

JP1 Version 12

# JP1/Integrated Management 2 - Manager Administration Guide

3021-3-D53-20(E)

### **Notices**

### ■ Relevant program products

For details about the supported OS versions, and about the OS service packs and patches required by JP1/Integrated Management 2 - View, see the release notes for the relevant product.

JP1/Integrated Management 2 - Manager (for Windows):

P-2A2C-8ECL JP1/Integrated Management 2 - Manager 12-50

The above product includes the following:

P-CC2A2C-9MCL JP1/Integrated Management 2 - Manager 12-50 (for Windows Server 2019, Windows Server 2016, Windows Server 2012)

P-CC2A2C-6HCL JP1/Integrated Management 2 - View 12-00 (for Windows Server 2019, Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012, Windows 7)

JP1/Integrated Management 2 - Manager (for Linux):

P-812C-8ECL JP1/Integrated Management 2 - Manager 12-50

The above product includes the following:

P-CC812C-9MCL JP1/Integrated Management 2 - Manager 12-50 (for Linux 8, Linux 7, Linux 6 (x64), Oracle Linux 8, Oracle Linux 7, Oracle Linux 6 (x64), CentOS 7, CentOS 6 (x64))

P-CC9W2C-9MCL JP1/Integrated Management 2 - Manager 12-50 (for SUSE Linux 15, SUSE Linux 12)

P-CC2A2C-6HCL JP1/Integrated Management 2 - View 12-00 (for Windows Server 2019, Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012, Windows 7)

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This software contains code derived from the RSA Data Security Inc. MD5 Message-Digest Algorithm, including various modifications by Spyglass Inc., Carnegie Mellon University, and Bell Communications Research, Inc (Bellcore).

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# ■ Microsoft product name abbreviations

This manual uses the following abbreviations for Microsoft product names.

Abbreviation		Full name or meaning
Hyper-V		Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2008 R2 Hyper-V <sup>(R)</sup>
		Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2012 Hyper-V <sup>(R)</sup>
IE	Windows Internet Explorer	Windows <sup>(R)</sup> Internet Explorer <sup>(R)</sup>
SCVMM		Microsoft <sup>(R)</sup> System Center Virtual Machine Manager 2008
		Microsoft <sup>(R)</sup> System Center Virtual Machine Manager 2012
Windows 7		Microsoft <sup>(R)</sup> Windows <sup>(R)</sup> 7 Enterprise
		Microsoft <sup>(R)</sup> Windows <sup>(R)</sup> 7 Professional
		Microsoft <sup>(R)</sup> Windows <sup>(R)</sup> 7 Ultimate
Windows 8		Windows <sup>(R)</sup> 8 Enterprise
		Windows <sup>(R)</sup> 8 Pro
Windows 8.1		Windows <sup>(R)</sup> 8.1 Enterprise
		Windows <sup>(R)</sup> 8.1 Pro
Windows 10		Windows <sup>(R)</sup> 10 Enterprise 32-bit
		Windows <sup>(R)</sup> 10 Enterprise 64-bit
		Windows <sup>(R)</sup> 10 Home 32-bit
		Windows <sup>(R)</sup> 10 Home 64-bit
		Windows <sup>(R)</sup> 10 Pro 32-bit
		Windows <sup>(R)</sup> 10 Pro 64-bit
Windows Server 2012	Windows Server 2012	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2012 Datacenter
		Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2012 Standard
	Windows Server 2012 R2	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2012 R2 Datacenter
		Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2012 R2 Standard

Abbreviation	Full name or meaning
Windows Server 2016	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2016 Datacenter
	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2016 Standard
Windows Server 2019	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2019 Datacenter
	Microsoft <sup>(R)</sup> Windows Server <sup>(R)</sup> 2019 Standard

*Windows* is often used generically to refer to Windows Server 2019, Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows Server 2012, or Windows 7.

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# Summary of amendments

The following table lists changes in this manual (3021-3-D53-20(E)) and product changes related to this manual.

Changes	Location
The following backup files were added:  • Single sign-on mapping definition file  • User-created plug-ins  • Storage folder for custom UI files  • Suggestion template files  • Suggestion definition file	1.1.1, 1.1.3
A procedure for performing backups and recoveries in new and rebuilding mode was added.	1.2.2(6)
A procedure for executing the jddupdatetree command in new and rebuilding mode when the Intelligent Integrated Management Base is used was added.	1.2.3(5), 1.2.3(6), 1.2.3(7)
The timeout times of the JP1/IM2 -Manager service (for Windows) and jco_start command (for UNIX) were changed.	3.4
An operation example for handing a system failure with the suggestion function was added.	5.3.5
Operation examples when the product is linked with external products through single sign-on were added.	5.3.6
An operation example of using the direct access URL function was added.	5.3.7
Notes when information is obtained from JP1/AJS3 - Manager hosts of version 12-50 or later were added.	5.4.1
The following logs were added to the list of log files and folders for the Intelligent Integrated Management Base:  • jddupdatesuggestion command trace log  • jddsetopinfo command trace log  • jddupdatessomap command trace log  • Logs of the response action execution history file  • User-created plug-ins	11.2.4
The following files were added to the OS system information that needs to be collected when a problem occurs:  • JP1/IM - Manager (Intelligent Integrated Management Base) access permission information (response action execution history folder)	11.3.1(1)
The following files were added to the JP1 information that needs to be collected when a problem occurs:  • Plug-in files  • Response action execution history files	11.3.1(2), 11.3.2(2)
Troubleshooting of user-created plug-ins was added.	11.5.1(70)
The following applicable OSs were added:  • Linux 8  • Oracle Linux 8	

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

### **Preface**

This manual explains administration, operations, and troubleshooting for JP1/Integrated Management 2 - Manager and JP1/Integrated Management 2 - View. In this manual, JP1/Integrated Management 2 - Manager and JP1/Integrated Management or JP1/IM. In addition, in this manual, read JP1/Integrated Management - Manager and JP1/Integrated Management - View as JP1/Integrated Management 2 - Manager and JP1/Integrated Management 2 - View, respectively.

### ■ 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 who implement centralized monitoring of events that occur in the system
- System administrators who 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.
- Those who have knowledge of operating systems and applications

# Organization of this manual

This manual is organized into the following parts:

#### PART 1. Administration

This part explains the tasks necessary for maintaining a JP1/Integrated Management system, along with system evaluation methods.

### PART 2. Operation

This part explains how to operate monitoring jobs that use JP1/Integrated Management.

#### PART 3. Linking with Other Products

This part provides an overview of monitoring tasks when linking with products other than integrated management products. It also describes the functionality that allows linkage to take place, how to build and use the monitoring environment, aspects of the user interface that relate to product linkage, and the command options used when linking with other products.

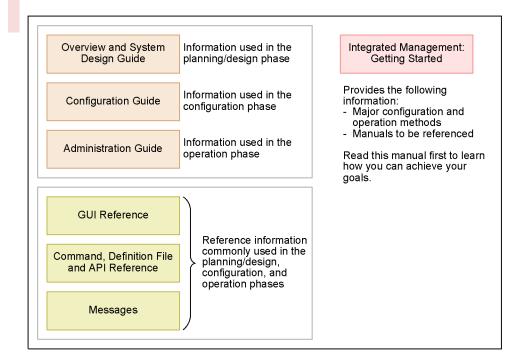
#### PART 4. Troubleshooting

This part explains the actions to take when problems occur in JP1/Integrated Management.

### Manual suite

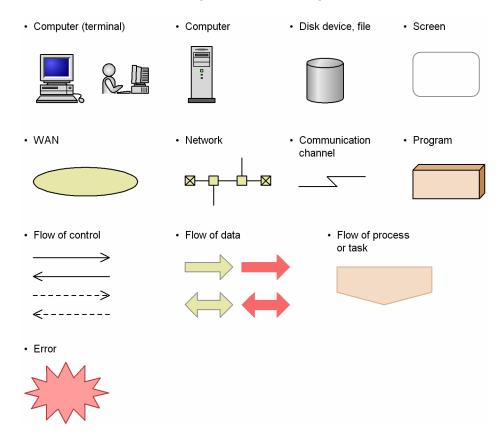
JP1/IM manuals provide necessary information according to the phase in the system life cycle (the phases include planning/design, configuration, and operation). Read the manual appropriate for the purpose.

The following figure explains which phases the JP1/IM manuals provide information for.



# **■** Conventions: Diagrams

This manual uses the following conventions in diagrams:



# ■ Conventions: Fonts and symbols

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

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

The following table explains the symbols used in this manual:

Symbol	Convention
ı	In syntax explanations, a vertical bar separates multiple items, and has the meaning of OR. For example:  A   B   C means A, or B, or C.
{ }	In syntax explanations, curly brackets indicate that only one of the enclosed items is to be selected. For example: $\{A \mid B \mid C\}$ means only one of A, or B, or C.
[ ]	In syntax explanations, square brackets indicate that the enclosed item or items are optional. For example:  [A] means that you can specify A or nothing.  [B C] means that you can specify B, or C, or nothing.
	In coding, an ellipsis () indicates that one or more lines of coding have been omitted.  In syntax explanations, an ellipsis indicates that the immediately preceding item can be repeated as many times as necessary. For example:  A, B, B, means that, after you specify A, B, you can specify B as many times as necessary.
Δ	Indicates a space. $\Delta_0$ : Zero or more spaces (space can be omitted). $\Delta_1$ : One or more spaces (space cannot be omitted).
<b>A</b>	Indicates a tab. Example:

Symbol	Convention
	▲ A means that a tab character precedes A.

### **Conventions for mathematical expressions**

This manual uses the following symbols in mathematical expressions:

Symbol	Meaning
x	Multiplication sign
/	Division sign

# ■ 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

<sup>#:</sup> Represents the installation folder when the product is installed in the default location. The location represented by *system-drive*: \Program Files is determined at the time of installation by an OS environment variable, and might differ depending on the environment.

# ■ Conventions: Meaning of "Administrator permissions" in this manual

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.

#### 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.

### Online manuals

JP1/IM comes with an HTML manual that you can read in a web browser.

The HTML manual has the same contents as this manual.

To view the HTML manual:

- In JP1/IM View, choose **Help** and then **Help Contents**.
- In Integrated Operation Viewer Window, choose Help and then Online manual.

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.

### Output destinations of Integrated trace log file

Starting with JP1/IM 12-10, all 32-bit Java processes for JP1/IM have been changed to 64-bit Java processes. Therefore, the integrated trace log output destination output by the Java process function of each function of JP1 / IM is changed.

The following is the destination of the integrated trace log for each JP1/IM function from version 12-10 or later. If you are using the log file trap function, you must change the settings as you change the destination.

Output destinations of Integrated trace log file (32 bit): system-drive\Program Files (x86) \Hitachi \HNTRLib2\spool

- IM database
- Central Scope Service
- Process management
- · Command execution
- · Automatic action
- Installation and Setup

Output destinations of Integrated trace log file (64 bit): system-drive\Program Files\Hitachi \HNTRLib2\spool

- Event base service
- Central Console viewer
- Central Scope viewer
- Event Genaration Service
- IM Configuration Management
- IM Configuration Management viewer
- Intelligent Integrated Management Base

# Contents

Notices 2 Summary of amendments 6 Preface 7

# **Part 1: Administration**

1	JP1/IM System Maintenance 19
1.1	Managing the configuration information 20
1.1.1	Backup (in Windows) 20
1.1.2	Recovery (in Windows) 27
1.1.3	Backup (in UNIX) 27
1.1.4	Recovery (in UNIX) 32
1.2	Managing the databases 34
1.2.1	Database reorganization 34
1.2.2	Database backup and recovery 36
1.2.3	Re-creating a database and changing its settings 42
1.3	Managing the disk capacity 54
1.3.1	Managing the IM database capacity 54
1.3.2	Managing the log file size 55
1.3.3	Managing dump files 55
1.4	Using historical reports 56
1.4.1	Outputting events to a CSV file 56
1.4.2	Correlation event generation history 56
1.4.3	Exclusion history and definition history of common exclusion conditions 57
1.5	Migrating the configuration information and databases 58
1.5.1	Configuration information and databases to be migrated 58
1.6	Managing certificates for the communication encryption function 60
1.6.1	Managing the effective duration of the server certificate 60
1.6.2	Managing keystores 60
2	Changing the Configuration of JP1/IM 62
2.1	Changing the JP1/IM settings information 63
2.2	Tasks necessary when a host name is changed 64
2.2.1	Tasks necessary immediately after the host name of a manager or agent is changed 64
2.2.2	Tasks to be performed when the host name of a manager or agent is changed 64
2.2.3	Procedure for re-distributing the system configuration when the host name of a manager or agent is changed 66

2.2.4	Tasks to be performed when the host name of a mail server is changed 66
2.2.5	Tasks to be performed before a logical host name is changed in a cluster system 66
2.2.6	Tasks necessary when the host name of the Intelligent Integrated Management Base is changed 67
2.3	Tasks necessary when an IP address is changed 68
2.3.1	Tasks necessary immediately after the IP address of a manager or agent is changed 68
2.3.2	Tasks to be performed when the IP address of a manager or agent is changed 68
2.3.3	Procedure for restarting the system when the IP address of a manager or agent is changed 68
2.3.4	Tasks to be performed when the IP address of a mail server is changed 69
2.3.5	Tasks to be performed when the IP address of the Intelligent Integrated Management Base is changed 69
2.4	Tasks necessary when the date of a manager or agent is changed 70
2.4.1	Resetting the date/time of a manager or agent to a past date/time 70
2.4.2	Advancing the system time 72
2.5	Tasks necessary when the date of a monitored host in a remote monitoring configuration is changed 73
2.5.1	Resetting the date/time of a monitored host in a remote monitoring configuration to a past date/time 73
2.5.2	Advancing the date/time of a monitored host in a remote monitoring configuration 73
2.6	Tasks necessary when the passwords of a monitored host in a remote monitoring configuration are changed 74
2.7	Notes on changing the monitoring configuration from remote to agent 75
2.7.1	Notes on log file traps 75
2.7.2	Notes on event log traps 75
2.8	Tasks necessary when an Port number is changed 76

# Part 2: Operation

3	Starting and Stopping JP1/IM - Manager //
3.1	Starting JP1/IM - Manager 78
3.1.1	In Windows 78
3.1.2	In UNIX 79
3.1.3	Operations in a cluster system 80
3.1.4	Operating a logical host in a non-cluster system 81
3.2	Stopping JP1/IM - Manager 82
3.2.1	In Windows 82
3.2.2	In UNIX 82
3.2.3	Operations in a cluster system 83
3.2.4	Operating a logical host in a non-cluster system 83
3.3	Automatic startup and automatic stop setting examples when a logical host operates in a non-cluster system 84
3.3.1	Setting up automatic startup and automatic stop when a logical host operates in a non-cluster system (for Windows) 84
3.3.2	Setting up automatic startup and automatic stop when a logical host operates in a non-cluster system (for Linux) 84

3.3.3	Setting up automatic startup and automatic stop on both the physical host and the logical host
3.4	Notes on starting and stopping 88
<b>4</b> 4.1	JP1/IM - Manager Login and Logout 90 Logging in to JP1/IM - Manager 91
4.1.1	Using a Web browser to log in to JP1/IM - Manager (Intelligent Integrated Management Base) 91
4.1.2	Using the GUI to log in to JP1/IM - Manager 91
4.1.3	Using a command to log in to JP1/IM - Manager 92
4.2	Logging out of JP1/IM - Manager 94
5	System Monitoring from the Intelligent Integrated Management Base 95
5.1	Viewing the system status 96
5.1.1	Items displayed in the sunburst chart or the tree chart 96
5.2	Viewing JP1 events (Events window) 98
5.2.1	Items displayed in the events list 99
5.2.2	Displaying Repeated event list window 101
5.2.3	Displaying detailed JP1 event information 102
5.3	Viewing links with other products 103
5.3.1	Using signs to avoid failures (link with JP1/AJS) 103
5.3.2	Understanding how extensive a problem that occurred during operation of a job is and handling it (link with JP1/AJS) 103
5.3.3	Understanding in advance which root jobnets are affected before the definition or content of a job is changed (link with JP1/AJS) 104
5.3.4	Checking performance data and handling the problem (link with JP1/PFM) 104
5.3.5	Handling errors by viewing suggestions 104
5.3.6	Logging in to the system with single sign-on through linkage with external products using OIDC authentication 105
5.3.7	Sharing information using a direct access URL 106
5.4	Notes on operating the Intelligent Integrated Management Base 108
5.4.1	Notes on when there is a link with JP1/AJS 108
5.4.2	Notes on using event receiver filters 110
6	System Monitoring from Central Console 111
6.1	Viewing JP1 events 112
6.1.1	Items displayed in the events list 112
6.1.2	Events displayed in the events list in the Event Console window 116
6.1.3	Applying a filter 120
6.2	Displaying detailed JP1 event information 121
6.2.1	Editing JP1 memo entries 123
6.3	Setting JP1 event response statuses 124
6.3.1	Settings for JP1 event response statuses 124
6.3.2	Setting a response status for JP1 events from the events list 125
6.3.3	Deleting severe events from the Severe Events page 125

6.4	Operating JP1 events from the Related Events window 126
6.4.1	Checking detailed information about repeated events and changing the response status 126
6.4.2	Checking detailed information about a correlation event and changing the response status 127
6.5	Applying a JP1/IM filter 130
6.5.1	Enabling a view filter to display only certain JP1 events 130
6.5.2	Displaying only severe events 130
6.5.3	Switching the event acquisition filter to be applied 131
6.5.4	Setting an additional common exclusion-condition to exclude a JP1 event from the monitoring target or action execution 135
6.6	Displaying an event by specifying an event display start-time 137
6.7	Narrowing the JP1 events to be displayed by specifying a time period 138
6.8	Searching for JP1 events 140
6.8.1	Search method 140
6.8.2	Displaying the search results 142
6.9	Customizing JP1 event information by operation 145
6.9.1	Displaying program-specific extended attributes of JP1 events (displaying program-specific extended attributes) 145
6.9.2	Displaying extended attributes of JP1 events (mapping of event information) 145
6.9.3	Adding a user-defined extended attribute to JP1 events that match a condition 148
6.9.4	Changing the severity level of JP1 events 149
6.9.5	Changing the message displayed for a JP1 event 152
6.10	Taking actions for the generation of a large number of events 156
6.10.1	General procedures and preparation for handling occurrence a large number of events 156
6.10.2	Preparing to suppress event forwarding from an agent 158
6.10.3	Handling the occurrence of a large number of events by suppressing event forwarding from an agent 161
6.10.4	Handling the occurrence of a large number of events by consolidating them on the manager 165
6.10.5	Setting a threshold for automatically suppressing event forwarding on an agent 166
6.10.6	Specifying repeated event conditions 167
6.10.7	Stopping, on the manager, a log file trap that issues a large numbers of events 172
6.10.8	Consolidated display when events with the same attributes occur consecutively 173
6.11	Handling JP1 events by linking with other products 175
6.11.1	Registering JP1 events as incidents in JP1/IM - Service Support (linking with JP1/IM - Service Support) 175
6.11.2	Displaying operating procedures for JP1 events (linking with JP1/Navigation Platform) 176
6.11.3	Checking the rule startup request status and making a rule startup request (linking with JP1/IM - Rule Operation) 176
6.11.4	Opening a monitor window of the application that issued JP1 events 179
6.11.5	Displaying performance reports for JP1 events when linking with JP1/PFM 180
6.12	Notes for Central Console 181
6.13	Notes on using the Central Console - View 182

7	System Monitoring from Central Scope 183
7.1	Monitoring from the Monitoring Tree window 184
7.1.1	Changing the status of monitoring nodes 184
7.1.2	Changing the monitoring status of monitoring nodes 185
7.1.3	Searching for monitoring nodes 186
7.1.4	Searching for status-change events 186
7.1.5	Displaying the attributes of monitoring nodes 187
7.1.6	Displaying guide information 187
7.1.7	Opening the Visual Monitoring window 188
7.1.8	Displaying a login user list 188
7.1.9	Saving the information in the Monitoring Tree window on the local host 188
7.2	Monitoring from the Visual Monitoring window 189
7.2.1	Opening the Monitoring Tree window from the Visual Monitoring window 189
7.2.2	Changing the status of monitoring nodes 190
7.2.3	Changing the monitoring status of monitoring nodes 190
7.2.4	Searching for monitoring nodes 191
7.2.5	Searching for status-change events 191
7.2.6	Displaying the attributes of monitoring nodes 192
7.2.7	Displaying guide information 192
7.3	Cautions on integrated scope 194
8	System Operation Using JP1/IM 198
8.1	Executing a command 199
8.1.1	Executing a command by using Command Execution 199
8.1.2	Executing a command by using the Command button 201
8.1.3	User that executes commands 203
8.1.3 8.1.4	User that executes commands 203  Checking command execution status and deleting a command 203
8.1.4	Checking command execution status and deleting a command 203
8.1.4 8.2	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205
8.1.4 8.2 8.2.1	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205
8.1.4 8.2 8.2.1 8.2.2	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206
8.1.4 8.2 8.2.1 8.2.2 8.2.3	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3 8.3.1	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213  Operations in the Tool Launcher window 214  Functions that can be operated from the Tool Launcher window 214  Managing the System Hierarchy Using IM Configuration Management
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3 8.3.1 8.3.2	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213  Operations in the Tool Launcher window 214  Functions that can be operated from the Tool Launcher window 214
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3 8.3.1 8.3.2	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213  Operations in the Tool Launcher window 214  Functions that can be operated from the Tool Launcher window 214  Managing the System Hierarchy Using IM Configuration Management 217
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3 8.3.1 8.3.2 <b>9</b>	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213  Operations in the Tool Launcher window 214  Functions that can be operated from the Tool Launcher window 214  Managing the System Hierarchy Using IM Configuration Management 217  Managing hosts 218
8.1.4 8.2 8.2.1 8.2.2 8.2.3 8.3 8.3.1 8.3.2 <b>9</b> 9.1 9.2	Checking command execution status and deleting a command 203  Executing automated actions and taking necessary steps 205  Checking the execution status of an automated action 205  Checking the execution results of automated actions 206  Checking the operating status of the automated action function 211  Opening other application windows from the Tool Launcher 213  Operations in the Tool Launcher window 214  Functions that can be operated from the Tool Launcher window 214  Managing the System Hierarchy Using IM Configuration Management 217  Managing hosts 218  Managing the system hierarchy 219

9.3.3	Applying the management information to the Central Scope monitoring tree 220
9.4	Managing business groups 222
9.5	Managing profiles 223
9.6	Managing service operation status 224
9.6.1	Collecting service operation information 224
9.6.2	Service operation information display 225
9.7	Exporting and importing management information of IM Configuration Management 226
9.7.1	Exporting management information of IM Configuration Management 226
9.7.2	Importing management information of IM Configuration Management 230
9.7.3	Applying the imported management information of IM Configuration Management to a system 240
9.8	Cautions on the IM configuration 243

# Part 3: Linking with Other Products

10	Linking with BJEX or JP1/AS 244
10.1	Overview of BJEX and JP1/AS linkage 245
10.1.1	System configuration when linking JP1/IM with a batch job execution system 245
10.2	JP1/IM functionality for BJEX and JP1/AS linkage 248
10.2.1	Handling response-waiting events in JP1/IM 248
10.2.2	Monitoring response-waiting events 250
10.2.3	Accumulation of response-waiting events 253
10.2.4	Responding to response-waiting events 254
10.2.5	Canceling response-waiting events 256
10.3	Configuring JP1/IM to link with BJEX and JP1/AS 258
10.3.1	Configuring JP1/IM - Manager 258
10.3.2	Configuring JP1/IM - View 259
10.3.3	Configuring JP1/Base 260
10.3.4	Communication settings between BJEX or JP1/AS and JP1/IM - Manager 260
10.3.5	Configuring BJEX or JP1/AS 261
10.4	Working with response-waiting events 262
10.4.1	Flow of tasks for responding to response-waiting events 262
10.4.2	Responding to response-waiting events 265
10.4.3	Manually releasing response-waiting events from the hold-and-accumulate state 265
10.4.4	Resuming monitoring of events in the hold-and-accumulate state 266
10.5	Command usage when linking with BJEX or JP1/AS 267
10.5.1	jcoimdef 267
10.5.2	jim_log.bat (Windows only) 267
10.5.3	jim_log.sh (UNIX only) 268

# Part 4: Troubleshooting

11	Troubleshooting 269
11.1	Troubleshooting procedure 270
11.2	Log information types 271
11.2.1	Common message log 271
11.2.2	Integrated trace log 271
11.2.3	Operation log 273
11.2.4	Log files and directory list 273
11.3	Data that needs to be collected when a problem occurs 306
11.3.1	In Windows 306
11.3.2	In UNIX 317
11.4	Collecting data 330
11.4.1	In Windows 330
11.4.2	In UNIX 338
11.5	Troubleshooting 342
11.5.1	Dealing with common problems 342

# Index 411

1

# JP1/IM System Maintenance

This chapter explains JP1/IM system maintenance.

To ensure stable operation of JP1/IM, which forms the basis for system administration and operations, we recommend that you plan regular maintenance activities, including backing up definition files and maintaining the database.

## 1.1 Managing the configuration information

This section explains how to back up and recover a JP1 system.

If the system no longer operates due to a disk failure, it might not be possible to restore data used in JP1/IM. As a precaution in the event the unexpected occurs, certain types of files need to be backed up.

According to the explanation provided here, consider backup and recovery of JP1 as part of a backup plan for the entire system. The recovery here means to return the files to the state when their backups were taken. Note that the backup and recovery process described in this section is not available for duplication between servers and file migration.

When you perform backup and recovery, all of the following items must match on the backup source and the recovery destination:

- Host name
- IP address
- PP model name
- PP version (match the format of VVRRZZ)
- Directory structure used by the product (permissions and the like must match)

It is assumed that OS and hardware on the source and the destination are able to perform the same operations.

If the above conditions are not met, you will need to move files.

See 1.5 Migrating the configuration information and databases and perform the operations described there.

OS commands or backup software can be used for a full backup of the entire system. However, we recommend that you back up or recover data by using the commands provided with individual JP1/IM - Manager functions that do not depend on the OS commands or backup software. If you use OS commands or backup software, the following conditions must be met:

- Data is backed up when all JP1/IM Manager services, including the IM database, have been stopped.
- Data is backed up when all file and registry information, including the information registered in the OS, is consistent.
- The backup target files are not sparse files.

If you back up and recover the definition information, also back up and recover the database.

Stop JP1/IM - View when you perform backup and recovery.

# 1.1.1 Backup (in Windows)

This subsection explains how to back up JP1/IM configuration information.

If you change the JP1/IM configuration, make a backup. When you make a backup of JP1/IM, be sure to make a backup of JP1/Base at the same time. For details about how to back up the definition files that are configured by JP1/Base users, see the JP1/Base User's Guide.

Make a backup using a method of your choice, such as copying files. If at all possible, perform backup procedures while the JP1/IM services are not running. If you must make a backup while these services are running, note the following:

- The definition files may be modified during execution in some cases. If a backup is made while a definition file is being modified, the backup file will be corrupted.

  Immediately following the backup operation, compare the collected backup file with the original file to make sure
  - Immediately following the backup operation, compare the collected backup file with the original file to make sure their contents match.
- When you make a backup, do not lock the target file. If you need to lock the file, first log out from all viewers that are connected, and then copy the target file to another file. After you have copied it, compare the copied file with the original file to make sure their contents match, and then back up the copied file.
- When you restore the backed-up configuration information, the configuration is simply modified with the restored content, and the events that have already arrived at JP1/IM Manager are not re-evaluated.

Of the files shown in the table below, back up all those that exist. If only some of the existing files are backed up, interaction with the remaining files might become inconsistent, preventing the system from operating correctly.

Also, if the system operates in a cluster configuration, back up each environment in the order of physical hosts, then logical hosts.

The table below shows the JP1/IM files to back up. For a logical host, replace *Console-path* in the table with *shared-folder*\JP1Cons, replace *Scope-path* with *shared-folder*\JP1Scope.

Table 1-1: JP1/IM files to back up

Product name	File name	Description
Common to all products	Backup files created in 7.3.4 Copying the common definition information during new installation (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide	Common definition information backup file <sup>#1</sup>
JP1/IM - Manager  user-selected-file-name	user-selected-file-name	Private key used by the communication encryption function File specified for the following common definition information:  JP1_DEFAULT \JP1BASE\SSL \PRIVATEKEYFILE \#2
	Server certificate used by the communication encryption function File specified for the following common definition information:  JP1_DEFAULT \JP1BASE\SSL \CERTIFICATEFILE# 2	
		Root certificate used by the communication encryption function File specified for the following common definition information:  JP1_DEFAULT \JP1BASE\SSL \CACERTIFICATEFIL E#2

Product nar	ne	File name	Description	
JP1/IM - Manager	Intelligent Integrated Manageme nt Base	Manager-path\conf\imdd\imdd.properties	Intelligent Integrated Management Base definition file	
		Manager-path\conf\imdd\systemnode.conf	System node definition file	
		Manager-path\conf\imdd\category_name.conf	Category name definition file for IM management nodes	
		Manager-path\conf\imdd\target_host.conf	Target host definition file for configuration collection	
		<pre>Manager-path\conf\imdd\imdd_host_name.conf</pre>	Host name definition file	
		Manager-path\conf\imdd\imdd_nodeLink_def.conf	IM management node link definition file	
		Manager-path\conf\imdd\imdd_sso_mapping.properties	Single sign-on mapping definition file	
		<pre>Manager-path\conf\imdd\plugin\jplajs\*.conf</pre>	Plug-in definition file for JP1/AJS	
		<pre>Manager-path\conf\imdd\plugin\jp1pfm\*.conf</pre>	Plug-in definition file for JP1/PFM	
		Manager-path\conf\imdd\user-created-plug-ins	User-created plug-ins	
		Manager-path\public\custumUI\user-created-folders-for-custom-UIs	Storage folder for custom UI files	
			<pre>Manager-path\conf\imdd\suggestion\template\en \imdd_suggestion_ajs_check_failed_agent_jobnet_en.conf</pre>	English suggestion template files for JP1/AJS
		<pre>Manager-path\conf\imdd\suggestion\template\en \imdd_suggestion_ajs_check_failed_agent_list_en.conf</pre>		
		<pre>Manager-path\conf\imdd\suggestion\template\en \imdd_suggestion_pfm_cpu_event_en.conf</pre>	English suggestion template files for	
		<pre>Manager-path\conf\imdd\suggestion\template\en \imdd_suggestion_pfm_set_status_of_events_to_processed _en.conf</pre>	JP1/PFM	
		<pre>Manager-path\conf\imdd\suggestion\template\en \imdd_suggestion_pfm_suspend_monitoring_en.conf</pre>		
		<pre>Manager-path\conf\imdd\suggestion\template\ja \imdd_suggestion_ajs_check_failed_agent_jobnet_ja.conf</pre>	Japanese suggestion template files for JP1/AJS	
		<pre>Manager-path\conf\imdd\suggestion\template\ja \imdd_suggestion_ajs_check_failed_agent_list_ja.conf</pre>		
		<pre>Manager-path\conf\imdd\suggestion\template\ja \imdd_suggestion_pfm_cpu_event_ja.conf</pre>	Japanese suggestion template files for	
		<pre>Manager-path\conf\imdd\suggestion\template\ja \imdd_suggestion_pfm_set_status_of_events_to_processed _ja.conf</pre>	JP1/PFM	
		<pre>Manager-path\conf\imdd\suggestion\template\ja \imdd_suggestion_pfm_suspend_monitoring_ja.conf</pre>		

Product name	File name	Description
	any-path\suggestion-definition-files	Suggestion definition file
Central Console	Console-path\conf\jp1co_env.conf	IM environment definition file
	Console-path\conf\jp1co_param.conf	IM parameter definition file
	Console-path\conf\jp1co_param_V7.conf	IM parameter definition file
	Console-path\conf\jp1co_service.conf	Extended startup process definition file
	Console-path\conf\jp1co_system.conf	IM server system environment settings file
	Console-path\conf\action\actdef.conf	Automated action definition file
	Console-path\conf\console\actprofile\actprofile_JP1-user-name	Action profile
	Console-path\conf\console\actprofile\actprofile2_JP1-user-name	
	Console-path\conf\console\actprofile\actprofile_0950_JP1-user-name	
	Console-path\conf\console\attribute\*.conf	Definition file for extended event attributes
	Console-path\conf\console\attribute\extend\*.conf	Definition file for extended event attributes (extended file)
	Console-path\conf\console\filter\*.conf	Filter definition file
	<pre>Console-path\conf\console\filter\attr_list \common_exclude_filter_attr_list.conf</pre>	Common-exclusion- conditions display item definition file
	<pre>Console-path\conf\console\filter\auto_list \common_exclude_filter_auto_list.conf</pre>	Common-exclusion- conditions auto-input definition file
	Console-path\conf\console\mapping\mapping.conf	Event information mapping definition file
	Console-path\conf\console\monitor\*.conf	Definition file for opening monitor windows
	Console-path\conf\console\object_type\*	Definition file for object types
	Console-path\conf\console\profile\.system	System profile
	Console-path\conf\console\profile\defaultUser	JP1/IM - View user profile (default)
	Console-path\conf\console\profile\profile_JP1-user-name	JP1/IM - View user profile
	Console-path\conf\console\profile\systemColor.conf	System color definition file

Product name	File name	Description
	Console-path\default\console.conf <sup>#3</sup>	Communication environment definition file
	Console-path\conf\console\correlation\view_cor.conf	Settings file for the consolidated display of repeated events
	Console-path\conf\console\correlation\view_cor_JP1-user-name.conf	Settings file for the consolidated display of repeated events
	Console-path\conf\console\rmtcmd\cmdbtn.conf	Command button definition file
	Console-path\conf\health\jcohc.conf	Health check definition file
	Console-path\conf\hostmap\user_hostmap.conf	Event-source-host mapping definition file
	Console-path\conf\action\actnotice.conf	Automatic action notification definition file
	Console-path\conf\processupdate\processupdate.conf	Status event definition file
	Console-path\conf\guide\jco_guide.txt	Event guide information file
	Console-path\conf\system\event_storm\*.conf	Repeated event condition definition file
	<pre>Console-path\conf\console\event_storm\attr_list \event_storm_attr_list.conf</pre>	Display item definition file for repeated event condition
	<pre>Console-path\conf\console\event_storm\auto_list \event_storm_auto_list.conf</pre>	Auto-input definition file for repeated event condition
	Console-path\conf\console\incident\incident.conf	Definition file for manually registering incidents
	Console-path\conf\console\incident\incident_info.conf	Configuration file for incident inheritance information
	user-selected-folder\user-selected-file-name	Event guide message file
	All files under Console-path\conf\evgen\	Definition files for correlation event generation
	user-selected-folder\file-name.conf	Correlation event generation definition file
	Console-path\conf\action\attr_list\attr_list.conf	File that defines which items are displayed for event conditions
	Console-path\conf\chsev\jcochsev.conf	Severity changing definition file

Product name	File name	Description
	Console-path\conf\chsev\attr_list\chsev_attr_list.conf	Display item definition file for severity change definition
	Console-path\conf\chsev\auto_list\chsev_auto_list.conf	Automatic input definition file for severity change definition
	Console-path\conf\mail\jimmail.conf	Email environment definition file
	Console-path\conf\chattr\jcochmsg.conf	Display message change definition file
	Console-path\conf\chattr\attr_list\chmsg_attr_list.conf	Display item definition file for a display message change definition
	Console-path\conf\chattr\auto_list\chmsg_auto_list.conf	Automatic input definition file for a display message change definition
	Console-path\conf\console\performance\performance.conf	Performance report display definition file
Central	Scope-path\conf\jcs_guide*.txt	Guide information file
Scope	Scope-path\conf\jcs_hosts	Host information file
	Scope-path\conf\action_complete_on.conf	Settings file for
	Scope-path\conf\action_complete_off.conf	completed-action linkage function
	user-selected-folder\user-selected-file-name	Definition file for automatic delete mode of status change event
	user-selected-folder\user-selected-file-name	Definition file for monitoring object initialization mode
	Scope-path\conf\auto_dbbackup_on.conf	Backup recovery settings
	Scope-path\conf\auto_dbbackup_off.conf	file for monitored object database
	Scope-path\conf\evhist_warn_event_on.conf	Settings file for the
	Scope-path\conf\evhist_warn_event_off.conf	maximum number of status change events
	user-selected-folder\user-selected-file-name	Guide message file
	user-selected-folder\user-selected-file-name	Definition file for on memory mode of status change condition
IM Configurat	<pre>Manager-path\conf\imcf\jplcf_applyconfig.conf i</pre>	Apply-IM-configuration- method definition file
on Manageme nt	Manager-path\conf\imcf\jp1cf_treedefaultpolicy.csv	Default monitoring policy definition file
	Manager-path\conf\agtless\targets\wmi.ini	Definition files regarding WMI authentication information

Product name	File name	Description
	Manager-path\conf\agtless\targets\ssh.ini	Definition files regarding SSH authentication information
JP1/IM - View	<pre>View-path\conf\webdata\en\*.html View-path\conf\webdata\ja\*.html View-path\conf\webdata\zh\*.html</pre>	Web page call definition file
	View-path\conf\tuning.conf	IM - View settings file
	<pre>View-path\conf\ssl\nosslhost.conf</pre>	Non-encryption communication host configuration file
	View-path\default\view.conf.update	Communication
	View-path\default\tree_view.conf.update	environment definition file
	<pre>View-path\conf\sovtoolexec\en\!JP1_CS_APP0.conf View-path\conf\sovtoolexec\ja\!JP1_CS_APP0.conf View-path\conf\sovtoolexec\zh\!JP1_CS_APP0.conf</pre>	Start program definition file
	<pre>View-path\conf\sovtoolitem\en\!JP1_CS_FTOOL0.conf View-path\conf\sovtoolitem\ja\!JP1_CS_FTOOL0.conf View-path\conf\sovtoolitem\zh\!JP1_CS_FTOOL0.conf</pre>	Toolbar definition file
	<pre>View-path\conf\sovtoolitem\en\!JP1_CS_FTREE0.conf View-path\conf\sovtoolitem\ja\!JP1_CS_FTREE0.conf View-path\conf\sovtoolitem\zh\!JP1_CS_FTREE0.conf</pre>	Icon operation definition file
	<pre>View-path\conf\appexecute\en\*.conf View-path\conf\appexecute\ja\*.conf View-path\conf\appexecute\zh\*.conf</pre>	Definition file for executing applications
	<pre>View-path\conf\function\en\*.conf View-path\conf\function\ja\*.conf View-path\conf\function\zh\*.conf</pre>	Definition file for the tool launcher
	user-selected-folder\user-selected-file-name	Configuration file for monitoring tree
	Files under View-path\image\icon\	Icon file
	Files under View-path\image\visual\	Visual icon file#4
	Files under View-path\image\map\	Background-image-file- name
	View-path\conf\jcfview\jcfview.conf	Operation definition file for IM Configuration Management - View
	<pre>View-path\conf\jrmview\jrmview.conf</pre>	Operation definition file for Rule Operation - View <sup>#5</sup>
	<pre>View-path\default\jrmview_reg.conf</pre>	Common definition settings file#5
	<pre>View-path\conf\sovsystem\en\system.conf</pre>	System profile of the
	<pre>View-path\conf\sovsystem\ja\system.conf</pre>	Central Scope viewer

Product name	File name	Description
	<pre>View-path\conf\sovsystem\zh\system.conf</pre>	

<sup>#1:</sup> The common definition information backup file backs up the definition information of a logical host in a cluster system. This backup file is created during setup of the cluster system. This backup file backs up the definition information of JP1/IM as well as JP1/Base, JP1/AJS, and Version 06-02 and later of JP1/Power Monitor. For details, see 7.1.3(5) Setting common definition information in the JP1/Integrated Management 2 - Manager Configuration Guide.

