IM - Manager (site manager) to JP1/IM - Manager (integrated manager), the event server name of the initial JP1/Base is set. |

| Item | Attribute name | Description |
|---|---|---|
| Target event server name | DESTSERVER | If the source application program explicitly specifies forwarding of the event to another event server, the name of that event server is set. |
| Source IP address | SOURCEIPADDR | IP address of the source event server (this value is not accurate if the transmission was via NAT (network address translation) or a proxy, or if the JP1 event was forwarded because of environment settings). |
| Target IP address | DESTIPADDR | IP address of the target event server (this value is not accurate if the transmission was via NAT (network address translation) or a proxy, or if the JP1 event was forwarded because of environment settings). |
| Source serial number | SOURCESEQNO | Serial number at the source host (this value is not changed by forwarding). |
| Code set | CODESET | Name of the character code set that is used for messages, detailed information, and extended attributes. |
| Message | MESSAGE | Character string describing the details of the event. |
| Detailed information | -- | Any data.<br>Detailed information about basic attributes is usually used by a product that issues events that are compatible with JP1/SES version 5 or earlier in order to record detailed information.<br>Products whose version is 6 or later typically use the JP1 event extended attributes to record detailed information. |

Legend:

--: None

## 3.1.2 Extended attributes

A program that issues JP1 events can specify any attributes as extended attributes. The extended attributes provide two types of information, common information and program-specific information. The common information is information that is common to all JP1 programs. The program-specific information applies to extended attributes that do not provide common information.

The extended attributes are sometimes identified by prefixing their names with E., such as E.SEVERITY. When it is necessary to use the prefix E., information to that effect is provided in the manual.

The following table lists and describes the common information provided by extended attributes.

*Table 3-2:* List of common information provided by extended attributes

| Item | Attribute name | Description |
|---|---|---|
| Event level | SEVERITY | Severity of the JP1 event. The following values can be assigned (listed here in descending order of severity):<br>Emergency<br>Alert<br>Critical<br>Error<br>Warning<br>Notice<br>Information<br>Debug |
| User name | USER_NAME | Name of the user executing the job. |
| Product name | PRODUCT_NAME | Name of the program that issued the JP1 event, such as the following:<br>/HITACHI/JP1/AJS<br>/HITACHI/JP1/FTP<br>/HITACHI/JP1/NETMDM<br>/HITACHI/JP1/NT_LOGTRAP<br>/HITACHI/JP1/PAM<br>/HITACHI/JP1/IM/SCOPE |
| Object type | OBJECT_TYPE | Name indicating the type of object that resulted in issuance of the event, such as the following:<br>JOB, JOBNET, BATCHJOB, ACTION, LIST |
| Object name | OBJECT_NAME | Name of the object that resulted in issuance of the event (such as the name of a job or a jobnet). |
| Root object type | ROOT_OBJECT_TYPE | Type of object. This is usually the same as the object type, but in the case of an object that has a hierarchical structure, such as a jobnet, this indicates the object type at the highest level of the hierarchy. The permissible values are the same as for the object type. |
| Root object name | ROOT_OBJECT_NAME | Name used to issue an execution instruction during user operation. This is usually the same as the object name, but in the case of an object that has a hierarchical structure, such as a jobnet, this indicates the name of the object at the highest level of the hierarchy. |
| Object ID | OBJECT_ID | Object ID.<br>Character string that uniquely identifies an object instance within the integrated system when it is combined with PRODUCT_NAME (the format depends on the product; this information is used to call the monitor of each product from the Tool Launcher window of JP1/IM - View). |

| Item | Attribute name | Description |
|------|----------------|-------------|
| Occurrence | OCCURRENCE | Event that occurred in the object indicated by the object name. The events include the following:<br>START (Start of execution)<br>END (End of execution)<br>PAUSE (Pausing execution)<br>RELEASE (Release of temporary stop)<br>RESTART (Start of re-execution)<br>CREATE (Creation of definition)<br>DESTROY (Deletion of definition) |
| Start time | START_TIME | Execution or re-execution start time (absolute time in seconds since UTC 1970-01-01 00:00:0). This item might not be set. |
| End time | END_TIME | Execution end time (absolute time in seconds since UTC 1970-01-01 00:00:0). This item might not always be available to set. |
| Termination code | RESULT_CODE | Termination code as a decimal character string. This item might not always be available to set. |

## 3.2 JP1 events issued by JP1/IM

This section describes the JP1 events that are issued by JP1/IM.

### 3.2.1 List of JP1 events issued by JP1/IM

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00002010 | When an action's execution time exceeds the action delay monitoring time. | KAVB4400-E The run time of an action for an event exceeded the action delay monitoring time.(Event_ID=*event-ID*, SEQNO=*serial-number-in-event-database*, Execution Host=*action-execution-host*, Action Serial Number=*action-serial-number*) Delay monitoring notifications will not be sent until suppression of the function for sending notifications to the action delay monitor is canceled. | Automatic Action Service |
| 00002011 | When an action is placed in Fail or Error status while the action's status is being monitored. | KAVB4402-E An event status is abnormal.(event ID = *event-ID*, event serial number = *serial-number-in-event-database*, execution host = *action-execution-host*, action serial number = *action-serial-number*) Status monitoring notifications will not be sent until suppression of the function for sending notifications to the action status monitor is canceled | Automatic Action Service |
| 00002012 | When the health check function detects an error. | KAVB8060-E An abnormality was detected in *function-name*. (host name = *host-name*, process name = *process-name*, process ID = *process-ID*) : *maintenance-information* | • Event Console Service<br>• Event Base Service |
| 00002013[#1] | When the health check function detects an error. | KAVB8062-E An abnormality was detected in *function-name*. (host name = *host-name*, process name = *process-name*) : *maintenance-information* | Event Console Service |

494

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00002014#2 | When the health check function detects error recovery. | `KAVB8061-I` *function-name* `has been recovered. (host name =` *host-name*`, process name =` *process-name*`, process ID =` *process-ID*`) :` *maintenance-information* | • Event Console Service<br>• Event Base Service |
| 00002015 | When suppression of the function for sending notification to the action delay monitor is released. | `KAVB4401-I Suppression of the function for sending notifications to the action delay monitor was canceled.` | Automatic Action Service |
| 00002016 | When suppression of the function for sending notification to the action status monitor is released. | `KAVB4403-I Suppression of the function for sending notifications to the action status monitor was canceled.` | Automatic Action Service |
| 00002020 | When an action that has been placed in delayed status during action delay monitoring wraps around in the action information file. | `KAVB4404-E Although the run time of an action exceeded the action delay monitoring time, an action delay notification event could not be sent because no action information exists in the action information file.(action serial number =` *action-serial-number*`) Delay monitoring notifications will not be sent until suppression of the function for sending notifications to the action delay monitor is canceled.` | Automatic Action Service |
| 00002021 | When an action that has been placed in error status during action status monitoring wraps around in the action information file. | `KAVB4405-E Although an action status is abnormal, an action state notification event could not be sent because no action information exists in the action information file. Status monitoring notifications will not be sent until suppression of the function for sending notifications to the action status monitor is canceled.:` *maintenance-information* | Automatic Action Service |
| 000020A0 | When automated action processing terminates abnormally due to a problem that prevents processing from resuming. | `KAVB4054-E Automatic Action was terminated abnormally. (Hostname :` *host-name*`)` | Automatic Action Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 000020A1 | When an automated action is started by the `jco_start` (`.model`) command. The default is that this event is not issued. | `KAVB4050-I Automatic Action was started. :` *logical-host-name* | Automatic Action Service |
| 000020A2 | When an automated action is terminated by the `jco_stop` (`.model`) command. The default is that this event is not issued. | `KAVB4051-I Automatic Action was terminated. :` *logical-host-name* | Automatic Action Service |
| 000020A3 | When the automated action function is started by the `jcachange` command or by a window operation. | `KAVB4055-I The action definition file was read and the automatic action function status was changed to operating. The processing will be based on the definitions read from the subsequently received` (*arrival-time-of-most-recently-processed-event* (*YYYY/MM/DD HH:MM:SS*)) `events.` (`Definition=`*total-number-of-effective-definitions*/ *total-number-of-definitions-in-file*, `SEQNO=`*serial-number-of-most-recently-processed-event*) | Event Base Service |
| 000020A4 | When the status of the automated action function changes from running to standby. | `KAVB4056-I Automatic action was suspended. Automatic actions cannot be executed for the subsequently received` (*arrival-time-of-most-recently-processed-event* (*YYYY/MM/DD HH:MM:SS*)) `events.` (`SEQNO=`*serial-number-of-most-recently-processed-event*) | Event Base Service |
| 000020A5 | When setting of locale information by Automatic Action Service fails. | `KAVB4909-E An attempt to set locale information has failed.` | Automatic Action Service |
| 000020A6 | When setting of locale information by the Event Base Service process fails. | `KAVB4909-E An attempt to set locale information has failed.` | Event Base Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 000020E0 | When execution of an action starts. | KAVB4430-I Execution of the action for an event was requested.(Event_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) | Automatic Action Service |
| 000020E1 | When execution of an action is completed. | KAVB4431-I Execution of the action for an event ended normally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*, Return_code=*termination-code*) | Automatic Action Service |
| 000020E2 | When an automated action or an action under command control is placed in abnormal status. | KAVB4432-E Automatic action or command control of the action for an event ended abnormally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) | Automatic Action Service |
| 000020E3[#3] | When an action execution request for an action status notification event is registered. | KAVB4433-I Execution of the action for an action state notification event was requested.(Event_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) | Automatic Action Service |
| 000020E4[#3] | When an action for an action status notification event terminates. | KAVB4434-I Execution of the action for an action state notification event ended normally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*, Return_code=*termination-code*) | Automatic Action Service |
| 000020E5[#3] | When an automated action or an action under command control for an action status notification event is placed in abnormal status. | KAVB4435-E Automatic action or command control of the action for an action state notification event ended abnormally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) | Automatic Action Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 000020E6[#3] | When the `jcocmddef` command has been set to provide notification of execution requests, but issuance of the action status notification event (`000020E0` or `000020E3`) for an execution request fails because the action information file has wrapped around. (Event level: `Warning`). | KAVB4436-W Although Execution of the action for an event was requested, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* | Automatic Action Service |
| 000020E7[#3] | When the `jcocmddef` command has been set to provide notification of command execution terminations, but issuance of the action status notification event (`000020E1` or `000020E4`) for an execution termination fails because the action information file has wrapped around. (Event level: `Warning`). | KAVB4437-W Although Execution of the action for an event ended normally, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* | Automatic Action Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 000020E8[#3] | When the jcocmddef command has been set to provide notifications of abnormal command terminations, but issuance of the action status notification event (000020E2 or 000020E5) for an abnormal termination fails because the action information file has wrapped around. (Event level: Error). | KAVB4438-E Although automatic action or command control of the action for an event ended abnormally, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* | Automatic Action Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00003F01[#1] | When no more events can be displayed because there are no events to be acquired from the event buffer at the connected host. | KAVB1513-W Cannot display some event(S).<br>There were no events to obtain from the event buffer on the connecting host.<br>All the events except the above will be displayed.<br>To search for an event which was not displayed, specify the search conditions in the event search condition settings dialog as follows:<br>(1) In "Search host", specify the name of the connecting host.<br>(2) In "Registered timeframe", specify the times when the events before and after this event were registered.<br><br>Check to see if the following conditions are met when this event appears frequently.<br>(1) The "Interval" value that was set for "Automatic refresh" in the Preferences window is too long.<br>(2) The "Num. of events to acquire at update" value that was set in the Preferences window is too small.<br>(3) The "Event buffer" value for the Manager that was set in the System Environment Settings window is too small. | Event Console Service |
| 00003F03[#1] | When an error occurs while events are being acquired from Event Service. | KAVB1516-W An error occurred in acquiring an event from the event service.<br>Cannot recover the error after attempting the number of retries specified in the system profile.<br>No more events will be displayed from now on due to this error.<br>Please check if the event service is running or not.<br>If not, recover the error by re-executing the manager after starting the event service. | Event Console Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00003F04[#1] | When an attempt is made to search for events using a condition that is not supported for the Event Service of JP1/Base version 06-00 (such as Is contained, Is not contained, Regular expression, or specification of multiple action statuses) or JP1/Base version 06-51 (such as Regular expression). | KAVB1527-E A condition that cannot be received by the search host is included. | Event Console Service |
| 00003F05[#1] | When the filter length is found to exceed Event Service's maximum value during event search processing. | KAVB0246-E The filter condition exceeds the maximum length. (Maximum length:*maximum-length*) | Event Console Service |
| 00003F06[#1] | When a specified regular expression is found to be invalid during event search processing. | KAVB0248-E The settings for a regular expression is incorrect. | Event Console Service |
| 00003F07[#1] | When the connection between Event Base Service and Event Service is lost. | KAVB4764-W An error occurred in acquiring an event from the event service. Please check if the event service is running or not. If not, recover the error by starting the event service. | Event Base Service |
| 00003F08[#1] | When an attempt is made to execute an event search with an exclusion condition specified, but the search host's JP1/Base version is 08-11 or earlier. | KAVB0251-E The search cannot be performed for the specified condition because the search host's JP1/Base does not support the exclusion condition. | Event Console Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| `00003F11` | When the status of a JP1 event action is changed by an operation in one of the following windows or by entering the following command:<br>• Event Console window<br>• Related Events window<br>• `jcochstat` command | `KAVB1577-I A status operation was performed. (user who performed the operation = ` *JP1-user*`, event ID = ` *event-ID*`, status before operation = ` *status-before-operation*`, status after operation = ` *status-after-operation*`)` | Event Console Service |
| `00003F13`[#4] | When a message is issued that provides notification that an event acquisition filter condition of JP1/IM - Manager has been changed in the System Environment Settings window or the Event Acquisition Conditions List window, or by entry of the `jcochfilter` command. | `KAVB4014-I The event acquisition filter definition file was read. The read definitions will be used for processing from the next received event. (filter name = ` *filter-name*`, last received event = ` *arrival-time*`, serial number in event DB = ` *serial-number-in-event-DB*`)` | Event Base Service |
| Event ID specified in the `SUCCESS_EVENT` parameter in the correlation event generation definition file | When a specified correlation event generation condition results in success during correlation event generation processing. | Message specified in the `SUCCESS_EVENT` parameter in the correlation event generation definition file | Correlation event generation function |
| Event ID specified in the `FAIL_EVENT` parameter in the correlation event generation definition file | When a specified correlation event generation condition results in failure during correlation event generation processing. | Message specified in the `SUCCESS_EVENT` parameter in the correlation event generation definition file | Correlation event generation function |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00003F15 | When (while the integrated monitoring database is enabled) a message is sent providing notification that the severe event definition of JP1/IM - Central Console has been changed from the Severe Event Definitions window. | KAVB1669-I The severe event definition file has been read. Next, processing will be performed using the definition read from the acquired event. (Event acquired at the end:Arrival time = *arrival-time-of-the-event-acquired-at-the-end*, serial number in event DB = *serial-number-in-event-database-of-the-event-acquired-at-the-end*) | Event Base Service |
| 00003F16 | When an error occurs while events are being acquired from the integrated monitoring database. | KAVB1671-W An error occurred in acquiring an event from the integrated monitoring database. Cannot recover the error after attempting the number of retries specified in the system profile. No more events will be displayed from now on due to this error. | Event Console Service |
| 00003F20[#4] | When a message is issued providing notification that an event acquisition filter condition of JP1/IM - Manager (Event Generation Service) has been changed in the System Environment Settings window or the Event Acquisition Conditions List window, or by entry of the jcochfilter command. | KAJV2179-I The event acquisition filter definition file was read. The read definitions will be used for processing from the next received event. (filter name = *filter-name*, last received event = *arrival-time*, serial number in event DB = *serial-number-in-event-database*) | Event Generation Service |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00003F21 | When a message is issued providing notification that a correlation event generation definition has been updated by the jcoegschange command. | KAJV2242-I The correlation event generation definition file has been read, and the definitions for the correlation event generation function have been updated. (file name = *file-name*) | Event Generation Service |
| 00003F25 | When a message is issued providing notification that correlation event generation processing has been restarted by the jcoegsstart command. | KAJV2243-I The correlation event generation function has been restarted. | Event Generation Service |
| 00003F26 | When a message is issued providing notification that correlation event generation processing has been terminated by the jcoegsstop command without stopping the Event Generation Service. | KAJV2234-I The correlation event generation function has stopped. | Event Generation Service |
| 00003F28 | When the number of JP1 event sets issued by the Event Generation Service exceeds the maximum value (20,000 sets). | KAJV2322-W A JP1 event (event ID = *event-ID*, serial number in the event database = *serial-number-in-event-database*) could not be correlated because the number of correlated JP1 event pairs has reached the upper limit (20,000). | Event Generation Service |
| 00003F51 | When events are deleted from the integrated monitoring database. | KAVB1841-I The events from *deletion-target-start-date-and-time* to *deletion-target-end-date-and-time* were deleted from the integrated monitoring database. | Integrated monitoring database |

504

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| 00003F52 | When the number of events on which an output-and-save operation has not been performed exceeds the deletion warning position. | KAVB1842-W Events not output for preservation have exceeded the deletion warning level (*deletion-warning-level*%). | Output-and-save function |
| 00003F53 | When an error occurs while events are being registered into the integrated monitoring database. | KAVB1832-E An error occur while attempting to register an event into the integrated monitoring database. The system will retry registering the event. (detailed information = *detailed-information*) | Event Base Service |
| 00003F54 | When an event registration error that occurred in the integrated monitoring database is recovered. | KAVB1833-I An error occur while attempting to register an event into the integrated monitoring database. However, after several retries, the event was registered into the database. The event base service is restarting event acquisition. | Event Base Service |
| 00003F61 | When a severity changing definition has been applied and jco_spmd_reload is executed. | KAVB4600-I The severity change definition has been read. Next, processing will be performed using the definition read from the received event. (arrival time of the last received event = *arrival-time*, serial number in the event database = *serial-number-in-event-database*) | Event Base Service |
| 00003FA0[#5] | When command execution control receives a command execution request from the Execute Command window. | KAVB2100-I [*host-name*:*JP1-user-name*] Command execution started. | JP1/Base command execution |
| 00003FA1[#5] | When execution of a command requested from the Execute Command window is completed. | KAVB2101-I [*host-name*:*JP1-user-name*] Command execution ended normally. | JP1/Base command execution |

| Event ID | When issued | Message | Function that issues the event |
|---|---|---|---|
| `00003FA2`[#5] | When it is detected that a command whose execution was requested from the Execute Command window cannot be executed for some reason. | `KAVB2102-E` `[`*host-name*`:`*JP1-user-name*`]` `Command` `execution ended abnormally.` | JP1/Base command execution |
| `00003FA3`[#5] | When execution of a command was requested from the Execute Command window but the elapsed time event issuance interval for the automated action is exceeded. (The `jcocmddef` command is used to specify the elapsed time event issuance interval). | `KAVB2402-W [`*host-name*`]The` `execution time of command` `execution exceeded the regulation` `value (`*numeric-value* `sec)` | JP1/Base command execution |
| `00003FA5`[#5] | When the number of pre-loaded automated actions reaches a threshold value (if a threshold for the number of pre-loaded commands has been set by the `jcocmddef` command). | `KAVB2071-W In` *target-host-name*`, the` `number of queued commands` `requested from` *source-host-name* `has` `exceeded the threshold (`*xx*`).` | JP1/Base command execution |
| `00003FA6`[#5] | When the number of pre-loaded automated actions becomes 0 (if a threshold for the number of pre-loaded commands has been set by the `jcocmddef` command). | `KAVB2072-I In` *target-host-name*`, the` `number of queued commands` `requested from` *source-host-name* `has` `become 0.` | JP1/Base command execution |

| Event ID | When issued | Message | Function that issues the event |
|----------|-------------|---------|-------------------------------|
| 00003FB0 | When the status of a monitoring node changes. | KAVB7900-I Status of *monitoring-node-name* is changed *status* from *status*. | Central Scope Service |
| 00003FB1 | When the number of monitoring node status change events reaches a maximum value. | KAVB7901-W The number of status change event for the monitored node *monitoring-node-ID* has reached the threshold. | Central Scope Service |
| 00003F90[#6] | When a process terminates abnormally. | KAVB3737-E The *component-name managed-process-name* terminated abnormally. | JP1/IM - Manager process management |
| 00003F91[#6] | When a timeout occurs during process startup. | KAVB3613-W A *component-name* timeout occurred in *managed-process-name*. Processing continues. | JP1/IM - Manager process management |
| 00003F92[#6] | When a process that terminated abnormally restarts. | KAVB3616-I Restart of the *component-name managed-process-name* has finished. | JP1/IM - Manager process management |

#1: These are dummy events to which the following limitations apply:

- The event cannot be searched in the Event Console window.

- If the details of the event are displayed, the JP1 event basic and extended attributes are not displayed.

- No action is executed pursuant to such an event even if an automated action is set.

- No mapping is performed on the event even if event information mapping is defined.

- This event is not subject to monitor startup.

- This event is not subject to the event acquisition filter.

- This event is not subject to correlation event generation processing.

#2: When recovery of JP1/Base Event Service (jevservice) is detected, the following message is displayed: KAVB8063-I *function-name* has been recovered. (host name = *host-name*, process name = *process-name*) : *maintenance-information*.

#3: The following limitation applies to these events:

- No action is executed on this event even if an automated action is set.

#4: The following limitation applies to these events:

507

- This event is not subject to the event acquisition filter.

#5: This is a JP1 event issued by JP1/Base command execution. For details about the JP1 events, see the chapter that describes JP1 events in the *Job Management Partner 1/Base User's Guide*.

#6: This event is issued only if issuance of JP1 events in response to process errors is set. To issue such JP1 events, you must edit the IM parameter definition file and then execute the `jbssetcnf` command. For details about the definition file, see *IM parameter definition file (jp1co_param_V7.conf)* in *2. Definition Files*. For details about the setup procedure, see *1.18.2 Settings for handling JP1/IM - Manager failures* (for Windows) and *2.17.4 Settings for handling JP1/IM - Manager failures* (for UNIX) in the *Job Management Partner 1/Integrated Management - Manager Configuration Guide*.