- #2: On a logical host, JP1 DEFAULT is the logical host name.
- #3: This file exists only on a physical host.
- #4: Files added by the user are backed up.
- #5: This file is used by JP1/IM View (the part linked to JP1/IM Rule Operation).

# 1.1.2 Recovery (in Windows)

This subsection explains how to recover JP1/IM configuration information.

Before you recover JP1/IM backup information, you must first recover JP1/Base. Make sure that the following prerequisite conditions are met, and then recover the backup files to their original locations.

Prerequisite conditions:

- JP1/Base has already been installed.
- JP1/IM Manager has already been installed.
- To recover a logical host environment, JP1 must already be set up in the logical host environment.
- JP1/Base and JP1/IM Manager are stopped.

Backup information is recovered only for the host of the environment that was backed up. To recover backup information, you must perform a recovery operation in each environment.

If the system operates in a cluster configuration, recover each environment in the order of physical hosts, then logical hosts.

# 1.1.3 Backup (in UNIX)

This subsection explains how to back up JP1/IM configuration information.

If you change the JP1/IM configuration, make a backup. When you make a backup of JP1/IM, be sure to make a backup of JP1/Base at the same time. For details about how to back up the definition files that are configured by JP1/Base users, see the JP1/Base User's Guide.

The available backup methods include the tar and cpio commands. You can also use a backup tool such as JP1/ OmniBack II to make a backup. Make a backup using a method of your choice, such as copying files. If at all possible, perform backup procedures when JP1/IM daemons are not running. If you must make a backup while these daemons are running, note the following:

- The definition files may be modified during execution in some cases. If a backup is made while a definition file is being modified, the backup file will be corrupted.
  - Immediately following the backup operation, compare the collected backup file with the original file to make sure their contents match.

- When you make a backup, do not lock the target file. If you need to lock the file, first log out from all viewers that are connected, and then copy the target file to another file. After you have copied it, compare the copied file with the original file to make sure their contents match, and then back up the copied file.
- When you restore the backed-up configuration information, the configuration is simply modified with the restored content, and the events that have already arrived at JP1/IM Manager are not re-evaluated.

Of the files shown in the table below, back up all those that exist. If only some of the existing files are backed up, interaction with the remaining files might become inconsistent, preventing the system from operating correctly.

Also, if the system operates in a cluster configuration, back up each environment in the order of physical hosts, then logical hosts.

The table below shows the JP1/IM files to back up. For a logical host, replace /var/opt and /etc/opt in the table with *shared-directory*.

Table 1-2: JP1/IM files to back up

Product name		File name	Description
Common to all products		Backup files created in 8.3.4 Copying the common definition information during new installation (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide	Common definition information backup file <sup>#1</sup>
JP1/IM - Manager		user-selected-file-name	Private key used by the communication encryption function  File specified for the following common definition information:  JP1_DEFAULT\JP1BASE \SSL\PRIVATEKEYFILE\#2
			Server certificate used by the communication encryption function  File specified for the following common definition information:  JP1_DEFAULT\JP1BASE \SSL\CERTIFICATEFILE#2
			Root certificate used by the communication encryption function  File specified for the following common definition information:  JP1_DEFAULT\JP1BASE \SSL \CACERTIFICATEFILE#2
JP1/IM - Manager	Intelligent Integrated Management Base	/etc/opt/jplimm/conf/imdd/imdd.properties	Intelligent Integrated Management Base definition file
		<pre>/etc/opt/jplimm/conf/imdd/ imdd_systemnode.conf</pre>	System node definition file
		/etc/opt/jplimm/conf/imdd/ imdd_category_name.conf	Category name definition file for IM management nodes
		<pre>/etc/opt/jplimm/conf/imdd/ imdd_target_host.conf</pre>	Target host definition file for configuration collection

Product name	File name	Description
	<pre>/etc/opt/jplimm/conf/imdd/ imdd_host_name.conf</pre>	Host name definition file
	<pre>/etc/opt/jplimm/conf/imdd/ imdd_nodeLink_def.conf</pre>	IM management node link definition file
	/etc/opt/jplimm/conf/imdd/ imdd_sso_mapping.properties	Single sign-on mapping definition file
	<pre>/etc/opt/jplimm/conf/imdd/plugin/jplajs/ *.conf</pre>	Plug-in definition file for JP1/AJS
	<pre>/etc/opt/jplimm/conf/imdd/plugin/jplpfm/ *.conf</pre>	Plug-in definition file for JP1/PFM
	/etc/opt/jplimm/plugin/imdd/user-created-plug-ins	User-created plug-ins
	/opt/jp1imm/public/custumUI/user-created-folders-for-custom-UIs	Storage folder for custom UI files
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/en/ imdd_suggestion_ajs_check_failed_agent_jobne t_en.conf</pre>	English suggestion template files for JP1/AJS
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/en/ imdd_suggestion_ajs_check_failed_agent_list_ en.conf</pre>	
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/en/ imdd_suggestion_pfm_cpu_event_en.conf</pre>	English suggestion template files for JP1/PFM
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/en/ imdd_suggestion_pfm_set_status_of_events_to_ processed_en.conf</pre>	
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/en/ imdd_suggestion_pfm_suspend_monitoring_en.co nf</pre>	
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/ja/ imdd_suggestion_ajs_check_failed_agent_jobne t_ja.conf</pre>	Japanese suggestion template files for JP1/AJS
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/ja/ imdd_suggestion_ajs_check_failed_agent_list_ ja.conf</pre>	
	<pre>/etc/opt/jplimm/conf/imdd/suggestion/ template/ja/ imdd_suggestion_pfm_cpu_event_ja.conf</pre>	Japanese suggestion template files for JP1/PFM
	/etc/opt/jplimm/conf/imdd/suggestion/ template/ja/ imdd_suggestion_pfm_set_status_of_events_to_ processed_ja.conf	
	/etc/opt/jplimm/conf/imdd/suggestion/ template/ja/	

Product name	File name	Description
	<pre>imdd_suggestion_pfm_suspend_monitoring_ja.co nf</pre>	
	any-path/suggestion-definition-files	Suggestion definition file
Central Consol	/etc/opt/jplcons/conf/jplco_env.conf	IM environment definition file
	/etc/opt/jplcons/conf/jplco_param.conf	IM parameter definition file
	/etc/opt/jp1cons/conf/jp1co_param_V7.conf	IM parameter definition file
	/etc/opt/jplcons/conf/jplco_service.conf	Extended startup process definition file
	/etc/opt/jplcons/conf/jplco_system.conf	IM server system environment settings file
	/etc/opt/jplcons/conf/action/actdef.conf	Automated action definition file
	/etc/opt/jp1cons/conf/console/actprofile/actprofile_JP1-user-name	Action profile
	/etc/opt/jp1cons/conf/console/actprofile/actprofile2_JP1-user-name	
	/etc/opt/jp1cons/conf/console/actprofile/actprofile_0950_JP1-user-name	
	/etc/opt/jplcons/conf/console/attribute/ *.conf	Definition file for extended event attributes
	<pre>/etc/opt/jplcons/conf/console/attribute/ extend/*.conf</pre>	Definition file for extended event attributes (extended file)
	/etc/opt/jplcons/conf/console/filter/*.conf	Filter definition file
	<pre>/etc/opt/jplcons/conf/console/filter/ attr_list/ common_exclude_filter_attr_list.conf</pre>	Common-exclusion-conditions display item definition file
	<pre>/etc/opt/jplcons/conf/console/filter/ auto_list/ common_exclude_filter_auto_list.conf</pre>	Common-exclusion-conditions auto-input definition file
	/etc/opt/jplcons/conf/console/mapping/mapping.conf	Event information mapping definition file
	/etc/opt/jplcons/conf/console/monitor/*.conf	Definition file for opening monitor windows
	/etc/opt/jplcons/conf/console/object_type/*	Definition file for object types
	/etc/opt/jplcons/conf/console/ profile/.system	System profile
	<pre>/etc/opt/jplcons/conf/console/profile/ defaultUser</pre>	JP1/IM - View user profile (default)
	/etc/opt/jplcons/conf/console/profile/ profile_JPl-user-name	JP1/IM - View user profile
	/etc/opt/jplcons/conf/console/profile/ systemColor.conf	System color definition file
	/etc/opt/jplcons/default/console.conf#3	Communication environment definition file

Product name	File name	Description
	/etc/opt/jp1cons/conf/console/correlation/ view_cor.conf	Settings file for the consolidated display of repeated events
	/etc/opt/jplcons/conf/console/correlation/view_cor_JPl-user-name.conf	Settings file for the consolidated display of repeated events
	<pre>/etc/opt/jplcons/conf/console/rmtcmd/ cmdbtn.conf</pre>	Command button definition file
	/etc/opt/jplcons/conf/health/jcohc.conf	Health check definition file
	/etc/opt/jp1cons/conf/hostmap/ user_hostmap.conf	Event-source-host mapping definition file
	/etc/opt/jplcons/conf/action/actnotice.conf	Automatic action notification definition file
	/etc/opt/jp1cons/conf/processupdate/ processupdate.conf	Status event definition file
	/etc/opt/jplcons/conf/guide/jco_guide.txt	Event guide information file
	<pre>/etc/opt/jplcons/conf/console/incident/ incident.conf</pre>	Definition file for manually registering incidents
	<pre>/etc/opt/jp1cons/conf/console/incident/ incident_info.conf</pre>	Configuration file for incident inheritance information
	<pre>/etc/opt/jplcons/conf/system/event_storm/ *.conf</pre>	Repeated event condition definition file
	/etc/opt/jp1cons/conf/console/event_storm/ attr_list/event_storm_attr_list.conf	Display item definition file for repeated event condition
	/etc/opt/jplcons/conf/console/event_storm/ auto_list/event_storm_auto_list.conf	Auto-input definition file for repeated event condition
	user-selected-directory/user-selected-file-name	Event guide message file
	All files under /etc/opt/jplcons/conf/evgen/	Definition files for correlation event generation
	user-selected-directory/file-name.conf	Correlation event generation definition file
	/etc/opt/jplcons/conf/chsev/jcochsev.conf	Severity changing definition file
	/etc/opt/jp1cons/conf/action/attr_list/ attr_list.conf	File that defines which items are displayed for event conditions
	<pre>/etc/opt/jp1cons/conf/chsev/attr_list/ chsev_attr_list.conf</pre>	Display item definition file for severity change definition
	/etc/opt/jplcons/conf/chsev/auto_list/chsev_auto_list.conf	Automatic input definition file fo severity change definition
	/etc/opt/jplcons/conf/chattr/jcochmsg.conf	Display message change definition file
	<pre>/etc/opt/jp1cons/conf/chattr/attr_list/ chmsg_attr_list.conf</pre>	Display item definition file for a display message change definition
	<pre>/etc/opt/jplcons/conf/chattr/auto_list/ chmsg_auto_list.conf</pre>	Automatic input definition file fo a display message change definition

Product name	File name	Description
	/etc/opt/jplcons/conf/console/performance/ performance.conf	Performance report display definition file
Central Scope	/etc/opt/jplscope/conf/jcs_guide*.txt	Guide information file
	/etc/opt/jp1scope/conf/jcs_hosts	Host information file
	/etc/opt/jplscope/conf/ action_complete_on.conf	Settings file for completed-action linkage function
	/etc/opt/jp1scope/conf/ action_complete_off.conf	
	user-selected-directory/user-selected-file-name	Definition file for automatic delete mode of status change event
	user-selected-directory/user-selected-file-name	Definition file for monitoring object initialization mode
	/etc/opt/jp1scope/conf/auto_dbbackup_on.conf	Backup recovery settings file for monitored object database
	/etc/opt/jp1scope/conf/ auto_dbbackup_off.conf	
	/etc/opt/jp1scope/conf/ evhist_warn_event_on.conf	Settings file for the maximum number of status change events
	<pre>/etc/opt/jplscope/conf/ evhist_warn_event_off.conf</pre>	
	user-selected-directory/user-selected-file-name	Guide message file
	user-selected-directory/user-selected-file-name	Definition file for on memory mode of status change condition
IM Configurat Management	on /etc/opt/jplimm/conf/imcf/ jplcf_applyconfig.conf	Apply-IM-configuration -method definition file
	/etc/opt/jplimm/conf/imcf/ jplcf_treedefaultpolicy.csv	Default monitoring policy definition file
	All files under /var/opt/jplimm/data/imcf/	System management information
	/etc/opt/jplimm/conf/agtless/targets/ssh.ini	Definition files regarding SSH authentication information

<sup>#1:</sup> The common definition information backup file backs up the definition information of a logical host in a cluster system. This backup file is created during setup of the cluster system. This backup file backs up the definition information of JP1/IM as well as JP1/Base, JP1/AJS, and Version 06-02 and later of JP1/Power Monitor. For details, see 7.1.3(5) Setting common definition information in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 1.1.4 Recovery (in UNIX)

This subsection explains how to recover the JP1/IM configuration information.

Before you recover JP1/IM backup information, you must first recover JP1/Base. Make sure that the following prerequisite conditions are met, and then recover the backup files to their original locations.

<sup>#2:</sup> On a logical host, JP1 DEFAULT is the logical host name.

<sup>#3:</sup> This file exists only on a physical host.

### Prerequisite conditions:

- JP1/Base has been installed, and the setup command has already been executed.
- JP1/IM Manager has been installed, and the setup command has already been executed.
- To recover a logical host environment, JP1 must already be set up in the logical host environment.
- JP1/Base and JP1/IM Manager are stopped.

Backup information is recovered only for the host of the environment that was backed up. To recover backup information, you must perform a recovery operation in each environment.

If the system operates in a cluster configuration, recover each environment in the order of physical hosts, then logical hosts.

## 1.2 Managing the databases

The JP1/IM system uses the following databases:

- Command execution log
- Monitored object database
- · Host information database
- · Event database
- File for accumulated response-waiting events
- · IM database

The monitored object database and the host information database are used when the Central Scope functions are used. The file for accumulated response-waiting events is used by the response-waiting event management function. This section explains the procedure for backing up and recovering these databases, and the procedure for re-creating them.

## 1.2.1 Database reorganization

# (1) Reorganization of the command execution log

There is no need to reorganize the command execution log.

# (2) Reorganization of the monitored object database and the host information database

There is no need to reorganize the monitored object database or the host information database.

# (3) Reorganization of the event database

There is no need to reorganize the event database.

# (4) Reorganization of the file for accumulated response-waiting events

There is no need to reorganize the file for accumulated response-waiting events.

# (5) Reorganization of the IM databases

This subsection explains the procedure for reorganizing the IM databases.

Among the IM databases, when data is repeatedly added to and deleted from the IM Configuration Management database, the free space in the IM database can become fragmented. This can prevent additional items from being registered before the maximum number of hosts or properties has been reached. In addition, registering, updating, and deleting database entries might take extra time.

To prevent such occurrences, reorganize the IM databases at times such as the following.

- When JP1/IM Manager is stopped for regular backup operations
- During annual creation and implementation of a reorganization execution plan
- When the message KFPH00212-I or KFPH00213-W is output to the Windows Event Log (syslog)

When issues like the above occur, use the procedure below to release free space in the database. To release the free space in the database:

- 1. In Windows, check whether the IM database service (JP1/IM2 Manager DB Server) is running.
- 2. Using the jimdbreclaim command, release the free space in the database.
- 3. Check whether any host information or profiles registered in the IM database are unnecessary, and delete those that are not needed.

If this procedure does not eliminate the occurrence of problems, you need to reorganize the IM database. The following describes the procedures for reorganizing the IM database on a physical host, and in a cluster environment.

### (a) Reorganizing the IM database on a physical host

To reorganize the IM database on a physical host:

- 1. Check the service status.
  - In Windows, check whether the IM database service (JP1/IM2 Manager DB Server) is running.
  - Check whether the JP1/IM-Manager service is stopped.
  - If JP1/IM MO is being used, check whether the JP1/IM Message Optimizer service of JP1/IM MO on the connection source is stopped.
- 2. Stop the JP1/IM Manager service.
  - If JP1/IM MO is being used, also stop the JP1/IM Message Optimizer service of JP1/IM MO on the connection source.
- 3. Using the jimdbrorg command, reorganize the database.
  - For details about the jimdbrorg command, see *jimdbrorg* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 Manager Command, Definition File and API Reference.*
- 4. Start the JP1/IM Manager service.
  - If JP1/IM MO is being used, also start the JP1/IM Message Optimizer service of JP1/IM MO on the connection source.

### (b) Reorganizing the IM database in a cluster environment

In a cluster environment, execute the reorganization process on the executing host. Furthermore, the shared directory must be accessible.

To reorganize the IM database in a cluster environment:

- 1. Check the service status.
  - In Windows, check whether the IM database service (JP1/IM2 Manager DB Server\_logical-host-name) is running.
  - Check whether the JP1/IM-Manager service and the cluster service (JP1/IM2 Manager DB Cluster Service\_logical-host-name) of the IM database are stopped.
  - If JP1/IM MO is being used, check whether the JP1/IM Message Optimizer service of JP1/IM MO on the connection source is stopped.
- 2. Using the jimdbrorg command, reorganize the database.

For details about the jimdbrorg command, see *jimdbrorg* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

3. Start the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database that was stopped in Step 1.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

## 1.2.2 Database backup and recovery

When you perform backup and recovery, all of the following items need to match on the backup source and the recovery destination:

- Host name
- IP address
- PP model name
- PP version (match the format of VVRRZZ)
- Directory structure used by the product (permissions and the like must match)

It is assumed that the OS and hardware on the source and the destination are able to perform the same operations.

If the above conditions are not met, you will need to move files.

See 1.5 Migrating the configuration information and databases and perform the operations described there.

You can use OS commands or backup software to make a full backup of the entire system. However, we recommend that you back up or recover data by using the commands provided with individual JP1/IM - Manager functions that do not depend on OS commands or backup software. If you use OS commands or backup software, the following conditions must be met:

- Data is backed up when all JP1/IM Manager services, including the IM database, have been stopped.
- Data is backed up when all file and registry information, including the information registered in the OS, is consistent.
- The backup target files are not sparse files.

Databases cannot be partially backed up and recovered. If a database is partially backed up or recovered, database associations become contradictory. In this case, incorrect data could be referenced.

Back up and recover definition information in addition to the database itself. If you back up only the database, relationships with the definition information might become inconsistent.

Stop JP1/IM - View when you perform backup and recovery.

# (1) Command execution log backup and recovery procedures

The following explains the procedures for backing up and recovering the command execution log.

### (a) Backup procedure

To back up the command execution log:

1. Stop JP1/IM - Manager.

- 2. Stop JP1/Base.
- 3. Back up the target files.

For details about which files to back up, see 1.2.2(1)(c) Files to back up.

- 4. Start JP1/Base.
- 5. Start JP1/IM Manager.

#### (b) Recovery procedure

To recover the command execution log:

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Place the backup files in their respective directories.
- 4. Start JP1/Base.
- 5. Start JP1/IM Manager.



#### **Important**

When the log is recovered, the history of the automated actions taken and the commands executed from the Command Execution window between the time of backup and the time of recovery cannot be viewed.

#### (c) Files to back up

The files to back up are listed below.

In Windows:

Table 1–3: Files to back up (Windows)

Information type	Files to back up
Command execution log file	All files under Base-path\log\COMMAND\
	All files under shared-folder\jplbase\log\COMMAND\
Action information file	Console-path\log\action\actinf.log
	shared-folder\jp1cons\log\action\actinf.log
Action hosts file	Console-path\log\action\acttxt{1 2}.log
	<pre>shared-folder\jp1cons\log\action\acttxt{1 2}.log</pre>

#### In UNIX:

Table 1–4: Files to back up (UNIX)

Information type	Files to back up
Command execution log file	All files under /var/opt/jp1base/log/COMMAND/
	All files under shared-directory/jp1base/log/COMMAND/
Action information file	/var/opt/jp1cons/log/action/actinf.log

Information type	Files to back up
	shared-directory/jplcons/log/action/actinf.log
Action hosts file	/var/opt/jplcons/log/action/acttxt{1 2}.log
	shared-directory/jp1cons/log/action/acttxt{1 2}.log

For details about the command execution log file, see the JP1/Base User's Guide.

## (2) Monitored object database backup and recovery procedures

The following explains the procedures for backing up and recovering the monitored object database. The monitored object database is used when the Central Scope functions are used.

#### (a) Backup procedure

To back up the monitored object database:

- 1. Stop JP1/IM Manager.
- 2. Back up the target files.

The table below shows the files to back up.

Table 1-5: Files to back up

os	Information type	Files to back up
Windows		All files under Scope-path\database\jcsdb\
database	database	All files under shared-folder\jp1scope\database\jcsdb\
UNIX	Monitored object	All files under /var/opt/jp1scope/database/jcsdb/
	database	All files under shared-directory/jp1scope/database/jcsdb/

3. Start JP1/IM - Manager.

## (b) Recovery procedure

To recover the monitored object database:

- 1. Stop JP1/IM Manager.
- 2. Place the backup files in directories.
- 3. Start JP1/IM Manager.

## (3) Host information database backup and recovery procedures

The following explains the procedures for backing up and recovering the host information database. The host information database is used when the Central Scope functions are used.

### (a) Backup procedure

To back up the host information database:

1. Stop JP1/IM - Manager.

<sup>1.</sup> JP1/IM System Maintenance

2. Back up the target files.

The table below shows the files to back up.

Table 1–6: Files to back up

os	Information type	Files to back up
Windows Host information database	All files under <i>Scope-path</i> \database\jcshosts\	
	database	All files under shared-folder\jp1scope\database\jcshosts\
UNIX	Host information	All files under /var/opt/jp1scope/database/jcshosts/
	database	All files under shared-directory/jp1scope/database/jcshosts/

3. Start JP1/IM - Manager.

#### (b) Recovery procedure

To recover the host information database:

- 1. Stop JP1/IM Manager.
- 2. Place the backup files in directories.
- 3. Start JP1/IM Manager.

## (4) Event database backup and recovery procedures

For details about the procedures for backing up and recovering the event database, see the explanation on backup and recovery in the *JP1/Base User's Guide*.

When you are recovering the event database of a JP1/IM - Manager host, you must also back up and recover the command execution log at the same time. For details about the procedures for backing up and recovering the command execution log, see 1.2.2(1) Command execution log backup and recovery procedures.



#### **Important**

When you are backing up and recovering the event database, you must also back up and recover the command execution log at the same time.

If you back up and recover only the event database, an inconsistency will occur in the association of JP1 event execution results and automated actions inside the event database.

The results of automated actions executed before the event database recovery may be displayed as the execution results of automated actions for JP1 events registered after the event database recovery.

# (5) Backup and recovery procedures for the file for accumulated response-waiting events

The following explains the procedures for backing up and recovering the file for accumulated response-waiting events. This file is used by the response-waiting event management function.

#### (a) Backup procedure

1. Stop JP1/IM - Manager.

2. Back up the target files.

The table below shows the files to back up.

Table 1-7: Files to back up

OS	Files to back up
Windows	Console-path\log\response\resevent.dat
	<pre>shared-folder\jp1cons\log\response\resevent.dat</pre>
UNIX	/var/opt/jp1cons/log/response/resevent.dat
	shared-directory/jplcons/log/response/resevent.dat

3. Start JP1/IM - Manager.

#### (b) Recovery procedure

- 1. Stop JP1/IM Manager.
- 2. Place the backup files in the appropriate directories.
- 3. Start JP1/IM Manager.

## (6) IM database backup and recovery procedures

This subsection explains the procedures for backing up and recovering the IM database on a physical host, and in a cluster environment.



#### Important

When you back up and recover the IM database, you must also back up and recover the event database. For details about the procedure for backing up and recovering the event database, see 1.2.2(4) Event database backup and recovery procedures.



#### Important

Depending on the method used to recover the event database, you might need to re-create the event database. Depending on the method used to re-create the event database, you might also need to re-create the IM database. In such a case, do not recover the IM database. If the IM database is recovered, information in the IM database might no longer match the information in the event database, resulting in an unexpected change to the JP1 event handling status when the handling status is changed.



#### Important

Do not recover the backup data that was acquired before jimdbupdate command execution from the pre-update IM database to the IM database after jimdbupdate command execution.

After you have executed the jimdbupdate command, use the jimdbbackup command again to acquire a backup.

#### (a) Procedures for backing up and recovering the IM database on a physical host

To back up the IM database on a physical host:

- 1. In Windows, check whether the IM database service (JP1/IM2 Manager DB Server) is running.
- 2. Stop the following services:
  - JP1/IM-Manager service
  - In Windows, the cluster service (JP1/IM2 Manager DB Cluster Service) of the IM database
  - If JP1/IM MO is being used, the JP1/IM Message Optimizer service of JP1/IM MO on the connection source
- 3. Use the jimdbbackup command to make a backup of the target database.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

4. Back up the target files.

For details about which files to back up, see 1.1.1 Backup (in Windows) and 1.1.3 Backup (in UNIX).

5. Start the services that were stopped in step 2.

To recover the IM database on a physical host:

- 1. In Windows, check whether the IM database service (JP1/IM2 Manager DB Server) is running.
- 2. Stop the following services:
  - JP1/IM-Manager service
  - In Windows, the cluster service (JP1/IM2 Manager DB Cluster Service) of the IM database
  - If JP1/IM MO is being used, the JP1/IM Message Optimizer service of JP1/IM MO on the connection source
- 3. Using the jimdbrecovery command, recover the target database.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

4. Place the backed up files in their respective directories.

With IM configuration management enabled, place the backed up files in their respective directories.

- 5. Start the services that were stopped in step 2.
- 6. When you use the Intelligent Integrated Management Base, execute the jddupdatetree command in the new and rebuilding mode.

## (b) Procedures for backing up and recovering the IM database in a cluster environment

The procedure for backing up the IM database in a cluster environment is described below. In the case of a cluster environment, execute the backup process on the executing host. Furthermore, the shared directory must be accessible.

To back up the IM database in a cluster environment:

1. Stop the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

2. Using the jimdbbackup command, make a backup of the target database.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

3. Back up the target files.

For details about which files to back up, see 1.1.1 Backup (in Windows) and 1.1.3 Backup (in UNIX).

4. Start the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database that was stopped in Step 1.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

To recover the IM database in a cluster environment. If the system operates in a cluster configuration, perform recovery on the active host. You will also need to be able to access shared directories.

1. Stop the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database.

If JP1/IM - MO is being used, also stop the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

2. Using the jimdbrecovery command, recover the target database.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

3. Place the backed up files in their respective directories.

With IM configuration management enabled, place the backed up files in their respective directories.

4. Start the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database that was stopped in Step 1.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

5. When you use the Intelligent Integrated Management Base, execute the jddupdatetree command in the new and rebuilding mode.

## 1.2.3 Re-creating a database and changing its settings

## (1) Re-creating the command execution log

To re-create the command execution log:

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Delete the command execution log file, the action information file, and the action hosts file shown in the table below.

#### In Windows:

Table 1–8: Files to delete (Windows)

Information type	Files to delete	
Command execution log file	All files under Base-path\log\COMMAND\	
	All files under shared-folder\jp1base\log\COMMAND	
Action information file	Console-path\log\action\actinf.log	
	<pre>shared-folder\jp1cons\log\action\actinf.log</pre>	
Action hosts file	Console-path\log\action\acttxt{1 2}.log	
	<pre>shared-folder\jp1cons\log\action\acttxt{1 2}.log</pre>	

#### In UNIX:

Table 1–9: Files to delete (UNIX)

Information type	Files to delete
Command execution log file	All files under /var/opt/jp1base/log/COMMAND/
	All files under shared-directory/jplbase/log/COMMAND/
Action information file	/var/opt/jp1cons/log/action/actinf.log
	shared-directory/jp1cons/log/action/actinf.log
Action hosts file	/var/opt/jp1cons/log/action/acttxt{1 2}.log
	<pre>shared-directory/jp1cons/log/action/acttxt{1 2}.log</pre>

#### 4. Start JP1/Base.

#### 5. Start JP1/IM - Manager.

Restarting JP1/Base and JP1/IM - Manager and executing a command from JP1/IM - View or an automated action recreates the command execution log.

## (2) Procedure for re-creating the monitored object database and the host information database

To re-create the monitored object database and the host information database:

- 1. Stop JP1/IM Manager.
- 2. Back up the files.

Back up the *Scope-path*\database\ folder.

3. Re-create the monitored object database.

Executing the jcsdbsetup -f command deletes the existing monitored object database, and then re-creates the object database.

4. Re-create the host information database.

First, delete the files from the *Scope-path*\database\jcshosts\ folder, and then execute the following command:

jcshostsimport -r host-information-file (jcs hosts)

## (3) Procedure for re-creating the event database

The procedure differs depending on the version of JP1/Base that is installed on the target host whose event database you are re-creating.

#### (a) Manager (JP1/Base 09-00 or later)

The procedure differs depending on whether the integrated monitoring database is used.

#### If the integrated monitoring database for JP1/IM - Manager is not used

Using the jevdbinit command of JP1/Base, initialize the event database.

For details about how to initialize the event database of JP1/Base, see the description about initializing the event database in the chapter that explains how to set up the Event Service environment in the JP1/Base User's Guide.

If you changed the serial numbers by executing the jevdbinit command with the -s option, you must re-create the command execution log.

For details about how to re-create the command execution log, see 1.2.3(1) Re-creating the command execution log.

#### If the integrated monitoring database for JP1/IM - Manager is used

You can use the following procedure to initialize the event database:

- 1. Stop JP1/IM Manager.
- 2. Execute the JP1/Base jevdbinit command without the -s option.

If you execute the jevdbinit command without the -s option, the serial numbers in the pre-initialization event database are inherited.

If you changed the serial numbers by executing the jevdbinit command with the -s option, you must set up the integrated monitoring database again and re-create the command execution log.

Before setting up the integrated monitoring database again, unset up the database by executing the jcodbunsetup command.

For details about how to re-create the command execution log, see 1.2.3(1) Re-creating the command execution log. For details about the jevdbinit command, see the chapter on commands in the  $JP1/Base\ User's\ Guide$ .

Note that if you execute the jevdbinit command with the -s option specified, you must use Central Scope to select the root monitoring node, change the status, and delete the status change event logs.

#### (b) Agent (JP1/Base 07-51 or earlier)

Using the jevdbinit command of JP1/Base, initialize the event database. There is no need to delete and re-create the event database.

For details about how to initialize the event database of JP1/Base, see the description about initializing the event database in the chapter that explains how to set up the Event Service environment in the *JP1/Base User's Guide*.



#### **Important**

If an agent initializes the event database, JP1/Base discards the events without registering them in the event database. Consequently, if the correct procedure is not followed, it might become impossible to transfer some of the events after the event database is initialized.

#### (c) Agent (JP1/Base 07-00 or earlier)

When an event database is re-created, the following problem occurs:

• At the JP1 event forwarding destination host, the processing performance for accepting, registering, and acquiring JP1 events deteriorates.

This is because re-creation initializes the event database at the forwarding source, creating a mismatch with the management information in the event database at the forwarding destination.



#### Important

If an agent initializes the event database, JP1/Base discards the events without registering them in the event database. Consequently, if the correct procedure is not followed, it might become impossible to transfer some of the events after the event database is initialized.

To prevent this problem from occurring, re-create event databases using the following procedure.

To re-create event databases:

- 1. Stop JP1/Base.
- 2. Stop JP1/Base at all forwarding destination hosts defined in the forwarding setting file (forward) of the JP1/Base you stopped in Step 1.

If data is forwarded from the JP1/Base at the forwarding destination host to yet another host, stop this forwarding destination as well. If JP1/IM - Manager has been installed on the host that is to be stopped, stop JP1/IM - Manager beforehand.

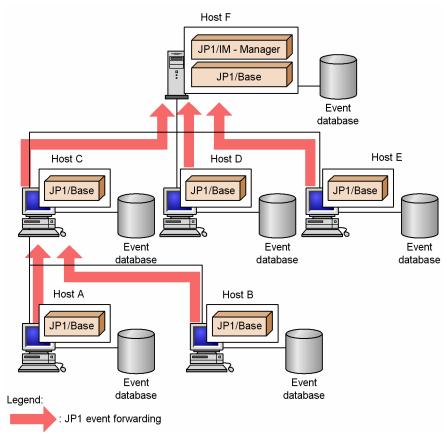
For details about the forwarding setting file (forward), see the sections that describe the settings for JP1 event forwarding in the chapter that explains how to set up an Event Service environment in the JP1/Base User's Guide.

- 3. Delete the event databases of the JP1/Bases you stopped in Steps 1 and 2.
  - If you need to view the content of the event databases, use the jevexport command of JP1/Base to output this content to a CSV file. Note that you cannot re-create an event database from an output CSV file.
  - For details about the jevexport command, see the chapter on commands in the JP1/Base User's Guide.
- 4. Start the JP1/Base (and JP1/IM Manager) that you stopped in Step 2.
- 5. Start the JP1/Base that you stopped in Step 1.

Starting JP1/Base in Steps 4 and 5 re-creates the event databases.

For this example, assume that event databases will be re-created in the system configuration shown in the following figure.

Figure 1–1: Example showing hosts and forwarding destination hosts on which event databases are to be re-created



To re-create (delete) the event database of host A, it is necessary to delete the event databases of Hosts C and F, which are the forwarding destination hosts for JP1 events.

# (4) Procedure for re-creating the file for accumulated response-waiting events

- 1. Stop JP1/IM Manager.
- 2. Delete the file for accumulated response-waiting events.

Table 1-10: Files to delete

os	Files to delete
Windows	Console-path\log\response\resevent.dat
	<pre>shared-folder\jp1cons\log\response\resevent.dat</pre>
UNIX	/var/opt/jp1cons/log/response/resevent.dat
	shared-directory/jp1cons/log/response/resevent.dat

3. Start JP1/IM - Manager.

### (5) Procedures for expanding the IM database size

This subsection explains how to expand the IM database size on a physical host, and in a cluster environment. If you create the IM database with L specified for the database size in the setup information file (jimdbsetupinfo.conf), the IM database size cannot be expanded.

#### (a) Procedure for expanding the IM database size on a physical host

The procedure for expanding the IM database size differs depending on whether you need to continue system monitoring without using the IM database during the expansion process. The procedure for each scenario is described below.

- Procedure when monitoring events without using the IM database during the expansion process
- 1. Isolate the integrated monitoring database and the IM Configuration Management database.

Isolate the integrated monitoring database and the IM Configuration Management database so that Central Console only uses the JP1/Base event database.

Execute the following command, and then restart JP1/IM - Manager:

```
jcoimdef -db OFF
```

For details about the <code>jcoimdef</code> command, see <code>jcoimdef</code> (in Chapter 1. Commands) in the manual <code>JP1/Integrated</code> Management 2 - Manager Command, Definition File and API Reference.

If JP1/IM - MO is being used, also stop the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

2. Back up the database.

Execute the jimdbbackup command with the -m EXPAND option specified.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

- 3. Unset up both the integrated monitoring database and the IM Configuration Management database. Unset up only those databases that have been set up.
- 4. Edit the setup information file.

Change the size specified in the database size (IMDBSIZE) of the setup information file.

- 5. Stop JP1/IM Manager.
- 6. Stop JP1/Base.
- 7. Restart the OS.
- 8. Start JP1/Base.
- 9. Start JP1/IM Manager.
- 10. Set up both the integrated monitoring database and the IM Configuration Management database.

Set up only those databases that were unset up in Step 3.