## 3.2.2 Details of JP1 events

### (1) Details of event ID: 0002010

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535$^{\#}$<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535$^{\#}$<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | Source serial number | SOURCESEQNO | Source serial number |
| | Message | MESSAGE | `KAVB4400-E The run time of an action for an event exceeded the action delay monitoring time.(Event_ID=`*event-ID*`, SEQNO=`*serial-number-in-event-database*`, Execution Host=`*action-execution-host*`, Action Serial Number=`*action-serial-number*`) Delay monitoring notifications will not be sent until suppression of the function for sending notifications to the action delay monitor is canceled.` |
| Extended attribute | Common information | Event level | SEVERITY | `Error` |
| | | Product name | PRODUCT_NAME | `/HITACHI/JP1/IM/JCAMAIN` |
| | | Object type | OBJECT_TYPE | `ACTION` |
| | | Object name | OBJECT_NAME | `JCAMAIN` |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | Occurrence | OCCURRENCE | `NOTICE` |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment variable file | EXECENV | Name of the environment variable file used during execution |
| | | Action serial number | ACTION_SEQNO | Serial number of the action |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | ID of the action triggering event | SRC_EVENT_ID | Event ID of the event that resulted in execution of the action |
| | | Inserted time | SEND_TIME | Time the action execution request was sent |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (2) Details of event ID: 00002011

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4402-E An event status is abnormal.(event ID = *event-ID*, event serial number = *serial-number-in-event-database*, execution host = *action-execution-host*, action serial number = *action-serial-number*) Status monitoring notifications will not be sent until suppression of the function for sending notifications to the action status monitor is canceled |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action terminated abnormally |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action's status |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment variable file | EXECENV | Name of the environment variable file used during execution |
| | | Action serial number | ACTION_SEQNO | Serial number of the action |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | ID of the action triggering event | SRC_EVENT_ID | Event ID of the event that resulted in execution of the action |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (3) Details of event ID: 00002012

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB8060-E An abnormality was detected in *function-name*. (host name = *host-name*, process name = *process-name*, process ID = *process-ID*) : *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Error |

512

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/HEALTHCHECK |
| | | Object type | OBJECT_TYPE | JCOHC |
| | | Object name | OBJECT_NAME | Name of the function in which the error was detected |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-spe-cific information | Host | HOST_NAME | Host name |
| | | Process name | PROCESS_NAME | Process name |
| | | Process ID | PROCESS_ID | Process ID |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### *(4)* *Details of event ID: 00002013*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows SYSTEM<br>• In UNIX root |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB8062-E An abnormality was detected in *function-name*. (host name = *host-name*, process name = *process-name*) : *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/HEALTHCHECK |
| | | Object type | OBJECT_TYPE | JCOHC |
| | | Object name | OBJECT_NAME | Name of the function in which the error was detected |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-spe-cific information | Host | HOST_NAME | Host name |
| | | Process name | PROCESS_NAME | Process name |
| | | Process ID | PROCESS_ID | Process ID |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (5) Details of event ID: 00002014

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#1] |
| | | Source group ID | GROUPID | From -1 to 65,535[#1] |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB8061-I *function-name* has been recovered. (host name = *host-name*, process name = *process-name*, process ID = *process-ID*) : *maintenance-information*[#2] |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/HEALTHCHECK |
| | | Object type | OBJECT_TYPE | JCOHC |
| | | Object name | OBJECT_NAME | Name of the recovered function |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Host | HOST_NAME | Host name |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Process name | PROCESS_NAME | Process name |
| | | Process ID | PROCESS_ID | Process ID |

Legend:

--: None

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

#2: If recovery of JP1/Base Event Service (`jevservice`) is detected, the following message is issued: `KAVB8063-I` *function-name* `has been recovered. (host name =` *host-name*`, process name =` *process-name*`) :` *maintenance-information*.

### (6) Details of event ID: 00002015

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | -- | KAVB4401-I Suppression of the function for sending notifications to the action delay monitor was canceled. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | NOTICE |

Legend:

--: None

\#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### *(7) Details of event ID: 00002016*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows SYSTEM • In UNIX root |
| | | Source group name | GROUPNAME | Blank |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4403-I Suppression of the function for sending notifications to the action status monitor was canceled. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | NOTICE |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (8) Details of event ID: 00002020

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4404-E Although the run time of an action exceeded the action delay monitoring time, an action delay notification event could not be sent because no action information exists in the action information file.(action serial number = *action-serial-number*) Delay monitoring notifications will not be sent until suppression of the function for sending notifications to the action delay monitor is canceled. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action serial number | ACTION_SEQNO | Serial number of the action |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### (9)  Details of event ID: 00002021

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | Source group ID | GROUPID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | Source group name | GROUPNAME | • In Windows<br>  Blank<br>• In UNIX<br>  root |
| | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | Source serial number | SOURCESEQNO | Source serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAVB4405-E Although an action status is abnormal, an action state notification event could not be sent because no action information exists in the action information file. Status monitoring notifications will not be sent until suppression of the function for sending notifications to the action status monitor is canceled.: *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action terminated abnormally |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Serial number of the action |
| | | Action status | ACTION_STATUS | Action's status |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (10) Details of event ID: 000020A0

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>  From -1 to 65,535#<br>• In UNIX<br>  0 |
| | | Source group ID | GROUPID | • In Windows<br>  From -1 to 65,535#<br>• In UNIX<br>  0 |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | • In Windows<br>  Blank<br>• In UNIX<br>  root |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4054-E Automatic Action was terminated abnormally. (Hostname : *host-name*) |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | TERMINATE |

\#: The substitute user ID and substitute group ID specified in the event server settings

file of JP1/Base are set. If they are not specified, `-1` is set.

### (11) Details of event ID: 000020A1

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action started |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4050-I Automatic Action was started. : *logical-host-name* |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | SERVICE |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | START |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (12) Details of event ID: 000020A2

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | Source serial number | SOURCESEQNO | Source serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAVB4051-I Automatic Action was terminated. : *logical-host-name* |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | TERMINATE |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### (13) Details of event ID: 000020A3

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#1] |
| | Source group ID | GROUPID | From -1 to 65,535[#1] |
| | Source user name | USERNAME | • In Windows SYSTEM • In UNIX root |
| | Source group name | GROUPNAME | Blank |
| | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action is running |
| | Source serial number | SOURCESEQNO | Source serial number |

525

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAVB4055-I The action definition file was read and the automatic action function status was changed to operating. The processing will be based on the definitions read from the subsequently received (*arrival-time-of-most-recently-processed-event* (*YYYY/MM/DD HH:MM:SS*)) events. (Definition=*total-number-of-effective-definitions*/ *total-number-of-definitions-in-file*, SEQNO=*serial-number-of-most-recently-processed-event*) [#2] |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | RUN |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

#2: If the automated action has not received the event, -- is displayed for *YYYY/MM/DD HH:MM:SS* and for *serial-number-of-last-event-processed*.

## (14) Details of event ID: 000020A4

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#1] |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group ID | `GROUPID` | From -1 to 65,535[#1] |
| | | Source user name | `USERNAME` | • In Windows<br>`SYSTEM`<br>• In UNIX<br>`root` |
| | | Source group name | `GROUPNAME` | Blank |
| | | Event-issuing server name | `SOURCESERVER` | Name of the logical host where the automated action was running |
| | | Source serial number | `SOURCESEQNO` | Source serial number |
| | | Message | `MESSAGE` | `KAVB4056-I Automatic action was suspended. Automatic actions cannot be executed for the subsequently received` (*arrival-time-of-most-recently-processed-event* (*YYYY/MM/DD HH:MM:SS*)) `events.` (`SEQNO=`*serial-number-of-most-recently-processed-event*)[#2] |
| Extended attribute | Common information | Event level | `SEVERITY` | `Information` |
| | | Product name | `PRODUCT_NAME` | `/HITACHI/JP1/IM/EVFLOW` |
| | | Object type | `OBJECT_TYPE` | `SERVICE` |
| | | Object name | `OBJECT_NAME` | `EVFLOW` |
| | | Occurrence | `OCCURRENCE` | `STANDBY` |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

#2: If the automated action has not received an event, `--` is displayed for *YYYY/MM/DD HH:MM:SS* and for *serial-number-of-last-event-processed*.

### *(15) Details of event ID: 000020A5*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | `SEQNO` | Serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | | Source group ID | GROUPID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | • In Windows<br>  Blank<br>• In UNIX<br>  root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the erroneous automated action process was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4909-E An attempt to set locale information has failed. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Occurrence | OCCURRENCE | ERROR |

#: The substitute user ID and substitute group ID specified in the event server settings

file of JP1/Base are set. If they are not specified, `-1` is set.

### (16) Details of event ID: 000020A6

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Event Base Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the erroneous Event Base Service process was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4909-E An attempt to set locale information has failed. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |

529

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | ERROR |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### (17) Details of event ID: 000020E0

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action is running |
| | Source serial number | SOURCESEQNO | Source serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | -- | KAVB4430-I Execution of the action for an event was requested.(Event_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | Start time | START_TIME | Time the action execution request was completed |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status RUNNING |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (18) Details of event ID: 000020E1

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source process ID | `PROCESSID` | Process ID of Automatic Action Service |
| | | Registered time | `TIME` | Time of registration |
| | | Arrived time | `ARRIVEDTIME` | Arrival time |
| | | Source user ID | `USERID` | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source group ID | `GROUPID` | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | `USERNAME` | • In Windows<br>`SYSTEM`<br>• In UNIX<br>`root` |
| | | Source group name | `GROUPNAME` | • In Windows<br>Blank<br>• In UNIX<br>`root` |
| | | Event-issuing server name | `SOURCESERVER` | Name of the logical host where the automated action was running |
| | | Source serial number | `SOURCESEQNO` | Source serial number |
| | | Message | -- | `KAVB4431-I Execution of the action for an event ended normally.(EVENT_ID=`event-ID`, SEQNO=`serial-number-in-event-database`, Return_code=`termination-code`)` |
| Extended attribute | Common information | Event level | `SEVERITY` | `Information` |
| | | Product name | `PRODUCT_NAME` | `/HITACHI/JP1/IM/JCAMAIN` |
| | | Object type | `OBJECT_TYPE` | `ACTION` |
| | | Object name | `OBJECT_NAME` | `JCAMAIN` |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action execution request was completed |
| | | Termination code | RESULT_CODE | Action's termination code |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status ENDED |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (19) Details of event ID: 000020E2

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source user ID | USERID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | | Source group ID | GROUPID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | • In Windows<br>  Blank<br>• In UNIX<br>  root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4432-E Automatic action or command control of the action for an event ended abnormally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action terminated abnormally |
| | | Occurrence | OCCURRENCE | NOTICE |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | User-specific or program-spe-cific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status ERROR or FAIL |
| | | Detailed abnormal termination information | ERROR_INFO | Message indicating the nature of the error |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |
| | | Cause of error | EXECERR | Maintenance information in the event of an error |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (20) Details of event ID: 000020E3

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group ID | GROUPID | • In Windows<br>  From -1 to 65,535[#]<br>• In UNIX<br>  0 |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | • In Windows<br>  Blank<br>• In UNIX<br>  root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action is running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4433-I Execution of the action for an action state notification event was requested.(Event_ID=*event-ID*, SEQNO=*serial-number-in-event-database*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | Start time | START_TIME | Time the action execution request was completed |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Action status | ACTION_STATUS | Action status RUNNING |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (21) Details of event ID: 000020E4

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4434-I Execution of the action for an action state notification event ended normally.(EVENT_ID=*event-ID*, SEQNO=*serial-number-in-event-database*, Return_code=*termination-code*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action execution request was completed |
| | | Termination code | RESULT_CODE | Action's termination code |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-spe-cific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status ENDED |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### (22) Details of event ID: 000020E5

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | Source serial number | SOURCESEQNO | Source serial number |
| | Message | -- | `KAVB4435-E Automatic action or command control of the action for an action state notification event ended abnormally.(EVENT_ID=`*event-ID*`, SEQNO=`*serial-number-in-event-database*`)` |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | Object ID | OBJECT_ID | Serial number of the event that caused the action |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | End time | END_TIME | Time the action terminated abnormally |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status ERROR or FAIL |
| | | Detailed abnormal termination information | ERROR_INFO | Message indicating the nature of the error |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |
| | | Cause of error | EXECERR | Maintenance information in the event of an error |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

**(23) Details of event ID: 000020E6**

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4436-W Although Execution of the action for an event was requested, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Warning |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | User name | USER_NAME | JP1 user who executed the action |
| | | Start time | START_TIME | Time the action execution request was completed |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status RUNNING |
| | | Command | EXECCMD | Command whose execution was requested |
| | | Environment-variable file name | EXECENV | Name of the environment variable file used during execution |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### *(24)* *Details of event ID: 000020E7*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4437-W Although Execution of the action for an event ended normally, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | End time | END_TIME | Time execution of the action ended |
| | | Occurrence | OCCURRENCE | NOTICE |

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| User-specific or program-spe-cific information | Action execution host | EXECHOST | Name of the host executing the action |
| | Action status | ACTION_STATUS | Action status ENDED |
| | Command | EXECCMD | Command whose execution was requested |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (25) Details of event ID: 000020E8

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the automated action was running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB4438-E Although automatic action or command control of the action for an event ended abnormally, an action state notification event could not be sent because no action information exists in the action information file. : *maintenance-information* |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/JCAMAIN |
| | | Object type | OBJECT_TYPE | ACTION |
| | | Object name | OBJECT_NAME | JCAMAIN |
| | | End time | END_TIME | Time the action terminated abnormally |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-spe-cific information | Action execution host | EXECHOST | Name of the host executing the action |
| | | Action status | ACTION_STATUS | Action status ERROR or FAIL |
| | | Detailed abnormal termination information | ERROR_INFO | Message indicating the nature of the error |
| | | Command | EXECCMD | Command whose execution was requested |

Legend:

--: None

545

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### *(26) Details of event ID: 00003F01*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | `SEQNO` | `-1` |
| | Source process ID | `PROCESSID` | `0` |
| | Registered time | `TIME` | Time of registration |
| | Arrived time | `ARRIVEDTIME` | Arrival time of an event that can be acquired |
| | Source user ID | `USERID` | `0` |
| | Source group ID | `GROUPID` | `0` |
| | Source user name | `USERNAME` | Blank |
| | Source group name | `GROUPNAME` | Blank |
| | Event-issuing server name | `SOURCESERVER` | Name of the event-issuing server |
| | Source serial number | `SOURCESEQNO` | `0` |

3.  JP1 Events

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAVB1513-W Cannot display some event(S).<br>There were no events to obtain from the event buffer on the connecting host.<br>All the events except the above will be displayed.<br>To search for an event which was not displayed, specify the search conditions<br>in the event search condition settings dialog as follows:<br>(1) In "Search host", specify the name of the connecting host.<br>(2) In "Registered timeframe", specify the times when the events before and after this event were registered.<br><br>Check to see if the following conditions are met when this event appears frequently.<br>(1) The "Interval" value that was set for "Automatic refresh" in the Preferences window is too long.<br>(2) The "Num. of events to acquire at update" value that was set in the Preferences window is too small.<br>(3) The "Event buffer" value for the Manager that was set in the System Environment Settings window is too small. |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | EVENT |
| | | Object name | OBJECT_NAME | \SYSTEM\ALL |
| | | Occurrence | OCCURRENCE | LOST |

## (27) Details of event ID: 00003F03

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | -1 |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB1516-W An error occurred in acquiring an event from the event service.<br>Cannot recover the error after attempting the number of retries specified in the system profile.<br>No more events will be displayed from now on due to this error. Please check if the event service is running or not.<br>If not, recover the error by re-executing the manager after starting the event service. |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object name | OBJECT_NAME | Event Service |
| | | Occurrence | OCCURRENCE | DISCONNECT |

## *(28)  Details of event ID: 00003F04*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | -1 |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB1527-E A condition that cannot be received by the search host is included. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | Event Service |
| | | Occurrence | OCCURRENCE | PARAM_ERROR |

### (29) Details of event ID: 00003F05

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | -1 |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB0246-E The filter condition exceeds the maximum length. (Maximum length:*maximum-length*) |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | Event Service |
| | | Occurrence | OCCURRENCE | OVER_LENGTH |

### (30) Details of event ID: 00003F06

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | -1 |

3. JP1 Events

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB0248-E The settings for a regular expression is incorrect. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | Event Service or IM database |
| | | Occurrence | OCCURRENCE | REGEXP_ERROR |

## *(31) Details of event ID: 00003F07*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | -1 |
| | Source process ID | PROCESSID | 0 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB4764-W An error occurred in acquiring an event from the event service. Please check if the event service is running or not. If not, recover the error by starting the event service. |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | Event Service |
| | | Occurrence | OCCURRENCE | DISCONNECT |

## (32) Details of event ID: 00003F08

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | -1 |
| | Source process ID | PROCESSID | 0 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB0251-E The search cannot be performed for the specified condition because the search host's JP1/Base does not support the exclusion condition. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | Event Service |
| | | Occurrence | OCCURRENCE | EXCLUDE_ERROR |

### *(33)  Details of event ID: 00003F11*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of occurrence |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#1] |
| | | Source group ID | GROUPID | From -1 to 65,535[#1] |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB1577-I A status operation was performed. (user who performed the operation = *JP1-user*[#2], event ID = *event-ID*, status before operation = *status-before-operation*[#3], status after operation = *status-after-operation*[#3]) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVTCON |
| | | Occurrence | OCCURRENCE | PROCESS |
| | User-specific or program-specific information | Serial number of the handled event | PROCESSUPDATE_SEQNO | Serial number of the JP1 event whose action's status was changed (decimal number) |
| | | Source serial number of the handled event | PROCESSUPDATE_ORIGINALSEQNO | Source serial number of the JP1 event whose action's status was changed (decimal number) |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Event level of the handled event | PROCESSUPDATE _SEVERITY | Event level of the JP1 event whose action's status was changed (one of the following: Emergency, Alert, Critical, Error, Warning, Notice, Information, or Debug) |
| | | Source event server name of the handled event | PROCESSUPDATE _SOURCESERVER | Name of the event-issuing server (server that issued the JP1 event whose action's status was changed) |
| | | Message for the handled event | PROCESSUPDATE _MESSAGE | Message (for the JP1 event whose action's status was changed) |
| | | Registration time of the handled event | PROCESSUPDATE _TIME | Time of registration (time the JP1 event whose action's status was changed was registered; displayed in the Event Details window in the format *MM*/*DD* *HH*:*MM*:*SS*) |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

#2: The value that is actually displayed for *JP1-user* depends on the status, as follows:

- When the action status was changed from JP1/IM - View version 08-01 or later: *JP1-user-who-changed-the-action-status*

- When the action status was changed from JP1/IM - View version 07-00 or earlier: -

- When the action status was changed by the jcochstat command: jcochstat

#3: *status-before-action* and *status-after-action* depend on the handling method, as shown below:

- Processed: PROCESSED

- Unprocessed: UNPROCESSED

- Processing: PROCESSING

- Held: HELD

- Processed -> Deleted: PROCESSED+DELETE

- Unprocessed -> Deleted: UNPROCESSED+DELETE

- Processing -> Deleted: PROCESSING+DELETE

- Held -> Deleted: HELD+DELETE

## *(34)  Details of event ID: 00003F13*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of occurrence |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the event base server is running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB4014-I The event acquisition filter definition file was read. The read definitions will be used for processing from the next received event. (filter name = *filter-name*, last received event = *arrival-time*, serial number in event DB = *serial-number*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | RUN |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (35) Details of the event ID specified in the SUCCESS_EVENT parameter in the correlation event generation definition file

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Event ID | IDBASE | User-defined event ID (must be in the range from 0 to 1FFF and from 7FFF8000 to 7FFFFFFF) |
| | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535# |
| | | Source group ID | GROUPID | From -1 to 65,535# |
| | | Source user name | USERNAME | • In Windows SYSTEM<br>• In UNIX root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | User-defined message |
| Extended attribute | Common information | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/GENERATE_EVENT |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | SUCCESS |

557

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| User-specific or program-spe-cific information | Relation event database sequence number | JP1_GENERATE_ SOURCE_SEQNO | Serial numbers of related events separated by the space ( $\Delta$ ), as shown below: *serial-number-1* $\Delta$ *serial-number-2* $\Delta$ ... $\Delta$ *serial-number-n* (*n*: value from 1 to 100) |
| | Correlation event generation condition name | JP1_GENERATE_ NAME | Name of the correlation event generation condition that resulted in approval |

Note: You can define as correlation event attributes additional attributes that are not listed in this table. For details, see *Correlation event generation definition file* in *2. Definition Files*.

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (36) Details of the event ID specified in the FAIL_EVENT parameter in the correlation event generation definition file

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | IDBASE | User-defined event ID (must be in the range from 0 to 1FFF and from 7FFF8000 to 7FFFFFFF) |
| | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#] |
| | Source group ID | GROUPID | From -1 to 65,535[#] |
| | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |

3. JP1 Events

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| Extended attribute | Common information | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/GENERATE_EVENT |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | FAIL |
| | User-specific or program-specific information | Relation event database sequence number | JP1_GENERATE_SOURCE_SEQNO | Serial numbers of related events separated by the space ( △ ), as shown below: *serial-number-1* △ *serial-number-2* △ ... △ *serial-number-n* (*n*: value from 1 to 100) |
| | | Correlation event generation condition name | JP1_GENERATE_NAME | Name of the correlation event generation condition that resulted in failure |

Note: You can define as correlation event attributes additional attributes that are not listed in this table. For details, see *Correlation event generation definition file* in *2. Definition Files*.

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (37) Details of event ID: 00003F15

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Event ID | ID | 3F15 |
| | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of Automatic Action Service |
| | | Registered time | TIME | Time of registration |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Arrived time | `ARRIVEDTIME` | Arrival time |
| | | Source user ID | `USERID` | • In Windows<br>From -1 to 65,535[#1]<br>• In UNIX<br>0 |
| | | Source group ID | `GROUPID` | • In Windows<br>From -1 to 65,535[#1]<br>• In UNIX<br>0 |
| | | Source user name | `USERNAME` | • In Windows<br>`SYSTEM`<br>• In UNIX<br>`root` |
| | | Source group name | `GROUPNAME` | • In Windows<br>Blank<br>• In UNIX<br>`root` |
| | | Event-issuing server name | `SOURCESERVER` | Name of the logical host where the event base server is running |
| | | Source serial number | `SOURCESEQNO` | Source serial number |
| | | Message | `MESSAGE` | `KAVB1669-I The severe event`<br>`definition file has been read.`<br>`Next, processing will be`<br>`performed using the definition`<br>`read from the acquired event.`<br>`(Event acquired at the`<br>`end:Arrival time =`<br>*arrival-time-of-the-event-acquired-at-the-end*`, serial number in event DB =`<br>*serial-number-in-event-database-of-the-event-acquired-at-the-end*)[#2] |
| Extended attribute | Common information | Event level | `SEVERITY` | `Information` |
| | | Product name | `PRODUCT_NAME` | `/HITACHI/JP1/IM/EVFLOW` |
| | | Object type | `OBJECT_TYPE` | `SERVICE` |
| | | Object name | `OBJECT_NAME` | `EVFLOW` |
| | | Occurrence | `OCCURRENCE` | `RUN` |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

#2: If Event Base Service has not received the event, -- is displayed for *arrival-time-of-last-event-acquired* and for *serial-number-of-last-event-acquired*.