During setup, you need to specify a database size that is larger than the backup size and the same database directory that was used during the backup.

11. Recover the database.

Execute the jimdbrecovery command with the -m EXPAND option specified.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

12. Restart the JP1/IM - Manager service.

Execute the following command and then restart JP1/IM - Manager:

jcoimdef -db ON

For details about the jcoimdef command, see *jcoimdef* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

13. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.

For details about the jddupdatetree command, see *jddupdatetree* in Chapter 1. Commands in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

- Procedure when stopping system monitoring via Central Console
- 1. Stop the JP1/IM Manager service.
- 2. Back up the database.

Execute the jimdbbackup command with the -m EXPAND option specified.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

3. Unset up the integrated monitoring database and the IM Configuration Management database.

Unset up only those databases that have been set up.

4. Edit the setup information file.

Change the size specified in the database size (IMDBSIZE) parameter in the setup information file.

- 5. Stop JP1/Base.
- 6. Restart the OS.
- 7. Start JP1/Base.
- 8. Set up the integrated monitoring database and the IM Configuration Management database.

Set up only those databases that you unset up in Step 3.

During setup, you need to specify a database size that is larger than the size of the database you backed up, and the same database directory that was used during the backup.

9. Recover the database.

Execute the jimdbrecovery command with the -m EXPAND option specified.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

- 10. Start the JP1/IM Manager service.
- 11. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.

For details about the jddupdatetree command, see *jddupdatetree* in *Chapter 1*. Commands in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

#### (b) Procedure for expanding the IM database size in a cluster environment

The procedure for expanding the database size differs depending on whether you need to continue system monitoring via Central Console during the expansion process. The procedure for each scenario is described below.

- Procedure when continuing system monitoring via Central Console (with limited functionality)
- 1. Isolate the integrated monitoring database and the IM Configuration Management database.

Isolate the integrated monitoring database and the IM Configuration Management database so that Central Console only uses the JP1/Base event database.

Execute the following command, and then restart JP1/IM - Manager:

jcoimdef -db OFF -h logical-host-name

For details about the <code>jcoimdef</code> command, see <code>jcoimdef</code> (in Chapter 1. Commands) in the manual <code>JP1/Integrated</code> Management 2 - Manager Command, Definition File and API Reference.

If JP1/IM - MO is being used, also stop the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

2. Stop the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database. Stop the cluster service (JP1/IM-Manager DB Cluster Service\_logical-host-name) of the IM database registered in the cluster software.

3. Back up the database.

Execute the jimdbbackup command with the -m EXPAND option specified.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

- 4. Unset up the integrated monitoring database and the IM Configuration Management database. Unset up only those databases that have been set up.
- 5. Edit the cluster setup information file.

Change the size specified in the database size (IMDBSIZE) of the cluster setup information file.

- 6. Stop JP1/IM Manager.
- 7. Stop JP1/Base.
- 8. Restart the OS.
- 9. Start JP1/Base.
- 10. Start JP1/IM Manager.
- 11. Set up the integrated monitoring database and the IM Configuration Management database.

Set up only those databases that were unset up in Step 4.

During setup, you need to specify a database size that is larger than the backup size and the same database directory that was used during the backup.

12. Recover the database.

Execute the jimdbrecovery command with the -m EXPAND option specified.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

13. Start the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database. Start the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database you stopped in Step 2.

14. Restart the JP1/IM - Manager service.

Execute the following command and then restart JP1/IM - Manager:

jcoimdef -db ON -h logical-host-name

For details about the <code>jcoimdef</code> command, see <code>jcoimdef</code> (in Chapter 1. Commands) in the manual <code>JP1/Integrated</code> Management 2 - Manager Command, Definition File and API Reference.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

15. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.

For details about the jddupdatetree command, see *jddupdatetree* in Chapter 1. Commands in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

- Procedure when stopping system monitoring via Central Console
- 1. Stop the JP1/IM Manager service and the cluster service (JP1/IM2 Manager DB Cluster Service\_logical-host-name) of the IM database.

Stop the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database registered in the cluster software.

2. Back up the database.

Execute the jimdbbackup command with the -m EXPAND option specified.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

- 3. Unset up the integrated monitoring database and the IM Configuration Management database. Unset up only those databases that have been set up.
- 4. Edit the cluster setup information file.

Change the size specified in the database size (IMDBSIZE) parameter in the cluster setup information file.

- 5. Stop JP1/Base.
- 6. Restart the OS.
- 7. Start JP1/Base.
- 8. Set up the integrated monitoring database and the IM Configuration Management database.

Set up only those databases you unset up in Step 3.

During setup, you need to specify a database size that is larger than the size of the database you backed up, and the same database directory that was used during the backup.

9. Recover the database.

Execute the jimdbrecovery command with the -m EXPAND option specified.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

10. Start the JP1/IM - Manager service and the cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database.

Start the JP1/IM - Manager service and cluster service (JP1/IM2 - Manager DB Cluster Service\_logical-host-name) of the IM database you stopped in Step 1.

11. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.

For details about the jddupdatetree command, see *jddupdatetree* in *Chapter 1*. Commands in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

### (6) Procedure for changing the IM database port

To change the IM database port:

1. Stop JP1/IM - Manager service.

If JP1/IM - MO is being used, also stop the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

2. Back up the database.

Execute the jimdbbackup command with the -m MAINT option specified.

For details about the jimdbbackup command, see *jimdbbackup* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

- 3. Unset up both the integrated monitoring database and the IM Configuration Management database. Unset up only those databases that have been set up.
- 4. Edit the setup information file.

Change the port number described in the setup information file.

- 5. Stop JP1/Base.
- 6. Restart the OS.
- 7. Start JP1/Base.
- 8. Set up both the integrated monitoring database and the IM Configuration Management database. Set up only those databases that were unset up in Step 3.
- 9. Recover the database.

Execute the jimdbrecovery command with the -m MAINT option specified.

For details about the jimdbrecovery command, see *jimdbrecovery* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

10. Start JP1/IM - Manager.

If JP1/IM - MO is being used, also start the JP1/IM - Message Optimizer service of JP1/IM - MO on the connection source.

11. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.

For details about the jddupdatetree command, see *jddupdatetree* in *Chapter 1*. Commands in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## (7) Procedure for rebuilding the IM database

The procedure below explains the procedure for rebuilding the IM database that is required when you change the manager's host name. After you change the host name of a physical or logical host, you need to rebuild the IM database. Note that when the host name of a logical host is changed, you need to re-register the service created in this procedure in the IM database service to be registered in the cluster software.

#### To rebuild the IM database:

- 1. Stop JP1/IM Manager service.
  - If JP1/IM MO is being used, also stop the JP1/IM Message Optimizer service of JP1/IM MO on the connection source.
- 2. Unset up both the integrated monitoring database and the IM Configuration Management database. Unset up only those databases that have been set up.
- 3. Change the name of the host on which JP1/IM Manager has been installed.
- 4. This step is not necessary if the host name is not changed.
- 5. Stop JP1/Base.
- 6. Restart the OS.
- 7. Start JP1/Base.
- 8. Set up both the integrated monitoring database and the IM Configuration Management database.
  - Set up only those databases that were unset up in Step 2.
  - When you are setting up a logical host, you need to edit the logical host name in the cluster setup information file.
- 9. Start JP1/IM Manager.
  - Start the JP1/IM Manager of the host to be changed.
  - If JP1/IM MO is being used, also start the JP1/IM Message Optimizer service of JP1/IM MO on the connection source.
- 10. When you are using the Intelligent Integrated Management Base, execute the jddupdatetree command in new and rebuilding mode.
  - For details about the jddupdatetree command, see *jddupdatetree* in *Chapter 1*. Commands in the manual *JP1/Integrated Management 2 Manager Command, Definition File and API Reference.*



#### **Important**

If you rebuild the IM database after changing the host name, you cannot recover the database. Therefore, as needed, use the jcoevtreport command to output and save JP1 events, and use the jcfexport command to save the IM configuration management information. For details about commands, see *Chapter 1. Commands* in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

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### 1.3 Managing the disk capacity

To ensure stable operation of JP1/IM, check the available disk space regularly.

### 1.3.1 Managing the IM database capacity

The integrated monitoring databases used by JP1/IM are designed not to increase invalid areas, even during continued use. As long as the required capacity is secured, there is no need to check the database during operations.

Because data is written to the database created at setup, you basically do not have to consider capacity increase if the capacity is properly estimated at setup.

For details about increasing the log file size, see 1.3.2 Managing the log file size.

When the number of JP1 events exceeds the storage limit of the integrated monitoring database, JP1 events are automatically deleted. Therefore, you need to output and save JP1 event information regularly to prevent data loss.

To manage the disk capacity using the output-and-save operation:

1. View the information related to output-and-save operations.

Executing the jcoevtreport -showsv command displays the information related to output-and-save operations. Based on this information, estimate the output-and-save frequency and the free space required for outputting and saving information.

The following table shows the items that are displayed.

Table 1-11: Displayed items

Displayed item	Description
Percentage of events that have not been saved	Shows the percentage of JP1 events within the integrated monitoring database that have not been output or saved (the ratio relative to the maximum number of entries in the integrated monitoring database).
Size of events that are have not been saved	Shows the data size of JP1 events within the integrated monitoring database that have not been output or saved (in megabytes).  The size displayed is the size within the integrated monitoring database.  CSV output will require 1.2 times the size of the displayed events that have not been output.
Settings for deletion warning notification	Shows the value set as the deletion warning notification level.  If the deletion warning notification is set to OFF, a hyphen (-) is displayed.

#### 2. Output and save the events that have not been output.

Executing the jcoevtreport -save command outputs to a CSV file all JP1 events that have not been output and saved.

For details about the jcoevtreport command, see *jcoevtreport* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

If too many JP1 events occurred and regular output-and-save operations were too late for them, you can issue a deletion warning notification event. A deletion warning notification event reports when the percentage of JP1 events that have not been output and saved exceeds the deletion warning notification level.

To set up a deletion warning notification:

1. Enable the issuance of deletion warning notification events.

Executing the jcoimdef -dbntc ON command enables the function that issues a deletion warning notification event when the percentage of JP1 events not output and saved within the integrated monitoring database exceeds the deletion warning notification level. This percentage is the ratio relative to the maximum number of entries in the integrated monitoring database. The default for the deletion warning notification event is OFF.

2. Specify a deletion warning notification level.

Executing the jcoimdef -dbntcpos 70 command sets the percentage of JP1 events for issuing a deletion warning notification event to 70%.

For details about the jcoimdef command, see *jcoimdef* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

For details about when the IM Configuration Management database is used, see 1.2.1(5) Reorganization of the IM databases.

### 1.3.2 Managing the log file size

One of the factors that can cause insufficient disk capacity is an increase in the size of log files.

In the case of JP1/IM and JP1/Base, if you estimate the log file size in advance, there is no need to consider the possibility of increasing the log file size. This is because JP1/IM and JP1/Base use a method that outputs log files by switching between multiple log files.

For the OS and other products on the same host, check their specifications and make sure that their log file size will not increase.

## 1.3.3 Managing dump files

If JP1/IM, JP1/Base, or a user program terminates abnormally because of a problem, a dump file such as a core dump file (in UNIX) might be output in some cases.

These dump files are large. Therefore, when a problem occurs, collect the necessary data and then delete the dump files.

In Windows, if an application error occurs in a process, the Windows Error Reporting dialog box opens. When this dialog box opens, the system goes into a response-waiting state and cannot restart. Therefore, you need to disable error reporting based on the screen display.

For details about collecting data for troubleshooting, see 11. Troubleshooting.

### 1.4 Using historical reports

JP1/IM manages historical information, such as information about JP1 events that occur during operations and JP1/IM processing information. This historical information is useful during maintenance of JP1/IM.

### 1.4.1 Outputting events to a CSV file

The function that outputs JP1 events to a CSV file is called the *event report output*. The following three methods are available for outputting JP1 events to a CSV file:

• Outputting a snapshot of event information to a CSV file

A snapshot means extraction of information at a specific time. The snapshot of event information displayed in JP1/IM - View can output JP1 events that are filtered according to the operation. For example, a snapshot showing the host or product where a problem has occurred, or a snapshot showing the corrective action being taken can be used as a system problem report.

For details about how to output to a CSV file the events list displayed in the Event Console window, see 6.1 Viewing JP1 events.

• Outputting the content of the event database to a CSV file

Using the jevexport command, you can output the content of the event database managed by JP1/Base to a CSV file. If you wish to use as historical or statistical information JP1 events that need not be forwarded to the manager, such as normal termination of JP1/AJS jobs, you can use the jevexport command to output the content of the agent's event database to a CSV file.

For details about the jevexport command, see the chapter that explains commands in the JP1/Base User's Guide.

• Outputting the content of the integrated monitoring database to a CSV file

Using the jcoevtreport command, you can output the JP1 events registered in the integrated monitoring database to a CSV file. You can use this method when you wish to output the JP1 events registered in the integrated monitoring database, such as a list of JP1 events that occurred last week, or specified events only.

For details about the jcoevtreport command, see *jcoevtreport* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## 1.4.2 Correlation event generation history

The correlation event generation history file shows the status of the correlation event generation service and the content of the correlation event generation process.

By viewing the correlation event generation history file, you can check whether correlation events are being generated according to the defined correlation event generation condition. For example, if a large number of historical reports have been issued in which a certain generation condition was not met, the combination of JP1 events for which correlation events are to be generated may not be appropriate, or the timeout period may be too short.

During regular reassessment of the generation condition, refer to the correlation event generation history file.

## 1.4.3 Exclusion history and definition history of common exclusion conditions

The history of common exclusion conditions is logged into the following files:

• Common exclusion history file

This file contains the information of JP1 events that were not collected or included in automated-action execution due to common exclusion-conditions and the information of common exclusion-conditions that caused the exclusion. This file also contains the history of operations to apply or change common exclusion definitions. The contents of common exclusion-conditions definitions that caused exclusion can be found in the common exclusion-conditions definition history file.

Common exclusion-conditions definition history file
 This file contains the history of operations to apply or change common exclusion-conditions definitions and the contents of the applied or changed common exclusion-conditions definitions.

You can view the common exclusion history file to check that JP1 events are excluded by common exclusion-conditions as intended.

For example, if an expected JP1 event does not appear in the event console or an expected automated action is not executed, a common exclusion-condition might unexpectedly exclude the JP1 event from the target to be collected or automated-action execution. Check the common exclusion history file to know whether any JP1 event is excluded unexpectedly.

For details about the files, see 4.2.7(5) Information included in a common exclusion history file and 4.2.7(6) Information included in a common exclusion-conditions definition history file of the manual JP1/Integrated Management 2 - Manager Overview and System Design Guide.

### 1.5 Migrating the configuration information and databases

## 1.5.1 Configuration information and databases to be migrated

The configuration information of JP1/IM needs to be migrated when one of the items listed below is different at the migration-destination host. Note that you cannot migrate a database.

- Host name
- · IP address
- PP version
- Directory structure used by the product (including permissions)

This subsection explains the configuration information of JP1/IM that is migrated.

## (1) JP1/IM - Manager (Intelligent Integrated Management Base)

During migration of the Intelligent Integrated Management Base to another host, the definition files are the only definitions that can be migrated.

The definition files for the Intelligent Integrated Management Base must be edited on the host at the migration destination.

## (2) JP1/IM - Manager (Central Console)

During migration to another host, the definitions in the automated action definition file are the only definitions that can be migrated.

Other definitions must be re-created on the host at the migration destination.

## (3) JP1/IM - Manager (Central Scope)

You can use the jcsdbexport and jcsdbimport commands to migrate the information of the monitored object database.

Other definitions must be re-created on the host at the migration destination.

Before migrating the information of the monitored object database, make sure that the host name and IP address of the local host, which are set in the status change condition and common condition of the monitored object, are correct.

## (4) JP1/IM - Manager (IM Configuration Management)

You can use the jcfexport and jcfimport commands to migrate the information of IM configuration management.

To apply the imported IM configuration management information to the system, see 9.7.3 Applying the imported management information of IM Configuration Management to a system.

If the manager host name of the migration source is set in the profile information of the imported setting file, review the profile settings.

### (5) JP1/IM - View

The definition file of JP1/IM - View must be re-created on the host at the migration destination.

### (6) IM database

The IM database cannot be migrated. You need to rebuild the IM database on the host at the migration destination. For details about how to rebuild the IM database, see 1.2.3(7) Procedure for rebuilding the IM database.

## (7) Event database

The event database cannot be migrated. You need to rebuild the event database on the host at the migration destination. For details about how to rebuild the event database, see the *JP1/Base User's Guide*.

## 1.6 Managing certificates for the communication encryption function

When you use the communication encryption function, you need to manage certificates and private keys.

To ensure continued stable operation of JP1/IM, you need to renew the server certificate before its effective duration expires.

Additionally, you need to correctly set the access permissions to the certificate and private key.

## 1.6.1 Managing the effective duration of the server certificate

The communication encryption function of JP1/IM is designed not to work if the server certificate of the manager host expires.

To ensure continued stable operation of JP1/IM, you need to renew the server certificate before its effective duration expires.

For details about how to update the server certificate, see 9.4.2 Changing configured certificates in the JP1/Integrated Management 2 - Manager Configuration Guide.

To check the effective duration of the server certificate, use the openssl command. Executing this command displays the server certificate information. Based on this information, consider when to update the server certificate.

For details about the openss1 command, see the official website of OpenSSL.

### 1.6.2 Managing keystores

When the communication encryption function is enabled, JP1/IM - Manager deletes and creates keystores when it starts, and deletes keystores when it stops. If the communication encryption function is disabled, JP1/IM - Manager deletes keystores when it starts.

The keystores for JP1/IM - Manager store the following files:

- · Private key
- Server certificate
- Certificate issued by an intermediate certificate authority (if used)

If the keystores were not able to be deleted when JP1/IM - Manager was starting or stopping, manually delete them. Perform the following procedure to manually delete the unnecessary keystores:

- 1. Make sure that JP1/IM Manager is stopped.
- 2. Delete the unnecessary keystores.

For details about the keystore storage destination, see 9.4.4(3) Keystores for JP1/IM - Manager in the JP1/Integrated Management 2 - Manager Configuration Guide.



#### **Important**

When a private key or a keystore for JP1/IM - Manager is obtained, someone might be able to decrypt encrypted communication data. Therefore, the JP1/IM - Manager administrator must strictly manage

the private key keystore for JI	y and the keystore f P1/IM - Manager m	for JP1/IM - Manag nust be set so that it	ger. The folder that cannot be accesse	stores the private d by ordinary user	key or the s.

2

## Changing the Configuration of JP1/IM

This chapter explains the tasks necessary for changing the configuration of a JP1/IM system.

### 2.1 Changing the JP1/IM settings information

Before you change the JP1/IM operating environment by, for example, increasing the number of hosts monitored or operated by JP1/IM or by improving the efficiency of JP1/IM jobs (system operation monitoring) by making changes in JP1/IM operations, you need to clearly understand the purposes for making these changes. You also need to identify what setting tasks will be necessary as a result of changes in the operating environment.

For details about the reasons for changing the operating environment and about the setting tasks, see the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*. For details about how to carry out setting tasks, see the *JP1/Integrated Management 2 - Manager Configuration Guide* and the *JP1/Base User's Guide*.

## 2.2 Tasks necessary when a host name is changed

This subsection explains the tasks you must perform when the host name of a manager or agent is changed, and the procedure for distributing the system configuration.

Some tasks might also become necessary when the host name of a mail server or the logical host name of a cluster system is changed. Perform these tasks based on the explanation provided here.

Stop JP1/Base of the manager or agent whose name is to be changed before starting the tasks.

# 2.2.1 Tasks necessary immediately after the host name of a manager or agent is changed

This subsection explains the tasks you must perform immediately after the host name of a manager or agent is changed.

## (1) Tasks necessary in JP1/Base

You must first terminate JP1/Base on the manager or agent whose host name has been changed, and then restart it.

## (2) Tasks necessary in the IM database

When a manager's host name is changed, see 1.2.3(7) Procedure for rebuilding the IM database and rebuild the IM database.

# 2.2.2 Tasks to be performed when the host name of a manager or agent is changed

## (1) Host name that was set in the filtering condition

If the registered host name defined in the Severe Event Definitions window, the Settings for View Filter window, or the Detailed Settings for Event Receiver Filter window needs to be changed, you must change the registered host name settings in each setting window.

## (2) Host name that was set in the Action Parameter Definitions window or in the automated action definition file

If the executing host name that was defined in the Action Parameter Definitions window or in the automated action definition file needs to be changed, you must change the executing host name settings in the Action Parameter Definitions window or in the automated action definition file.

After setting the host name, perform either of the following tasks:

- When starting JP1/IM Manager, in the Action Parameter Definitions window of JP1/IM View, click the **Apply** button to enable the definition.
- Reload the definition by executing the jcachange command.

# (3) Host name that was set using a status change condition for the monitored object

If a host name that was set in the Status Change Condition Settings window or in the Common Condition Detailed Settings window needs to be changed, you must change the host name settings in each setting window.

After setting the host name, re-distribute the system configuration. For details, see 2.2.3 Procedure for re-distributing the system configuration when the host name of a manager or agent is changed.

## (4) Host name that was set in the correlation event generation definition file

If a host name defined as a condition for generating a correlation event in the correlation event generation definition file needs to be changed, you must change the host name settings in the correlation event generation definition file.

After setting the host name in the correlation event generation definition file, enable the correlation event generation definition by executing the jcoeqschange command.

## (5) Host name that was set in the severity changing definition file

If a host name defined as a severity changing condition in the severity changing definition file needs to be changed, you must change the host name settings in the severity changing definition file.

If the severity changing function is enabled for an event, enable the host name change by performing one of the following tasks:

- Execute the jco spmd reload command.
- Start JP1/IM Manager.
- In the Add Severity Change Definition Settings window, click the **OK** button.
- In the View Severity Change Definitions window, click the **Apply** button.

## (6) Host name that is set in the display message change definition file

If a host name defined as a display message change condition in the display message change definition file needs to be changed, you must change the host name that is set in the display message change definition file.

If the display message change function is enabled for an event, enable the host name change by performing one of the following tasks:

- Execute the jco spmd reload command.
- Start JP1/IM Manager.
- In the Add Display Message Change Definitions window, click the **OK** button.
- In the Display Message Change Definitions window, click the **Apply** button.

## (7) Host name described in CN and SAN of a server certificate

If the communication encryption function is enabled and the host name described in CN and SAN of a server certificate needs to be changed, you need to re-create the server certificate.

For details about how to re-create a server certificate, see 9.4.2 Changing configured certificates in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 2.2.3 Procedure for re-distributing the system configuration when the host name of a manager or agent is changed

If the host name of a manager or agent is changed, you need to re-distribute the system configuration. The procedure is as follows:

- 1. Terminate all JP1/IM Views that are connected to JP1/IM Manager.
- 2. Terminate JP1/IM Manager.
- 3. Execute the jbsrt distrib command and redistribute the system configuration.
- 4. Start JP1/IM Manager.
- 5. Start all JP1/IM Views that are connected to JP1/IM Manager.

For details about the system configuration distribution methods, see 1.8 Setting the system hierarchy (when IM Configuration Management is used) (for Windows), 1.9 Setting the system hierarchy (when IM Configuration Management is not used) (for Windows), or 2.8 Setting the system hierarchy (when IM Configuration Management is not used) (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 2.2.4 Tasks to be performed when the host name of a mail server is changed

## (1) Host name that is set in the mail environment definition file

If the name of the host defined as the SMTP server and POP3 server in the mail environment definition file needs to be changed, you must change the host name in the mail environment definition file.

After changing the host name in the mail environment definition file, execute the jimmail command to enable the changed host name.

# 2.2.5 Tasks to be performed before a logical host name is changed in a cluster system

Before changing a logical host name in an environment in which a cluster system is running, firstly delete the logical host environment you want to change. Then, set up a new logical host so that the cluster system can work.

#### In Windows:

For details about how to delete a logical host, see 7.6.1 Deleting logical hosts (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide. For details about how to set up a logical host, see 7.3 Installing and setting up logical hosts (new installation and setup) (for Windows) or 7.5 Upgrade installation and setup of logical hosts (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### In UNIX:

For details about how to delete a logical host, see 8.6.1 Deleting logical hosts (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide. For details about how to set up a logical host, see 8.3 Installing and setting up logical hosts (new installation and setup) (for UNIX) or 8.5 Upgrade installation and setup of logical hosts (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

## Important

In the case of a cluster system, after a host name is changed, JP1 events that were issued under the old host name are processed as follows:

- Source host in JP1/IM View shows the old host name.
- When you search for an event, the result will be matched to the old host name.
- When the Event Details window is opened, an error message may be issued, such as The specified JP1 event could not be found.
- You cannot display the JP1/AJS View monitor from a JP1 event that was issued under the old host name.
- In **Host** in the Action Log window, the Action Log Details window, and the List of Action Results window, the old host name is displayed.

# 2.2.6 Tasks necessary when the host name of the Intelligent Integrated Management Base is changed

After you change the host name of the host on which the Intelligent Integrated Management Base runs, you will need to restart JP1/IM - Manager. For details about how to start JP1/IM - Manager, see 3.1 Starting JP1/IM - Manager.

In addition, if the communication encryption function is enabled and the host name described in CN and SAN of a server certificate needs to be changed, you need to re-create the server certificate. For details about how to re-create a server certificate, see 9.4.2 Changing configured certificates in the JP1/Integrated Management 2 - Manager Configuration Guide.

If the host name of the host serving as the IM management node needs to be changed, you need to recollect the IM management node. For details about how to recollect an IM management node, see 3.2.6 Changes in IM management nodes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

### 2.3 Tasks necessary when an IP address is changed

This subsection explains the tasks you must perform when the IP address of a manager or agent is changed. It also explains the procedure for distributing the system configuration.

Some tasks might also become necessary when the IP address of a mail server is changed. Perform these tasks based on the explanation provided here.

Stop JP1/Base of the manager or agent whose name is to be changed before starting the tasks.

# 2.3.1 Tasks necessary immediately after the IP address of a manager or agent is changed

This subsection explains the tasks you must perform immediately after the IP address of a manager or agent is changed.

## (1) Necessary tasks in JP1/Base

You must first terminate JP1/Base on the manager or agent whose IP address has been changed, and then restart it.

## (2) Necessary tasks related to the IM database

When a manager's IP address is changed, you must first terminate the IM database, and then restart it.

# 2.3.2 Tasks to be performed when the IP address of a manager or agent is changed

# (1) IP address that was set using a status change condition for the monitoring object

If an IP address that was set in the Status-Change Condition Settings window or the Common Condition Detailed Settings window needs to be changed, you must change the IP address specification in each setting window.

After setting the IP address, restart the system. For details, see 2.3.3 Procedure for restarting the system when the IP address of a manager or agent is changed.

## (2) Using IM Configuration Management

If you are using IM Configuration Management, start IM Configuration Management - View before collecting host information.

# 2.3.3 Procedure for restarting the system when the IP address of a manager or agent is changed

If the IP address of a manager or agent is changed, you need to restart JP1/IM - Manager and JP1/IM - View. The procedure is as follows:

- 1. Terminate all instances of JP1/IM View that are connected to JP1/IM Manager.
- 2. Terminate JP1/IM Manager.
- 3. Start JP1/IM Manager.
- 4. Start JP1/IM View.

# 2.3.4 Tasks to be performed when the IP address of a mail server is changed

## (1) IP address that was set in the mail environment definition file

If a host name defined as the SMTP server and POP3 server in the mail environment definition file needs to be changed, you must change the host name setting in the mail environment definition file.

After you change the IP address in the mail environment definition file, execute the jimmail command to enable the changed IP address.

# 2.3.5 Tasks to be performed when the IP address of the Intelligent Integrated Management Base is changed

After you change the IP address of the host on which the Intelligent Integrated Management Base runs, you need to restart JP1/IM - Manager. In addition, if you are using a plug-in customized by the user, handle the situation according to the specification of the plug-in. For details about how to start JP1/IM - Manager, see 3.1 Starting JP1/IM - Manager.

Note that after you change the IP address of the host serving as the IM management node, you do not have to do anything.

### 2.4 Tasks necessary when the date of a manager or agent is changed

This subsection provides notes related to changing the date of a manager or agent while JP1/IM is running, along with the procedure. If the date of a monitored host in a remote monitoring configuration is being changed, see 2.5 Tasks necessary when the date of a monitored host in a remote monitoring configuration is changed.



#### **Important**

If you are using the communication encryption function, check whether the changed date is within the effective duration of the certificate being used. If the changed date is past the effective duration of the certificate, obtain a certificate whose effective duration accommodates the changed date.

## 2.4.1 Resetting the date/time of a manager or agent to a past date/time

When you change the date/time of a manager or agent, do not return it to a past date/time, as a rule. On a host where JP1/IM is running, resetting the system clock of the operating system to a past date/time affects the database significantly, which requires JP1/IM to be re-installed or the database to be set up again.

Even when you are correcting a system clock that is too fast or slow, setting the system time back may disrupt the order in which the execution results of automated actions are displayed, or it may cause a problem in the way the monitoring tree status change date/time is displayed. Such problems occur when resetting the system time causes inconsistencies in the data managed by JP1/IM - Manager and JP1/Base. JP1/IM - View is not affected.

Furthermore, if the system time is set back, events may not be correctly searched when you search for events by specifying the arrival time.

If you intentionally set the system date/time forward to a future date/time for testing purposes, and you then need to return the system date/time to the original settings, use the procedure below.



#### Important

If you are using a method to set the server's system date/time that does not reset it to a past date/time, such as a method using a Network Time Protocol (NTP) server, you can change the date/time without following the procedure described below. In this case, there is no need to stop JP1/Base.

## (1) Resetting the manager's date/time back to the original date/time

- 1. Stop JP1/IM Manager.
- 2. If the IM database is being used, stop the IM database.
- 3. Stop JP1/Base.
- 4. Reset the system to an earlier time.
- 5. When the system reaches the original time, start JP1/IM Manager.

For example, if the system was reset from 02:00 to 01:00 in step 2, start JP1/IM - Manager when the system reaches 02:00.

However, if the IM database is being used, perform the following steps to start JP1/IM - Manager in step 4.

- 1. JP1/Base
- 2. IM database
- 3. JP1/IM Manager



#### **Important**

If you inadvertently start a service before the system time has reached the original time before the reset (that is, before 02-00 in step 5), the integrated monitoring database might become corrupted. If such corruption occurs, you need to rebuild the system.

Before resetting the time, back up the configuration information and database so that they can be recovered after the system is rebuilt.

The files that can be recovered are those that were backed up at a system time that was before the system time at the time of recovery. If the system time during the backup was not prior to the system time at the time of recovery, recover the files after the system time is past the backup time.

Alternatively, you can use the method described below to reset the system date and time. However, note that if you use this method, the information shown in step 5 and the event and host information in the IM database must be deleted.

Steps 3 and 6 are required only if you are using the IM database. To reset the date/time back to the original date/time:

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Perform unsetup for the IM database.

For Windows, you need to start the JP1/IM2 - Manager DB Server service beforehand.

If the integrated monitoring database and IM Configuration Management database have been set up, you must remove both of those setups.

- 4. Reset the system date/time to the current date/time.
- 5. Delete the action information file, action hosts file, event database, and command execution log file. The tables below show where the files to delete are stored.

In Windows:

Table 2–1: Files to delete (Windows)

File name	Storage location
Action information file	Console-path\log\action\actinf.log
	<pre>shared-folder\jp1cons\log\action\actinf.log</pre>
Action hosts file	Console-path\log\action\acttxt{1 2}.log
	$shared-folder \neq 12$ .log
Command execution log file	All files under Base-path\log\COMMAND\
	All files under shared-folder\jplbase\log\COMMAND\
Event database	<pre>IMEvent*.* files under Base-path\sys\event\servers\default\#</pre>
	<pre>IMEvent*.* files under shared-folder\jp1base\event\#</pre>

<sup>#:</sup> If a different path was specified in the event server index (index) file, the files under the specified path need to be deleted.

#### In UNIX:

Table 2–2: Files to delete (UNIX)

File name	Storage location
Action information file	/var/opt/jp1cons/log/action/actinf.log
	shared-directory/jplcons/log/action/actinf.log
Action hosts file	/var/opt/jp1cons/log/action/acttxt{1 2}.log
	<pre>shared-directory/jplcons/log/action/acttxt{1 2}.log</pre>
Command execution log file	All files under /var/opt/jplbase/log/COMMAND/
	All files under shared-directory/jp1base/log/COMMAND/
Event database	<pre>IMEvent*.* files under /var/opt/jp1base/sys/event/servers/default/#</pre>
	<pre>IMEvent*.* files under shared-directory/jp1base/event/#</pre>

<sup>#:</sup> If a different path was specified in the event server index (index) file, the files under the specified path need to be deleted.

- 6. Set up the IM database.
- 7. Start JP1/Base.
- 8. Start JP1/IM Manager.

This completes resetting of the system data/time of the manager. If you are using Central Scope, perform the following tasks.

- 1. From JP1/IM View, log in to JP1/IM Manager (Central Scope).
- 2. From the Monitoring Tree window, choose the highest-order monitoring group and set its state to the initial state. Resetting all monitored nodes to their initial states eliminates inconsistencies in the data managed by Central Scope.

## (2) Resetting the agent's date/time to the original date/time

When you reset the agent's date/time to the original date/time, you must modify the settings for JP1/Base on the applicable host. For details such as the relevant procedure, see the explanation on necessary tasks when the system date and time is changed in the chapter about changing settings during operation of JP1/Base in the JP1/Base User's Guide.

## 2.4.2 Advancing the system time

Unlike in the case of resetting the system clock back, there is no need to stop JP1/IM or delete files in order to set the system clock forward.

If the IM database is used, do not change the time while starting or stopping the IM database.

# 2.5 Tasks necessary when the date of a monitored host in a remote monitoring configuration is changed

This subsection provides notes related to changing the date of a monitored host in a remote monitoring configuration, along with the procedure.

# 2.5.1 Resetting the date/time of a monitored host in a remote monitoring configuration to a past date/time

If you want to reset the date/time of a monitored host in a remote monitoring configuration after intentionally changing the date/time to a point in the future for testing or other purposes, you must delete the event log for the future date/time and the file that contains the collection status for remote monitoring on the host.

To reset the date/time:

- 1. If there is a remote monitoring event log trap that is running on the host, stop it.
- 2. Change the date/time of the host.
- 3. Confirm that the host does not have an event log whose date/time is later than the current date/time on the host. If there is such a log, delete the corresponding event log.
- 4. Back up the following file that contains the collection status, and then delete the original file:
  - For a physical host Manager-path\log\imcf\profiles\monitored-host-name\al\event\_log\_trap\evt.wdef
  - For a logical host shared-folder\JP1IMM\log\imcf\profiles\monitored-host-name\al\event\_log\_trap \evt.wdef

If you delete the wrong file by mistake, restore the file from the backup.

5. Restart the stopped remote monitoring event log trap.

If the date and time of the monitored host do not match the date and time of the machine where JP1/IM - Manager is running, remote-monitoring event log traps cannot be used for monitoring. When changing the date/time of a monitored host, also check the date/time of the host on which JP1/IM is running.

# 2.5.2 Advancing the date/time of a monitored host in a remote monitoring configuration

No tasks are necessary for setting the date/time of a monitored host in a remote monitoring configuration for a reason such as a clock delay.

# 2.6 Tasks necessary when the passwords of a monitored host in a remote monitoring configuration are changed

If you change the password of the manager that manages monitored hosts in a remote monitoring configuration, and the password of a monitored remote host, you must review and, if necessary, revise the settings in the Remote Monitoring Settings window or the System Common Settings window.

If you change the user name or domain name of a monitored remote host, you must review the settings in the Remote Monitoring Settings window or the System Common Settings window.



#### Note

When registering or changing a monitored remote host, you can store and manage the OS communication settings information as common settings of the system. To do so, use the System Common Settings window rather than the Remote Monitoring Settings window.

For details about the settings in the Remote Monitoring Settings window and the System Common Settings window, see 3.1.5 Changing the attributes of host information in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about the Remote Monitoring Settings window and the System Common Settings window, see the following sections in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

- 5.7 Remote Monitoring Settings window
- 5.20 System Common Settings window

## 2.7 Notes on changing the monitoring configuration from remote to agent

This section provides notes on changing the monitoring configuration from a remote monitoring configuration using a log file trap (remote monitoring log file trap) and an event log trap (remote monitoring event log trap) to an agent configuration using a log file trap and event log trap.

For an overview of managing a monitored remote host, see 7.6 Managing remotely monitored hosts in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

# 2.7.1 Notes on log file traps

If you are changing the monitoring configuration of log file traps from a remote monitoring configuration to an agent monitoring configuration, note the following:

- Enable the extended regular expression in the common definition information.
- If a file monitoring interval (-t option) is not specified, the monitoring interval becomes shorter.
- When migrating the remote monitoring for a logical host, specify the name of the destination event server (-s option).

## 2.7.2 Notes on event log traps

If you are changing the monitoring configuration of event log traps from a remote monitoring configuration to an agent monitoring configuration, note the following:

- Enable the extended regular expression in the common definition information.
- When migrating the remote monitoring for a logical host, specify the event server name (server) in the JP1/Base event log trap action-definition file.
  - For details about the JP1/Base event log trap action-definition file, see the chapter on definition files in the JP1/Base User's Guide.
- When the specified trap-interval is 181 or more, change the value to 180 or less.

  When the version of JP1/Base is 11-00 or later, trap-interval is not required to be set.
- If trap-interval is not specified, the monitoring interval becomes shorter.