### (38) Details of event ID: 00003F16

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | -1 |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Time the error occurred |
| | | Source user ID | USERID | 0 |
| | | Source group ID | GROUPID | 0 |
| | | Source user name | USERNAME | Blank |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | 0 |
| | | Message | MESSAGE | KAVB1671-W An error occurred in acquiring an event from the integrated monitoring database. Cannot recover the error after attempting the number of retries specified in the system profile. No more events will be displayed from now on due to this error. |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVENTCONSOLE |
| | | Object type | OBJECT_TYPE | SERVICE |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object name | OBJECT_NAME | IM Database |
| | | Occurrence | OCCURRENCE | DISCONNECT |

## (39) Details of event ID: 00003F20

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535[#] |
| | | Source group ID | GROUPID | From -1 to 65,535[#] |
| | | Source user name | USERNAME | • In Windows<br>   SYSTEM<br>• In UNIX<br>   root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the Event Generation Service is running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAJV2179-I The event acquisition filter definition file was read. The read definitions will be used for processing from the next received event. (filter name = *filter-name*, last received event = *arrival-time*, serial number in event DB = *serial-number-in-event-database*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EGS |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | RUN |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (40) Details of event ID: 00003F21

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#] |
| | Source group ID | GROUPID | From -1 to 65,535[#] |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | Blank |
| | Event-issuing server name | SOURCESERVER | Name of the logical host where the Event Generation Service is running |
| | Source serial number | SOURCESEQNO | Source serial number |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAJV2242-I The correlation event generation definition file has been read, and the definitions for the correlation event generation function have been updated. (file name = *file-name*) |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EGS |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | RUN |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (41) Details of event ID: 00003F25

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#] |
| | Source group ID | GROUPID | From -1 to 65,535[#] |
| | Source user name | USERNAME | • In Windows SYSTEM<br>• In UNIX root |
| | Source group name | GROUPNAME | Blank |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the Event Generation Service is running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAJV2243-I The correlation event generation function has been restarted. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EGS |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | START |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### (42) Details of event ID: 00003F26

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535# |
| | Source group ID | GROUPID | From -1 to 65,535# |
| | Source user name | USERNAME | • In Windows<br>  SYSTEM<br>• In UNIX<br>  root |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the logical host where the Event Generation Service is running |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAJV2234-I The correlation event generation function has stopped. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EGS |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | STOP |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (43) Details of event ID: 00003F28

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#] |
| | Source group ID | GROUPID | From -1 to 65,535[#] |
| | Source user name | USERNAME | • In Windows SYSTEM • In UNIX root |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAJV2322-W A JP1 event (event ID=*event-ID*, serial number in the event database=*serial-number*) could not be correlated because the number of correlated JP1 event pairs has reached the upper limit (20,000). |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EGS |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EGS |
| | | Occurrence | OCCURRENCE | RUN |

Note: JP1 event `00003F28` is output once when the number of JP1 event sets reaches the maximum value. After that, this event is not output again until the number of JP1 event sets drops down to 16,000 or fewer.

\#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

## *(44) Details of event ID: 00003F51*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | ID | 00003F51 |
| | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source user ID | USERID | From -1 to 65,535[#1] |
| | | Source group ID | GROUPID | From -1 to 65,535[#1] |
| | | Source user name | USERNAME | • In Windows<br>　SYSTEM<br>• In UNIX<br>　root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB1841-I The events from *deletion-target-start-date-and-time* to *deletion-target-end-date-and-time* were deleted from the integrated monitoring database.[#2] |
| Extended attribute | Common information | Event level | SEVERITY | Notice |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Deletion start date | DEL_STARTDAY | Deletion start date, expressed as absolute time in seconds (displayed in the Event Details window in the format *MM/DD hh:mm:ss*) |
| | | Deletion end date | DEL_ENDDAY | Deletion end date, expressed as absolute time in seconds (displayed in the Event Details window in the format *MM/DD hh:mm:ss*) |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

#2: The format of *deletion-start-date* and *deletion-end-date* is replaced in the KAVB1841-I message with *YYYY/MM/DD hh:mm:ss*.

### (45) Details of event ID: 00003F52

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Event ID | ID | 00003F52 |
| | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | 0 |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | From -1 to 65,535# |
| | | Source group ID | GROUPID | From -1 to 65,535# |
| | | Source user name | USERNAME | • In Windows SYSTEM • In UNIX root |
| | | Source group name | GROUPNAME | Blank |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | MESSAGE | KAVB1842-W Events not output for preservation have exceeded the deletion warning level (*deletion-warning-level*%). |
| Extended attribute | Common information | Event level | SEVERITY | Warning |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Occurrence | OCCURRENCE | NOTICE |

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

### *(46)  Details of event ID: 00003F53*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Source host | SOURCESERVER | Name of the event-issuing server |
| | | Message | MESSAGE | KAVB1832-E An error occur while attempting to register an event into the integrated monitoring database. The system will retry registering the event. (detailed information = *detailed-information*) |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | NOTICE |

### *(47)  Details of event ID: 00003F54*

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Source host | SOURCESERVER | Name of the event-issuing server |
| | | Message | MESSAGE | KAVB1833-I An error occur while attempting to register an event into the integrated monitoring database. However, after several retries, the event was registered into the database. The event base service is restarting event acquisition. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | NOTICE |

## *(48) Details of event ID: 00003F61*

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | ID | 00003F61 |
| | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | 0 |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | From -1 to 65,535[#1] |
| | Source group ID | GROUPID | From -1 to 65,535[#1] |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | Blank |
| | Event-issuing server name | SOURCESERVER | Name of the server or logical host where Event Base Service is running |
| | Source serial number | SOURCESEQNO | Source serial number |

571

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Message | MESSAGE | KAVB4600-I The severity change definition has been read. Next, processing will be performed using the definition read from the received event. (arrival time of the last received event = *arrival-time*, serial number in the event database = *serial-number-in-event-database*)[#2] |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/EVFLOW |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | EVFLOW |
| | | Occurrence | OCCURRENCE | RUN |

#1: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

#2: The format of *arrival-time* is replaced in the KAVB4600-I message with *YYYY/MM/DD hh:mm:ss*. The time set in *arrival-time* is based on the time zone set in the machine where JP1/IM - Manager is running.

### (49) Details of event ID: 00003FB0

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Message | MESSAGE | KAVB7900-I Status of *monitoring-node-name* is changed *status* from *status*. |
| Extended attribute | Common information | Event level | SEVERITY | Information |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/SCOPE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | IM_CS |
| | | Occurrence | OCCURRENCE | STATUS_CHANGE |

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| User-specific or program-spe-cific information | Monitoring node ID | `MON_NODE_ID` | ID of the monitoring node |
| | Monitoring node name | `MON_NODE_NAME` | Name of the monitoring node |
| | Monitoring node status[#1] | `MON_NODE_STATUS` | `StatusID` of the monitoring node |
| | Information about the JP1 event resulting in the status change[#2] | *attributes* | Attributes (the name of a basic attribute is prefixed with `JCS_B_`, and the name of an extended attribute is prefixed with `JCS_E_`) |

#1: For the monitoring node status (`E.MON_NODE_STATUS`), the status of the monitoring node that issued the JP1 event is stored in `StatusID`, expressed as a numeric value as shown below:

Value of `StatusID` (monitoring node status):

> `Emergency: 800; Alert: 700; Critical: 600; Error: 500; Warning: 400; Normal: 300; Debug: 200; Initial: 100`

> For example, if a JP1 event is issued when the monitoring node status has changed to `Emergency`, its monitoring node status (`E.MON_NODE_STATUS`) would be `800`.

#2: The item *Information about the JP1 event resulting in the status change* cannot be checked by JP1/IM - View. All information about the JP1 event resulting in the status change is stored in this item as sets of *attribute-name-attribute-value*. If `00003FB0` exceeds the maximum length for a JP1 event (10,000 bytes), JP1/IM stores as much JP1 event information as fits. If the number of extended attributes exceeds 100, JP1/IM stores as much JP1 event information as fits, but no more than 100 extended attributes. The attributes `E.JCS_B_TIME` (registration time of the JP1 event resulting in the status change) and `E.JCS_B_ARRIVEDTIME` (arrival time of the JP1 event resulting in the status change) are stored in this item in GMT in the format *yyyy/mm/dd hh:mm:ss*.

### (50) Details of event ID: 00003FB1

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| Basic attribute | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Event ID | -- | 00003FB1 |
| | | Message | -- | KAVB7901-W The number of status change event for the monitored node *monitoring-node-ID*[#] has reached the threshold. |
| Extended attribute | Common information | Event level | SEVERITY | WARNING |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/SCOPE |
| | | Object type | OBJECT_TYPE | SERVICE |
| | | Object name | OBJECT_NAME | IM_CS |
| | | Occurrence | OCCURRENCE | NOTICE |
| | User-specific or program-specific information | Monitoring node ID | MON_NODE_ID | ID of the monitoring node |
| | | Number of status change events | EVHIST_NUMBER | Number of status change events |

Legend:

--: None

#: Only one JP1 event with event ID 00003FB1 is issued even if a single JP1 event triggered more than 100 status change events from multiple monitoring objects. A maximum of 10 monitoring object IDs can be listed in *monitoring-node-ID* in the message, separated by the comma. If there are more than 10 monitoring object IDs, ... is displayed following the last listed ID.

### (51) Details of event ID: 00003F90

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | -- | 00003F90 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Serial number | SEQNO | Serial number |
| | | Source process ID | PROCESSID | Process ID of jco_spmd |
| | | Registered time | TIME | Time of registration |
| | | Arrived time | ARRIVEDTIME | Arrival time |
| | | Source user ID | USERID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | KAVB3737-E The *component-name managed-process-name* terminated abnormally. |
| Extended attribute | Common information | Event level | SEVERITY | Error |
| | | Product name | PRODUCT_NAME | /HITACHI/JP1/IM/SPMD |
| | | Object type | OBJECT_TYPE | SPMD |
| | | Object name | OBJECT_NAME | Name of the process that terminated abnormally |

| Attribute type | Item | | Attribute name | Description |
|---|---|---|---|---|
| | | Occurrence | OCCURRENCE | NOTICE |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

## (52) Details of event ID: 00003F91

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | -- | 00003F91 |
| | Serial number | SEQNO | Serial number |
| | Source process ID | PROCESSID | Process ID of jco_spmd |
| | Registered time | TIME | Time of registration |
| | Arrived time | ARRIVEDTIME | Arrival time |
| | Source user ID | USERID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535#<br>• In UNIX<br>0 |
| | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source serial number | `SOURCESEQNO` | Source serial number |
| | | Message | `--` | `KAVB3613-WA` *component-name* `timeout occurred in` *managed-process-name*`. Processing continues.` |
| Extended attribute | Common information | Event level | `SEVERITY` | `Warning` |
| | | Product name | `PRODUCT_NAME` | `/HITACHI/JP1/IM/SPMD` |
| | | Object type | `OBJECT_TYPE` | `SPMD` |
| | | Object name | `OBJECT_NAME` | Name of the process resulting in a start timeout |
| | | Occurrence | `OCCURRENCE` | `NOTICE` |

Legend:

--: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, `-1` is set.

### (53) Details of event ID: 00003F92

| Attribute type | Item | Attribute name | Description |
|---|---|---|---|
| Basic attribute | Event ID | `--` | `00003F92` |
| | Serial number | `SEQNO` | Serial number |
| | Source process ID | `PROCESSID` | Process ID of `jco_spmd` |
| | Registered time | `TIME` | Time of registration |
| | Arrived time | `ARRIVEDTIME` | Arrival time |
| | Source user ID | `USERID` | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |

| Attribute type | | Item | Attribute name | Description |
|---|---|---|---|---|
| | | Source group ID | GROUPID | • In Windows<br>From -1 to 65,535[#]<br>• In UNIX<br>0 |
| | | Source user name | USERNAME | • In Windows<br>SYSTEM<br>• In UNIX<br>root |
| | | Source group name | GROUPNAME | • In Windows<br>Blank<br>• In UNIX<br>root |
| | | Event-issuing server name | SOURCESERVER | Name of the event-issuing server |
| | | Source serial number | SOURCESEQNO | Source serial number |
| | | Message | -- | `KAVB3616-I Restart of the` *component-name managed-process-name* `has finished.` |
| Extended attribute | Common information | Event level | SEVERITY | `Information` |
| | | Product name | PRODUCT_NAME | `/HITACHI/JP1/IM/SPMD` |
| | | Object type | OBJECT_TYPE | `SPMD` |
| | | Object name | OBJECT_NAME | Name of the process that was restarted |
| | | Occurrence | OCCURRENCE | `NOTICE` |

Legend:

    --: None

#: The substitute user ID and substitute group ID specified in the event server settings file of JP1/Base are set. If they are not specified, -1 is set.

# 4. Lists of System-Monitoring Objects (for Central Scope)

This chapter describes the system-monitoring objects provided by JP1/IM. These are monitoring objects that are provided by the system in which basic settings are predefined for various products.

For details about the functions of monitoring trees and the monitoring objects described in this chapter as well as how to interpret the tables, see *4.2 Monitoring tree* in the *Job Management Partner 1/Integrated Management - Manager Overview and System Design Guide*. For details about how to set monitoring trees and monitoring objects, see *5.3 Using the GUI to create a monitoring tree* in the *Job Management Partner 1/Integrated Management - Manager Configuration Guide*.

## 4.1 List of products for which system-monitoring objects are supported

The table below lists the products for which JP1/IM - Manager provides system-monitoring objects and, for each product, indicates whether the automatic generation function is supported.

*Table 4-1:* Products for which JP1/IM - Manager provides system-monitoring objects and the automatic generation function support status

| Product name | Automatic generation function |
|---|---|
| JP1/AJS2 07-00 or later, JP1/AJS3 09-00 | Supported[1] |
| JP1/PFM 07-00 or later | Supported[1] |
| JP1/PAM 07-00 or later | Not supported |
| JP1/Software Distribution 07-00 or later | Not supported |
| HP NNM Version 7 or Version 8[2] | Not supported |
| HP NNMi | Not supported |
| JP1/IM - Central Console 07-00 or later | Supported[1] |
| Cosminexus 06-00 or later | Supported[1] |
| HiRDB 07-02 or later | Not supported |

#1: To use the automatic generation function, JP1/Base version 07-00 or later must be installed on the host where the linked product is installed. You also need an installed copy of JP1/IM - View with the same version as JP1/IM - Manager.

#2: To use the automatic generation function, JP1/Base Version 7 or Version 8 must be installed on the host where the linked product is installed.

## 4.2 System-monitoring objects for JP1/AJS

The `AJS Monitoring Object` and `Jobnet Monitoring (AJS)` system-monitoring objects are provided For JP1/AJS.

### 4.2.1 AJS Monitoring system-monitoring object

*Table 4-2:* Overview of the system-monitoring object

| Item | Description | | |
|---|---|---|---|
| Monitoring node type | `AJS Monitoring Object` | | |
| Purpose | Monitoring of JP1/AJS itself for failures and for the jobnet execution status | | |
| Basic information | Object name | Complete name of the jobnet (*scheduler-service-name*:/*jobnet-name*) Example: `AJSROOT1:/Job_A/Order_Processing` | |
| | Host name | Host name of the manager where JP1/AJS - Manager is installed Example: `host01` | |

*Table 4-3:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| Jobnet warning event (AJS) | `Warning` | Jobnet warning event (AJS)[#] | Event ID (`B.ID`) | `00004108`, `00004122`, `00004123` |
| | | Object ID (`E.OBJECT_NAME`) | | Object name in the basic information |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Host name in the basic information |
| Jobnet error event (AJS) | `Error` | Jobnet error event (AJS)[#] | Event ID (`B.ID`) | `00004104`, `00004131`, `00004142`, `00004143`, `00004144` |
| | | Object ID (`E.OBJECT_NAME`) | | Object name in the basic information |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Host name in the basic information |

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| System warning event (AJS) | Warning | System warning event (AJS)# | Event ID (B.ID) | 00004154, 00004164, 00004171, 000041F1 |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |
| System error event (AJS) | Error | System error event (AJS)# | Event ID (B.ID) | 00004110, 00004130, 00004152, 00004162, 00004170, 000041F0, 000041F3 |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.2.2 Jobnet Monitoring (AJS) system-monitoring object

*Table 4-4:* Overview of the system-monitoring object

| **Item** | **Description** | |
|---|---|---|
| Monitoring node type | Jobnet Monitoring(AJS) | |
| Purpose | Monitoring of job execution status | |
| Basic information | Job execution host | Name of the host that executes the job<br>Example: jp1-agent |
| | Event-issuing server | Name of the host where JP1/AJS - Manager is installed<br>Example: jp1-manager |
| | Registration name | Complete name of the root jobnet (*scheduler-service-name*:/ *root-jobnet-name*)<br>Example: AJSROOT1:/Job_A/Order_Processing |

*Table 4-5:* Status change conditions

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Job warning event (AJS) | Warning | Job warning event (AJS)# | Event ID (B.ID) | 00004109 |
| | | Registration name (E.ROOT_OBJECT_NAME) | | Registration name in the basic information |

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| | | Execution host name (`E.C0`) | | Job execution host in the basic information |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Event-issuing server in the basic information |
| Job error event (AJS) | Error | Job error event (AJS)[#] | Event ID (`B.ID`) | `00004107` |
| | | Registration name (`E.ROOT_OBJECT_NAME`) | | Registration name in the basic information |
| | | Execution host name (`E.C0`) | | Job execution host in the basic information |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Event-issuing server in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.3 System-monitoring object for JP1/PFM

The `Agent Monitoring (PFM)` system-monitoring object is provided for JP1/PFM.

To monitor the system-monitoring object for JP1/PFM, you must specify the settings as follows:

- To manage events issued by JP1/PFM - Manager, you must specify the alarm settings of JP1/PFM - Manager in such a manner that a JP1 event is issued as an action of command execution when the alarm status changes (this is because the default setting does not issue JP1 events).

### 4.3.1 Agent Monitoring (PFM) system-monitoring object

*Table  4-6:*  Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `Agent Monitoring(PFM)` | |
| Purpose | Monitoring of the status of the JP1/PFM agent | |
| Basic information | Object ID | Service ID of the JP1/PFM agent<br>Example: `TA1host01` |
| | Event-issuing server | Name of the host where JP1/PFM - Manager is installed<br>Example: `pfm-manager` |
| | Host name | Name of the host where JP1/PFM - Agent is installed<br>Example: `pfm-agent` |

*Table 4-7:* Status change conditions

| Status change condition | | Common condition[1] and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Resource error event (PFM) | Error | Resource error event (PFM)[1] | Event level (E.SEVERITY) | Error |
| | | | Product name (E.PRODUCT_NAME) | /PFM/ALARM_EVENT |
| | | Object ID (E.OBJECT_ID) | | Object ID in the basic information |
| | | Name of the host where the alarm occurred (E.JPC_AGENT) | | Host name in the basic information |
| | | Event-issuing server name (B.SOURCESERVER) | | Event-issuing server in the basic information |
| Resource warning event (PFM) | Warning | Resource warning event (PFM)[1] | Event level (E.SEVERITY) | Warning |
| | | | Product name (E.PRODUCT_NAME) | /PFM/ALARM_EVENT |
| | | Object ID (E.OBJECT_ID) | | Object ID in the basic information |
| | | Name of the host where the alarm occurred (E.JPC_AGENT) | | Host name in the basic information |
| | | Event-issuing server name (B.SOURCESERVER) | | Event-issuing server in the basic information |

#1: This is a common condition (condition commonly used in monitoring objects).

#2: The JP1/PFM service is identified by the product ID and function ID contained in the service ID. The following services are supported:

- Service whose product ID is not P (PFM - Manager)
- Service whose function ID is A (Agent Collector)

## 4.4 System-monitoring objects for JP1/PAM

The `Metric Monitoring (PAM)` and `Object Monitoring (PAM)` system-monitoring objects are provided for JP1/PAM.

## 4.4.1 Metric Monitoring (PAM) system-monitoring object

*Table 4-8:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `Metric Monitoring(PAM)` | |
| Purpose | Monitoring of the metric status of JP1/PAM | |
| Basic information | Host name | Name of the host monitored by JP1/PAM<br>Example: `host1` |

*Table 4-9:* Status change conditions

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| Metric error event (PAM) | `Error` | Metric error event (PAM)[#] | Event ID (`B.ID`) | `00004602, 00004604, 0000460B` |
| | | Host name (`E.PAM_HOSTNAME`) | | Host name in the basic information |
| Metric warning event (PAM) | `Warning` | Metric warning event (PAM)[#] | Event ID (`B.ID`) | `00004600, 00004603, 00004609` |
| | | Host name (`E.PAM_HOSTNAME`) | | Host name in the basic information |

\#: This is a common condition (condition commonly used in monitoring objects).

## 4.4.2 Object Monitoring (PAM) system-monitoring object

*Table 4-10:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `Object monitoring(PAM)` | |
| Purpose | Monitoring of the status of objects managed by JP1/PAM | |
| Basic information | Host name | Name of the host monitored by JP1/PAM<br>Example: `host1` |

*Table 4-11:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| Object error event (PAM) | Error | Object error event (PAM)[#] | Event ID (B.ID) | 00004620,00004625 |
| | | Host name (E.PAM_HOSTNAME) | | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.5 System-monitoring objects for JP1/Software Distribution

The `SD Monitoring` and `Distribution Job Monitoring (SD)` system-monitoring objects are provided for JP1/Software Distribution.

## 4.5.1 SD Monitoring system-monitoring object

*Table 4-12:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `SD Monitoring` | |
| Purpose | Monitoring of JP1/Software Distribution Manager itself for failures | |
| Basic information | Host name | Host name of the manager where JP1/Software Distribution Manager is installed<br>Example: `host01` |

*Table 4-13:* Status change conditions

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| Critical system event (NETM/DM) | `Critical` | Critical system event (NETM/DM)# | Event ID (`B.ID`) | `00010401` |
| | | Event-issuing server name (`B.SOURCE.SERVER`) | | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.5.2 Distribution Job Monitoring (SD) system-monitoring object

*Table 4-14:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `Distribution Job Monitoring (SD)` | |
| Purpose | Monitoring of the execution status of distribution jobs by JP1/Software Distribution | |
| Basic information | Host name | Host name of the manager where JP1/Software Distribution Manager is installed<br>Example: `host01` |

*Table 4-15:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Distribution job error event (Software Distribution) | Error | Distribution job error event (Software Distribution)[#] | Event ID (`B.ID`) | `00010403` |
| | | Event-issuing server name (`B.SOURCE.SERVER`) | | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.6 System-monitoring objects for HP NNMi

The `NNMi Monitoring` and `Node Monitoring (NNMi)` system-monitoring objects are provided for HP NNMi. In the case of monitoring of NNMi incidents issued by HP NNMi, no distinction is made between Management incidents and SNMP traps. For details about NNMi incidents, see the manual *Job Management Partner 1/Integrated Management - Event Gateway for Network Node Manager i Description, User's Guide and Reference*.

### 4.6.1 NNMi Monitoring system-monitoring object

*Table 4-16:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `NNMi Monitoring` | |
| Purpose | Monitoring of HP NNMi itself for failures | |
| Basic information | Host name | Host name of the manager where HP NNMi is installed<br>Example: `host01` |

*Table 4-17:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| System alert event (NNMi incident) | Alert | System alert event (NNMi incident)[#] | Event ID (`B.ID`) | `00006100` |
| | | Name of the node where the event occurred (`E.NNMI_SOURCE_NODE_NAME`) | | Host name |
| Critical system event (NNMi incident) | Critical | Critical system event (NNMi incident)[#] | Event ID (`B.ID`) | `00006100` |
| | | Name of the node where the event occurred (`E.NNMI_SOURCE_NODE_NAME`) | | Host name |
| System warning event (NNMi incident) | Warning | System warning event (NNMi incident)[#] | Event ID (`B.ID`) | `00006100` |

| Status change condition | | Common condition# and individual condition | |
|---|---|---|---|
| **Condition name** | **Status** | **Condition** | **Values to be compared** |
| | | Name of the node where the event occurred (E.NNMI_SOURCE_NODE_NAME) | Host name |

#: This is a common condition (condition commonly used in a monitoring objects).