  When the version of JP1/Base is 11-00 or later, trap-interval is not required to be set.
- If you want a JP1 event to be issued when event log acquisition fails during event log monitoring (as in remote monitoring), define <code>jp1event-send</code> as 1 (notify).

## 2.8 Tasks necessary when an Port number is changed

When you change the setting of port number to accept HTTP request on the Intelligent Integrated Management Base service, follow the procedure described below.

- 1. Stop the JP1/IM Manager service.
- 2. Chang server.port of the Intelligent Integrated Management Base definition file (imdd.properties).
- 3. Start the JP1/IM Manager service.

For details about the Intelligent Integrated Management Base definition file (imdd.properties), see Intelligent Integrated Management Base definition file (imdd.properties) in Chapter 2. Definition Files in the manual JP1/Integrated Management - Manager Command, Definition File and API Reference.

3

# **Starting and Stopping JP1/IM - Manager**

This chapter explains how to start and stop JP1/IM - Manager.

# 3.1 Starting JP1/IM - Manager

This section explains how to start JP1/IM - Manager.

Before you start JP1/IM - Manager, start all JP1/Base services required for monitoring. Before you restart JP1/Base services, JP1/IM - Manager must be stopped. If JP1/IM - Manager is not stopped, a problem might occur (for example, events cannot be displayed).

For details about starting JP1/Base services, see the chapter about starting and stopping JP1/Base in the JP1/Base User's Guide.

Furthermore, you must stop JP1/IM - Manager before you can restart the Event Service of JP1/Base. If you do not restart JP1/IM - Manager, you will have problems displaying events, for example.

The startup method varies depending on the OS that is being used. For details, see 3.1.1 In Windows or 3.1.2 In UNIX.

#### 3.1.1 In Windows

This subsection explains how to start JP1/IM - Manager when the host is a physical host whose OS is Windows.

The startup method when the IM database is being used is as follows.

To start up when the IM database is being used:

1. Start the IM database.

Start the JP1/IM - Manager DB Server service.

2. Start JP1/IM - Manager.

Start the JP1/IM - Manager service.

The startup method when the IM database is not being used is as follows.

To start up when the IM database is not being used:

1. Start JP1/IM - Manager.

Start the JP1/IM - Manager service.

To start the IM database and JP1/IM - Manager, you can use either a method that uses JP1/Base startup control or one that does not use startup control.

Startup control is a function that starts services according to a preset sequence. If startup control is set up, it first starts JP1/Base Control Service during Windows startup, and then it starts various services such as JP1/Base and JP1/IM - Manager.

If you want to automatically start individual services at system startup, use startup control of JP1/Base to control the start sequence of those services.

Before you can use startup control to start services, you must choose **Control Panel**, then **Administrative Tools**, and then **Services** in Windows. In the Services dialog box, you must set the startup method for the JP1/IM - Manager DB Server service and JP1/IM - Manager service to **Manual**. For details about startup control, see the chapter on setting up the service startup and stopping sequence (Windows only) in the *JP1/Base User's Guide*.

#### Starting the IM database

The default setting is that the IM database is not started using JP1/Base startup control.

To start the IM database without using startup control, choose Control Panel and then Administrative Tools, and then start the JP1/IM - Manager DB Server service from Services.

To start the IM database using startup control, delete # from the lines shown below in the start sequence definition file of JP1/Base. Also, replace JP1/IM - Manager-path in StopCommand with Manager-path.

#[Jp1IM-Manager DB]

#Name=JP1/IM-Manager DB Server

#ServiceName= HiRDBEmbeddedEdition JMO

#StopCommand=Manager-path\bin\imdb\jimdbstop.exe

For details about startup control, see the chapter on setting up the service startup and stopping sequence (Windows only) in the *JP1/Base User's Guide*.

#### Starting JP1/IM - Manager

The default setting is that JP1/IM - Manager is started using the startup control of JP1/Base.

To start JP1/IM - Manager without using startup control, choose **Control Panel** and then **Administrative Tools**, and then start the JP1/IM - Manager DB Server service and JP1/IM - Manager service from **Services**.



#### **Important**

- When you use JP1/Power Monitor to start or stop the host on which JP1/IM Manager starts, specify a command such as a batch file for executing net stop *IM-database-service-name* in the StopCommand parameter of the start sequence definition file of JP1/Base.
- If you are using the integrated monitoring database, set it up; if you are using IM Configuration Management, set up the IM Configuration Management database. If you are using Central Scope, set up the monitoring object database, and then start JP1/IM Manager.

#### 3.1.2 In UNIX

In UNIX, an OS function starts JP1/IM - Manager (if the automatic startup script is set).

If the IM database is used, the automatic startup script is executed during system startup and starts JP1/Base, JP1/IM - Manager, and IM database in that order. Note that the pdprcd process is started during system startup whether or not the automatic startup script is enabled.

If the IM database is not used, the automatic startup script is executed during system startup and starts JP1/Base, followed by JP1/IM - Manager.

For details about how to set the automatic startup script, see 2.17.2 Setting automatic startup and automatic stop (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide. For details about the automatic startup script, see jco\_start (UNIX only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

To start JP1/IM - Manager without setting up the automatic startup script, execute the /etc/opt/jp1cons/jco\_start.model script or a file into which this script has been copied.

Before starting JP1/IM - Manager, start all JP1/Base services required for monitoring. To use the IM database, you must also start the IM database when you start JP1/IM - Manager. Before you restart JP1/Base services, JP1/IM - Manager must be stopped. If JP1/IM - Manager is not stopped, a problem might occur (for example, events cannot be displayed).

For details about starting JP1/Base services, see the chapter about starting and stopping JP1/Base in the JP1/Base User's Guide.



#### **Important**

If you are using the integrated monitoring database, set it up; if you are using IM Configuration Management, set up the IM Configuration Management database. If you are using Central Scope, set up the monitoring object database, and then start JP1/IM - Manager.

# (1) Notes for cases where the automatic startup and automatic stop of JP1/IM - Manager are enabled in Linux

To start JP1/IM - Manager manually after enabling the automatic startup and automatic stop, execute the commands listed below.

To check the status (started or stopped) of JP1/IM - Manager processes, you can use the jco\_spmd\_status command. When the IM database is used, you can use the jimdbstatus command to check the operating status of the IM database.

• To start JP1/IM - Manager:

```
Physical hosts:
systemctl start jp1_cons.service
Logical hosts:
systemctl start jp1_cons_logical-host-name.service
```

Even when the automatic startup and automatic stop are enabled, JP1/IM - Manager does not stop automatically after it is started or stopped by using a command other than the systemctl command, for example, the jco\_start or jco\_start.cluster command or the jco\_stop or jco\_stop.cluster command. In such a case, the automatic startup and automatic stop remain enabled although the stop script does not start when the system stops.

To allow JP1/IM - Manager to stop automatically when the system stops, start JP1/IM - Manager again by using the systemctl command. To know whether JP1/IM - Manager stops automatically, execute one of the following commands to check whether active is returned:

```
Physical hosts:
```

```
systemctl is-active jp1_cons.service
Logical hosts:
   systemctl is-active jp1_cons_logical-host-name.service
```

# 3.1.3 Operations in a cluster system

Regardless of the platform (OS and cluster software type) being used, to operate JP1/IM - Manager of a logical host in a cluster system, use the cluster software controls to start JP1/IM - Manager.

In a cluster system, applications are registered in the cluster software and are started and stopped by the cluster software; therefore, these applications are executed by the executing server and moved to the standby server through a failover when an error such as a system failure occurs. When you operate JP1/IM - Manager in a cluster operation system, you must also register JP1/IM - Manager in the cluster software so that the cluster software controls it.

When JP1/IM - Manager is running in a cluster operation system, it must be started and stopped by cluster software operations. If you start or stop JP1/IM - Manager manually, such as by executing a command, the status of the JP1/IM - Manager being managed by the cluster software will not match the actual status, which may be judged as an error.

For details about the start sequence, see 7.4 Registering into the cluster software during new installation and setup (for Windows) or 8.4 Registering into the cluster software during new installation and setup (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 3.1.4 Operating a logical host in a non-cluster system

On a logical host in a non-cluster system, start JP1/Base and JP1/IM - Manager according to the following sequence:

- 1. JP1/Base
- 2. JP1/IM Manager

If you are using the IM database, start JP1/Base and JP1/IM -Manager according to the following sequence:

- 1. JP1/Base
- 2. IM database
  Start JP1/IM-Manager DB Cluster Service\_logical-host-name.
- 3. JP1/IM Manager

For details about automatic startup and automatic stop when a logical host is operated in a non-cluster system, see 3.3 Automatic startup and automatic stop setting examples when a logical host operates in a non-cluster system.

## 3.2 Stopping JP1/IM - Manager

This section explains how to stop JP1/IM - Manager.

You must stop JP1/IM - Manager before you stop JP1/Base. If you are using the IM database, you must stop the IM database when you stop JP1/IM - Manager.

The stopping method differs depending on the OS that is being used.

#### 3.2.1 In Windows

If you are using the IM database, start JP1/Base, the IM database service, and JP1/IM - Manager in that order.

If JP1/Power Monitor has been installed, you can use the startup control of JP1/Base to stop a service. For details about how to set up startup control, see the chapter on setting up the service startup and stopping sequence (Windows only) in the JP1/Base User's Guide.

To stop a service without using startup control, choose **Control Panel** and then **Administrative Tools**, and then stop the JP1/IM - Manager service from **Services**.

#### 3.2.2 In UNIX

If you are using the IM database and you have set up the automatic termination script, JP1/IM - Manager, the IM database, and JP1/Base stop in that order when the system stops. Although the pdprcd process continues running even when JP1/IM - Manager and the IM database have stopped, it is not necessary to stop it.

If you are not using the IM database but have set up the automatic termination script, JP1/IM - Manager and JP1/Base stop in that order when the system stops.

For details about how to set the automatic startup script, see 2.17.2 Setting automatic startup and automatic stop (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide. For details about the automatic termination script, see jco\_stop (UNIX only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

To stop JP1/IM - Manager without setting up the automatic termination script, execute the /etc/opt/jp1cons/jco\_stop.model script or a file into which this script has been copied.

# (1) Notes for cases where the automatic startup and automatic stop of JP1/IM - Manager are enabled in Linux

To stop JP1/IM - Manager manually after enabling the automatic startup and automatic stop, execute the commands listed below.

To check the status (started or stopped) of JP1/IM - Manager processes, you can use the jco\_spmd\_status command. When the IM database is used, you can use the jimdbstatus command to check the operating status of the IM database.

To stop JP1/IM - Manager:
 Physical hosts:
 systemctl stop jp1 cons.service

#### Logical hosts:

```
systemctl stop jp1 cons logical-host-name.service
```

Even when the automatic startup and automatic stop are enabled, JP1/IM - Manager does not stop automatically after it is started or stopped by using a command other than the systemctl command, for example, the jco\_start or jco\_start.cluster command or the jco\_stop or jco\_stop.cluster command. In such a case, the automatic startup and automatic stop remain enabled although the stop script does not start when the system stops.

To allow JP1/IM - Manager to stop automatically when the system stops, start JP1/IM - Manager again by using the systemctl command. To know whether JP1/IM - Manager stops automatically, execute one of the following commands to check whether active is returned:

#### Physical hosts:

```
systemctl is-active jp1_cons.service
Logical hosts:
   systemctl is-active jp1 cons logical-host-name.service
```

## 3.2.3 Operations in a cluster system

Regardless of the platform (OS and cluster software type) being used, to operate JP1/IM - Manager of a logical host in a cluster system, use the cluster software controls to stop JP1/IM - Manager.

In a cluster system, applications are registered in the cluster software and are started and stopped by the cluster software, so that these applications are executed by the executing server and moved to the standby server through a failover when an error such as a system failure occurs. When you operate JP1/IM - Manager in a cluster operation system, you must also register JP1/IM - Manager in the cluster software so that the cluster software controls it.

When JP1/IM - Manager runs in a cluster operation system, it must be started and stopped by cluster software operations. If you start or stop JP1/IM - Manager manually, such as by executing a command for example, the status of the JP1/IM - Manager being managed by the cluster software will not match the actual status, which may be judged as an error.

# 3.2.4 Operating a logical host in a non-cluster system

On a logical host in a non-cluster system, stop JP1/Base and JP1/IM - Manager according to the following sequence:

- 1. JP1/IM Manager
- 2. JP1/Base

If you are using the IM database, stop JP1/Base and JP1/IM - Manager according to the following sequence:

- 1. JP1/IM Manager
- 2. IM database

Stop JP1/IM-Manager DB Cluster Service logical-host-name.

3. JP1/Base

For details about automatic startup and automatic stop when a logical host is operated in a non-cluster system, see 3.3 Automatic startup and automatic stop setting examples when a logical host operates in a non-cluster system.

<sup>3.</sup> Starting and Stopping JP1/IM - Manager

# 3.3 Automatic startup and automatic stop setting examples when a logical host operates in a non-cluster system

To automatically start and stop JP1 services for a logical host at system startup or stop, you must follow the setup sequence described below. The setup method differs depending on the OS supported by JP1/IM - Manager. The setup method for each OS is described below.

# 3.3.1 Setting up automatic startup and automatic stop when a logical host operates in a non-cluster system (for Windows)

1. Use a text editor to add the following description to the start sequence definition file (JP1SVPRM.DAT): Storage destination: *Base-path*\conf\boot\JP1SVPRM.DAT

```
[Jp1BaseEvent logical-host-name]
Name=JP1/BaseEvent logical-host-name
ServiceName=JP1 Base Event logical-host-name
[Jp1Base logical-host-name]
Name=JP1/Base logical-host-name
ServiceName=JP1 Base logical-host-name
StopCommand=jbs spmd stop.exe -h logical-host-name
[JP1/IM-Manager DB Cluster Service logical-host-name]
Name=JP1/IM-Manager DB Cluster Service logical-host-name
ServiceName=HiRDBClusterService JMn
StopCommand=Manager-path\bin\imdb\jimdbstop.exe -h logical-host-name
[Jp1IM-Manager logical-host-name]
Name=JP1/IM-Manager_logical-host-name
ServiceName=JP1 Console logical-host-name
StopCommand=jco spmd stop.exe -h logical-host-name
```

JMn: For n, specify the same value as that specified for LOGICALHOSTNUMBER in the cluster setup information

The command specified by the StopCommand parameter is executed when JP1/Power Monitor shuts down the host.



#### Important

When you use JP1/Power Monitor to start or stop the host on which JP1/IM - Manager starts, specify a command such as a batch file for executing net stop IM-database-service-name in the StopCommand parameter of the start sequence definition file of JP1/Base.

# 3.3.2 Setting up automatic startup and automatic stop when a logical host operates in a non-cluster system (for Linux)

1. Create a script for automatic startup and automatic stop for the logical host.

Storage destination: /usr/lib/systemd/system/jp1 cons logical-host-name.service

#### Automatic startup and automatic stop script example

```
[Unit]
Description=JP1/Integrated Management - Manager logical-host-name Service
Requires=jp1_base_logical-host-name.service
After=jp1_base_logical-host-name.service
ConditionFileIsExecutable=/etc/opt/jp1cons/jco_start.cluster
ConditionFileIsExecutable=/etc/opt/jp1cons/jco_stop.cluster

[Service]
ExecStart=/etc/opt/jp1cons/jco_start.cluster logical-host-name
ExecStop=/etc/opt/jp1cons/jco_stop.cluster logical-host-name

Type=forking
KillMode=none
StandardOutput=null
StandardError=null

[Install]
WantedBy=multi-user.target graphical.target
```

*logical-host-name* indicates the name of the logical host to be started. For details about the Unit file of a JP1/Base logical host, follow the settings in JP1/Base.

After creating an automatic start or automatic stop script for a logical host, run the following command to set permissions.

```
chmod 644 /usr/lib/systemd/system/jp1_cons_logical-host-name.service chgrp root /usr/lib/systemd/system/jp1_cons_logical-host-name.service chown root /usr/lib/systemd/system/jp1_cons_logical-host-name.service
```

2. Use the following command to register the created script for automatic startup and automatic stop.

```
# systemctl --systemenable jp1 cons logical-host-name
```

3. To edit the script for automatic startup and automatic stop, use the following command to apply the change to systemd:

# systemctl daemon-reload



#### **Important**

In Linux, to start or stop JP1/IM - Manager manually when the automatic start and automatic stop of JP1/IM - Manager are enabled, execute the commands listed below. To start or stop JP1/IM - Manager manually, you can use the commands listed below. To check the status (started or stopped) of JP1/IM - Manager processes, you can use the jco\_spmd\_status command. When the IM database is used, you can use the jimdbstatus command to check the operating status of the IM database.

• Starting JP1/IM - Manager

Physical hosts:

```
systemctl start jp1_cons.service
Logical hosts:
systemctl start jp1 cons logical-host-name.service
```

• Stopping JP1/IM - Manager

Physical hosts:

systemctl stop jp1 cons.service

#### Logical hosts:

```
systemctl stop jp1 cons logical-host-name.service
```

Even when automatic startup and stop is set to enabled, JP1/IM - Manager does not stop automatically after it is started or stopped by using a command other than the systemctl command, for example, by using the jco\_start or jco\_start.cluster command to start, or the jco\_stop or jco\_stop.cluster command to stop. (In such a case, automatic startup and stop remains enabled although the stop script does not start when the system stops.)

To allow JP1/IM - Manager to stop automatically when the system stops, start it again by using the systemctl command. To know whether JP1/IM - Manager will stop automatically, execute the following commands to check whether active is returned.

#### Physical hosts:

```
systemctl is-active jp1_cons.service
```

#### Logical hosts:

systemctl is-active jp1\_cons\_logical-host-name.service

# 3.3.3 Setting up automatic startup and automatic stop on both the physical host and the logical host

To implement automatic startup and automatic stop on both the physical and the logical hosts, you must use the settings described below, in addition to the settings for automatic startup and automatic stop on the logical host.

The setup method differs depending on the OS. The setup method for each OS is described below.

#### In the Windows environment:

Startup control sequentially executes startup and stop processes as described in the startup sequence definition file (JP1SVPRM.DAT), starting at the top. To change the startup sequence of the physical host and logical host, define a new startup and stop sequence for the physical host and logical host in the startup sequence definition file (JP1SVPRM.DAT).

#### In the Linux environment:

The automatic startup and stop sequences are determined based on the value of the numerical portion (\*\* portion in S\*\* and K\*\*) in the automatic startup and automatic stop script. The greater the numerical value, the later the execution. The symbolic link to the automatic startup and automatic stop script for the physical host is automatically created during installation. To implement automatic startup and stop on both the physical and logical hosts, change the name of the symbolic link created for the logical host, and adjust the startup and stop sequences of the physical and logical hosts.

Note that the automatic startup and automatic stop scripts for the physical host are already provided. The following table lists the symbolic links to the automatic startup and automatic stop scripts for the physical host.

Table 3–1: List of symbolic links to the automatic startup and automatic stop scripts for the physical host

Startup script	Stop script	
/etc/rc.d/rc3.d/S99_JP1_20_CONS	/etc/rc.d/rc0.d/K01_JP1_80_CONS	
/etc/rc.d/rc5.d/S99_JP1_20_CONS	/etc/rc.d/rc6.d/K01_JP1_80_CONS	

Adjust the physical and logical host startup sequence by varying the size relationship between the value of the \*\* portion in S \*\* and K \*\* in the symbolic link list, and the value of the \*\* portion in S \*\* and K \*\* in the symbolic link to the automatic startup and stop script for the logical host.

For example, to start the logical host first, set the number in the symbolic name S\*\* for the automatic startup script to be created for the logical host to a value smaller than 99 (for Linux).

# 3.4 Notes on starting and stopping

• Do not change the **System account** initial settings in the JP1/IM - Manager service's **Logon** settings. In addition, do not select the **Allow service to interact with desktop** option. If this option is selected, the service might not function normally.

For details about the JP1/IM - Manager service, see 2.7 JP1/IM - Manager service in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

- If you restart Event Service of JP1/Base, you must also restart JP1/IM Manager. In addition, you must restart the JP1/IM View that was connected. If you do not restart it, you will have problems displaying events, for example.
- If a process does not stop even after you have stopped all services of JP1/IM Manager for a logical host, you can execute the jco\_killall.cluster command to forcibly stop the process. Use this command for stopping a process only when a process does not stop after you have used a normal method and stopped the JP1/IM Manager services.
- If you collect a large number<sup>#1</sup> of events during startup of JP1/IM Manager, the startup time<sup>#2</sup> will lengthen in proportion to the number of events that are collected. Consequently, the JP1/IM Manager service (in Windows) or the jco\_start command (in UNIX) may time out<sup>#3</sup> and return an error value. In such a case, JP1/IM Manager may appear not to be starting, but startup will be completed after a while.

#1

The number will vary depending on the event collection filtering condition and the number of events that have accumulated in the event database.

#2

The startup time will vary depending on the machine's performance.

#3

The timeout period for the JP1/IM2 - Manager service (in Windows) is 125 seconds. The timeout period for the jco\_start command (in UNIX) is 300 seconds by default. For details about the timeout setting of the jco\_start command, see 13.7.11 Considering the timeout period during startup or stop of JP1/IM - Manager (in UNIX) in the manual JP1/Integrated Management 2 - Manager Overview and System Design Guide.

• If the IM database fails to start, it may be unstable because it is in restart suspension (after the IM database fails to start, 8 is returned as the return value when the jimdbstatus command is executed).

Factors that cause the IM database to be in restart suspension and to become unstable are as follows:

- Insufficient disk capacity (not insufficient IM database capacity)
- · Insufficient memory

If the IM database is in restart suspension and is unstable, you cannot normally stop the IM database by stopping services or executing a command. To avoid this state, you must execute the jimdbstop command with the -f option specified to forcibly stop the IM database.

- If you are using the IM database, start JP1/Base, the IM database service, and JP1/IM Manager in that order.
- If you are using the IM database, stop JP1/IM Manager, the IM database service, and JP1/Base in that order.
- If JP1/IM MO is being used, stop the JP1/IM Message Optimizer service of JP1/IM MO on the connection source before stopping JP1/IM Manager.
- If you terminate hosts from JP1/Power Monitor by using the default description example given in the JP1/Base startup sequence definition file (jp1svprm.dat), KAVA4516-E is output to the event log in the service termination processing for the IM database.

To restrict the output of KAVA4516-E, change the definition of the startup sequence definition file as follows:

· For a physical host

(1) Create a batch file that has the following content with any file name:

```
Manager-path\bin\imdb\jimdbstop.exe
net stop HiRDBEmbeddedEdition JM0
```

(2) Set the startup sequence definition file in a way such as the following:

The following shows the settings to set when the name and storage destination of the batch file created in step (1) is "C:\jp1\jp1imdbstopservice.bat":

```
[Jp1IM-Manager DB]
Name=JP1/IM-Manager DB Server
ServiceName=HiRDBEmbeddedEdition_JM0
StopCommand=C:\jp1\jp1imdbstopservice.bat
```

- · For a logical host
- (1) Create a batch file that has the following content with any file name for each logical host:

```
Manager-path\bin\imdb\jimdbstop.exe -h <logical-host-name>
net stop HiRDBClusterService_JM<n>#
```

#: <n> is a number in the range from 1 to 9. Use the value specified for LOGICALHOSTNUMBER in the cluster setup information file.

(2) Set the startup sequence definition file in a way such as the following:

The following shows the settings to set when the name and storage destination of the batch file created in step (1) is "C:\jp1\jp1imdbstopservice.bat":

```
[Jp1IM-Manager DB]
Name=JP1/IM-Manager DB Cluster Service_<logical-host-name>
ServiceName=HiRDBClusterService_JM<n>#
StopCommand=C:\jp1\jp1imdbstopservice.bat
```

#: <n> is a number in the range from 1 to 9. Use the value specified for LOGICALHOSTNUMBER in the cluster setup information file.

4

# JP1/IM - Manager Login and Logout

To use JP1/IM - View, you must log in to JP1/IM - Manager. This chapter explains how to log in to and log out of JP1/IM - Manager.

## 4.1 Logging in to JP1/IM - Manager

To use JP1/IM - View and IM Configuration Management - View, you must log in to JP1/IM - Manager from the viewer. You can log in to JP1/IM - Manager by using the GUI or by executing the jcoview or jcfview command.

If you register a shortcut for the jcoview or jcfview command at Windows startup, you can start JP1/IM - View and IM Configuration Management - View when you log on to Windows. You can also register a shortcut for the jcoview or jcfview command in the Quick Launch bar displayed next to the **Start** button in Windows, or you can create a shortcut for the jcoview or jcfview command for each host or user.

# 4.1.1 Using a Web browser to log in to JP1/IM - Manager (Intelligent Integrated Management Base)

To use a Web browser to log in to JP1/IM - Manager (Intelligent Integrated Management Base):

- 1. Enter the URL of Intelligent Integrated Management Base in a Web browser to show the page for it. The Login window opens.
- In the Login window, enter your user name and password.
   You can use alphanumeric characters, 1 to 31 bytes, for the user name. The user name is not case sensitive.
   The password is case-sensitive.
- 3. Click the **Log In** button.

The window for the integrated operation viewer opens.

# 4.1.2 Using the GUI to log in to JP1/IM - Manager

# (1) Using JP1/IM - View

To use JP1/IM - View to log in to JP1/IM - Manager via a GUI:

1. From the Windows **Start** menu, choose **All Programs**, then **JP1\_Integrated Management 2 - View**, and then **Integrated View**.

The Login window opens.

2. In the Login window, enter a user name, a password, and the name of the host to which you want to connect. You can use alphanumeric characters, 1 to 31 bytes, for the user name. The user name is not case sensitive. The password is case-sensitive.

For the host to which to connect, specify the name of the host where the JP1/IM - Manager to which you are logging in is located. Specify a host name defined in the viewer or an IP address.

For details about the Login window, see 1.2.2 Login window of Central Consol and Central Scope in the manual JP1/Integrated Management 2 - Manager GUI Reference.

If you want to log in to Central Scope, advance settings for using the Central Scope functions are required.

3. Select the check boxes according to the functions you wish to use.

You can select either one or both of them.

If you select the Central Console check box, you will be connected to JP1/IM - Manager (Central Console).

If you select the Central Scope check box, you will be connected to JP1/IM - Manager (Central Scope).

#### 4. Click OK.

If you are connecting to JP1/IM - Manager (Central Console), the Event Console window opens. If you are connecting to JP1/IM - Manager (Central Scope), the Monitoring Tree window opens.

The user name you use for login must be registered in advance. For details about user registration, see the chapter on setting up the user management function in the *JP1/Base User's Guide*.

When logging in to JP1/IM - Manager, you can log in to a maximum of three different Managers from a single viewer.

# (2) Using IM Configuration Management - View

To use IM Configuration Management - View to log in to JP1/IM - Manager via a GUI:

1. From the Windows Start menu, choose All Programs, then JP1\_Integrated Management 2 - View, and then Configuration Management.

The Login window opens.

If Configuration Management is removed from the Windows Start menu, you must execute the jcovcfsetup command and add Configuration Management to the Windows Start menu. For details about how to add Configuration Management to the Windows Start menu, see 1.19.3 Setting up and customizing IM Configuration Management - View (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide.

2. In the Login window, enter a user name, a password, and the name of the host to which you want to connect. You can use only lower-case letters for the user name. If you enter upper-case letters, they will be recognized as lower-case letters.

The password is case-sensitive.

For the host to which to connect, specify the name of the host where the JP1/IM - Manager to which you are logging in is located. Specify a host name defined in the viewer or an IP address.

#### 3. Click OK.

You are connected to IM Configuration Management, and the IM Configuration Management window opens.

The user name to be used for login must be registered in advance. For details about user registration, see the chapter on setting up the user management function in the *JP1/Base User's Guide*.

When you log in to JP1/IM - Manager, you can log in to a maximum of three different managers from a single viewer.

# 4.1.3 Using a command to log in to JP1/IM - Manager

# (1) Using JP1/IM - View

This subsection explains how to use the jcoview command to log in to JP1/IM - Manager and use JP1/IM - View.

Execute the following command:

• To open the Login window

```
jcoview [-c] [-s] [-h name-of-host-to-which-to-connect] [-u user-name]
```

If no argument is specified, the Login window opens with the information from the previous login entered.

If arguments are specified, the Login window opens with the specified values entered.

• To log in

```
jcoview [-c] [-s] [-h name-of-host-to-which-to-connect] [-u user-name] [-p password]
```

If you specify all arguments, you will be logged in to both Central Console and Central Scope of JP1/IM - Manager. If you specify only the -c argument, you will be logged in to Central Console. If you specify only the -s argument, you will be logged in to Central Scope. If you omit both the -c and -s arguments, you will be logged in to Central Console.

Once the user is authenticated, the Login window will not be displayed. The Event Console window and the Monitoring Tree window open according to the arguments that are specified.

For details about how to log in via the GUI, see 4.1.2 Using the GUI to log in to JP1/IM - Manager. For details about the jcoview command, see jcoview (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

# (2) Using IM Configuration Management - View

This subsection describes the method of using the jcfview command to log in to JP1/IM - Manager and use IM Configuration Management - View.

Execute the following command:

• To open the Login window

```
jcfview -h [name-of-host-to-connect] -u [user-name]
```

If no argument is specified, the Login window opens with the information from the previous login entered. If arguments are specified, the Login window starts with the specified values entered.

• To log in

```
jcfview -h [name-of-host-to-connect] -u [user-name] -p [password]
```

If you specify all arguments, you will be logged in to IM Configuration Management of JP1/IM - Manager. Once the user is authenticated, the Login window will not be displayed. The IM Configuration Management window opens according to the arguments that are specified.

For details about how to log in via the GUI, see 4.1.2 Using the GUI to log in to JP1/IM - Manager. For details about the jcfview command, see jcfview (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

## 4.2 Logging out of JP1/IM - Manager

To log out of JP1/IM - Manager, use the following methods.

To log out of JP1/IM - Manager (Intelligent Integrated Management Base):

• In the Integrated Operation Viewer window, from the File menu, choose Logout.

To log out of JP1/IM - Manager (Central Console):

- In the Event Console window, from the File menu, choose Exit, Logout.
- Click the × button in the upper right corner of the Event Console window.

When you log out of JP1/IM - Manager (Central Console), the user profile will be updated and the user environment for the event console, such as the column widths and whether the view filter is enabled or disabled, is saved.

To log out of JP1/IM - Manager (Central Scope):

- In the Monitoring Tree window, from the File menu, choose Exit, Logout.
- Click the × button in the upper right corner of the Monitoring Tree window.

To log out of JP1/IM - Manager (IM Configuration Management):

- In the IM Configuration Management window, from the File menu, choose Exit, Logout.
- Click the × button in the upper right corner of the IM Configuration Management window.

The above methods close the active windows. Note, however, that windows and monitoring windows that were started from Tool Launcher will not be closed. You must close these windows individually.

If you exit it without logging out of it, the login information remains on the manager, ultimately leading to a potential lack of resources for the manager. Make sure that you exit it using the logout operation.

# 5

# **System Monitoring from the Intelligent Integrated Management Base**

This chapter explains how to use the Intelligent Integrated Management Base to monitor your system. Note that the integrated monitoring database and the event-source-host mapping definition must be enabled to monitor the system through the Intelligent Integrated Management Base.

#### 5.1 Viewing the system status

When you enable the event-source-host mapping function, the **Operating status** area of the integrated operation viewer window shows the status of the systems that are registered in the integrated monitoring database for the manager to which the user has logged in. If a change occurs in the system, the window is refreshed automatically to show the latest status at all times.

By viewing the status of a system through the integrated operation viewer window, you can:

- View the systems you are managing and their status at a glance.
- Detect problems during job operation to avoid serious obstacles to business.
- Identify where a failure occurred in the system and know whether a serious event occurred.
- See which managed systems are affected by a failure in order to grasp the cause of it.
- See the color of the item shown in the sunburst chart or tree chart to understand how high or low the priority of handling the failure is (urgency).

## 5.1.1 Items displayed in the sunburst chart or the tree chart

In the sunburst chart or the tree chart of the **Operating status**, the items shown in the following table are shown hierarchically.

Table 5–1: Items displayed in the sunburst chart or the tree chart

Display item	Explanation
System name	It displays the name of the system or subsystem.
Host name	It displays the name of the host in the system.
Category name	This item shows the group that the monitoring target is in.
Scheduler service name/job group name	If a link with JP1/AJS is enabled, the scheduler service name of JP1/AJS and its job group name are displayed as one component.
Root jobnet name	If a link with JP1/AJS is enabled, the name of the root jobnet in the job group is displayed.
Service name for the monitoring agent of JP1/PFM	If a link with JP1/AJS is enabled, the service name of the monitoring agent collected from JP1/PFM - Manager is displayed.
Name of the installed product	The name of the installed JP1 product (such as JP1/Base, JP1/AJS, JP1/PFM, or JP1/IM - Manager) is displayed.

The following figure shows a display example of the **Operating status** area.

Figure 5-1: Example of changing the Operating status area

The color of each item means how healthy the system is. If the system is healthy, the item is shown in green, which means Normal/Resolved. Yellow means a Warning, orange means an Error, and red indicates that an Emergency/Alert/Critical failure has occurred.

When you click an item, the information related to the item you selected is displayed in the **Details** area.

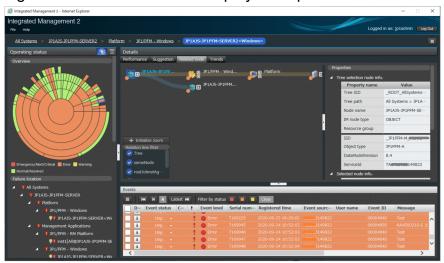
# 5.2 Viewing JP1 events (Events window)

By checking the attributes and response status of the system on the event window, you can operate as follows.

When you select an item in the **Operating status** area or the **Details** area of the integrated operation viewer window, ongoing JP1 events for the selected item are listed in the **Events** area.

New JP1 events are added at the bottom of the events list. The JP1 event with the most recent arrival date/time is displayed at the very bottom of the events list.

Figure 5-2: Events window display example



The following types of events are displayed in the events list:

- Event registered in the integrated monitoring database
- Event that occurs from the selected item and an event that occurs from one of all the underlying items
- Item that a logged-in user has access permissions to, if a resource group or business group is set up
- Event that passed a filter according to the event receiver filter setting, if the event receiver filter is set up

By viewing the system attributes and the event status in the Events window, you can:

- Check the status of the system where a failure occurred, because you can narrow down the events related to the system easily.
- Carefully examine the cause of the failure and how to handle it with the details of the event.
- Change an event status easily.
- For consolidation events, you can see the repeating events that have been consolidation on the repeated event list window by displaying the repeated event list window.
  - The repeat event List window is displayed by clicking the **Repeated event list** menu in the event list.
- If the event is a monitor started event, you can start the application window for the event and see more information about the event.

You can start the monitor from the monitor menu in the event list.

# 5.2.1 Items displayed in the events list

The events list displays the attribute items (basic attributes, common extended attributes, and program-specific extended attributes) of each event. The displayed items cannot be changed.

The following table lists the items (columns) displayed in the events list.

Table 5–2: Items displayed in the events list

Display item (column name)	Explanation	
Event status	It displays the status (Processed, Processing, Held, and Unprocessed) of the JP1 event.  In the case of a consolidation event, the event status of the consolidation start event is displayed. If the event status of the consolidation start event differs from the event status of a repeated event consolidated with it, an exclamation mark (!) is displayed in the <b>Event status</b> column of the consolidation start event.	
Consolidation event	A consolidation start event displays 📜 .	
! (Severe event)	If an event is a severe event, it displays . A consolidation start event displays if it is a severe event.  When repeated events consolidated as a severe event actually consist of not only severe events but also non-severe events, an exclamation mark (!) is displayed.	
Event level	It indicates the urgency of a JP1 event. From the most urgent to the least urgent, the value can be: Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.  When you are using the integrated monitoring database, if you use the severity changing function to change a severity level, this attribute indicates the urgency of the JP1 event after the change.	
Serial number	Order in which the JP1 event arrived at this event server, regardless of the source.	
Registered time	Time at which a JP1 event was registered in the event database of the event-issuing host.	
Event source host	Name of the agent that registered the JP1 event (source event server).	
User name	Name of the user that issued the JP1 event.	
Event ID	Value that indicates the source program or the event that occurred.	
Message	Message text that shows the content of the JP1 event.	
Object type	Character strings, such as JOB and JOBNET, that indicate the type of object where the event that triggered event generation occurred.	
Action	When automated actions are set up and if an event becomes the target of action execution, an action icon ☑ (action that was not suppressed), ② (action that was suppressed), or ☑ (action that was partially suppressed) is displayed.  If a large number of events occur while the corresponding action is suppressed by the repeated event monitoring suppression function, ☑ is displayed in the Events window.  When an event is not the target of action execution due to the common exclusion-conditions, ☑ (action-excluded event) is displayed.	

Display item (column name)	Explanation
	When the action status differs between a consolidation start event and repeated events, an exclamation mark (!) is displayed in the <b>Action</b> column.

#### Width of the item column

You can change the width of the column for the item displayed in the events list with the drag operation of the mouse. You can also drag the column itself to change the order of the columns.

#### Background colors for severe events

For a severe event, one of the colors shown in the following table is applied depending on the event level displayed in the **Events** area:

Table 5-3: Background colors for severe events

Event level	Event status	Background color	
Warning, Notice, Information, Debug	Other than Processed	sed Yellow	
Error		Orange	
Emergency, Alert, Critical		Red	
None of the above	Processed	White (no background color)	

#### Event response status

For any event for which the JP1 event response status is specified, an event status and an icon are displayed at the leftmost column of the events list.

The table below lists the event status types and the corresponding event status icons. Choose the event status to set for each situation based on the operation.

Table 5–4: Event status types and event status icons

Event status	Event status icon	
Processed	<b>⊠</b>	
Processing	Þ	
Held	П	
Unprocessed	(No icon)	

The specified event status is registered in the logged-in manager's integrated monitoring database or event database. (For a JP1 event that has been forwarded from a different host, the information in the integrated monitoring database or event database of the forwarding source host is not changed.) Consequently, the event status is applied to the **Monitor Events** and **Severe Events** pages of instances of JP1/IM - View that are logged in to the same manager.

#### Upper limit of the number of events that can be displayed on the screen

The upper limit of JP1 events that can be displayed on the screen is 100. If the number of JP1 events exceeds the upper limit of JP1 events that can be displayed, 100 events from the latest event are displayed. You can view 101<sup>st</sup> and later events sequentially by moving to the next page.

#### Refresh of the Events window

The Events window refreshes automatically after the Intelligent Integrated Management server is checked for new events at regular intervals. The window is updated automatically only if the latest events are displayed. The window is not updated automatically if past events (101st and later events) are displayed. In addition, you cannot change the update interval.

Note that if you update the window manually, the latest events are displayed.

#### Status filtering

You can filter the events to be displayed in the Events window by using the button. With the colors of the buttons, the events shown in the following table can be filtered:

Table 5-5: Button color and Event to be filtered

Button color	Event to be filtered	
	Event level	Event status
Yellow	Warning, Notice, Information, Debug	Other than Processed
Orange	Error	
Red	Emergency, Alert, Critical	

You can turn on all the buttons. If the filtering mode is changed, the latest events (100 events) are collected to refresh the events list with the settings after the change.



#### **Important**

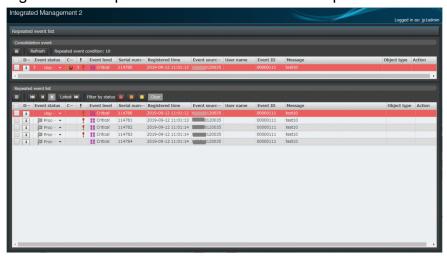
The integrated operation viewer does not support the consolidated display of repeated events function.

## 5.2.2 Displaying Repeated event list window

The Repeated event list window shows consolidation events and consolidated repeated events in a list. This window allows you to process the event status of all consolidation events displayed in the list.

To display the Repeated event list window, select a consolidation start event, and click the **Operation menu** button, and then **Repeated event list**.

Figure 5–3: Repeated event list window example



For details about the items displayed in the Repeated event list window, see *Chapter 2. Integrated Operation Viewer Window* in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

## 5.2.3 Displaying detailed JP1 event information

You can display the detailed attribute information of JP1 events that are displayed in the events list.

To display detailed information, in the events list of the Events window, click i of the JP1 event of which you want to display the attribute. The Event Detail dialog opens in a separate window.

Figure 5-4: Event Detail dialog example



The Event Detail dialog displays the event attribute name and attribute value registered for that JP1 event. The registered attributes differ depending on the JP1 event. In addition, if a selected JP1 event is an event that can be started as a monitor, the **Monitor** button is enabled. Clicking it opens a window of application that corresponds to the JP1 event.

In addition, the monitor start can also be activated from the **Linked prod.** displayed in the properties of the **Details** area.

The items that are displayed as detailed information are the same as those for the events list of Central Console. For details, see 6.1.1 Items displayed in the events list.

# 5.3 Viewing links with other products

In the Intelligent Integrated Management Base, you can monitor data from other linked products with the integrated operation viewer.

# 5.3.1 Using signs to avoid failures (link with JP1/AJS)

To see the sign of an operational failure, such as a higher load on JP1/AJS, in the event notification and avoid the failure:

- 1. In the Events window, click the **Detail** button for the event of which a sign is notified. The Event Detail dialog box is displayed.
- 2. Check the event guide information and Message.
- 3. Check the operating status of the scheduler service in the **Trends** tab. A graph of the trend information for the selected event is displayed.
- 4. Click the [+] **Add node** button to select a node with performance data of the host where the job is executed. A graph of the performance data of the host where the job is executed is displayed.
- 5. Compare the graph shown in step 3 with the one shown in step 4.

  Compare the trends to determine how extensive the failure is and isolate the cause of it.
- 6. Based on the resulting isolated cause of the failure, give instructions to the person in charge to avoid it.

# 5.3.2 Understanding how extensive a problem that occurred during operation of a job is and handling it (link with JP1/AJS)

To understand the cause of a problem that occurred during operation of a job and how extensive it is:

- Click the location where a problem occurred in the **Operating status** area.
   You can see the location in red, orange, or yellow on the sunburst chart or the tree chart.
- 2. The following information of the root jobnet you clicked is displayed in the **Job flow** tab.
  - Relation with the preceding and following root jobnets
  - Whether it affects the following root jobnets
  - List of ongoing events
- 3. Click the icon shown before the node to open the Linked unit dialog box. Check the following unit to be affected and its expected start date and time.
- 4. Click the link of the following unit to open a monitor window of JP1/Web Console. Deal with the following unit to be affected.

# 5.3.3 Understanding in advance which root jobnets are affected before the definition or content of a job is changed (link with JP1/AJS)

To understand potentially affected root jobnets in advance before changing the definition or content of a job:

- 1. Click the root jobnet you are going to change.
- 2. Check the **Job flow** tab or **Related node** tab.

The nodes related to the root jobnet you are going to change are displayed.

3. Refer to the displayed root jobnet name and the information in **Properties** to understand whether the change will have an effect and how extensive the effect is.

# 5.3.4 Checking performance data and handling the problem (link with JP1/PFM)

To check the status of a related infrastructure to determine whether it caused a job to terminate abnormally:

- 1. Click the location where a problem occurred in the **Operating status** area.

  You can see the location in red, orange, or yellow on the sunburst chart or the tree chart.
- 2. Check the target agent of the job in the **Related node** tab.

  Expand the layer of the related node and check the target agent of the job.
- 3. Add the node for the target agent in the **Trends** tab to show the graph of performance data. Check events on the target agent.
- 4. Open the **Performance** tab.

Select a report related to the applicable metric, identify a process with high usage of resources, and handle the problem.

For details about the Custom UI window of JP1/PFM, see the descriptions on JP1/PFM - Web Console in JP1/PFM manuals of version 12-10 or later.

# 5.3.5 Handling errors by viewing suggestions

To use the suggestion function to handle errors in your system:

- Identify the location where a problem occurred in the **Operating status** area.
   You can see the location in red, orange, or yellow on the sunburst chart or the tree chart.
- 2. Click the IM management node for which the  $\bigcirc$  icon is displayed. A list of suggestions appears in the **Suggestion** tab.
- 3. Click the **Suggestion** button.

The suggestion bars are activated, which you can use to handle the problem.

4. Click one of the suggestion bars to check the description of the suggestion and the previous execution history in the **Suggestion details** area.

<sup>5.</sup> System Monitoring from the Intelligent Integrated Management Base

To check the details of the criteria, click the **Show the case details** button. The Case details window appears, where you can see the activation criteria of the suggestion.

#### 5. Click the **Execute** button.

The response action is taken. The name of the button turns into **Running**.

6. Check that the response action is complete.

The name of the button turns into **Execute**. You can also check the completion of the response action through an email notification sent by an automated action of an event.

- If you click the **Suggestion** button again after the response action is taken, the list of activated suggestions now appears in a deactivated state because the system status has been changed due to the execution of the action.
- If a response action to change the status of the event to *Processed* when the system returns to normal is defined in the suggestion definition file, the applicable suggestion is activated.
- If you execute the suggestion for which the response action to change the status of the event to *Processed* is defined, changing the status of the event to *Processed* will change the status of the node to Normal. Clicking the **Suggestion** button again shows the list of deactivated suggestions.

# Important

- Response actions for the same IM management node and same suggestion ID cannot be executed simultaneously.
- If the jddupdatesuggestion command or the jddupdatetree command is executed while a response action is being executed, the response action will not terminate midway. Therefore, response actions that reference the IM management node or suggestion definitions may fail.
- If a JP1 user is deleted or JP1 user permissions are changed or deleted while a response action is being executed, command executions using JP1 user information, plug-in common methods, and the REST API may fail, causing the response action to fail.
- If the JP1/IM2 Manager service is stopped while a response action is being executed, the JP1/IM2 Manager service will not stop until the response action terminates, meaning it may take some time for the service to stop. If the REST API or commands that take time are executed with the response action, it is necessary to carry out processing asynchronously.
- If the JP1/IM2 Manager service is stopped directly after the execution of a response action began, response actions of the following types may fail:
  - plugin (if using common methods related to JP1 events)
  - eventStatus

Furthermore, if the REST API of JP1/IM is executed while the service is stopped, the status code of 500 is returned. As a result of this, the response action may fail.

# 5.3.6 Logging in to the system with single sign-on through linkage with external products using OIDC authentication

The following shows procedures when single sign-on is enabled for linking external products that use OIDC authentication.

# (1) Opening the Web console window of another service

- 1. Log in to the Intelligent Integrated Management Base through authentication provided by an OpenID provider. The Integrated Operation Viewer window appears.
- 2. Click an event managed by the service in the **Events** area.
- 3. The Web console window of the service appears without the authentication window of the OpenID provider.

# (2) Opening the Integrated Operation Viewer window from another service

- 1. Log in to another service through authentication provided by an OpenID provider.
- 2. Start the Integrated Operation Viewer window from the service.
- 3. The Integrated Operation Viewer window appears without the login window of the Intelligent Integrated Management Base.

# (3) Issuing the REST API of JP1/IM with authentication information authenticated by an OpenID provider attached to it from another service

- 1. Log in to another service through authentication provided by an OpenID provider.
- 2. Issue the REST API to which authentication information at the time of login is attached.

# 5.3.7 Sharing information using a direct access URL

This subsection describes how to share information on a specific node with other users, using an example of sending an email notification about a URL for viewing the Event detail dialog box in the Integrated Operation Viewer window, to the person in charge (userA) via an automated action.

1. Define an email to be sent via an automated action.#

The definition of the email is as follows:

From: admin@xxxxx.com
To: userA@xxxxx.com

Email subject: Check the impact on your business

Email body: http://host-name-of-the-Intelligent-Integrated-Management-server:20703/index?seqno=73&tab=job&eou=1

- 2. An error occurs in the system, causing the automated action to send an email to the person in charge (userA).
- 3. The person in charge (userA) clicks the direct access URL in the email body.

  Access the Integrated Operation Viewer window through the URL in the email that contains a serial number.
- 4. The Integrated Operation Viewer window appears with the Event detail dialog box open.

<sup>5.</sup> System Monitoring from the Intelligent Integrated Management Base

#

If you have changed the port number on which HTTP communication is received in the Intelligent Integrated Management Base service, change the port number 20703 in the email definition example to the changed one. In addition, if you use the communication encryption function of JP1/IM - Manager (encrypt communications between your web browser and the Intelligent Integrated Management Base with HTTPS), change http to https.

## 5.4 Notes on operating the Intelligent Integrated Management Base

This section provides notes on operating the Intelligent Integrated Management Base.

#### 5.4.1 Notes on when there is a link with JP1/AJS

- Execute the jddcreatetree command while the JP1/AJS3 Manager host is not running any job. If the jddcreatetree command is executed while a job is running, both command and job processes impose a load on the system, causing them to potentially be delayed.
  - If jobs are always running, then execute the jddcreatetree command when the number of executed jobs is small, so that the command execution causes less impact on business operations. In addition, verify the execution in your development environment sufficiently to make sure there is no problem with each of the processes.
- The jddcreatetree command can collect information from JP1/AJS3 Manager hosts for a maximum of 60 minutes. A timeout occurs when 60 minutes is reached and the command can no longer collect the information. If it takes 60 minutes or more to collect the information and then a timeout occurs, the IMDDAdapter\_HITACHI\_JP1\_AJS3 adapter command process, which is responsible for information collection, might be kept running on the JP1/AJS3 Manager host. As two adapter commands cannot be executed at once, you need to terminate the IMDDAdapter\_HITACHI\_JP1\_AJS3 process by using the following method on the JP1/AJS3 Manager host, if you collect the information again:

#### In Windows

Use Task Manager to terminate the process.

#### In UNIX

Use the kill command to terminate the process.

Then, adjust how your units are configured and the number of jobnets registered for execution so that the collection time is less than or equal to 60 minutes, and re-execute the jddcreatetree command.

- The jddcreatetree command does not collect unit information from:
  - Manager job group
  - Manager jobnet
  - Recovery manager jobnet
  - Remote jobnet and its underlying units
  - · Recovery remote jobnet and its underlying units
  - JP1 event sending job in which queueless is specified for its execution service, and units with wait conditions
  - JP1 event reception monitoring job and JP1 event sending job that are defined in the same level as a root jobnet
  - · Root jobnet not registered for execution and its underlying units
- Execution of an adapter command running on a JP1/AJS3 Manager host cannot be cancelled from a JP1/IM2 Manager host. To cancel it, on the JP1/AJS3 Manager host, use the following method to terminate the IMDDAdapter\_HITACHI\_JP1\_AJS3 process:

#### In Windows

Use Task Manager to terminate the process.

#### In UNIX

Use the kill command to terminate the process.

• A single JP1/AJS3 - Manager host can collect information from up to 400,000 units. If the number of units exceeds 400,000, the jddcreatetree command fails with message KAJY04260-E and the configuration management tree is not updated. You can estimate the number of units by executing the following commands on the JP1/AJS3 - Manager host:

#### In Windows

Total number of rows obtained by executing the following commands:

```
ajsname -F scheduler-service-name -R -E "/" ajsname -F scheduler-service-name -R -G "/"
```

#### In UNIX

Total number of rows obtained by executing the following commands:

```
/opt/jplajs2/bin/ajsname -F scheduler-service-name -R -E "/"
/opt/jplajs2/bin/ajsname -F scheduler-service-name -R -G "/"
```

• If environment settings parameter ADMACLIMIT is set to yes on the JP1/AJS3 - Manager host, the jddcreatetree command might fail to collect information. Use the following corrective action to make a configuration so that the information can be collected before operation:

#### In Windows

Set environment settings parameter ADMACLIMIT to no or remove the parameter to disable the function.

On the JP1/AJS3 - Manager host, register a JP1 user named system add one of the following JP1 permission levels to the user:

Or, on the JP1/AJS3 - Manager host, register a JP1 user named SYSTEM and add one of the following JP1 permission levels to the user:

```
JP1_AJS_Admin permissionJP1_AJS_Manager permissionJP1_AJS_Editor permissionJP1 AJS Operator permission
```

#### - JP1 AJS Guest permission

#### In UNIX

Set environment settings parameter ADMACLIMIT to no or remove the parameter to disable the function.

Or, on the JP1/AJS3 - Manager host, register a superuser as a JP1 user and add one of the following JP1 permission levels to the user:

```
JP1_AJS_Admin permissionJP1_AJS_Manager permissionJP1_AJS_Editor permissionJP1_AJS_Operator permissionJP1_AJS_Guest permission
```

- If information, such as a unit name, unit definition, execution agent name, or JP1 resource group name, collected by the jddcreatetree command contains a control character, the command might fail to collect the information. Avoid using any control character in the information if it is to be collected.
- If the system time on the JP1/AJS3 manager host of the trend information acquisition destination is set back<sup>#</sup>, and the time recorded in duplicate in the performance log files due to the system time change overlaps with the specified start or end time for the trend information display period, only part of the duplicate record in the performance log file might be displayed. If so, it might be possible to avoid this issue by one of the following methods.
  - Wait before displaying again
  - · Change the periods before displaying again

<sup>5.</sup> System Monitoring from the Intelligent Integrated Management Base

- If you perform the above workarounds but the record in the performance log files is not output correctly, perform the following methods.
- Execute the ajsreport command on the JP1/AJS3 manager host of the trend information acquisition destination. For information on trend information metrics and the item list that is output in the performance reports by ajsreport command, see the manual 2.5.1 Metrics that can be retrieved from JP1/AJS in the manual JP1 Version 12 JP1/Integrated Management 2 Manager GUI Reference.
- Consider deleting the performance log files. To delete the performance log files, you will need to stop the scheduler service of the JP1/AJS3 manager host of the trend information acquisition destination. For details, see the JP1/Automatic Job Management System 3 manual.
  - # This applies if the prerequisites for the trend information display function are not met, or if the system time is set back while the JP1/AJS3 services on the JP1/AJS3 manager host of the trend information acquisition destination are stopped. To set back the system time while the JP1/AJS3 services are stopped, see the manual JP1/Automatic Job Management System 3 Administration Guide, and delete the performance log files.
- If the jddcreatetree command is used to obtain information from a target JP1/AJS3 Manager host of version 12-50 or later, make sure that the JP1/AJS3 Manager host as the information acquisition target can resolve the agent host name as the job execution destination, before you execute the jddcreatetree command.

### 5.4.2 Notes on using event receiver filters

It may take time to get events for displaying the events list if you do one of the following operations in the integrated operation viewer window when setting up an event receiver filter:

- If you select an IM management node
- If you use a button on the toolbar in the Events area to update the events list

In these cases, event acquisition is interrupted after a certain number of searches and the events acquired before the interruption are displayed in the **Events** area.

You can change the upper limit for the number of searches before event acquisition is interrupted in the <code>jp1.imdd.gui.settings.eventSearchCount</code> property of the Intelligent Integrated Management Base definition file (<code>imdd.properties</code>). If you want to shorten the time before event acquisition is interrupted, decrease the upper limit for the number of searches. If you want to lengthen the time before event acquisition is interrupted, increase the upper limit for the number of searches. If you do not want to interrupt event acquisition, set the upper limit for the number of searches to 0.

We recommend you use a system node definition file (imdd\_systemnode.conf) or a business group, not an event receiver filter, for the limit of events that can be referred to or worked with in the Intelligent Integrated Management Base.

For details about the jpl.imdd.gui.settings.eventSearchCount property, see Intelligent Integrated Management Base definition file (imdd.properties) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference, and for details about the system node definition file (imdd\_systemnode.conf) in Chapter 2. Definition Files.

6

## **System Monitoring from Central Console**

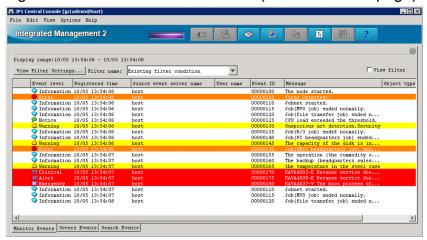
This chapter explains how to use JP1/IM - View to monitor JP1 events.

### 6.1 Viewing JP1 events

Received JP1 events are displayed in the Event Console window. The Event Console window opens when you log in to JP1/IM - Manager (Central Console).

The following figure shows a display example of the Event Console window.

Figure 6–1: Event Console window (Monitor Events page) display example



The Event Console window displays the JP1 events registered in the logged-in manager's event database. New JP1 events are added at the bottom of the events list. The JP1 event with the most recent arrival date/time is displayed at the very bottom of the events list.



#### **Note**

You can use a CSV file to save a snapshot of the events list displayed in the Event Console window. To save a snapshot in a CSV file, in the Event Console window, choose **File** and then **Save Displayed Events**.

You can also copy selected parts of JP1 event information and action execution results to the clipboard in CSV format. For details about the information that can be copied to the clipboard in CSV format, see 4.15.3 Copying JP1 event information and action execution results to the clipboard in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

## 6.1.1 Items displayed in the events list

The events list displays the attributes of JP1 events and their handling status. For the event attributes, you can also display basic attributes, common extended attributes, and program-specific extended attributes.

You can change the column width of the items displayed in the events list by holding the mouse button down on a column edge and dragging. If you change a column width on one page (on the **Monitor Events** page, for example), it is also changed on the other two pages (**Severe Events** and **Search Events** pages).

You can set up the **Monitor Events**, **Severe Events**, and **Search Events** pages so that background colors are added to specific events displayed in these pages. You can add background colors to events with the following levels of severity: Emergency, Alert, Critical, Error, and Warning.

If you use the severity changing function to change a severity level, set up a background color for the events at the changed severity level.

You can set the severity changing function if you are using the integrated monitoring database.

For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about how to set up the severity changing function, see 5.13 Setting the severity changing function in the JP1/Integrated Management 2 - Manager Configuration Guide.

In the Preferences window, you can specify whether to save the column width for each display item when you log out, and whether to add background colors for specific events. For details about the Preferences window, see 3.24 Preferences window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

## (1) Basic attributes, common extended attributes, and program-specific extended attributes of JP1 events

The events list displays the attributes (basic attributes, common extended attributes, or program-specific extended attributes) of each event. The default is that the severity level, registered time, registered host name, user name, event ID, message, object type, and action are displayed. You can change the items displayed in the events list from the Preferences window. For details about how to change displayed items, see 3.24 Preferences window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

The items that can be displayed (columns) in the events list are those event attributes that are listed in the table below.

Table 6–1: Items displayed in the events list

Attribute	Explanation		
Response status display item	Displays information (Processed, Processing, Held, or Unprocessed) that indicates the response status of JP1 events. If the response status of a consolidated event is different from the response status of repeated events, ! is displayed.		
Consolidation status	This attribute shows the number of times a consolidated event is repeated. It is only displayed when monitoring of repeated events is suppressed or the display of repeated events is consolidated.		
	For events that are being consolidated, + is displayed after the repetition count, indicating that consolidation is in progress.		
Severity	This attribute indicates the urgency of a JP1 event, in the following descending order: Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.		
	When you are using the integrated monitoring database, if you use the severity changing function to change a severity level, this attribute indicates the urgency of the JP1 event after the change.		
Registered time	Time at which a JP1 event was registered in the event database of the event-issuing host.		
Registered host name	Name of the agent (source event server) that registered the JP1 event.		
User name	Name of the user that issued the JP1 event.		
Event ID	Value that indicates the source program of the event that occurred.		
Message	Message text that shows the content of the JP1 event.		
Object type	Character strings, such as JOB and JOBNET, that indicate the type of object where the event that trigge event generation occurred.		

Attribute	Explanation		
Action	When automated actions are set up and if an event becomes the target of action execution, an action icon (action that was not suppressed) (action that was suppressed), or (action that was partially suppressed) is displayed.  If a large number of events occur while the corresponding action is suppressed by the repeated event		
	monitoring suppression function, 🗱 is displayed in the Event Console window.		
	When monitoring of repeated events is suppressed or the display of repeated events is consolidated, and the action status of a consolidated event is different from the action status of repeated events, ! is displayed.		
	When an event is not the target of action execution due to the common exclusion-conditions, **\text{\lambda} \text{ (Action-excluded event) is displayed.}		
Product name	Name of the program that issued the JP1 event.		
Object name	Name of the object (job, jobnet, etc.) where the event that triggered event generation occurred.		
Root object type	Object type. The root object type is normally the same as the object type, but the highest-order object type is displayed for multi-level jobs, such as jobnets and jobs.		
Root object name	Object name. The root object name is normally the same as the object name, but the highest-order object name is displayed for multi-level jobs, such as jobnets and jobs.		
Arrival time	Time at which the JP1 event arrived at the event database of the connected manager.  For the <b>Search Events</b> page, this attribute shows the time at which the JP1 event was registered in the even database of the search-target host.		
Start time	Shows the time zone in which the execution started.		
End time	Shows the time zone in which the execution ended.		
Occurrence	Shows the phenomena (execution start, definition creation, etc.) that occurred for the object.		
Serial number	Order in which the JP1 event arrived at this event server, regardless of the source.		
Source process ID	Process ID of the source application program.		
Source user ID	Source process user ID. The ID is -1 if the event comes from Windows.		
Source group ID	Source process group ID. The ID is -1 if the event comes from Windows.		
Source user name	Source process user name.		
Source group name	Source process group name. The name is left blank if the event comes from Windows.		
Source serial number	Serial number at the source host (the value does not change through forwarding).		
Туре	JP1 event type.  Either the correlation succeeded icon or the correlation failed icon is displayed.  If a large number of events occur that are suppressed by the repeated event monitoring suppression function is displayed on each page of the Event Console window to indicate that a large number of events hav occurred.		
Action type	Action type.  An icon indicating the action type (command) or (rule) is displayed.		
Severity (before change)	Severity level before the change.  This attribute can be set when the integrated monitoring database is used and the severity changing function is enabled.		
Severity changing	When the severity level is changed, the icon [ is displayed.		
	This attribute is displayed when the integrated monitoring database is used and the severity changing function is enabled.		
Changed display message	Displays a message after the change.		

Attribute	Explanation		
	This attribute is displayed when the integrated monitoring database is used and the display message change function is enabled.		
	After an upgrade from version 10-50 or earlier, this attribute can only be used if the IM database has been updated using the jimdbupdate command.		
New display message	When the display message is changed, [ is displayed.		
	This attribute is displayed when the integrated monitoring database is used and the display message change function is enabled.		
	After an upgrade from version 10-50 or earlier, this attribute can only be used if the IM database has been updated using the jimdbupdate command.		
Display message change	Definition name of display message change.		
definition	This attribute is displayed when the integrated monitoring database is used and the display message change function is enabled.		
	After an upgrade from version 10-50 or earlier, this attribute can only be used if the IM database has been updated using the jimdbupdate command.		
Memo	When there are memo entries for the JP1 event, the icon is displayed.		
	This attribute can be set when the integrated monitoring database is used and the function for setting memo entries is enabled.		
Source host name	Name of the host on which an event generating a JP1 event occurs.  A name is displayed when the integrated monitoring database is used, and source host mapping is enabled		
Source IP address	IP address of the source event server.		
Object ID	Serial number of the event that triggered an action.		
Return code	Command execution result.		
Relation Event serial number	Serial number of correlation source event database.		
Correlation event generation condition name	Name of a correlation event generation condition that is satisfied.		
Suppressed event ID	Serial number (unique number in the event database) of a repeated event that occurs more frequently than the threshold.		
Repeated event condition name	Name of a repeated event condition that determined that the event was a repeated-event.		
Monitoring ID	Log file trap ID.		
Monitoring name	Log file trap name.		
Program-specific extended attribute	Displays the content of a program-specific extended attribute.  The program-specific extended attributes defined in the definition file for extended event attributes (extended file) are displayed.		

## (2) Program-specific extended attributes of JP1 events (displaying program-specific extended attributes)

When you set up a definition file for extended event attributes (extended file), you can display the content of a program-specific extended attribute in the column of the events list with a specified item name. For example, when you specify System Name as the item name for the E.SYSTEM program-specific extended attribute, you can display the attribute value of the E.SYSTEM program-specific extended attribute under an item called *System Name* in the events list.

## (3) Program-specific extended attributes of JP1 events (event information mapping)

When you set up event information mapping, you can display the content of a program-specific extended attribute in the display item (basic attribute or common extended attribute) column of the events list. For example, when an SNP trap is converted into a JP1 event to be displayed in the events list, you can display the SNMP trap source host name in the registered host column.

When a program-specific extended attribute is displayed using event information mapping, it is preceded by the hash mark and a space (#).

To display a program-specific extended attribute using event information mapping, you need to map a display item to the program-specific extended attribute. For details about event information mapping, see 6.9.2 Displaying extended attributes of JP1 events (mapping of event information).

## (4) JP1 event response status

You can display a response status icon indicating the event's response status (Processed, Processing, or Held) in the farleft column of the events displayed in the events list. For details about how to display response status icons, see 6.3.1 Settings for JP1 event response statuses.

If you are using the repeated event monitoring suppression function or the consolidated display of repeated events function, and the response status of a consolidated event is different from the response status of repeated events, ! is displayed.

## 6.1.2 Events displayed in the events list in the Event Console window

Types of events displayed on the screen:

Events displayed on the screen are normal JP1 events, consolidated events (including events being consolidated and consolidation completion events), and correlation events.

· Consolidated events

The number of repetitions or a plus sign (+) indicating that consolidation is in progress appears in **Summary status**. For details about displaying consolidated events, see 6.1.2(1) Displaying consolidated events in the events list.

• Correlation events

The icon property or the icon is or the icon is or the icon.

For details about displaying correlation events, see 6.1.2(2) Displaying correlation events in the events list.

Number of events that can be displayed on the screen:

The number of events that can be displayed on the screen is the value specified in **Scroll Buffer** in the Preferences window. The maximum number of JP1 events that can be displayed is 2,000.

If you use the integrated monitoring database, you can display all events saved in the integrated monitoring database. You can use the slider to adjust the event display start-time located in the event display start-time specification area, or by specifying a date and time. For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

When the number of JP1 events exceeds the number of JP1 events that can be displayed, the following operation takes place:

#### **Monitor Events** page

Regardless of its response status, the JP1 event with the earliest arrival time is erased.

#### Severe Events page

Even if its response status is Processed, the JP1 event with the earliest arrival time is erased.

If there are Processed severe events, the JP1 event with the earliest arrival time is erased regardless of its response status.

Even those JP1 events that are erased from the screen are registered in the event database. To view the JP1 events that have been erased from the screen, search for JP1 events. For details about how to search for JP1 events, see 6.8 Searching for JP1 events.

JP1 events that are displayed when the screen starts:

JP1 events that are displayed when the screen is started are the latest JP1 events that satisfy either of the following conditions:

- JP1 events that occurred after the logged-in manager started but before the screen was started
- JP1 events that were acquired from the event database beginning from the event acquisition start time set by the jcoimdef command until startup of the currently logged-in manager.

The number of JP1 events that are displayed when the screen is started is limited to one of the following values, whichever is smaller:

- The value specified in **Event Buffer** in the System Environment Settings window (event buffer count)
- The value specified in Scroll Buffer in the Preferences window (scroll buffer count)

Note that the JP1 event count also includes the communication events<sup>#</sup> used internally. Therefore, during the initial display, the number of JP1 events displayed may not reach the upper limit.

#### #: Communication event

A communication event is internally generated when the response status of a severe event is changed or deleted, or when an automated action is executed and is not displayed on the screen.

*Updating the events list:* 

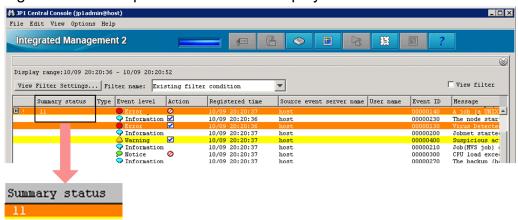
The events list is updated at a user-specified updating interval, and displays the latest JP1 events. However, if automatic updating is not set up, the latest JP1 events are not displayed even when the screen is started. To display the latest JP1 events in such a case, from the **View** menu, choose **Refresh**.

Specify whether to automatically refresh the screen, and the automatic refresh interval, in the Preferences window.

## (1) Displaying consolidated events in the events list

After JP1 events have been consolidated by the repeated event monitoring suppression function or the consolidated display of repeated events function, consolidated events are displayed in the events list.

Figure 6-2: Example of consolidated display of consolidated events



#### **Summary Status**

**Summary Status** shows the number of repetitions. The number of repetitions is the sum total of the number of consolidated events plus the number of repeated events. No data is displayed for non-consolidated events.

• Consolidation completion events

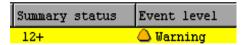
The number of repetitions is displayed.

If suppression of repeated event monitoring is set, the number of repetitions to be displayed is from 1 to 1,000,000. If repeated event consolidated display is set, the number of repetitions to be displayed is from 1 to 100.



· Events being consolidated

The number of repetitions is displayed, together with a plus sign (+) indicating that consolidation is in progress. For example, if the number of repetitions is 1 (only the consolidation start event), 1+ is displayed. If the number of repetitions is 2 (the consolidation start event and a repeated event), 2+ is displayed. On the **Severe Events** page, if the consolidation start event has already been deleted and there is no repeated event, 0+ is displayed.



The following is displayed when a consolidated event is deleted.

• When the consolidation start event is deleted

In the Event Console window, if you delete the consolidation start event on the **Severe Events** page, that event is displayed as deleted and Del is displayed to the right of the number of repetitions.



Subsequently, if event consolidation is completed and the event becomes a deleted non-consolidated event, it is no longer displayed on the **Severe Events** page of the Event Console window.

• When a repeated event is deleted

If you are using the consolidated display of repeated events function and you delete a repeated event from **Related Events** in the Related Events (Summary) window, the number of repetitions for consolidated events is reduced by the number of deleted events.

If the number of repetitions of consolidation completion events reaches 1 as a result of deletion of repeated events, that one event becomes a non-consolidated event. Furthermore, if that non-consolidated event has already been deleted, it is no longer displayed on the **Severe Events** page of the Event Console window.

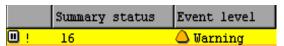
If you are using the repeated event monitoring suppression function, deleting a repeated event does not reduce the number of repetitions of consolidated events.

#### Response status display

A response status icon indicating the response status of a JP1 event is displayed in the far-left column.

The response status icon types and contents are the same as those displayed on the **Monitor Events** page and the **Severe Events** page of the Event Console window.

When you use the repeated event monitoring suppression function, an exclamation mark (!) is displayed if the 1st (the consolidation event) to 100th repeated events do not all have the same response status. If more than 100 events are consolidated, a different status among the 101st and subsequent events does not cause the exclamation mark (!) to appear.



#### Action

When the function for suppressing automated actions is being used, an icon indicating the action suppression status is displayed in the Event Console window.

Table 6–2: Action suppression status

Action suppression status	Explanation	
<b>☑</b>	Action that was not suppressed	
0	Action that was suppressed	
₩	Action that was partially suppressed	

If a large number of events occur while the corresponding action is suppressed by the repeated event monitoring suppression function, the icon appears in the Event Console window.

When the action status of a consolidated event is different from the action status of a repeated event, an exclamation mark (!) is displayed as the action suppression status.



#### **Type**

If a large number of events occur while events are being suppressed by the repeated event monitoring suppression function, the icon  $\mbox{\em 429}$  appears in the Event Console window.

Pages in the Event Console window

If a large number of events occur while events are being suppressed by the repeated event monitoring suppression function, the icon  $\mbox{\ensuremath{\not{u}}}$  appears on each page of the Event Console window.

## (2) Displaying correlation events in the events list

Correlation events are displayed on the **Monitor Events** page, **Severe Events** page, and **Search Events** page of the Event Console window.

For a correlation event, an icon is displayed in **Type**.

Either the correlation succeeded icon 👺 or the correlation failed 🎇 icon is displayed.

Note that **Type** is not a default display item. To display it, you must specify **Type** as a display item in the Preferences window. For details, see 3.24 Preferences window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

### 6.1.3 Applying a filter

By applying a pre-set filter, you can restrict the JP1 events that are displayed in the Event Console window. The following four filters are available:

#### View filter

If a view filter is set, only those JP1 events that match the filtering condition are displayed.

For details about how to switch the view filter that needs to be applied when multiple view filters are set, see 6.5.1 Enabling a view filter to display only certain JP1 events.

On the **Monitor Events** or **Severe Events** page (selected in the Event Console window), you can choose to save which view filter is applied, and whether the **View Filter** check box is selected. If you choose to save the applied status, it is saved when you log out of JP1/IM - View, and then restored at the next login. (Events are displayed according to status.) For details, see 5.16 Setting JP1/IM - View for each login user in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### User filter

If a user filter is set, the JP1 events that are displayed are restricted according to which user is logged in.

#### Severe event filter

If a severe event filter is set, severe events are displayed on the **Severe Events** page of the Event Console window. For details about the **Severe Events** page, see 6.5.2 Displaying only severe events.

When JP1/IM - View receives a severe event, the color of the light in the top area of the screen changes to red. If you change all severe events to Processed or delete them all on the **Severe Events** page, or if you cancel the severe events, the color of the light returns to green.

#### Event acquisition filter

If an event acquisition filter is set, JP1 events that JP1/IM - Manager acquires from JP1/Base are restricted.

For details about how to switch the event acquisition filter that is applied when multiple event acquisition filters are set, see 6.5.3 Switching the event acquisition filter to be applied.

For details about how to set a common exclusion-condition based on JP1 events that have occurred during operation and then apply this condition, see 6.5.4 Setting an additional common exclusion-condition to exclude a JP1 event from the monitoring target or action execution.

For details about how to preset each filter, see 5.2 Setting JP1 event filtering in the JP1/Integrated Management 2 - Manager Configuration Guide.

### 6.2 Displaying detailed JP1 event information

You can display the detailed attribute information of JP1 events that are displayed in the events list.

To display detailed information, in the events list in the Event Console window, double-click the JP1 event whose attributes you want to display. The Event Details window opens.

If you double-click a consolidated event displayed by the repeated event monitoring suppression function or the consolidated display of repeated events function, the detailed information about the consolidation start event is displayed. For details about how to check detailed information about repeated events that are consolidated into a consolidated event, see 6.4.1(1) Checking detailed information about repeated events that are consolidated into a consolidated event.

The Event Details window displays event attributes, a message, event guide information, and a memo.

**Event attributes** displays the event attribute name and attribute value registered for that JP1 event. The registered attributes differ depending on the JP1 event.

To display detailed information for the previous or next JP1 event in the events list, click the **Previous** or **Next** button.

You can also use one of the following methods to display details about a JP1 event:

- In the Event Console window, select a JP1 event, and then from the View menu, choose Event Details.
- In the Event Console window, select a JP1 event, and then from the pop-up menu, choose **Event Details**.
- In the Event Console window, select a JP1 event, and then click the Event Details button in the toolbar.

The table below shows the items that are displayed as detailed information.