## 4.6.2 Node Monitoring (NNMi) system-monitoring object

*Table 4-18:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | Node Monitoring (NNMi) | |
| Purpose | Monitoring of the status of nodes monitored by HP NNMi | |
| Basic information | Host name | Host name of the node monitored by HP NNMi<br>Example: host01 |

*Table 4-19:* Status change conditions

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Network alert event (NNMi incident) | Alert | Network alert event (NNMi incident)# | Event ID (B.ID) | 00006100 |
| | | Name of the node where the event occurred (E.NNMI_SOURCE_NODE_NAME) | | Host name in the basic information |
| Critical network event (NNMi incident) | Critical | Critical network event (NNMi incident)# | Event ID (B.ID) | 00006100 |
| | | Name of the node where the event occurred (E.NNMI_SOURCE_NODE_NAME) | | Host name in the basic information |
| Network warning event (NNMi incident) | Warning | Network warning event (NNMi incident)# | Event ID (B.ID) | 00006100 |

591

| Status change condition | | Common condition[#] and individual condition | |
| --- | --- | --- | --- |
| **Condition name** | **Status** | **Condition** | **Values to be compared** |
| | | Name of the node where the event occurred (`E.NNMI_SOURCE_NODE_NAME`) | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.7 System-monitoring objects for HP NNM

The `NNM Monitoring` and `Node Monitoring (NNM)` system-monitoring objects are provided for HP NNM version 8 or earlier.

### (1) NNM Monitoring system-monitoring object

*Table 4-20:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `NNM Monitoring` | |
| Purpose | Monitoring of HP NNM version 8 or earlier itself for failures | |
| Basic information | Host name | Host name of the manager where HP NNM version 8 or earlier is installed<br>Example: `host01` |

*Table 4-21:* Status change conditions

| Status change condition | | Common condition[#1] and individual condition | |
|---|---|---|---|
| **Condition name** | **Status** | **Condition** | **Values to be compared** |
| System alert event (NNM) | `Alert` | System alert event (NNM)[#1] | Event ID (`B.ID`) | `00003A80` |
| | | | SNMP Object ID (`E.SNMP_OID`) | `~.(50790429\|58851330\|`<br>`59179066\|59179227\|`<br>`59179229\|59179230\|`<br>`40000020)`[#2] |
| | | Name of the node where the event occurred (`E.SNMP_VARBIND2`) | Host name in the basic information |

| Status change condition | | Common condition[#1] and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Critical system event (NNM) | Critical | Critical system event (NNM)[#1] | Event ID (B.ID) | 00003A80 |
| | | | SNMP Object ID (E.SNMP_OID) | ~.(58720265\|58720270\| 58851329\|58851332\| 59179058\|59181005\| 59181006\|59179225\| 59179228\|59179232\| 59179234\|59180002\| 59180005\|59180100\| 59181002\|59181004\| 58982397\|58982398\| 58982401\|58982402\| 58982415\|58982417\| 58982422\|59179061\| 40000028\|58720263)[#2] |
| | | Name of the node where the event occurred (E.SNMP_VARBIND2) | | Host name in the basic information |
| System error event (NNM) | Error | System error event (NNM)[#1] | Event ID (B.ID) | 00003A80 |
| | | | SNMP Object ID (E.SNMP_OID) | ~.(58720266\|59047936\| 59179226\|59179233\| 59179235\|58982408\| 58982414\|50790430\| 40000021)[#1] |
| | | Name of the node where the event occurred (E.SNMP_VARBIND2) | | Host name in the basic information |
| System warning event (NNM) | Warning | System warning event (NNM)[#1] | Event ID (B.ID) | 00003A80 |
| | | | SNMP Object ID (E.SNMP_OID) | ~.(40000027\|58982399\| 59179065)[#2] |
| | | Name of the node where the event occurred (E.SNMP_VARBIND2) | | Host name in the basic information |

#1: This is a common condition (condition commonly used in monitoring objects).

#2: Replace ~ with
`.iso.org.dod.internet.private.enterprises.hp.nm.openView.hpOpe nView.0.`

### (2) Node Monitoring (NNM) system-monitoring object

*Table 4-22:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `Node Monitoring(NNM)` | |
| Purpose | Monitoring of the status of nodes monitored by HP NNM version 8 or earlier | |
| Basic information | Host name | Host name of the node monitored by HP NNM version 8 or earlier<br>Example: `host01` |

*Table 4-23:* Status change conditions

| Status change condition | | Common condition[1] and individual condition | | |
|---|---|---|---|---|
| **Condition name** | **Status** | **Condition** | | **Values to be compared** |
| Critical network event (NNM) | `Critical` | Critical network event (NNM)[1] | Event ID (`B.ID`) | `00003A80` |
| | | | SNMP Object ID (`E.SNMP_OID`) | `~.58916868`[2] |
| | | Name of the node where the event occurred (`E.SNMP_VARBIND2`) | | Host name in the basic information |
| Network warning event (NNM) | `Warning` | Network warning event (NNM)[1] | Event ID (`B.ID`) | `00003A80` |
| | | | SNMP Object ID (`E.SNMP_OID`) | `~.(40000083\|40000084\|40000085\|50790400\|58916865)`[2] |
| | | Name of the node where the event occurred (`E.SNMP_VARBIND2`) | | Host name in the basic information |

#1: This is a common condition (condition commonly used in monitoring objects).

#2: Replace ~ with
`.iso.org.dod.internet.private.enterprises.hp.nm.openView.hpOpenView.0.`

## 4.8 System-monitoring object for JP1/IM - Manager

The `IM Monitoring` system-monitoring object is provided for JP1/IM - Manager.

## 4.8.1 IM Monitoring system-monitoring object

*Table 4-24:* Overview of the system-monitoring object

| Item | Description | |
|------|-------------|---|
| Monitoring node type | `IM Monitoring` | |
| Purpose | Monitoring of JP1/IM - Manager itself for failures | |
| Basic information | Host name | Host name of the manager where JP1/IM - Manager is installed<br>Example: `host01` |

*Table 4-25:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|-------------------------|--------|------------------------|--|--|
| Condition name | Status | Condition | | Values to be compared |
| System warning event (IM) | `Warning` | System warning event (IM)[#] | Event ID (`B.ID`) | `000020E6, 000020E7, 00003F91` |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Host name in the basic information |
| System error event (IM) | `Error` | System error event (IM)[#] | Event ID (`B.ID`) | `00002010, 00002011, 00002012, 00002020, 00002021, 000020A0, 000020E2, 000020E5, 000020E8, 00003F90` |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.9 System-monitoring objects for Cosminexus

The `Logical Server Monitoring (Cosminexus)` and `J2EE Application Monitoring (Cosminexus)` system-monitoring objects are provided for Cosminexus.

## 4.9.1 Logical Server Monitoring (Cosminexus) system-monitoring object

*Table 4-26:* Overview of the system-monitoring object

| Item | Description | |
|------|-------------|---|
| Monitoring node type | `Logical Server Monitoring(Cosminexus)` | |
| Purpose | Monitoring of JP1 events related to failures at the server level[#] | |
| Basic information | Domain name | Domain name of the Cosminexus server<br>Example: `DOM001` |
| | Logical host name | Name of the logical host monitored by Cosminexus<br>Example: `APSV001` |

#: JP1 events whose event level is `Warning` or higher are monitored.

*Table 4-27:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| Logical server emergency event (Cosminexus) | `Emergency` | Logical server emergency event (Cosminexus)[#] | Event ID (`B.ID`) | `00012000, 00012080` |
| | | Domain name (`E.DOMAIN_NAME`) | | Domain name in the basic information |
| | | Logical server name (`E.LOGICAL_SERVER_NAME`) | | Logical host name in the basic information |
| Logical server alert event (Cosminexus) | `Alert` | Logical server alert event (Cosminexus)[#] | Event ID (`B.ID`) | `00012001, 00012081` |
| | | Domain name (`E.DOMAIN_NAME`) | | Domain name in the basic information |

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| | | Logical server name (`E.LOGICAL_SERVER_NAME`) | | Logical host name in the basic information |
| Logical server critical event (Cosminexus) | Critical | Logical server critical event (Cosminexus)[#] | Event ID (`B.ID`) | 00012002, 00012082 |
| | | Domain name (`E.DOMAIN_NAME`) | | Domain name in the basic information |
| | | Logical server name (`E.LOGICAL_SERVER_NAME`) | | Logical host name in the basic information |
| Logical server error event (Cosminexus) | Error | Logical server error event (Cosminexus)[#] | Event ID (`B.ID`) | 00012003, 00012083 |
| | | Domain name (`E.DOMAIN_NAME`) | | Domain name in the basic information |
| | | Logical server name (`E.LOGICAL_SERVER_NAME`) | | Logical host name in the basic information |
| Logical server warning event (Cosminexus) | Warning | Logical server warning event (Cosminexus)[#] | Event ID (`B.ID`) | 00012004, 00012084 |
| | | Domain name (`E.DOMAIN_NAME`) | | Domain name in the basic information |
| | | Logical server name (`E.LOGICAL_SERVER_NAME`) | | Logical host name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.9.2 J2EE Application Monitoring (Cosminexus) system-monitoring object

*Table 4-28:* Overview of the system-monitoring object

| Item | Description |
|---|---|
| Monitoring node type | J2EE Application Monitoring(Cosminexus) |
| Purpose | Monitoring of JP1 events related to failures at the application level[#] |

| Item | | Description |
|---|---|---|
| Basic information | Domain name | Domain name of the Cosminexus server<br>Example: DOM001 |
| | Logical host name | Name of the logical host monitored by Cosminexus<br>Example: APSV001 |
| | J2EE application name | Name of the J2EE application on the logical host that is monitored by Cosminexus<br>Example: API |

#: JP1 events whose event level is Warning or higher are monitored.

*Table 4-29:* Status change conditions

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| J2EE application emergency event (Cosminexus) | Emergency | J2EE application emergency event (Cosminexus)# | Event ID (B.ID) | 00012090, 000120D0 |
| | | Domain name (E.DOMAIN_NAME) | | Domain name in the basic information |
| | | Logical server name (E.LOGICAL_SERVER_NAME) | | Logical host name in the basic information |
| | | J2EE application name (E.APPLICATION_NAME) | | J2EE application name in the basic information |
| J2EE application alert event (Cosminexus) | Alert | J2EE application alert event (Cosminexus)# | Event ID (B.ID) | 00012091, 000120D1 |
| | | Domain name (E.DOMAIN_NAME) | | Domain name in the basic information |
| | | Logical server name (E.LOGICAL_SERVER_NAME) | | Logical host name in the basic information |
| | | J2EE application name (E.APPLICATION_NAME) | | J2EE application name in the basic information |
| J2EE application critical event (Cosminexus) | Critical | J2EE application critical event (Cosminexus)# | Event ID (B.ID) | 00012092, 000120D2 |
| | | Domain name (E.DOMAIN_NAME) | | Domain name in the basic information |

| Status change condition | | Common condition# and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| | | Logical server name (E.LOGICAL_SERVER_NAME) | | Logical host name in the basic information |
| | | J2EE application name (E.APPLICATION_NAME) | | J2EE application name in the basic information |
| J2EE application error event (Cosminexus) | Error | J2EE application error event (Cosminexus)# | Event ID (B.ID) | 00012093, 000120D3 |
| | | Domain name (E.DOMAIN_NAME) | | Domain name in the basic information |
| | | Logical server name (E.LOGICAL_SERVER_NAME) | | Logical host name in the basic information |
| | | J2EE application name (E.APPLICATION_NAME) | | J2EE application name in the basic information |
| J2EE application warning event (Cosminexus) | Warning | J2EE application warning event (Cosminexus)# | Event ID (B.ID) | 00012094, 000120D4 |
| | | Domain name (E.DOMAIN_NAME) | | Domain name in the basic information |
| | | Logical server name (E.LOGICAL_SERVER_NAME) | | Logical host name in the basic information |
| | | J2EE application name (E.APPLICATION_NAME) | | J2EE application name in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

## 4.10 System-monitoring object for HiRDB

The `HiRDB Monitoring` system-monitoring object is provided for HiRDB.