Table 6–3: Detailed JP1 event information

Display name <sup>#1</sup>	Description		
Serial number	Order in which the JP1 event arrived at this event server, regardless of the source.		
Event ID	Value that indicates the source program of the event that occurred.		
Source process ID	Process ID of the source application program.		
Registered time	Time at which the JP1 event was registered in the source event server.		
Arrival time	Time at which the JP1 event was registered in the local event server.		
Source user ID	Source process user ID. The ID is -1 if the event comes from Windows.		
Source group ID	Source process group ID. The ID is -1 if the event comes from Windows.		
Source user name	Source process user name.		
Source group name	Source process group name. The name is left blank if the event comes from Windows.		
Source event server name	Source event server name (displayed as the registered host name in the events list). Even when the event is forwarded from JP1/Base (agent) to JP1/IM - Manager (site manager) to JP1/IM - Manager (integrated manager), for example, the event server name of the first JP1/Base is used.		
Source IP address	IP address corresponding to the source event server.		
Source serial number	Serial number at the source host (the value does not change through forwarding).		
Severity	This attribute indicates the urgency of a JP1 event, in the following descending order: Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.		
	When you are using the integrated monitoring database, if you use the severity changing function to change a severity level, this attribute indicates the urgency of the JP1 event after the change.		

Display name <sup>#1</sup>	Description		
User name	Name of the user that is executing the job.		
Product name	Name of the program that issued the JP1 event.		
Object type	Name that indicates the type of object that triggered event generation.		
Object name	Name of the object (job, jobnet, etc.) that triggered event generation.		
Root object type	Object type. The root object type is normally the same as the object type, but the highest-order object type is used for multi-level objects, such as jobnets. The value range is the same as for the object type.		
Root object name	Name that becomes the unit for specifying execution during user operations. The root object name is normally the same as the object name, but the highest-order object name is used for multi-level objects, such as jobnets.		
Object ID	Serial number of the event that triggered an action.		
Occurrence	Event that occurred for the object indicated by the object name.		
Start time	Execution start time or re-execution start time.		
End time	Execution end time.		
Result code	Command execution result.		
Source host name	Name of the host on which an event generating a JP1 event occurs.  A name is displayed when the integrated monitoring database is used and when source host mapping is enabled.		
Item name of program-specific information of extended attribute#2	Attribute value of the program-specific extended attribute defined in the definition file for extended event attributes (extended file).		
Relation Event serial number	Serial numbers of correlation source events, delimited by spaces and displayed in the following format: $serial$ - $number\Delta serial$ - $num$		
Correlation event generation condition name	Approved correlation event generation condition name.		
Severity (before change)	When the integrated monitoring database is used and when a severity level is changed using the severity changing function, the urgency of the JP1 event before the change is displayed. The urgency level can take one of the following values (listed in descending order): Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.		
Display message change definition name	Definition name of display message change. This item can be displayed when the integrated monitoring database is used and the detailed information whose message was changed by using the display message change function is selected.		
Suppressed event ID	Serial number (unique number in the event database) of a repeated event that occurs more frequently than the threshold. When the repeated event monitoring suppression function is used, the value for this item is displayed in character string format.		
Repeated event condition name	Condition name of a repeated event that is determined to be a repeated event. When the repeated event monitoring suppression function is used, the value for this item is displayed in character string format.		
Monitoring ID	Log file trap ID.		
Monitoring name	Log file trap name.		
Common exclude conditions group ID	ID of the common exclusion-conditions group that caused the exclusion.		
Common exclude conditions group name	Name of the common exclusion-conditions group that caused the exclusion.		

Display name <sup>#1</sup>	Description
Common exclude conditions group target-for-exclusion	Exclusion target of the common exclusion-conditions. action appears when the JP1 event is excluded from automated-action execution.
Message	Character string describing the event. If the integrated monitoring database is used, both the original message and changed message can be displayed when the detailed information whose message was changed by using the display message change function is selected.
Guide	Event guide information corresponding to the JP1 event.  This information is displayed when event guide display is enabled. If there is no event guide information for a JP1 event, the message KAVB1588-I is displayed.
Memo	When the integrated monitoring database is used and the function for setting memo entries is enabled, memo entries are displayed.

<sup>#1:</sup> For an event that matches a definition in the definition file for the extended event attributes, the item names specified in the definition file for the extended event attributes are displayed.

Note that items beginning with Severity may not be displayed in some cases, depending on the event.

### 6.2.1 Editing JP1 memo entries

When you are using the integrated monitoring database, by enabling the memo entry setup function, you can add memo entries to JP1 events saved in the integrated monitoring database. This subsection explains how to edit memo entries and apply them to JP1 events in the integrated monitoring database.

For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about how to enable the memo entry startup function, see 5.7 Setting memo entries in the JP1/Integrated Management 2 - Manager Configuration Guide.

Note that the following operations require <code>JP1\_Console\_Admin permission</code> or <code>JP1\_Console\_Operator</code> permission:

- 1. Open the Edit Event Details window.
  - You can open the Edit Event Details window by clicking the **Edit** button in the Event Details window or by selecting a single event from the events list and selecting the **Edit Event Details** menu.
- 2. Describe a memo entry in the Edit Event Details window.
- 3. Click the **Apply** button in the Edit Event Details window.

The memo entry is displayed in **Memo**, which is a display item in the events list, and in the Event Details window. The memo icon is also displayed for events that have memo entries.

<sup>#2:</sup> This is the item name defined in the definition file for extended event attributes (extended file).

### 6.3 Setting JP1 event response statuses

This subsection provides an overview on how to set JP1 event response statuses and explains the operation procedure. It also explains how to delete severe events that are displayed on the **Severe Events** page.

## 6.3.1 Settings for JP1 event response statuses

You can set a response status for any JP1 event listed on each page of the Event Console window. When you set a response status for an event, a response status icon is displayed in the far-left column of the events list.

The following table shows the response status types and the corresponding response status icons. Choose the response status to set for each situation based on the operation.

Table 6–4: Response status types and response status icons

Response status	Response status icon	
Processed	pa .	
Processing	Ð	
Held	III	
Unprocessed	(No icon)	
Different response status #	!	

#

When you use the repeated event monitoring suppression function or the consolidated display of repeated events function, this symbol indicates a situation in which JP1 events with different response statuses set are consolidated and coexist in a single consolidated event.

When you use the repeated event monitoring suppression function, an exclamation mark (!) is displayed if the 1st (the consolidation event) to 100th repeated events do not all have the same response status. If more than 100 events are consolidated, a different status among the 101st and subsequent events does not cause the exclamation mark (!) to appear.

The response status that is set is registered in the logged-in manager's integrated monitoring database or event database. (For a JP1 event has been forwarded from another host, the information in the integrated monitoring database or event database of the forwarding source host is not changed.) Consequently, the response status is applied to the **Monitor Events** and **Severe Events** pages of instances of JP1/IM - View that are logged in to the same manager.

The **Search Events** page displays the content of JP1 events at the time of the search, and therefore the displayed content does not change even if the response status is set in another page. To refresh the display, perform the search again.

Setting a response status for a consolidated event

When you set a response status for a consolidated event, the response statuses of all repeated events that have been consolidated into the consolidated event by the setting time are also changed to the same response status. However, if you are using the repeated event monitoring suppression function and more than 100 events are consolidated, the response status for the 101st and subsequent events is not changed.

The response status of repeated events is not set if they are consolidated after the response status is changed. Since repeated events with different response statuses coexist within the consolidated event, an exclamation mark (!) is displayed as the response status.

## 6.3.2 Setting a response status for JP1 events from the events list

This subsection explains how to set a response status for JP1 events. This operation assumes the following:

- The JP1 user who logs in to JP1/IM Manager has JP1\_Console\_Admin permissions or JP1\_Console\_Operator permissions.
- If the response status is being set on the **Search Events** page, the search results must be from a logged-in manager.
- 1. In the Event Console window, from the events list in each page, select the JP1 event for which you wish to set a response status.
- 2. Perform one of the following operations (which can be performed regardless of the response status of the selected event):
  - From the menu bar, choose View, and then from the submenu, select the response status you wish to set.
  - From the popup menu that opens when you right-click the mouse, select the response status you wish to set.
  - Among the buttons on the **Severe Events** page (if you are setting a response status from the **Severe Events** page), click the button for the response status you wish to set.



#### **Note**

To set a response status for a severe event, you can use the jcochstat command. For details about the jcochstat command, see *jcochstat* in *Chapter 1. Commands* of the *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*.

### 6.3.3 Deleting severe events from the Severe Events page

This subsection explains how to delete severe events from the **Severe Events** page. This operation assumes the following:

- The JP1 user who logs in to JP1/IM Manager has JP1\_Console\_Admin permissions or JP1 Console Operator permissions.
- 1. In the Event Console window, from the events list in each page, select the JP1 event you wish to delete.
- 2. Perform one of the following operations (which can be performed regardless of the response status of the selected event):
  - From the menu bar, choose View, and then Delete.
  - Right-click the mouse, and from the popup menu that opens, choose **Delete**.
  - Out of the buttons on the Severe Events page, click the Delete button.

The deletion operation here merely deletes the JP1 event from the window, but does not delete it from the event database or the integrated monitoring database. Likewise, the deletion information is not applied to other pages of the Event Console window.

#### 6.4 Operating JP1 events from the Related Events window

This subsection explains how to operate JP1 events from the Related Events window. For details about the Related Events window, see the following locations in the manual JP1/Integrated Management 2 - Manager GUI Reference:

- 3.8 Related Events (Summary) window
- 3.9 Related Events (Correlation) window

## 6.4.1 Checking detailed information about repeated events and changing the response status

When you use the repeated event monitoring suppression function or the consolidated display of repeated events function, and wish to check detailed information about repeated events that are consolidated into a consolidated event or set a response status for them, operate JP1 events from the Related Events (Summary) window.

## (1) Checking detailed information about repeated events that are consolidated into a consolidated event

To check detailed information about repeated events that are consolidated into a consolidated event:

- 1. On the Monitor Events page or Severe Events page of the Event Console window, select one consolidated event.
- 2. In the Event Console window, from the View menu, choose **Display Related Event List**. #
  The Related Events (Summary) window opens.

#

You cannot select this menu command if:

- Multiple events are selected on the Monitor Events page or Severe Events page
- A non-consolidated event is selected
- 3. From **Related Events** in the Related Events (Summary) window, double-click the repeated event whose detailed information you wish to check.

The Event Details window opens.

If the repeated event monitoring suppression function is enabled, the 101st and subsequent repeated events do not appear in the Related Events (Summary) window. In this case, the **Events that cannot be displayed** area of the Related Events (Summary) window displays the arrival time of the 101st repeated event, and the arrival time of the last repeated event. If you want to view detailed information about the 101st and subsequent repeated events, specify the arrival times of repeated events (displayed in the **Events that cannot be displayed** area) as search conditions. Note that you can also search for repeated events consolidated in a consolidation event. To do this, specify the suppressed event ID, which is assigned to each consolidation event, as a search condition.

For details about how to search for events, see 6.8 Searching for JP1 events.

## (2) Setting a response status for repeated events that are consolidated into a consolidated event

To set a response status for repeated events that are consolidated into a consolidated event:

1. On the Monitor Events page or Severe Events page of the Event Console window, select one consolidated event.

2. In the Event Console window, from the View menu, choose **Display Related Event List**. The Related Events (Summary) window opens.

#

You cannot select this menu command if:

- Multiple events are selected on the Monitor Events page or Severe Events page.
- A non-consolidated event is selected.
- 3. In the Related Events (Summary) window, under **Related Events**, double-click the repeated event for which you wish to set a response status.

You can also select multiple repeated events.

4. Right-click the selected repeated event, and from the popup menu that opens, select the response status you wish to set.

The response status is set for the repeated event.

The response status of the consolidated event into which repeated events are consolidated does not change. Since repeated events with different response statuses coexist within the consolidated event, an exclamation mark (!) is displayed as the response status.

For details about the response status types and their corresponding icons, see 6.3.1 Settings for JP1 event response statuses.

## 6.4.2 Checking detailed information about a correlation event and changing the response status

You can perform the same kinds of operations on correlation events as on JP1 events. For example, you can display event details and change the response status.

In the case of a correlation approval event, from the correlation event, you can display the correlation source event that became the trigger for its generation. If the host that generated the correlation event is different from the host you logged in to using JP1/IM - View, the correlation source event is acquired from the host that generated the correlation event.

In the case of a correlation failure event, you can display the correlation source events that were associated according to the event-correlating condition until the time when the correlation failure occurred.

If you are using the repeated event monitoring suppression function or the consolidated display of repeated events function, correlation events may be consolidated and displayed as shown below.

Table 6–5: Example of consolidated display of correlation events

Display example	Explanation	
Summary status Type Event level	Correlation events have been consolidated.	
Summary status Type Event level	Correlation events are being consolidated.	
Summary status Type Event level  15 Del	Correlation events that have been consolidated are deleted.	
Summary status Type Event level	The response status of the correlation event's consolidation start event is different from the response status of the repeated events.	

In this case, to display the correlation source event, first open the Related Events (Summary) window and then open the Related Events (Correlation) or Related Events (Correlation fails) window.

### (1) Displaying correlation source events

This subsection explains how to display correlation source events. For details about how to view events that are consolidated and displayed, see 6.1.2(1) Displaying consolidated events in the events list.

- 1. On each page of the Event Console window, select one correlation event from the events list.
- 2. In the Event Console window, from the View menu, choose **Display Related Event List**.#
  - If the correlation event that you selected in the previous step is a non-consolidated event:

    The Related Events (Correlation) or Related Events (Correlation fails) window opens and lists correlation events.

    The next step is not necessary.
  - If the correlation event that you selected in the previous step is a consolidated event: The Related Events (Summary) window opens. Proceed to the next step.

#

You cannot select this menu command when multiple JP1 events are selected from the events list.

3. If the Related Events (Summary) window opens in the previous step, select one correlation event from **Related Events**, and from the popup menu that opens when you right-click the mouse, select **Display Related Event List**. The Related Events (Correlation) or Related Events (Correlation fails) window opens and lists correlation source events.

# (2) Setting a response status for a correlation source event from the Related Events (Correlation) or Related Events (Correlation fails) window

This subsection explains how to set a response status for a correlation source event from the Related Events (Correlation) or Related Events (Correlation fails) window. This operation assumes the following:

- The JP1 user who logs in to JP1/IM Manager has JP1\_Console\_Admin permissions or JP1 Console Operator permissions.
- If the response status is being set from the **Search Events** page, the search results must be from a logged-in manager.
- 1. Follow the procedure in 6.4.2(1) Displaying correlation source events and display the correlation source event for which you wish to set a response status.
- 2. From **Related Events**, select the correlation source event for which you wish to set a response status.



#### **Note**

You can also set a response status for a correlation event by selecting a correlation event from **Display Items**.

3. Right-click the selected correlation source event, and from the popup menu that opens, select the response status you wish to set.

The response status is set for the correlation source event.



#### Note

Even if you change the response status of the correlation event to be displayed in the Related Events (Correlation) or Related Events (Correlation fails) window, the response status of the correlation source events displayed in the list does not change. Likewise, even if you change the response status of the correlation source events displayed in the list, the response status of the correlation event to be displayed does not change. This is because correlation source events and correlation events express different phenomena.

## (3) Deleting correlation source events from the Related Events (Correlation) or Related Events (Correlation fails) window

This subsection explains how to delete correlation source events from the Related Events (Correlation) or Related Events (Correlation fails) window. This operation assumes the following:

- The JP1 user who logs in to JP1/IM Manager has JP1\_Console\_Admin permissions or JP1 Console Operator permissions.
- 1. Follow the procedure in 6.4.2(1) Displaying correlation source events, and from the **Severe Events** page, display the correlation source event you wish to delete.
- 2. Make sure that the content displayed in **Display window:** of the Related Events (Correlation) or Related Events (Correlation fails) window is either of the following:
  - Severe Events
  - Severe Events Related Events (Summary)
- 3. From **Related Events**, select the correlation source event you wish to delete.



#### **Note**

You can also delete a correlation event by selecting a correlation event from **Display Items**.

4. Right-click the selected correlation source event, and from the popup menu that opens, choose **Delete**.

The correlation source event is deleted.

The deletion operation here merely deletes the correlation source event from the window, but does not delete it from the event database or the integrated monitoring database. Likewise, the deletion information is not applied to other pages of the Event Console window.

## 6.5 Applying a JP1/IM filter

This subsection explains how to apply a JP1/IM filter from JP1/IM - View.

## 6.5.1 Enabling a view filter to display only certain JP1 events

To switch the view filter that is applied to JP1 events displayed on the **Monitor Events** and **Severe Events** pages of the Event Console window, perform the following operation. Filters must already be set up before a view filter can be switched.

For details about setting up view filters, see the following section:

See 5.2.1 Settings for view filters in the JP1/Integrated Management 2 - Manager Configuration Guide.

- 1. From the **Filter name** list box, select the view filter you want to enable.
- 2. Check the View filter check box, or from the menu, choose View, and then Apply Filter Settings.
  JP1 events that match the condition set by the filter are displayed on the Monitor Events and Severe Events pages of the Event Console window.

### 6.5.2 Displaying only severe events

To display only severe events on the screen, from the Event Console window, choose the **Severe Events** page. The events list on the **Severe Events** page displays only the severe events from among the JP1 events that are displayed on the **Monitor Events** page.

The administrator can define which JP1 events are considered severe events. The default is that JP1 events whose severity level is Emergency, Alert, Critical, or Error are defined as severe events.

If the number of severe events displayed on the **Severe Events** page exceeds the maximum number of events that can be displayed on the screen, the oldest severe events are erased. The first severe event to be erased is a Processed severe event. If there are no Processed severe events, the oldest event among the Unprocessed, Held, and Processing severe events is deleted. In this case, the oldest severe event is deleted regardless of its status. For details about how to set a response status for JP1 events, see 6.3.2 Setting a response status for JP1 events from the events list.

By enabling the integrated monitoring database, you can display all events stored in it. To display specific events, use the slider to adjust the event display start-time. For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

When you use the repeated event monitoring suppression function, deleting a consolidated event from the events list deletes any of the oldest 100 repeated events that have not already been deleted. It does not delete the 101st and subsequent repeated events. Note that deleting a repeated event does not reduce the number of consolidated events.

If a view filter is set, you can further filter the JP1 events that are displayed. Select the filter you want to apply from the **Filter name** list box, and then select the **View Filter** check box. Only JP1 events that satisfy the set filtering conditions will be displayed.

If, in the Preferences window, you select the **Display** check box of the **Coloring** field, and you then click the **Include the Severe Events** page radio button, the background of a line in an event list is highlighted in the color for that event level.

You can change the background color in the system color definition file (systemColor.conf). For details, see *System color definition file (systemColor.conf)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## 6.5.3 Switching the event acquisition filter to be applied

From the multiple event acquisition filters that have been saved, you can select the filtering condition that JP1/IM uses when it acquires JP1 events from JP1/Base, and you can switch to this condition.

In an event acquisition filter, you can switch between enabling and disabling a common exclusion-condition, which is defined to temporarily exclude certain JP1 events from being acquired.

You switch the common exclusion-condition when it is necessary to exclude a host on which maintenance work is being performed from the monitoring object, so that the JP1 events generated on the host undergoing maintenance are temporarily filtered out and not acquired.

The following three methods are available for switching event acquisition filters and common exclusion-conditions:

- Making the switch from the System Environment Settings window

  If you know the name of the event acquisition filter you want to switch to, select that event acquisition filter from the System Environment Settings window and make the switch.
- Making the switch from the Event Acquisition Conditions List window
   If you cannot identify the name of the event acquisition filter from the System Environment Settings window, check the setting content of event acquisition filters in the Event Acquisition Conditions List window and make the switch.
- Using the jcochfilter command to make the switch

  Use the job scheduler function of JP1/AJS and execute the jcochfilter command at the specified time to create a jobnet that starts a maintenance job. In this way, you can automate the process of changing the maintenance job and monitoring state.

Note, however, that if an event acquisition filter is running for a compatibility reason, you cannot switch it.

To start the System Environment Settings window or Event Acquisition Conditions List window, you need JP1\_Console\_Admin permissions. In addition, when reference and operation permissions are set for a business group, operations in these windows might not be possible, depending on the combination of the JP1 resource group and JP1 permissions level. For details, see 4.1.4(2) Assigning a JP1 resource group and permission level to a JP1 user in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

For details about the events that are generated when an event acquisition filter is switched, see 4.2.2 Event acquisition filter in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

## (1) Switching an event acquisition filter from the System Environment Settings window

To switch an event acquisition filter:

- In the Event Console window, choose **Options** and then **System Environment Settings**.
   The System Environment Settings window opens.
- 2. From the **A filter is being applied** drop-down list, select an event acquisition filter.
- 3. Click Apply.

## (2) Switching between enabling and disabling a common exclusioncondition from the System Environment Settings window

To switch between enabling and disabling a common exclusion-condition:

- In the Event Console window, choose **Options** and then **System Environment Settings**.
   The System Environment Settings window opens.
- 2. In Common exclusion-conditions groups, select the condition group you want to apply.
- 3. Click Apply.

The setting is enabled.

## (3) Switching the event acquisition filter from the Event Acquisition Conditions List window

To switch an event acquisition filter:

- 1. In the Event Console window, choose **Options** and then **System Environment Settings**. The System Environment Settings window opens.
- 2. In Event acquisition conditions, click the Editing list button.

The Event Acquisition Conditions List window opens.

3. From Filter list, select an event acquisition filter.

Select an event acquisition filter based on the filter ID or filter name. To check the content, select an event acquisition filter and click the **Edit** button. The Event Acquisition Settings window opens and you can check the content of the filter you selected.

4. Click OK.

The display returns to the System Environment Settings window.

5. Click Apply.

The setting is enabled.

In the Event Acquisition Conditions List window, you can add, edit, copy, and delete filtering conditions. For details, see 5.2.4 Settings for event acquisition filters in the JP1/Integrated Management 2 - Manager Configuration Guide.

## (4) Switching between enabling and disabling a common exclusioncondition from the Event Acquisition Conditions List window

To switch between enabling and disabling a common exclusion-condition:

- In the Event Console window, choose Options and then System Environment Settings.
   The System Environment Settings window opens.
- 2. Click the Editing list button in Event acquisition conditions.

The Event Acquisition Conditions List window opens.

3. In Common exclusion-conditions groups, check the condition group you want to apply.

To check the content, select a common exclusion-condition and click the **Edit** button. The Common Exclusion-Conditions Settings window opens and you can check the content of the common exclusion-condition you selected.

#### 4. Click OK.

The display returns to the System Environment Settings window.

#### 5. Click Apply.

The setting is enabled.

## (5) Using the jcochfilter command to switch an event acquisition filter

Each event acquisition filter is assigned a unique filter ID. By using this filter ID and the jcochfilter command, you can switch an event acquisition filter.

For details about the jcochfilter command, see *jcochfilter* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

To switch an event acquisition filter:

- 1. Enter the jcochfilter command and display an event acquisition conditions list.

  Examples follow of displaying an event acquisition conditions list on a physical host and a logical host.
  - Displaying an event acquisition conditions list on a physical host Enter the command as follows.

```
jcochfilter
```

• Displaying an event acquisition conditions list on logical host hostA

Enter the command as follows.

```
jcochfilter -h hostA
```

A display example follows of an event acquisition conditions list on logical host hostA.

Figure 6–3: Using the jcochfilter command to display an event acquisition conditions list

```
> jcochfilter
KAVB1005-I The command (jcochfilter) has started.
KAVB0856-I The list of event acquisition filters will now be displayed.
(host name: hostA)
KAVB0857-I A connection to JP1/IM - Manager has been established.
Filter ID currently being used: 3
      Filter name: Normal operation filter
Common exclusion-conditions group ID currently being applied: 0
      Common exclusion-conditions group name: Application server maintenance
Common exclusion-conditions group ID currently being applied: 2
      Common exclusion-conditions group name: Database server maintenance
Defined filter list:
ID Filter name
0 Existing filtering condition
3 Normal operation filter
Defined common exclusion-conditions group list:
ID Condition group name
0 Application server maintenance
1 Web server maintenance
2 Database server maintenance
KAVB1002-I The command (jcochfilter) terminates normally.
```

If JP1/IM - Manager on the specified host has not started, you cannot use the command to switch an event acquisition filter.

- 2. Select an event acquisition filter based on the filter ID and filter name.
- 3. Enter the jcochfilter -i command and switch the event acquisition filter.

Examples of switching an event acquisition filter on a physical host and a logical host are described below.

• Switching an event acquisition filter on a physical host to a filter that has a filter ID of 3 Enter the command as follows.

```
jcochfilter -i 3
```

• Switching an event acquisition filter on logical host hostA to a filter that has a filter ID of 3 Enter the command as follows.

```
jcochfilter -i 3 -h hostA
```

## (6) Using the jcochfilter command to switch between enabling and disabling a common exclusion-condition

Each common exclusion-condition is assigned a unique common exclusion-condition group ID. Using this common exclusion-condition group ID and the jcochfilter command, you can switch between enabling and disabling a common exclusion-condition.

For details about the jcochfilter command, see *jcochfilter* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

To switch between enabling and disabling a common exclusion-condition:

- 1. Enter the jcochfilter command and display an event acquisition conditions list.

  Examples of displaying an event acquisition conditions list on a physical host and a logical host are described below.
  - Displaying an event acquisition conditions list on a physical host Enter the command as follows.

```
jcochfilter
```

• Displaying an event acquisition conditions list on logical host hostA

Enter the command as follows.

```
jcochfilter -h hostA
```

If JP1/IM - Manager on the specified host has not started, you cannot use the command to switch an event acquisition filter

- 2. Select a common exclusion-conditions group based on the common exclusion-conditions group ID and the common exclusion-conditions group name.
- 3. Switch between enabling and disabling the common exclusion-conditions group.

Use one of the following options to switch between enabling and disabling the common exclusion-conditions group.

• -e option

Specify the common exclusion-conditions group ID you want to enable.

Unspecified common exclusion-conditions groups are disabled.

• -on or -off option

Specify the common exclusion-conditions group ID you want to enable.

The enabling and disabling settings of unspecified common exclusion-conditions groups are not changed.

These options can be used when the operating mode of the common exclusion-condition is extended mode.

The following describes an example of switching between enabling and disabling common exclusion-conditions on the physical host and a logical host.

• On the physical host, the common exclusion-conditions with common exclusion-conditions group ID 3 are enabled, and the common exclusion-conditions with common exclusion-conditions group IDs 1 and 2 are disabled (only the specified common exclusion-conditions groups are changed).

This specification can be used when the operating mode of the common exclusion-condition is extended mode. jcochfilter -on 3 -off 1,2

• On the physical host, the common exclusion-conditions with common exclusion-conditions group ID 3 are enabled, and the other common exclusion-conditions are disabled.

```
jcochfilter -e 3
```

• On logical host hostA, the common exclusion-conditions with common exclusion-conditions group ID 3 are enabled, and the other common exclusion-conditions are disabled.

```
jcochfilter -e 3 -h hostA
```

## 6.5.4 Setting an additional common exclusion-condition to exclude a JP1 event from the monitoring target or action execution

If the common exclusion-condition is in extended mode, you can select a JP1 event that you do not want to monitor or one that you want to monitor but exclude from action execution in the Event Console window, and then right-click the JP1 event to display a popup menu. From the popup menu, choose **Exclude by Common Exclusion-Conditions** to register the JP1 event as a common exclusion-condition.

The registered common exclusion-condition is displayed as an additional common exclusion-condition in the System Environment Settings window.

## (1) Setting additional common exclusion-conditions by using JP1 events that have occurred

- 1. If the common exclusion-condition is in basic mode, switch it to extended mode.

  For details about how to change the mode, see 5.2.4(3)(a) Switching between common exclusion-conditions basic mode and extended mode in the JP1/Integrated Management 2 Manager Configuration Guide.
- 2. Select a JP1 event you want to exclude from the event list in the Event Console window.
- 3. Do either of the following to display the Common Exclusion-Condition Settings (Extended) window: In the Event Console window, choose **Display** and then **Exclude by Common Exclusion-Conditions**, or from the popup menu which appears on right clicking, choose **Exclude by Common Exclusion-Conditions**.

The Common Exclusion-Condition Settings (Extended) window opens because the attribute of the JP1 event selected in step 2 has been automatically set as an event condition.

The items that are automatically set can be changed by using the common-exclusion-conditions auto-input definition file (common\_exclude\_filter\_auto\_list.conf). For details about the common-exclusion-conditions auto-input definition file (common\_exclude\_filter\_auto\_list.conf), see Common-exclusion-conditions auto-input definition file (common\_exclude\_filter\_auto\_list.conf) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

Nothing is displayed in **Common exclusion-conditions group ID** in the Common Exclusion-Condition Settings (Extended) window, and nothing can be set. The common exclusion-conditions group ID of an additional common exclusion-conditions group is assigned on registration.

- 4. Edit the necessary items in the Common Exclusion-Condition Settings (Extended) window.
- 5. Click the **OK** button.
- 6. A message asking whether the settings should be applied is displayed. If there is no problem, click the **OK** button. A JP1 event indicating that an additional common exclusion-condition is set is displayed in the Event Console window, and the condition is applied to the event acquisition filter.

## (2) Changing an additional common exclusion-condition to a common exclusion-condition

An additional common exclusion-condition can be changed to a common exclusion-condition.

- 1. In the System Environment Settings window, click the **Editing list** button to display the Event Acquisition Conditions List window.
- 2. In the **Common exclusion-conditions groups** field of the Event Acquisition Conditions List window, select the additional common exclusion-condition (**Type** is a on) you want to change to a common exclusion-condition.
- 3. Click the **Type** button.
- 4. A message asking whether the type should be changed is displayed. If there is no problem, click the **OK** button.
- 5. In the System Environment Settings window, click the **Apply** button.

  The selected additional common exclusion-condition is changed to a common exclusion-condition.

  At this point, the common exclusion-conditions group ID changes. The new group ID is created by adding 1 to the highest number of the already defined common exclusion-conditions group IDs. If the new common exclusion-conditions group ID exceeds the maximum value, an unused ID is assigned in order starting from 0.



#### **Important**

If you change an additional common exclusion-condition to a common exclusion-condition by mistake, click the **Close** button in the System Environment Settings window to cancel the change before clicking the **Apply** button.

## 6.6 Displaying an event by specifying an event display start-time

If a large number of JP1 events occur within a short time period, and they exceed the maximum number of events that can be displayed on the **Monitor Events** page, older events might not be visible. By specifying an event display start-time, you can display these hidden events on the **Monitor Events** page. Before you can specify an event display start-time, you must enable the integrated monitoring database. For details about how to enable the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide. For details about the display range when specifying an event display start-time, see 3.2 Monitor Events page in the manual JP1/Integrated Management 2 - Manager GUI Reference.

You can specify the event display start-time on the following pages:

- Monitor Events page
- Severe Events page

To specify an event display start-time to display JP1 events that are no longer visible:

1. In the Event Console window, click the **Expand/Shrink** button to open the event display start-time specification area.

The event display start-time specification area is not displayed when you first log in.

For details about the event display start-time specification area, see Figure 3-4 Monitor Events page with the event display start-time specification area displayed in 3.2 Monitor Events page in the manual JP1/Integrated Management 2 - Manager GUI Reference.

2. Move the slider to the time at which to start displaying events.

Based on the specified event display start-time, events that pass the user filter and view filter currently being applied are collected from the integrated monitoring database and displayed. The default for the maximum number of events that can be displayed (scroll buffer size) is 500. You can halt the collection of events beginning at the event display start-time by specifying a new event display start-time or by clicking the **Cancel** button.

You can specify a precise event display start-time using the **Event display start-time** text box. The default for the **Event display start-time** text box differs depending on the time you log in to JP1/IM - Manager. If the login time is later than the base time, the base time of the day you are logging in to JP1/IM - Manager is displayed by default.

Example: You log in to JP1/IM - Manager on 2008-07-08 at 10:00, when the base time is 09:00.

The default value displayed in the **Event display start-time** text box is 2008-07-08 09:00.

If the time at which you log in to JP1/IM - Manager is earlier than the base time, the previous day's base time is displayed by default.

Example: You log in to JP1/IM - Manager on 2008-07-08 at 08:00, when the base time is 09:00.

The default value displayed in the **Event display start-time** text box is 2008-07-07 09:00.

Clicking the **Most Recent Event** button returns the event display start-time to the previous setting. If the automatic scrolling function is enabled, the latest event is displayed when a new event is received. To keep displaying the events for the time specified in the event display start-time specification area even when new events are received, disable the automatic scrolling function.

## 6.7 Narrowing the JP1 events to be displayed by specifying a time period

You can display a list of JP1 events by enabling the display of events for a specified time period.

You can display events for a specified time period on the following pages:

- Monitor Events page
- Severe Events page

Event display for a specified period displays JP1 events that have passed all filters (event acquisition filter, user filter, severe events filter, and view filter) and whose repeated events have been consolidated.

This subsection explains how to enable the function for displaying events for a specified period of time, and how to specify the desired time period.

Whether a JP1 event falls within the specified time period is determined by comparing the time at which the JP1 event arrived at JP1/IM - Manager and the current time of the host on which JP1/IM - View is running. If the time set in JP1/IM - Manager is different from the time set in JP1/IM - View, JP1 events outside the specified period might be displayed. Therefore, we recommend that you synchronize the times of JP1/IM - Manager and JP1/IM - View before displaying events.

- 1. From the menu in the Event Console window, choose **Options** and then **Preferences**. The Preferences window opens.
- 2. On the Event Attributes page, select the Enable check box in the Specified display event period area. Base time and Display period become enabled.
- 3. Specify Base time and Display period.

For **Base time**, you can specify a time from 00:00 to 23:59 as the base time for a day. The default is 09:00.

The event display range varies according to the difference between the base time and the current time. The following explains the display range for JP1 events in each case.

- If the current time of the host on which JP1/IM View is running is later than the base time:

  The range starts at the base time (*display period* 1) days earlier and ends at the base time on the following day.
- If the current time of the host on which JP1/IM View is running is earlier the base time:

  The range starts at the base time prior to the display period and ends at the base time on the current day.

The base time at the end is not included in the range.

For example, if the current time is 09:15, and if the display period is set to 2 days and the base time is set to 09:30, a list of JP1 events that occurred from 09:30 2 days ago to 09:29 today is displayed.

For **Display period**, you can specify a range from 1 to 31 days to indicate how many days' worth of JP1 events in the immediate past you want to display. The default is 1 day.

#### 4. Click OK.

The specified content (event display for the specified period) is enabled, and the Preferences window closes. The Event Console window displays JP1 events for the specified period.

If the function for displaying events for a specified period is enabled, you can switch between displaying events for the specified period and not displaying those events, by selecting the **Specified display event period** check box in the Event Console window or by selecting **View - Specified display event period** from the menu in the Event Console window.

If the function for displaying events for a specified period in the Preferences window is enabled when you log in again, you can select both the **Specified display event period** check box and the **Specified display event period** menu, and

you can display the events list of each page by applying event display for the specified period. If the function is disabled, you can hide both the **Specified display event period** check box and the **Specified display event period** menu, and you can display the events list of each page without applying event display for the specified period.

For details about the specified display event period, see 4.18 Specifying the event display period in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

### 6.8 Searching for JP1 events

You can use various conditions to search for JP1 events and display those JP1 events that satisfy the search condition.

This section explains how to search for JP1 events and how to display the search results.

For details about the search function, see 4.6 Searching for events in the JP1/Integrated Management 2 - Manager Overview and System Design Guide. For details about the window used to search for events, see 3.25 Event Search Conditions window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

#### 6.8.1 Search method

This subsection explains the method for searching for JP1 events.

When you enable the integrated monitoring database, you can select the search object from the event database and the integrated monitoring database. For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

## (1) Search procedure

To search for JP1 events:

- 1. To use the attribute value of a JP1 event displayed in the events list as the search condition, select a JP1 event from the events list in the Event Console window.
- 2. In the Event Console window, choose **View** and then **Search Events**. Alternatively, on the **Search Events** page of the Event Console window, click the **Search Events** button.

The Event Search Conditions window opens.

3. In the Event Search Conditions window, specify search conditions.

In the Event Search Conditions window, specify the following items:

• Specify the search object

When you use the integrated monitoring database, **Search object** is displayed in the Event Search Conditions window, and you can select either the integrated monitoring database or the event database. If you are not using the integrated monitoring database, the item **Search object** is not displayed. JP1 events in the event database are searched.

• Enter the search host

Enter the search object host name (event server name) in **Search host**.

By default, the name of the connected host is specified.

If you are using the integrated monitoring database and you select the integrated monitoring database in **Search object**, the item **Search host** becomes inactive.

The address of the specified host name is resolved inside the manager. Therefore, specify a host name that can be resolved inside the manager.

In an environment protected by a firewall, exercise special care when searching for events using a viewer that is outside the firewall, since a single host IP address might appear differently when seen from outside or inside the firewall. If you use a viewer that is outside the firewall and you specify an IP address to search for events, specify an IP address that can be resolved inside the manager.

Specify an IP address also when you are connecting to an agent that is connected to multiple LANs via an NIC of a host other than the representative host.

· Specify a search direction

Specify the direction in which to search the integrated monitoring database or the event database.

Specify either Past direction or Future direction as the event search direction. The default is Past direction.

For details, see 6.8.1(2) Event search direction.

• Specify a condition group

To differentiate between various event search conditions, names are assigned to condition groups.

You can specify multiple condition groups, and condition groups are ORed.

To specify condition groups, you must first click the **Show List** button to show the **List** area.

Adding a condition group: Clicking the **Add** button adds undefined name *conditions-group-n* (where n is a number).

Copying a condition group: Selecting a condition group and clicking the **Copy** button adds *condition-group-name-selected-for-copying*.

Deleting a condition group: Selecting a condition group and clicking the **Delete** button deletes the selected condition group.

Renaming a condition group: Selecting a condition group displays the name of the selected condition group in **Condition group name**. Editing this name and moving the focus changes the name of the condition group.

• Set up a condition (detailed settings of each condition group)

Set up a pass condition or exclusion-condition for the JP1 events to be searched for.

You can set up a condition by combining multiple conditions, and the conditions are ANDed.

The items you can specify differ depending on the specified search item.

If the search object is the event database, the items you can specify are as follows: Event source host name<sup>#1</sup>, registered host name, event level, object type, object name, root object type, root object name, occurrence, user name, message, product name, event ID, start time, end time, registered time, arrival time, response status, action<sup>#2</sup>, and program-specific extended attribute.

If the search object is the integrated monitoring database, the items you can specify are as follows: Event source host name<sup>#1</sup>, registered host name, event level, object type, object name, root object type, root object name, occurrence, user name, message, product name, event ID, start time, end time, registered time, arrival time, response status, action<sup>#2</sup>, program-specific extended attribute, memo<sup>#3</sup>, new severity level<sup>#4</sup>, original severity level<sup>#4</sup>, new display message<sup>#5</sup>, changed display message<sup>#5</sup>, repeated events<sup>#6</sup>, and suppressed event ID<sup>#6</sup>.

- #1: You can specify this item if source host mapping is enabled.
- #2: If linkage with JP1/IM Rule Operation is enabled, you can specify the action type as a search condition.
- #3: You can specify this item if the memo function is enabled.
- #4: You can specify this item if the severity changing function is enabled.
- #5: You can specify this item if the display message change function is enabled.
- #6: You can specify this item if the repeated event monitoring suppression function is enabled.

To commit the attribute value of the JP1 event selected in the Event Console window to the condition list, click the **Read From Selected Event** button.

If the repeated event monitoring suppression function is enabled, the **Read Suppressed Event ID From Selected Event** button appears. To apply the suppressed event ID of the repeated event selected in the Event Console window, click the **Read Suppressed Event ID From Selected Event** button. Because all repeated events consolidated in a single consolidation event have the same suppressed event ID, use this button to filter those repeated events, which have the same suppressed event ID as the selected repeated event.

You can use a regular expression to specify the following: Event source host name, registered host name, object type, object name, root object type, root object name, occurrence, user name, message, product name, program-

specific extended attribute, memo, suppressed event ID, and changed display message. For details about using a regular expression to specify search conditions, see 6.8.1(3) Using regular expressions to specify search conditions.

#### 4. Click OK.

When the **Search Events** page opens and the search begins, **Searching** is displayed on the page tab. Events matching the search condition are sequentially displayed on the **Search Events** page of the Event Console window as search results.

To cancel the event search, click the **Cancel Search** button. You can halt the search if you executed an event search with an incorrect search condition, or if you have found the event you wanted to acquire.

### (2) Event search direction

By specifying a search direction, you can search a range that satisfies a condition. In the Preferences window, you can change the number of events that can be acquired from a single search. By clicking the **Search for Next Event** button on the **Search Events** page of the Event Console window, you can acquire and display the events that could not be acquired in a single search.

When you specify **Past direction** for the event search direction, a search is executed beginning with the latest JP1 event registered in the integrated monitoring database or the event database (events are acquired from the latest event toward earlier events). When you specify **Past direction** and execute a search, events are acquired starting with the latest one, and these events are then displayed chronologically (in order of earliest to latest). Clicking the **Search for Next Event** button displays the next set of events, acquired with the **Search for Next Event** button, above the events that have already been displayed. Note that events are always displayed chronologically starting with the earlier ones (that is, events acquired earlier are displayed above events acquired later).

When you specify **Future direction** for the event search direction, a search is executed beginning with the earliest JP1 event registered in the integrated monitoring database or the event database (events are acquired from the earliest event towards later events). When you specify **Future direction** and execute a search, events are acquired starting with the earliest one. Clicking the **Search for Next Event** button displays the next set of events, acquired with the **Search for Next Event** button, below the events that have already been displayed.

See the examples in 6.8.2 Displaying the search results to confirm the behavior of the event search operation.

## (3) Using regular expressions to specify search conditions

You can specify a regular expression in the search conditions specified in the Event Search Conditions window. You can specify a regular expression for the following: Event source host name, registered host name, object type, object name, root object type, root object name, occurrence, user name, message, product name, program-specific extended attribute, memo, suppressed event ID, and changed display message.

To specify a regular expression as a search condition in the Event Search Conditions window, specify a regular expression as a search condition in the **Conditions** text box, and then select **Regular expression** from the list box on the right side. To specify a regular expression for a program-specific extended attribute, use the Event Search Detailed Conditions (Program-Specific Information in Extended Attribute) window.

The types of regular expressions that can be used depend on the settings of JP1/Base at the search target host. For details, see the description about regular expressions in the chapter on installation and setup in the *JP1/Base User's Guide*.

## 6.8.2 Displaying the search results

Event search results are displayed on the **Search Events** page in the Event Console window.

In the Preferences window, you can specify the number of events that can be acquired in a single event search. For details about how to specify the event acquisition count in the Preferences window, see 3.24 Preferences window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

To display the events that could not be acquired in a single event search, click the **Search for Next Event** button. The content that is displayed differs depending on the search direction and the range specified by each condition.

Display examples of event search results are shown below.

#### Assumptions:

- The number of events that can be acquired from a single event search is 20.
- Only the following events are stored in the event database.

Figure 6-4: Events stored in the event database

```
2000 07/01 00:01:00 Event 01
2000 07/01 00:02:00 Event 02
2000 07/01 00:03:00 Event 03
2000 07/01 00:04:00 Event 04
2000 07/01 00:05:00 Event 05
(Omitted)
2000 07/01 00:56:00 Event 56
2000 07/01 00:57:00 Event 57
2000 07/01 00:58:00 Event 58
2000 07/01 00:59:00 Event 59
2000 07/01 01:00:00 Event 60
```

#### Example 1:

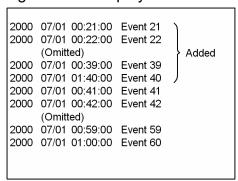
In the Event Search Conditions window, in **Search direction**, clicking the **Past direction** radio button displays in an event list the last 20 JP1 event entries registered in the event database.

Figure 6-5: Last 20 JP1 event entries

```
2000 07/01 00:41:00 Event 41
2000 07/01 00:42:00 Event 42
(Omitted)
2000 07/01 00:59:00 Event 59
2000 07/01 01:00:00 Event 60
```

Clicking the **Search for Next Event** button adds the next set of 20 events and displays them above the events that are already displayed.

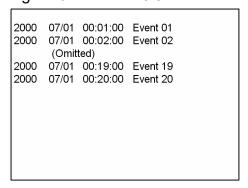
Figure 6–6: Display after the Search for Next Event button is clicked



#### Example 2:

In the Event Search Conditions window, in **Search direction**, clicking the **Future direction** radio button displays in an event list the first 20 JP1 event entries registered in the event database.

Figure 6-7: First 20 JP1 event entries



Clicking the **Search for Next Event** button adds the next set of 20 events and displays them below the events that are already displayed.

Figure 6-8: Display after the Search for Next Event button is clicked

2000	07/01	00:01:00	Event 01	
2000	07/01	00:02:00	Event 02	
	(Omitted)			
2000	07/01	00:19:00	Event 19	
2000	07/01	00:20:00	Event 20	
2000	07/01	00:21:00	Event 21 \	١
2000	07/01	00:22:00	Event 22	
	(Omitted) } Added			Added
2000	07/01	00:39:00	Event 39	
2000	07/01	00:40:00	Event 40	)
1				

#### 6.9 Customizing JP1 event information by operation

You can customize JP1 event information according to different operations.

### 6.9.1 Displaying program-specific extended attributes of JP1 events (displaying program-specific extended attributes)

When you set up the definition file for extended event attributes (extended file), you can display program-specific extended attributes in the events list of the Event Console window using desired item names.

For details about how to set up the definition file for extended event attributes (extended file), see 5.11 Setting the display and specification of program-specific extended attributes in the JP1/Integrated Management 2 - Manager Configuration Guide.

To add the program-specific extended attributes defined in the definition file for extended event attributes (extended file) to display items in the Preferences window, and then display these attributes in the events list of the Event Console window:

- 1. From the menu in the Event Console window, choose **Options** and then **Preferences**. The Preferences window opens.
- 2. Choose Event Attributes, and then Display items & order. Then, from the Available items box, select a program-specific extended attribute defined in the definition file for extended event attributes (extended file).
  In the Available items box, program-specific extended attributes defined in the definition file for extended event attributes (extended file) are displayed using item names.
- 3. Click the -> button to move the selected item to the **Display items & order** box.

  The display order in the **Display items & order** box indicates the display order in the events list. To change the display order, select an item and click the **Up** or **Down** button to move the item name.
- 4. Click OK.

The Preferences window closes. Program-specific extended attributes are displayed in the events list of the Event Console window.

### 6.9.2 Displaying extended attributes of JP1 events (mapping of event information)

By mapping a program-specific extended attribute to an item with a basic attribute or common extended attribute, you can display the content of a program-specific extended attribute in the display item (basic attribute or common extended attribute) column of the events list.

An example follows.

Mapping definition settings

The following mapping definitions are set:

Event information mapping definition 1

Mapping program-specific extended attribute LOGHOST to the registered host name.

Mapping-target event ID: 12E0

Event information mapping definition 2

Mapping program-specific extended attribute LOGTIME to the arrival time.

Mapping-target event ID: 12E0

Events generated:

Events with the following content are generated.

Table 6-6: Event generation content

No.	Attribute	Content	
1	Severity	Error	
2	Registration time	2001/10/30 17:47:31	
3	Arrival time	2001/10/30 17:47:39	
4	Registered host name	host_A	
5	User name	jp1nps	
6	Event ID	000012E0	
7	Message	KAJC391-E	
8	LOGHOST	loghost_1	
9	LOGTIME	1003976997#	

<sup>#:</sup> In the time format, the value becomes 2001/10/25 11:29:57.

Display in the Event Console window:

Normally, the events list in the Event Console window displays the contents of Nos. 1 to 7 in the above table, but because No. 8 is mapped to No. 4 and No. 9 is mapped to No. 3, the following is displayed:

Table 6-7: Event Console window display

Severity	Registration time	Arrival time	Registered host name	User name	Event ID	Message
Error	10/25 17:47:31	# 10/25 11:29:57	# loghost_1	jp1nps	000012E0	KAJC391- E

To display a program-specific extended attribute, in the Event-Information Mapping Definitions window, map a display item to the program-specific extended attribute. To start the Event-Information Mapping Definitions window, you need <code>JP1\_Console\_Admin</code> permissions. In addition, when reference and operation permissions are set for a business group, operations in the Event-Information Mapping Definitions window might not be possible depending on the combination of JP1 resource group and JP1 permission level. For details, see 4.1.4(2) Assigning a JP1 resource group and permission level to a JP1 user in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.



#### Note

Difference between event information mapping and source host mapping

The event information mapping functionality maps the value of an extended attribute of a JP1 event to the attribute of a display item in an event list, and displays it. This functionality can display another attribute value in the registered host name field of an event list. Note, however, that the functionality can be used only for changing the display of an event list. It cannot be used for event conditions, such as actions and event correlation.

The source host mapping functionality, however, registers the host name and source host name of a JP1 event acquired by JP1/IM - Manager in order to monitor and manage JP1 events. This functionality can display information in the source host name field of an event list and can also be used for event conditions, such as actions and event correlation. Note, however, that you must use the integrated monitoring database and enable source host mapping.

To map a program-specific extended attribute:

1. In the Event Console window, from the **Options** menu, choose **Event-Information Mapping Definitions**.

The Event-Information Mapping Definitions window opens.

**List of definitions** shows the list of mapping definition information that is currently set.

You can create a maximum of 16 mapping definitions.

- 2. To enable event information mapping, from the **Mapping** menu, choose **Map**.
- 3. To create a new mapping definition, click the **Add** button. To modify defined mapping information, choose an item from **List of definitions** and then click the **Edit** button, or double-click the item in **List of definitions**. The Event-Information Mapping Detailed Definitions window opens.
- 4. From **Display items & order**, select the display item in the events list to which you want to map the program-specific extended attribute.

You can select (in the Preferences window) the following items:

Source process ID, arrival time, source user ID, source group ID, source user name, source group name, registered host name, source serial number, severity, user name, product name, object type, object name, root object type, root object name, occurrence, start time, and end time.

- Specification example: registered-host-name
- 5. In **Attribute name**, specify the name of the program-specific extended attribute you want to map.

You can specify a maximum of 32 characters consisting of uppercase letters, numbers, and underscores. You need not specify  $\mathbb E$  to indicate a program-specific extended attribute.

Each display item can be mapped to a single program-specific extended attribute.

To map a program-specific extended attribute to arrival time, start time, or end time, specify an attribute name whose attribute value is a numeric value (from 0 to 2,147,483,647 seconds from January 1, 1970 UTC). If you specify a value other than a numeric value or an attribute with a numeric value that is outside the range, the original attribute is displayed.

- Specification example: LOGHOST
- 6. In **Event ID**, specify the event ID of the JP1 event you want to map.

You can specify a maximum of 1,000 characters, consisting of letters A-F or a-f, numbers, and commas. Specify the value in hexadecimal format. The range of values that can be specified is 00000000 to 7FFFFFFF.

You can specify a maximum of 100 event IDs, delimited by commas.

- Specification example 1: 3FFF
- Specification example 2: 12345B, 7FFFFFFF
- 7. Click the **OK** button.

The Event-Information Mapping Detailed Definitions window closes, and the specified content is committed to the Event-Information Mapping Definitions window.

8. In the Event-Information Mapping Definitions window, click the Apply button.

For events that arrive after the **Apply** button has been clicked, the program-specific extended attribute is displayed along with this mapping definition.

You can specify the mapped program-specific extended attribute to filter JP1 events when using the view filter, severe event filter, and user filter.

When a program-specific extended attribute is displayed, it is preceded by the hash mark and a space (#).

To specify a displayed program-specific extended attribute as the filtering condition, you need not enter a hash mark and a space (# ).

In the Preferences window, if you select the **Display** check box of the **Coloring** field, the background of a line in an event list is highlighted in the color for that event level.

If you changed the settings in the Event-Information Mapping Definitions window, the change is applied to the events list of all JP1/IM - Views connected to the same JP1/IM - Manager.

To view the information prior to mapping, select the mapped event and open the Event Details window. The Event Details window displays the information prior to mapping. Note that you can use the definition file for extended event attributes to display program-specific extended attributes in the Event Details window. For details, see the following explanations:

Using the definition file for extended event attributes to display program-specific extended attributes

See 4.14 Displaying user-defined event attributes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

About the definition file for extended event attributes

See Definition file for extended event attributes in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

Note the following points when you are mapping program-specific extended attributes:

- In an event search, because the integrated monitoring database or the event database of Event Service is searched, events before mapping are not searched. Therefore, the mapping information is not reflected in the search results. To search for mapping-target events, use **Extended attribute** in the Event Search Conditions window to specify the information of the program-specific extended attribute you want to map.
- The related events displayed in the Related Events window are the result of an event search, and therefore do not reflect the mapping information.
- If you select an event to which a program-specific extended attribute is mapped and then click the **Read From Selected Event** button in the Event Search Conditions window, for example, the attribute of the display item at the mapping destination and the value of the program-specific extended attribute are not input into the condition list.

### 6.9.3 Adding a user-defined extended attribute to JP1 events that match a condition

This subsection explains how to add user-defined information as an extended attribute to JP1 events by using the additional extended attribute settings file of JP1/Base.

For details about the function, see 4.12 Adding program-specific attributes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

1. Define the event attribute to be added to the additional extended attribute settings file of JP1/Base.

In the additional extended attribute settings file, define the condition for adding the attribute and the extended attribute to be added when the condition is satisfied.

In the event filter of JP1/Base, specify the specification format for attribute addition conditions.

For the first seven bytes of an extended attribute name, specify a name that begins with JP1ADD .

For details about the additional extended attribute settings file, see the JP1/Base User's Guide.

Example of content to be specified in the additional extended attribute settings file:

```
# Event : Extended attribute adding setting
add
filter
# input Event-filter
B.ID IN 111
end-filter
# input Extended-attribute
E.JP1ADD_SYSTEMNAME SystemA
end-add
```

2. Start JP1/Base or execute the jevextreload command.

```
jevextreload [-h event-server-name] {-recv | -send}
```

For details about the additional extended attribute settings file and the jevextreload command, see the *JP1/Base User's Guide*.

### 6.9.4 Changing the severity level of JP1 events

When you are using the integrated monitoring database, you can change the severity level of an event by setting up the severity changing function.

For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about how to set up the severity changing function, see 5.13 Setting the severity changing function in the JP1/Integrated Management 2 - Manager Configuration Guide.

The following shows how to change the severity level of an event.

# (1) Setting a severity change definition in the Severity Change Definition Settings window

To set a severity change definition in the Severity Change Definition Settings window:

1. Make sure that the severity changing function is enabled for the event.

Check whether the function is enabled by executing the <code>jcoimdef</code> command with the <code>-chsev</code> option specified. If it is not enabled, use the <code>jcoimdef</code> command to enable it. By default, the function is not enabled. After enabling the severity changing function, restart JP1/IM - Manager. For details about the <code>jcoimdef</code> command, see <code>jcoimdef</code> Chapter 1. Commands of the manual <code>JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.</code>

2. In the Event Console window, select **Options**, and then **Severity Change Definitions**.

The View Severity Change Definitions window opens.

3. Click the **Add**, **Edit**, or **Delete** button according to your needs.

If you click the Add button:

The Severity Change Definition Settings window opens. You can set a new severity change definition.

If you click the **Edit** button:

The Severity Change Definition Settings window opens. You can edit the selected severity change definition.

If you click the **Copy** button:

The selected severity change definition is copied and added to the View Severity Change Definitions window. Copy is added to the beginning of the copied severity change definition.

If you click the **Delete** button:

The selected severity change definition is deleted.

In this case, skip step 4.

4. In the Severity Change Definition Settings window, set the severity.

Set an event condition for which you want to change the severity. Then, select a new severity level from **New severity level**, and then click the **OK** button.

- 5. In the View Severity Change Definitions window, click the **Apply** button to enable the severity change definition. In the View Severity Change Definitions window, select the severity change definition that was set in the Severity Change Definition Settings window, and then select the **Apply** check box to enable the severity change definition. If you want to set multiple events, repeat steps 3 through 5.
- 6. A confirmation message appears. To apply the settings, click **Yes**. The severity change definition you have set takes effect.

### (2) Setting a severity change definition in the severity changing definition file

To set a severity change definition in the severity changing definition file:

1. Make sure that the severity changing function is enabled for the event.

Check whether the function is enabled by executing the <code>jcoimdef</code> command with the <code>-chsev</code> option specified. If it is not enabled, use the <code>jcoimdef</code> command to enable it. By default, the function is not enabled. After enabling the severity changing function, restart JP1/IM - Manager. For details about the <code>jcoimdef</code> command, see <code>jcoimdef</code> Chapter 1. Commands of the manual <code>JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.</code>

2. Define the severity level change for the event in the severity changing definition file.

Create a severity change definition for each system. You can change the severity level to any of the following: Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debug.

For details about the severity changing definition file, see *Severity changing definition file (jcochsev.conf)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

Specification example for the severity changing definition file

DESC\_VERSION=2
def severity-change-1

```
cmt comment
define enable
cnd
B.ID IN 100 200
E.SEVERITY IN Warning
B.SOURCESERVER IN hostA hostB hostC
end-cnd
sev Emergency
end-def
```

3. Execute the jco spmd reload command or restart JP1/IM - Manager.

If you changed the severity changing function from Disabled to Enabled in step 1, you need to restart JP1/IM - Manager.

For details about the <code>jco\_spmd\_reload</code> command, see <code>jco\_spmd\_reload</code> in Chapter 1. Commands of the manual <code>JP1/Integrated Management 2 - Manager Command</code>, <code>Definition File and API Reference</code>.

The severity of the JP1 event after the change has been applied is displayed under **Severity** in the events list. The severity of the JP1 event before the change is displayed under **Original severity level** in the events list. Additionally, for the JP1 event whose severity was changed, an icon is displayed under **New severity level** in the events list.

Event Base Service changes the severity of the JP1 events received from the Event Service instance on the manager, and registers the new severity level in the integrated monitoring database. During this process, the content of Event Service's event database is not changed.

A mapping definition is sometimes used to change severity. By using a mapping definition, you can display a different attribute under **Severity** in the events list.

# (3) Adding a severity change definition by using events that occur during operations

During system operations, you can select an event you want to change, and add conditions for the severity change definition in the Add Severity Change Definition Settings window.

If you select an event and then add a definition, the definition is registered at the top of the definitions displayed in the View Severity Change Definitions window, and that definition takes priority.

To set the severity level of events in the Add Severity Change Definition Settings window:

- 1. In the Event Console window, select an event whose severity you want to change, right-click the mouse, and from the popup menu that opens, choose **Add Severity Change Definition Settings**.
  - The Add Severity Change Definition Settings window opens.
- 2. In the Add Severity Change Definition Settings window, change the severity.
  Set the event conditions for which the severity is to be changed, and from New severity level, select a new severity level.
- 3. Click the **OK** button.

The added severity change definition is applied to the View Severity Change Definitions window. An icon is displayed in the **Type** column of the severity change definition that was added during operations.

# (4) Converting an added severity change definition to a regular severity change definition

To convert a severity change definition that was added during system operations to a regular severity change definition:

- 1. From the menu in the Event Console window, select **Options** and then **Severity Change Definitions** to display the View Severity Change Definitions window.
- 2. In the View Severity Change Definitions window, from View Severity Change Definitions, select the added severity change definition (for which an icon is displayed in the Type column) that you want to convert to a regular severity change definition.
- 3. Click the **Type** button.
- 4. A confirmation message appears. To apply the settings, click **Yes**.

  The added severity change definition that you selected is converted to a regular severity change definition.
- 5. In the View Severity Change Definitions window, click the **Apply** button.
- 6. A confirmation message appears. To apply the settings, click **Yes**. The severity change definition that you added takes effect.

### 6.9.5 Changing the message displayed for a JP1 event

When you use the integrated monitoring database, you can change the messages to be displayed for events by setting the display message change function.

You can configure the display message change function by using the GUI, or you can define the function in the display message change definition file and execute the jco spmd reload command to apply the settings.



#### **Important**

Do not set a severity change definition in the GUI and in the definition file at the same time. If you modify the definition file by using a text editor or another method while the definition is being modified in the GUI, data in the definition file might become different from that in memory.

For details about how to set up the integrated monitoring database, see 1.4.2 Setting up the integrated monitoring database (for Windows) or 2.4.2 Setting up the integrated monitoring database (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about how to configure the display message change function, see 5.14 Setting the display message change function in the JP1/Integrated Management 2 - Manager Configuration Guide.

The following shows how to change the messages to be displayed for events.

### (1) Setting a display message change definition in the Display Message Change Definition Settings window

To set a display message change definition in the Display Message Change Definition Settings window:

1. Make sure that the display message change function is enabled for the event.

In the Event Console window, under **Options**, check whether **Display Message Change Definitions** is displayed. If it is not displayed, enabling the integrated monitoring database will enable the display message change function. When you enable the display message change function, restart JP1/IM - Manager.

In addition, if the IM database was not updated using the jimdbupdate command after an upgrade of JP1/IM - Manager from version 10-50 or earlier, update the IM database. For details about the jimdbupdate command, see *jimdbupdate* in *Chapter 1. Commands* of the manual *JP1/Integrated Management 2 - Manager Command*, *Definition File and API Reference*.

- 2. In the Event Console window, choose **Options** and then **Display Message Change Definitions**. The Display Message Change Definitions window opens.
- 3. Click the **Add**, **Edit**, **Copy**, or **Delete** button according to your needs.
  - If you click the Add button:
     The Display Message Change Definition Settings window opens. You can set a new display message change definition.
  - If you click the Edit button:
     The Display Message Change Definition Settings window opens. You can edit the selected display message change definition.
  - If you click the **Copy** button:

    The selected display message change definition is copied and added to the Display Message Change Definitions window. Copy is added to the beginning of the copied display message change definition.
  - If you click the **Delete** button:

    The selected display message change definition is deleted.

    In this case, step 4 is skipped.
- 4. In the Display Message Change Definition Settings window, set the message.

Set an event condition for which you want to change the message. Then, set a new message format in **Message after the change**. If you specify the facility for converting the event information to inherit, you can standardize the message character count and the number display format so that they are easy to read. For details about the facility for converting the event information to inherit, see *Display message change definition file (jcochmsg.conf)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*. After setting, click the **OK** button.

- 5. In the Display Message Change Definitions window, click the **Apply** button to enable the setting. In the Display Message Change Definition Settings window, select the display message change definition that was set in the Display Message Change Definitions window, and then select the **Apply** check box to enable it. If you want to set multiple events, repeat steps 3 through 5.
- A confirmation message appears. To apply the settings, click Yes.
   The display message change definition that you set takes effect.

### (2) Setting a display message change definition in the display message change definition file

To set a display message change definition from the display message change definition file:

1. Make sure that the display message change function is enabled for the event.

In the Event Console window, under **Options**, check whether **Display Message Change Definitions** is displayed. If it is not displayed, enabling the integrated monitoring database will enable the display message change function. When you enable the display message change function, restart JP1/IM - Manager.

In addition, if the IM database was not updated using the jimdbupdate command after an upgrade of JP1/IM - Manager from version 10-50 or earlier, update the IM database. For details about the jimdbupdate command, see *jimdbupdate* in *Chapter 1. Commands* of the manual *JP1/Integrated Management 2 - Manager Command*, *Definition File and API Reference*.

2. Define the display message change for the event in the display message change definition file.

Define a display message change definition for each system.

In the display message change definition, specify the event condition for the JP1 event whose display message you want to change, and a new message format.

If you use the facility for converting the event information to inherit, you can standardize the message character count and the number display format so that they can be displayed in an easy-to-read manner in the events list. For details about the display message change definition file, see *Display message change definition file* (*jcochmsg.conf*) in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*.

Specification example for the display message change definition file

```
DESC_VERSION=1

def display-message-change-1

cmt comment-1

define enable

addflag false

cnd

B.ID IN 100 200

E.SEVERITY IN Warning

B.SOURCESERVER IN hostA hostB hostC

end-cnd

msg $EVDATE $EVTIME An error occurred in the database server end-def
```

3. Execute the jco spmd reload command or restart JP1/IM - Manager.

For details about the jco\_spmd\_reload command, see *jco\_spmd\_reload* in *Chapter 1*. Commands of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

The message for the JP1 event after the change has been applied is displayed under **Changed display message** in the events list. The message for the JP1 event before the change was applied is displayed under **Message** in the events list. Additionally, for the JP1 event whose message was changed, the icon is displayed under **New display message**.

Event Base Service changes the messages for the JP1 events received from the Event Service instance on the manager, stores the new messages in **Changed display message**, and registers them in the integrated monitoring database. During this process, the original messages are not changed.

# (3) Adding a display message change definition by using events that occur during operations

During system operations, you can select an event you wish to change, and add a condition for a display message change definition from the Add Display Message Change Definitions window.

If you select an event and then add a definition, the definition is registered at the top of the definitions displayed in the Display Message Change Definitions window, and that definition takes priority.

To add a display message change definition in the Add Display Message Change Definitions window:

In the Event Console window, select an event whose display message you want to change, right-click the mouse, and from the popup menu that opens, choose **Display Message Change Definitions**.
 The Add Display Message Change Definitions window opens.

2. In the Add Display Message Change Definitions window, change the display message.

Set the event conditions for changing the message. Then, set a new message format in **Message after the change**. If you specify the facility for converting the event information to inherit, you can standardize the message character count and the number display format so that they are easy to read. For details about the facility for converting the event information to inherit, see *Display message change definition file (jcochmsg.conf)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*. After setting, click the **OK** button.

3. Click the **OK** button.

The added display message change definition is applied to the Display Message Change Definitions window. An icon is displayed in the **Type** column of the display message change definition that was added during operations.

### (4) Converting an added display message change definition to a regular display message change definition

To convert a display message change definition that was added during system operations to a regular display message change definition:

- 1. From the menu in the Event Console window, select **Options** and then **Display message change definitions** to display the Display Message Change Definitions window.
- 2. In the Display Message Change Definitions window, from **Display Message Change Definitions**, select the added display message change definition (for which an icon is displayed in the **Type** column) that you want to convert to a regular display message change definition.
- 3. Click the **Type** button.
- 4. A confirmation message appears. To change the type, click Yes.
  The added display message change definition that you selected is converted to a regular display message change definition.
- 5. In the Display Message Change Definitions window, click the **Apply** button.
- A confirmation message appears. To apply the settings, click Yes.
   The display message change definition that you added takes effect.

#### 6.10 Taking actions for the generation of a large number of events

The following two methods are available for handling the occurrence of a large number of JP1 events.

Suppressing event forwarding from an agent (JP1/Base function for suppressing event forwarding)

You can suppress event forwarding from an agent on which a large number of JP1 events have occurred and stop monitoring of the agent.

Consolidating the events on the manager (JP1/IM - Manager's repeated event monitoring suppression function)

By setting a repeated event condition, you can consolidate and display JP1 events that satisfy a condition in the events list, and you can suppress execution of automatic actions.

The next subsection explains the general procedures for handling a large number of events by using each of these methods.

We recommend that you establish an operational procedure to determine beforehand the method to use for handling the occurrence of a large number of JP1 events.

For an overview of suppressing monitoring of a large number of events, see 4.5.1 Mechanism of the suppression of monitoring of a large number of events in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

Also review the settings for JP1 events to be forwarded from JP1/Base to the manager, as well as the settings for JP1 event filtering on the manager. For details about the settings for JP1 events forwarded from JP1/Base, see 12.1.2 Considerations for forwarding JP1 events to managers in the JP1/Integrated Management 2 - Manager Overview and System Design Guide. For details about the settings for event filtering on the manager, see 12.1.3 Considerations for filtering JP1 events in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

Before you can handle a large number of events by using the method that consolidates events on the manager, you need to build the integrated monitoring database, enable it, and enable suppression of repeated event monitoring on the manager. For details, see 5.3 Setting monitoring of repeated events to be prevented in the JP1/Integrated Management 2 - Manager Configuration Guide.

### 6.10.1 General procedures and preparation for handling occurrence a large number of events

When a large number of events are detected, you can suppress event forwarding by the applicable agent, or you can set a repeated event condition to consolidate the events, based on the events displayed in the events list of the Event Console window. If a large number of events have occurred in the past or are expected to occur again, you can prepare for the large number of events by setting a threshold in advance for automatically suppressing event forwarding or for setting a repeated event condition.

The following figures show the general procedure for each of these processes.

Figure 6–9: General procedure for handling detection of a large number of events

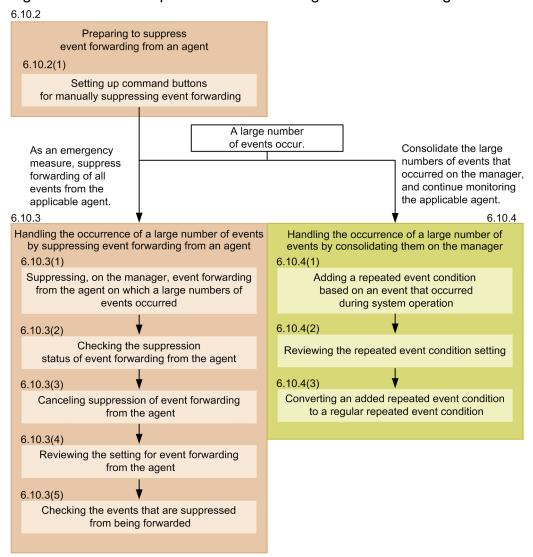
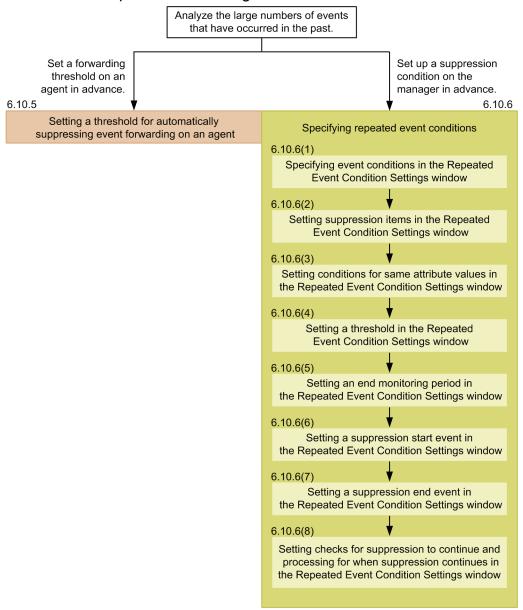


Figure 6–10: General procedure when a large number of events have occurred in the past or are expected to occur again



### 6.10.2 Preparing to suppress event forwarding from an agent

As part of the preparation to suppress event forwarding from an agent, set up command buttons to suppress event forwarding or cancel suppression. By setting up command buttons, you can reduce the number of command inputs required of the administrator when a large number of events need to be handled, thereby preventing operational mistakes.

The following describes the command buttons that can be set up and what each one does.

#### All supp button

- This is used when a large number of events occur on an agent.
- Before the command can be executed, a confirmation message appears, and the administrator must confirm
  execution.

• With regard to selecting an agent, the administrator selects a single event in the Console window of JP1/IM - View, and the host name is automatically extracted from it.

#### Cns supp button

- Operation is based on a trigger such as completion of a corrective action following an error, after which monitoring (forwarding) of events from the applicable agent resumes.
- Before the command can be executed, a confirmation message appears, and the administrator must confirm execution.
- With regard to selecting an agent, the administrator selects a single event in the Console window of JP1/IM View, and the host name is automatically extracted from it.

#### Chk supp button

• This displays for confirmation the forwarding suppression status of a large number of events.

The following conditions are required for command execution:

- The JP1 user who executes the command from JP1/IM View is registered in the authentication server.
- The JP1 user who executes the command from JP1/IM View has either of the following JP1 permissions:
  - JP1 Console Admin
  - JP1 Console Operator
- The system configuration is defined using JP1/Base configuration management.
- JP1 users and OS users are mapped on the manager host.
- OS users mapped with JP1 users have execute permissions for the <code>jevagtfw</code> command on the manager host. For details about the <code>jevagtfw</code> command, see the chapter on commands in the <code>JP1/Base User's Guide</code>.

For details about how to set up a command execution environment, see 1.15 Setting up a command execution environment (for Windows) or 2.14 Setting up a command execution environment (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

# (1) Setting up command buttons for manually suppressing event forwarding

- 1. Terminate all instances of JP1/IM View that are connected to JP1/IM Manager.
- 2. Execute the jcoimdef command to enable the command buttons.

Command specification example

```
jcoimdef -i -cmdbtn ON
```

In the command execution result, confirm that S\_CMDBTN is ON. Since the -i option is specified, command buttons are enabled immediately after command execution.

3. Set up the commands to be used as command buttons.

Create a command button definition file.

Definition example (for Windows)

```
def
usr name-of-JP1-user-who-uses-the-command-button
btn All supp
```

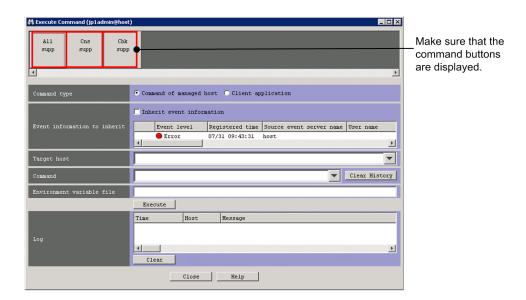
```
cmt Suppresses forwarding of all events from the applicable agent
 cmdtype agent
 inev true
 hst manager-host-name
 cmd "Base-path\bin\jevagtfw.exe" -s -o all $EVHOST
 qui false
 preview true
 end-btn
btn Cns supp
 cmt Cancels suppression of forwarding of all events from the applicable
agent
 cmdtype agent
 inev true
 hst manager-host-name
 cmd "Base-path\bin\jevagtfw.exe" -r -f $EVHOST
 qui false
 preview true
 end-btn
btn Chk supp
 cmt Confirms event forwarding suppression status
 cmdtype agent
 inev false
 hst manager-host-name
 cmd "Base-path\bin\jevagtfw.exe" -1
 qui false
 preview true
 end-btn
end-def
```

For \$EVHOST in the definition example, the event-issuing host name of the event selected in the Console window of JP1/IM - View is assigned.

For UNIX, replace Base-path\bin\jevagtfw.exe with /opt/jplbase/bin/jevagtfw.

- 4. Start the Console window of JP1/IM View.
- 5. Confirm that the command buttons that were set in the Execute Command window are displayed.

  To display the Execute Command window, click the **Execute Command** button in the Event Console window.



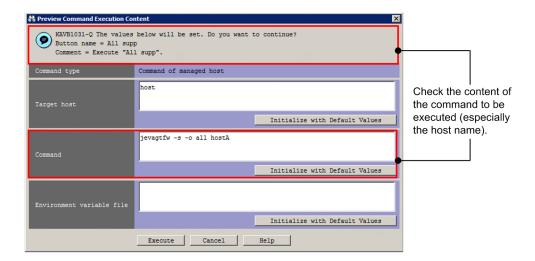
# 6.10.3 Handling the occurrence of a large number of events by suppressing event forwarding from an agent

This subsection explains how to use the command buttons that you set up in 6.10.2 Preparing to suppress event forwarding from an agent to handle the occurrence of a large number of events by suppressing event forwarding from an agent.