To monitor the system-monitoring object for HiRDB, you must specify the settings as follows:

- To manage HiRDB-related events, you must specify the settings in such a manner that the error information managed by HiRDB is issued as JP1 events (this is because the default setting does not issue JP1 events).

### 4.10.1 HiRDB Monitoring system-monitoring object

*Table 4-30:* Overview of the system-monitoring object

| Item | Description | |
|---|---|---|
| Monitoring node type | `HiRDB Monitoring` | |
| Purpose | Monitoring of HiRDB itself for failures | |
| Basic information | Host name | Name of the host where HiRDB is installed<br>Example: `host02` |
| | HiRDB identifier | Identifier for identifying HiRDB<br>Example: `PDB1` |

*Table 4-31:* Status change conditions

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| HiRDB emergency event | `Emergency` | HiRDB emergency event[#] | Product name (`E.PRODUCT_NAME`) | `/HITACHI/HiRDB` |
| | | | Event level (`E.SEVERITY`) | `Emergency` |
| | | Event-issuing server name (`B.SOURCESERVER`) | | Host name in the basic information |
| | | Registration name (`E.ROOT_OBJECT_NAME`) | | HiRDB identifier in the basic information |

| Status change condition | | Common condition[#] and individual condition | | |
|---|---|---|---|---|
| Condition name | Status | Condition | | Values to be compared |
| HiRDB alert event | Alert | HiRDB alert event[#] | Product name (E.PRODUCT_NAME) | /HITACHI/HiRDB |
| | | | Event level (E.SEVERITY) | Alert |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |
| | | Registration name (E.ROOT_OBJECT_NAME) | | HiRDB identifier in the basic information |
| HiRDB critical event | Critical | HiRDB critical event[#] | Product name (E.PRODUCT_NAME) | /HITACHI/HiRDB |
| | | | Event level (E.SEVERITY) | Critical |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |
| | | Registration name (E.ROOT_OBJECT_NAME) | | HiRDB identifier in the basic information |
| HiRDB error event | Error | HiRDB error event[#] | Product name (E.PRODUCT_NAME) | /HITACHI/HiRDB |
| | | | Event level (E.SEVERITY) | Error |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |
| | | Registration name (E.ROOT_OBJECT_NAME) | | HiRDB identifier in the basic information |
| HiRDB warning event | Warning | HiRDB warning event[#] | Product name (E.PRODUCT_NAME) | /HITACHI/HiRDB |
| | | | Event level (E.SEVERITY) | Warning |
| | | Event-issuing server name (B.SOURCESERVER) | | Host name in the basic information |
| | | Registration name (E.ROOT_OBJECT_NAME) | | HiRDB identifier in the basic information |

#: This is a common condition (condition commonly used in monitoring objects).

# 5. Monitoring Tree Models (for Central Scope)

This chapter describes the structure of monitoring trees that can be generated automatically.

To generate a monitoring tree automatically, choose in the Auto-generation - Select Configuration window a template that is to serve as the basis for the tree configuration. The two templates that are provided are the work-oriented tree and the server-oriented tree.

A monitoring tree model is defined in each template. When you generate a monitoring tree automatically, the definitions collected from the hosts are applied to the monitoring tree model.

# 5.1 Monitoring tree model for the work-oriented tree

The following figures show the monitoring tree model that is generated when the work-oriented tree template is selected for generating a monitoring tree automatically.

*Figure 5-1:* Monitoring tree model (work-oriented tree template)
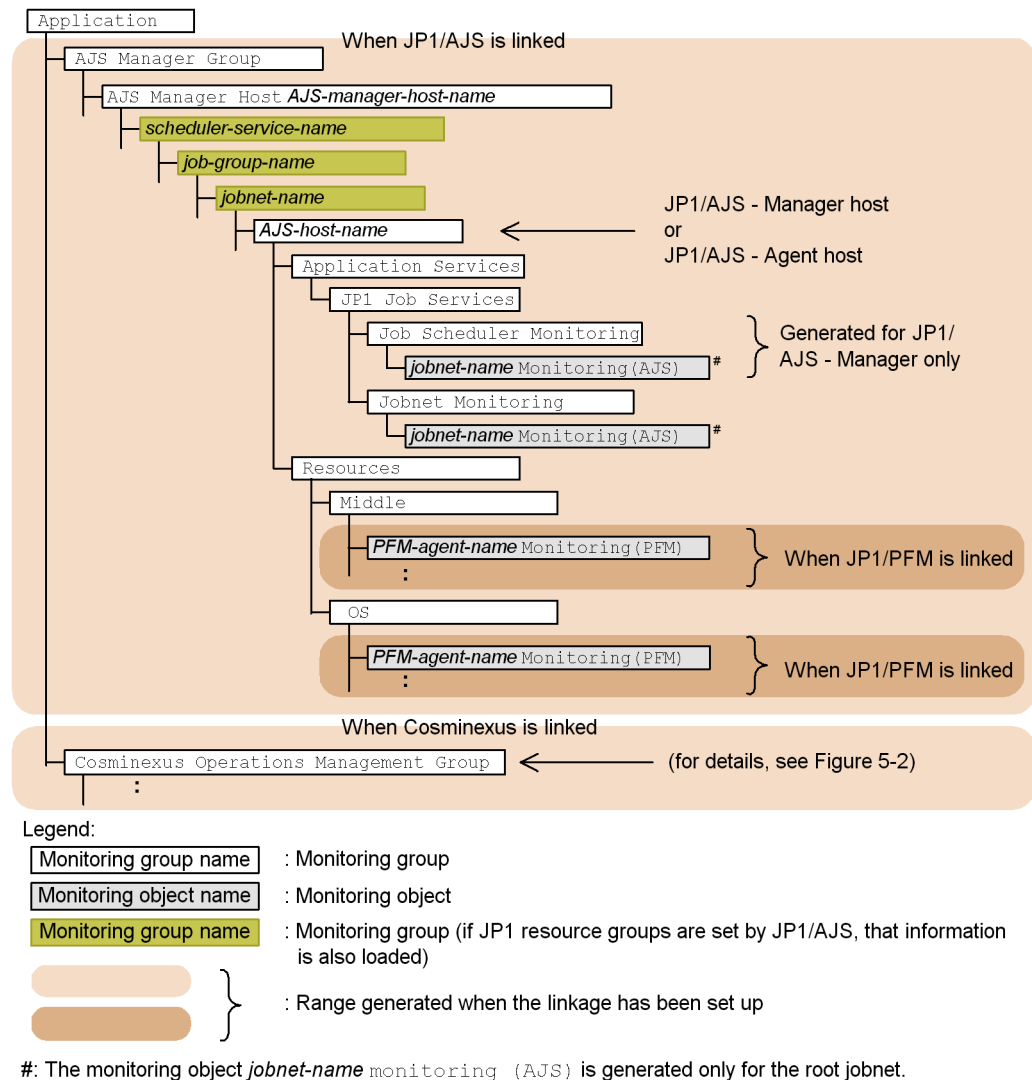
*Figure 5-2:* Monitoring tree model (work-oriented tree template)

Legend:

| Monitoring group name | : Monitoring group

| Monitoring object name | : Monitoring object
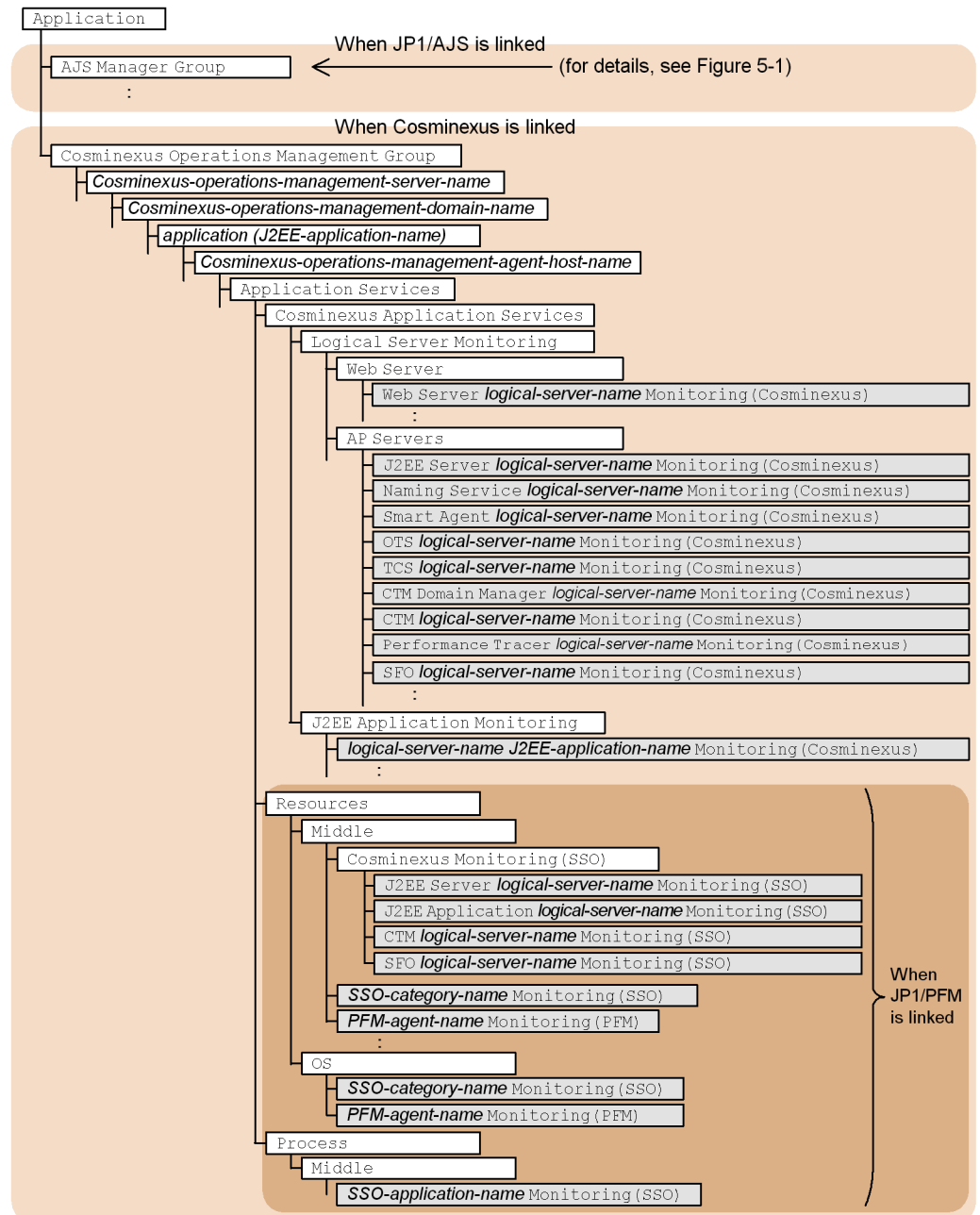
: Range generated when the
 linkage has been set up
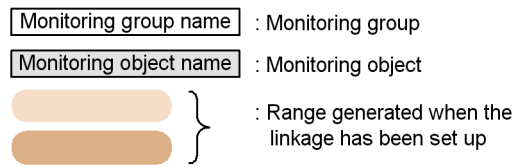
## 5.2 Monitoring tree model for the server-oriented tree

The following figures show the monitoring tree model that is generated when the server-oriented tree template is selected for generating a monitoring tree automatically.

*Figure 5-3:* Monitoring tree model (server-oriented tree template)

*Figure 5-4:* Monitoring tree model (server-oriented tree template)

# Index

**E**

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