### (1) Suppressing, on the manager, event forwarding from the agent on which a large numbers of events occurred

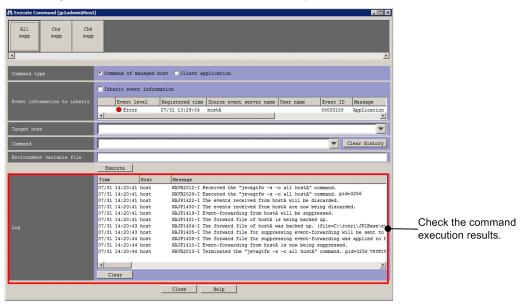
Using a command button that was set up, you can suppress, on the manager, event forwarding from an agent.

- 1. In the events list in the Event Console window, make sure that a large number of JP1 events are being output from a specific agent.
- 2. Select the JP1 events being forwarded from the agent that you wish to suppress.
- 3. Click the Execute Command button to display the Execute Command window.
- 4. Click the **All supp** command button that was set up in 6.10.2 Preparing to suppress event forwarding from an agent. The Preview Command Execution Content window opens. Check the content of the command to be executed (especially the name of the host to be suppressed).



5. In the Preview Command Execution Content window, click the **Execute** button to execute the <code>jevagtfw</code> command. Event forwarding from the specified agent is suppressed.

In the Log area of the Execute Command window, you can check the execution result of the command.



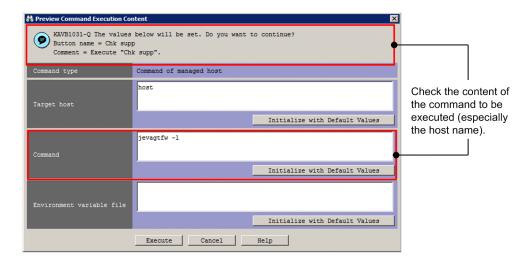
6. Identify the reason why a large number of events are occurring, and then solve the problem.

While event forwarding is suppressed, investigate the agent that is outputting the events, and then solve the problem.

### (2) Checking the suppression status of event forwarding from the agent

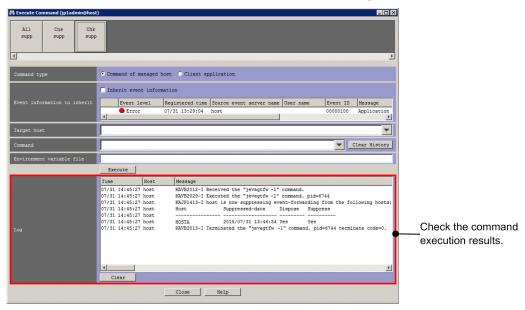
Using a command button that was set up, you can, on the manager, check the suppression status of event forwarding from an agent.

- 1. In the Event Console window, click the command button. The Execute Command window opens.
- 2. Click the **Chk supp** command button that was set up in 6.10.2 Preparing to suppress event forwarding from an agent. The Preview Command Execution Content window opens. Check the content of the command to be executed.



3. In the Preview Command Execution Content window, click the **Execute** button to execute the <code>jevagtfw</code> command. In the **Log** area of the Execute Command window, check the suppression status.

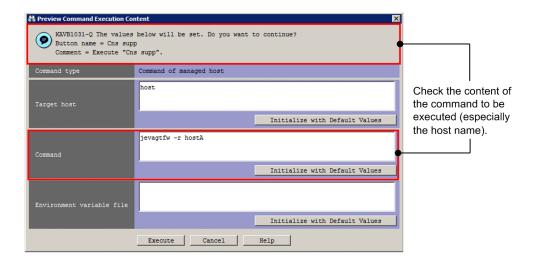
You can check the execution result of the command in the Log area of the Execute Command window.



### (3) Canceling suppression of event forwarding from the agent

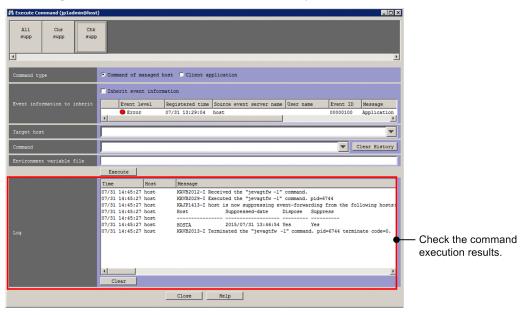
Using a command button that was set up, you can, on the manager, cancel suppression of event forwarding from an agent.

- 1. In the Event Console window, among the JP1 events whose forwarding from the agent was suppressed, select those for which you want to cancel suppression.
- 2. Click the Execute Command button to display the Execute Command window.
- 3. Click the **Cns supp** command button that was set up in 6.10.2 Preparing to suppress event forwarding from an agent. The Preview Command Execution Content window opens. Check the content of the command to be executed (especially the name of the host to be released from suppression).

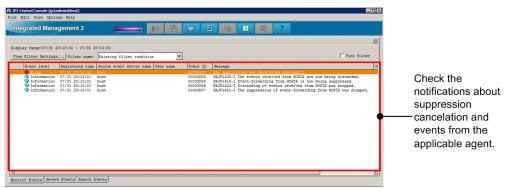


4. In the Preview Command Execution Content window, click the **Execute** button to execute the <code>jevagtfw</code> command. Suppression of event forwarding from the specified agent is canceled.

In the Log area of the Execute Command window, you can check the execution result of the command.



5. Also in the Event Console window, confirm that suppression has been canceled and that events are being forwarded from the specified agent.



#### (4) Reviewing the setting for event forwarding from the agent

As a measure to prevent a large number of events from recurring, you can analyze the situation under which the recent large number of events occurred and set a threshold for suppressing automatic forwarding of events.

Analyze the situation under which the events occurred from the following viewpoints:

- If, the next time there is a large number of events, they need to be filtered, what kind of filtering condition is appropriate?
- How many events occurred within a set time period (for example, 60 seconds)?
- Are large numbers of events occurring continuously?

Based on the results of analyses carried out from these viewpoints, set the event forwarding condition (which is equivalent to the threshold for frequently occurring events) in the forwarding settings file of JP1/Base on the agent. For details about the setting procedure, see 6.10.5 Setting a threshold for automatically suppressing event forwarding on an agent.

#### (5) Checking the events that are suppressed from being forwarded

When you suppress event forwarding from an agent on which a large number of events have occurred, important events that need to be forwarded from the agent to the manager might not be forwarded. Therefore, search the relevant agent's event database from JP1/IM - View and check the events that occurred while forwarding was suppressed. For details about how to search for JP1 events, see 6.8 Searching for JP1 events.

### 6.10.4 Handling the occurrence of a large number of events by consolidating them on the manager

By setting a repeated event condition based on events that occur during system operation, you can consolidate and display JP1 events that satisfy a condition in the events list, and you can suppress execution of automatic actions. This subsection explains how to use this method for handling the occurrence of a large number of events.

Note that changing the response status requires <code>JP1\_Console\_Admin</code> permissions or <code>JP1\_Console\_Operator</code> permissions.

### (1) Adding a repeated event condition based on an event that occurred during system operation

In the Repeated Event Condition Settings window, you can suppress repeated event monitoring using the conditions of a repeated event that has occurred during system operation. Conditions added in this manner are called *added repeated* event conditions.

- 1. In the events list in the Event Console window, select the JP1 event whose monitoring you want to suppress.
- 2. From the View menu in the Event Console window, choose Suppress by Repeated Event Conditions to display the Repeated Event Condition Settings window. Alternatively, right-click and from the popup menu that appears, choose Suppress by Repeated Event Conditions.
  - The Repeated Event Condition Settings window appears, with the attributes of the JP1 event you selected in step 1 already filled in as the repeated event conditions.
  - You can change what attributes are automatically filled in by editing the auto-input definition file for the repeated event condition (event\_storm\_auto\_list.conf). For details about the auto-input display item definition

file for the repeated event condition, see *Auto-input definition file for the repeated event condition* (event\_storm\_auto\_list.conf) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

- 3. Edit the items in the Repeated Event Condition Settings window as needed.
- 4. Click the **OK** button.

The repeated event condition that you added appears in the List of Repeated Event Conditions window. The icon appears in the **Type** column for repeated event conditions added during system operation.

Events that satisfy the set condition are excluded from repeated event monitoring. For details about how to start suppression of monitoring, see 4.5.4 When the suppression of monitoring of a large number of events starts in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

#### (2) Reviewing the repeated event condition setting

Review the repeated event condition that is specified. For details, see 6.10.6 Specifying repeated event conditions.

### (3) Converting an added repeated event condition to a regular repeated event condition

To convert a repeated event condition that was added during system operations to a regular repeated event condition:

- 1. In the Event Console window, from the **Options** menu, choose **Repeated Event Condition Settings** to display the Repeated Event Condition Settings window.
- 2. In the List of repeated event conditions area in the List of Repeated Event Conditions window, select the added repeated event condition (a condition with the icon in the **Type** column) that you want to convert to a regular repeated event condition.
- 3. Click Type.
- 4. A confirmation message appears. To apply the settings, click **Yes**.

  The selected repeated event condition that you added is converted to a regular repeated event condition.
- 5. In the List of Repeated Event Conditions window, click Apply.
- A confirmation message appears. To apply the change, click Yes.
   The repeated event condition that you added takes effect.

# 6.10.5 Setting a threshold for automatically suppressing event forwarding on an agent

To automatically suppress event forwarding by setting a threshold in advance, in case a large number of events occur on an agent:

1. Edit the forwarding setting file on the agent on which you want to automatically suppress event forwarding. In the forwarding setting file of JP1/Base on the agent, set the conditions for suppressing event forwarding (which are equivalent to the threshold of frequently occurring events).

The format of the condition for suppressing event forwarding is as follows:

```
suppress ID unit-of-time threshold-value confirmation-count [destination(o
ptional)]
event-filter
end-suppress
```

For details about the conditions for suppressing event forwarding, see the description about the forwarding settings file (forward) in the *JP1/Base User's Guide*.

2. Enable the changes in the forwarding setting file.

Reload the forwarding setting file or restart the event service to enable the new settings.

If the event occurrence status matches the set conditions for suppressing event forwarding, event forwarding is suppressed.

While event forwarding is suppressed, investigate the agent that is outputting the large number of events, and resolve the problem.

#### 6.10.6 Specifying repeated event conditions

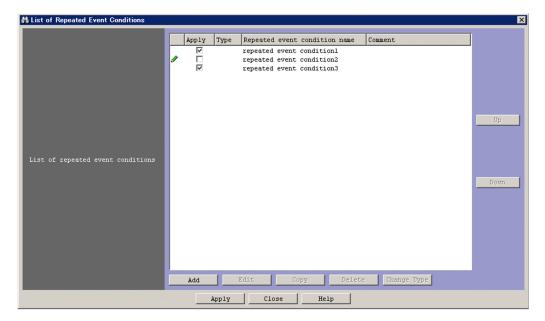
By specifying repeated event conditions, you can consolidate events that meet the specified conditions on the manager, display them in the events list, and suppress automatic action execution.

You can specify repeated event conditions in the Repeated Event Condition Settings window or List of Repeated Event Conditions window. For details about each window, see 3.17 Repeated Event Condition Settings window and 3.19 List of Repeated Event Conditions window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

To specify repeated event conditions, the JP1 user who performs operations from JP1/IM - View must have JP1 Console Admin permissions.

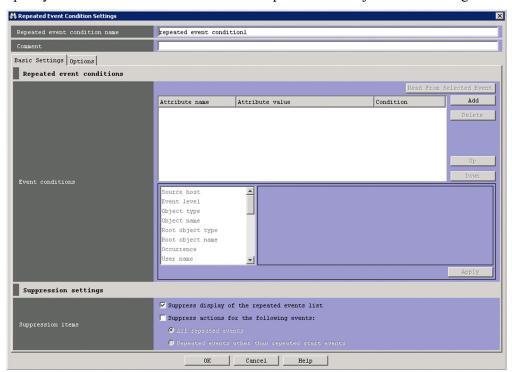
To specify repeated event conditions:

- 1. In the Event Console window, from the **Options** menu, choose **Repeated Event Condition Settings**. The List of Repeated Event Conditions window opens.
- 2. Use one of the following methods to display the Repeated Event Condition Settings window:
  - To specify a new repeated event condition, in the List of Repeated Event Conditions window, click the **Add** button.
  - To edit an existing repeated event condition, in the List of Repeated Event Conditions window, select a displayed repeated event condition and click the **Edit** button.



The Repeated Event Condition Settings window opens.

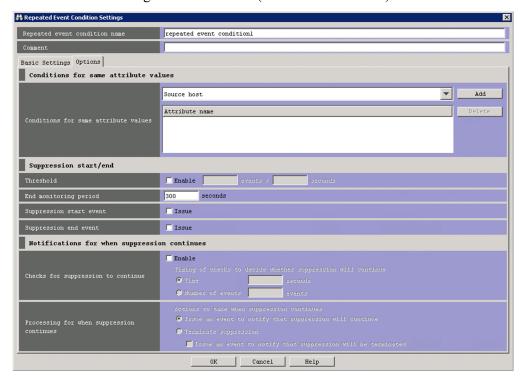
3. On the **Basic Settings** page of the Repeated Event Condition Settings window, set **Event conditions**. (Optional) Specify the attribute value with which to compare events subject to monitoring that are acquired by the manager.



For details about the specification procedure, see 6.10.6(1) Specifying event conditions in the Repeated Event Condition Settings window.

- 4. On the **Basic Settings** page of the Repeated Event Condition Settings window, set **Suppression items**. (Required) Set the items to be suppressed for JP1 events that match the condition.
  - For details about the specification procedure, see 6.10.6(2) Setting suppression items in the Repeated Event Condition Settings window.
- 5. On the **Options** page of the Repeated Event Condition Settings window, specify **Conditions for same attribute** values. (Optional)
- 6. System Monitoring from Central Console

Specify attribute values when you want to group all repeated events that match the repeated event condition by attribute and suppress them. For example, you can group all events whose severity level is Warning or lower by each attribute of the registered host name (B. SOURCESERVER).



For details about the specification procedure, see 6.10.6(3) Setting conditions for same attribute values in the Repeated Event Condition Settings window.

6. On the **Options** page of the Repeated Event Condition Settings window, specify **Threshold**. (Optional) Specify the threshold for starting to suppress the display of repeated events and the execution of automatic actions. If no threshold is specified, suppression starts when an event is acquired that matches the repeated event condition is acquired.

For details about the specification procedure, see 6.10.6(4) Setting a threshold in the Repeated Event Condition Settings window.

- 7. On the **Options** page of the Repeated Event Condition Settings window, specify **End monitoring period**. (Required) Specify the period (end monitoring period) for determining when a large number of events is no longer occurring. For details about the specification procedure, see 6.10.6(5) Setting an end monitoring period in the Repeated Event Condition Settings window.
- 8. On the **Options** page of the Repeated Event Condition Settings window, specify **Suppression start event**. (Optional) Specify a suppression start event if you want to issue an event that indicates that suppression of a large number of events has started.

For details about the specification procedure, see 6.10.6(6) Setting a suppression start event in the Repeated Event Condition Settings window.

9. On the Options page of the Repeated Event Condition Settings window, specify Suppression end event. (Optional) Specify a suppression end event when you want to issue an event that indicates that suppression of a large number of events has ended.

For details about the specification procedure, see 6.10.6(7) Setting a suppression end event in the Repeated Event Condition Settings window.

10. On the **Options** page of the Repeated Event Condition Settings window, specify **Checks for suppression to continue** and **Processing for when suppression continues**. (Optional)

Specify these values if you want to determine whether suppression of repeated event monitoring is continuing at a specified time interval (seconds) or after a specified number of events, if you want to issue a JP1 event for notification if suppression is continuing, or if you want to terminate suppression.

For details about the specification procedure, see 6.10.6(8) Setting checks for suppression to continue and processing for when suppression continues in the Repeated Event Condition Settings window.

- 11. In the Repeated Event Condition Settings window, click the **OK** button.
  - The repeated event condition is applied to the List of Repeated Event Conditions window.
- 12. In the List of Repeated Event Conditions window, select the **Apply** check box for the repeated event condition that was set.
- 13. In the List of Repeated Event Conditions window, click the **Apply** button.
- 14. A confirmation message appears. To apply the settings, click **Yes**. The repeated event condition takes effect.

### (1) Specifying event conditions in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Basic Settings** page of the Repeated Event Condition Settings window.
- 2. Specify event conditions by performing the necessary operations from among the following:
  - To add a new event condition, click the Add button.
     An event condition whose Attribute name, Attribute value, and Condition are blank is added to the list of event conditions.
  - To edit an event condition, select the event condition you want to edit from the list of event conditions. Then, select **Attribute name**, **Attribute value**, and **Condition** from the event condition editing area and click the **Apply** button.
  - To delete an event condition, select the event condition you want to delete from the list of event conditions and then click the **Delete** button.
  - To set as a condition an attribute value that is the same as the event selected in the Event Console window, click the **Read From Selected Event** button.
    - The condition that was set before the **Read From Selected Event** button was clicked is deleted and overwritten with the attribute value that is the same as the event selected in the Event Console window.

### (2) Setting suppression items in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Basic Settings** page of the Repeated Event Condition Settings window.
- 2. Select one or both of the following check boxes:
  - Suppress display of the repeated events list
  - · Suppress actions of the repeated events

3. If you selected **Suppress actions of the repeated events** in step 2, specify the range of events for which you want to suppress actions.

Select one of the following:

• All repeated events

Actions are suppressed for all repeated events that match the repeated event conditions.

Repeated events other than repeated start events

Actions are suppressed for all repeated events that match the repeated event conditions, except for repeated start events (which triggered suppression).

### (3) Setting conditions for same attribute values in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. Specify conditions for same attribute values by performing whichever of the following operations is necessary:
  - To add a condition for same attribute values, from the **Conditions for same attribute values** drop-down list, select an attribute name and click the **Add** button.
  - To delete a condition for same attribute values, from the **Attribute name** list in **Conditions for same attribute** values, select an attribute name and click the **Delete** button.

#### (4) Setting a threshold in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. For **Threshold**, select the **Enable** check box.
- 3. Set a threshold.

For example, if the threshold is set to 10 events in 3 seconds (10 events / 3 seconds), suppression starts if ten or more events were acquired during the three seconds prior to the arrival time of the last event acquired by JP1/IM - Manager.

# (5) Setting an end monitoring period in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. Specify the end monitoring period.

The concept of end monitoring period differs depending on whether a threshold is set in 6.10.6(4) Setting a threshold in the Repeated Event Condition Settings window. The following describes the difference between setting and not setting a threshold when the end monitoring period is set to 300 seconds.

If a threshold is set:

A large number of events is judged to no longer be occurring when the threshold that was set is not exceeded for 300 seconds prior to the arrival time of the last event acquired by JP1/IM - Manager.

If a threshold is not set:

A large number of events is judged to no longer be occurring when no repeated event matching the repeated event condition is acquired during the 300 seconds prior to the arrival time of the last event acquired by JP1/IM - Manager.

### (6) Setting a suppression start event in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. For Suppression start event, select the Issue check box.

### (7) Setting a suppression end event in the Repeated Event Condition Settings window

The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. For **Suppression end event**, select the **Issue** check box.

# (8) Setting checks for suppression to continue and processing for when suppression continues in the Repeated Event Condition Settings window

Checks for suppression to continue and Processing for when suppression continues must be specified together. The specification procedure is as follows:

- 1. Display the **Options** page of the Repeated Event Condition Settings window.
- 2. In Checks for suppression to continue, select the Enable check box.
- 3. In Checks for suppression to continue, specify the trigger for determining whether suppression is continuing. Select either Time or Number of events. For details about the differences between these settings, see 4.4.7 Issuing notifications when the suppression of repeated-event display continues in the JP1/Integrated Management 2 Manager Overview and System Design Guide.
- 4. In **Processing for when suppression continues**, select the processing that is to take place when suppression continues.

Select either Issue an event to notify that suppression will continue or Terminate suppression.

If you selected **Terminate suppression**, you can select the **Issue an event to notify that suppression will be terminated** check box to issue a JP1 event that indicates that suppression has been terminated.

### 6.10.7 Stopping, on the manager, a log file trap that issues a large numbers of events

The procedure described in this subsection shows how to stop a specific log file trap, by using IM Configuration Management on the manager, as an action to take when a large numbers of events are issued by the log file trap. For

details about how to stop a specific log file trap without using IM Configuration Management, see the description about suppressing forwarding of large numbers of events in the *JP1/Base User's Guide*.

Before you can perform the procedure described in this subsection, IM Configuration Management must be used to manage the profile of the agent. For a general description of profile management using IM Configuration Management, see 7.5 Profile management in the JP1/Integrated Management 2 - Manager Overview and System Design Guide. For details about how to set an agent's profile using IM Configuration Management, see 3.5 Setting the profiles in the JP1/Integrated Management 2 - Manager Configuration Guide.

Also, mapping of the event source host must be enabled before you can perform the procedure described below. For details about how to enable mapping of the event source host, see 5.15 Setting event source host mapping in the JP1/Integrated Management 2 - Manager Configuration Guide.

- 1. In the events list in the Event Console window, make sure that a large number of JP1 events issued by a log file trap are being output.
- 2. Display the Event Details window for the relevant JP1 event.
- 3. In the Event Details window, make sure that the event source host name and monitoring name<sup>#</sup> are displayed for **Event attributes**.

#

- In the Event Details window, to display the monitoring name of a log file trap for **Event attributes**, JP1/IM Manager must be version 10-50 or later, and JP1/Base on the agent must be version 10-50 or later.
- 4. Log in to the IM configuration management viewer (IM Configuration Management), and display the IM Configuration Management window.
- 5. Click the **IM Configuration** tab to display the **IM Configuration** page.
- 6. In the tree area, select the event source host name of the log file trap, and then from the **View** menu, select **Display Profiles**.

The Display/Edit Profiles window for the relevant host appears.

- 7. In the tree area, select **JP1/Base**, and then from the **Edit** menu, select **Exclusive Editing Settings**. Exclusive editing of the profile is permitted.
- 8. From **Log File Trapping** in the tree area, select the monitoring name of the log file trap you want to suppress, and then from the **Operation** menu, select **Stop Process**.

A confirmation message is output, asking you whether to stop the log file trap.

9. Click the Yes button.

The log file trap stops.

While the log file trap is stopped, investigate the source application that output the logs, and resolve the problem that caused the log output.

# 6.10.8 Consolidated display when events with the same attributes occur consecutively

When you consolidate the display of repeated events, JP1 events that have the same content and that occur consecutively over a short period of time can be displayed as a single event on the **Monitor Events** page or **Severe Events** page of

the Event Console window. You can configure the consolidated display of repeated events function in the Preferences window.

You cannot use the consolidated display of repeated events function concurrently with the event monitoring suppression function.

You can view detailed information about repeated events and consolidated events. You can also change response statuses similarly to the case in which repeated events are not being monitored. To change a response status, you need <code>JP1\_Console\_Admin permissions</code> or <code>JP1\_Console\_Operator permissions</code>.

For a general description of the consolidated display of repeated events function, see 4.4.10 Suppressing repeated-event display by the consolidated display of repeated events in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

If you want to consolidate JP1 events that do not occur consecutively, or if you want to specify event conditions or certain criteria under which consolidation starts, use repeated event monitoring suppression instead of the consolidated display of repeated events. For details about repeated event monitoring suppression, see 6.10.4 Handling the occurrence of a large number of events by consolidating them on the manager.

#### (1) Setting up the consolidated display of repeated events function

- From the menu in the Event Console window, choose **Options** and then **Preferences**.
   The Preferences window opens.
- 2. In the **Event Attribute** area, click the **Enable** check box beside **Display most significant status**. The **Timeout time** field becomes available.
- 3. Specify the timeout time.

Specify the timeout period for consolidating repeated events.

Event consolidation ends when more than time the specified timeout period has elapsed between the consolidation start event and the arrival of received events.

#### 4. Click OK.

The settings take effect.

Events that have been consolidated into a single event appear as a consolidated event on the **Monitor Events** page and **Severe Events** page of the Event Console window.

Supplementary note:

The consolidated display of repeated events applies to events received after you have configured the feature. Events received before this time are not subject to consolidated display. Event consolidation ends when more than a specified length of time has elapsed between the consolidation start event and the arrival of received events. A maximum of 100 events can be consolidated into a single event.

#### 6.11 Handling JP1 events by linking with other products

This subsection explains the operational procedure in JP1/IM - View for handling JP1 events by linking with other products.

### 6.11.1 Registering JP1 events as incidents in JP1/IM - Service Support (linking with JP1/IM - Service Support)

By linking JP1/IM - Manager with JP1/IM - Service Support, you can register JP1 events displayed in JP1/IM - View as incidents in JP1/Service Support. For details about how to link JP1/IM - Manager with JP1/Service Support, see 10.1.1 Enabling calling the JP1/Service Support window in the JP1/Integrated Management 2 - Manager Configuration Guide.

You can register incidents in JP1/Service Support by displaying the Select the process work board as the registration target window of JP1/Service Support from the following windows:

- Any page in the Event Console window
- Related Events window
- · Event Details window

The following describes how to display the Select the process work board as the registration target window of JP1/ Service Support from each of these windows. The procedure for registering an incident in JP1/Service Support from the Select the process work board as the registration target window is described in the JP1/Service Support Operator's Guide.

Note that registering JP1 events as incidents requires  $\tt JP1\_Console\_Admin$  permission or  $\tt JP1\_Console\_Operator$  permission.

### (1) Displaying JP1/Service Support from pages of the Event Console window

To display JP1/Service Support from pages of the Event Console window:

- 1. In the Event Console window, from the list of JP1 events displayed in the events list, select a JP1 event that you want to register as an incident.
  - Note that although JP1 events registered in other event databases can be displayed in the **Search Events** page, you cannot register these JP1 events as incidents. Only JP1 events registered in the event database of the manager can be registered as incidents.
- Right-click the event and choose Register Incident, or from the View menu, choose Register Incident.
   Your Web browser (Internet Explorer) opens and displays the Select the process work board as the registration target window of JP1/Service Support.

### (2) Displaying JP1/Service Support from the Related Events window

To display JP1/Service Support from the Related Events window:

1. From the JP1 events displayed in the Related Events window, select a JP1 event that you want to register as an incident.

2. Right-click the event and choose Register Incident.

Your Web browser (Internet Explorer) opens and displays the Select the process work board as the registration target window of JP1/Service Support.

#### (3) Displaying JP1/Service Support from the Event Details window

To display JP1/Service Support from the Event Details window:

1. In the Event Details window, click the **Register Incident** button.

Your Web browser (Internet Explorer) opens and displays the Select the process work board as the registration target window of JP1/Service Support.

### 6.11.2 Displaying operating procedures for JP1 events (linking with JP1/Navigation Platform)

By linking JP1/IM - Manager with JP1/Navigation Platform, you can access the descriptions of operating procedures provided by JP1/Navigation Platform directly from a JP1 event in JP1/IM - View. This process uses single sign-on. For details about how to link JP1/IM - Manager with JP1/Navigation Platform, see 10.2 Linking to JP1/Navigation Platform in the JP1/Integrated Management 2 - Manager Configuration Guide.

To display the window of JP1/Navigation Platform where work tasks are executed from the Event Details window using single sign-on:

1. In the Event Details window, click a link in the Guide area.

Your Web browser (Internet Explorer) opens and displays the operating procedure that corresponds to the selected JP1 event in the window of JP1/Navigation Platform where work tasks are executed.

# 6.11.3 Checking the rule startup request status and making a rule startup request (linking with JP1/IM - Rule Operation)

This subsection explains how to check whether a rule startup request was correctly reported to JP1/IM - Rule Operation when JP1/IM is linked to JP1/IM - Rule Operation. It also explains how to open the Rule Log Details window of JP1/IM - Rule Operation.

### (1) Checking whether a rule startup request was reported to JP1/IM - Rule Operation

With a rule startup request, you can use the function for monitoring automated action status to monitor action status and delay. By setting up these items, you can detect the following types of problems at an early stage in their occurrence:

- Reporting of a rule startup request did not finish within the expected time frame, or took a long time to finish.
- Reporting of a rule startup request failed (with the Fail, Error, or Error (Miss) status).

When a problem is detected, you can generate a JP1 event (event ID = 2010 or 2011) or execute a notification command.

For details about setup, see 5.5.3 Settings for monitoring the automated action execution status in the JP1/Integrated Management 2 - Manager Configuration Guide.

To check whether a rule startup request was reported:

- 1. In the Event Console window, monitor rule startup events.

  Rule startup events are those JP1 events that show in Action Type.
- 2. Open the Action Log window or List of Action Results window, and check the execution results for rule startup requests.

Check the execution status of the rule startup requests.

3. Cancel or re-execute rule startup requests as needed.

If a rule startup request is stuck in Running status or is in Error status, it cannot be reported to JP1/IM - Rule Operation. Therefore, cancel or re-execute rule startup requests as needed.

When the function for monitoring automated action status is set for rule startup requests:

When reporting using the delay monitoring function or status monitoring function is executed once, reporting is suppressed until the user cancels reporting suppression. When an error in a rule startup request is detected by the delay monitoring function or status monitoring function, after you have finished re-executing or have canceled the rule startup request, follow the procedure described below.

- In the Event Console window, from the Options menu, display Function-Status Notification Return, and then Action Delay Monitoring and Action Status Monitoring, and then select a function name that is enabled.
   A suppressed function is displayed in gray letters. When you select a function name that is enabled, a dialog box asking whether to cancel reporting suppression opens.
- 2. Click **Yes** in the dialog box.

Reporting suppression is canceled, thus enabling monitoring again.



#### Note

You can determine whether a rule startup request has matched the rule startup condition on the JP1/IM - Rule Operation side by checking the return code displayed in the following three windows:

- Action Log window
- List of Action Results window
- · Action Log Details window

For details about the Action Log, List of Action Results, and Action Log Details windows, see *Chapter 1. Window Transitions and Login Window* in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

For details about operations such as checking automated action status and re-execution, also see 8.2.2 Checking the execution results of automated actions.

#### (2) Displaying the Rule Log Details window of JP1/IM - Rule Operation

When a rule startup request is reported to JP1/IM - Rule Operation and satisfies the rule startup condition of JP1/IM - Rule Operation, you can display the Rule Log Details window of JP1/IM - Rule Operation from the following three windows:

- · Action Log window
- List of Action Results window
- Action Log Details window

The procedure for each of these windows follows.

• Opening the Rule Log Details window of JP1/IM - Rule Operation from the Action Log window

To open the Rule Log Details window of JP1/IM - Rule Operation from the Action Log window:

- 1. Select a single rule startup event from the events list in the Event Console window.
- 2. Use one of the following methods to open the Action Log window:
  - From the menu bar, choose View and then Action Log.
  - From the popup menu, choose Action Log.
  - Click the **Action Log** button.

The Action Log window opens.

3. Select a single rule startup request execution result.

Rule startup events are those events that show **l** in **Type**. Additionally, make sure that **Return Code** in **Log** is 0.

4. Click the **Rule Log Details** button.

The Rule Log Details window of JP1/IM - Rule Operation opens.

• Opening the Rule Log Details window of JP1/IM - Rule Operation from the List of Action Results window

To open the Rule Log Details window of JP1/IM - Rule Operation from the List of Action Results window:

1. In the Event Console window, choose **View** and then **List of Action Results**.

The List of Action Results window opens. This window lists the results of both rule startup requests and automated actions.

2. Select a single rule startup request execution result.

Rule startup events are those events that show in Type. Additionally, make sure that **Return Code** in **Log** is 0.

3. Click the **Rule Log Details** button.

The Rule Log Details window of JP1/IM - Rule Operation opens.

• Opening the Rule Log Details window of JP1/IM - Rule Operation from the Action Log Details window

You can also open the Rule Log Details window of JP1/IM - Rule Operation from the Action Log Details window, which can be opened from the Action Log window and List of Action Results window that are explained above.

To open the Rule Log Details window of JP1/IM - Rule Operation from the Action Log Details window:

1. From **Log** in the Action Log window or the List of Action Results window, select a single rule startup request and click the **Details** button.

The Action Log Details window opens. Make sure that **Return Code** (attribute name) in **Log** is 0.

2. Click the **Rule Log Details** button.

The Rule Log Details window of JP1/IM - Rule Operation opens.

For details about the Action Log window, List of Action Results window, and Action Log Details window, see *Chapter 1. Window Transitions and Login Window* in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

For details about the Rule Log Details window, see the manual *Job Management Partner 1/Integrated Management - Rule Operation GUI Reference*.

### 6.11.4 Opening a monitor window of the application that issued JP1 events

You can open the monitor window of the program that is related to the received JP1 event to view the information or perform other operations.

To open a monitor window from the Event Console window:

1. From the events list in the Event Console window, select a JP1 event and choose View and then Monitor.

Alternatively, click the icon on the toolbar, or choose **Monitor** from the popup menu.

The monitor window (Web page or application program) of the corresponding program opens.

You can also open a monitor window by clicking the **Monitor** button in the Event Details window.

If there is no program that corresponds to the selected JP1 event or if the settings necessary for opening a monitor window have not been made, you cannot choose the menu or button. For details about how to open a monitor window, see 5.17 Setting monitor startup for linked products in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### (1) List of applications that can open a monitor window

The following table lists programs that can open a monitor window. For details about the OSs that support the applications, see the documentation for the applicable application.

Program name	Window type	Monitor start definition file name		
JP1/NETM/Asset Information Manager	Web page	hitachi_jp1_aim_mon.conf		
JP1/PFM	Web page	hitachi_jp1_pfmmgr_mon.conf		
JP1/IM - Rule Operation	Application window	hitachi_jpl_im_rm_mon.conf		
JP1/IM - Event Gateway for Network Node Manager i	Web page	hitachi_jp1_im_egn_mon.conf		
JP1/Base (SNMP trap)	Web page	hitachi_jp1_imevtgw_mon.conf		
JP1/AJS2 - Scenario Operation	Application window	hitachi_jp1_ajs2so_mon.conf		
JP1/AJS3 (version 9 or later) or JP1/AJS2 (version 8 or earlier)	Application window	hitachi_jp1_ajs2_mon.conf		
JP1/AJS2 mainframe	Application window	hitachi_jp1_ajs2_mainframe_mon.conf		
Cosminexus Application Server	Application window	hitachi_cosminexus_manager_mon.conf		

<sup>6.</sup> System Monitoring from Central Console

### 6.11.5 Displaying performance reports for JP1 events when linking with JP1/PFM

If you specify settings for linking with JP1/PFM, you can use single sign-on to access the JP1/PFM - Web Console report window from JP1 events displayed in JP1/IM - View. For details about the settings for linking with JP1/PFM, see the JP1/PFM documentation.

### (1) Displaying the JP1/PFM - Web Console report window from any page in the Event Console window

The procedure is as follows:

- 1. In the Event Console window, check the list of events and select the JP1 event for which you want to view a report.
- 2. In the Event Console window, select the **View** menu, and then select **Display Performance**. Alternatively, select **Display Performance** from the pop-up menu.

JP1/PFM - Web Console starts, and the report window is displayed.

### (2) Displaying the JP1/PFM - Web Console report window from the Event Details window

The procedure is as follows:

1. In the Event Details window, click the **Display Performance** button. JP1/PFM - Web Console starts, and the report window is displayed.

#### 6.12 Notes for Central Console

- Delay monitoring of the automated action monitors the delay of execution of the automated action at a set interval. Therefore, it may not be able to detect the delay exactly as you specified in [Delay monitoring] of [Action Parameter Detailed Definitions] window. Furthermore, if the automated action causes the delay monitoring to terminate, for example, when the automated action terminates soon after [Delay monitoring] has passed, a delay may not be detected.
- JP1/IM Manager operates in a WOW64 environment. For this reason, a 64-bit program might not run through automated action in the above OSs. In such cases, execute the following command through automated action, and execute the program from the 64-bit cmd.exe:

```
%WinDir%\Sysnative\cmd.exe execution command
```

- In the following cases, the maximum length of a URL that can be set in a web browser is 2,046 characters:
  - When a link to an HTML event guide is clicked
  - When an incident is registered in JP1/IM Service Support
  - When a report is displayed by the event-source-host performance report display function

By entering the following common definition formation to any file, and by applying it with the jbssetcnf command, you can reset this limit (same as 09-10 or earlier), or change the limit value:

```
[logical host name\JP1CONSOLEMANAGER]
"GUIDE_URLLIMIT"="value"
"URLLIMIT_CHAR_NUM"=dword:value
```

In the case of a physical host, set the above *logical host name* as JP1 DEFAULT.

In the case of a logical host, set it to the actual name of the logical host.

Enter [logical host name\JP1CONSOLEMANAGER] at the beginning of the file.

GUIDE URLLIMIT: You can limit, or not limit, the URL length of hyperlinks of HTML event guides.

- When limiting the length of the URL: Specify "1".
- When not limiting the length of the URL: Specify "0".

URLLIMIT\_CHAR\_NUM: The following cases can specify the maximum length of the URL to be set for a web browser:

- When a link to an HTML event guide is clicked
- When an incident is registered in JP1/IM Service Support
- When a report is displayed by the event-source-host performance report display function Enter the maximum length as a hexadecimal number. The unit is the number of characters.

If you disable this restriction or change the maximum length, make sure that the length of the URL does not exceed the maximum length allowed by the web browser.

• Do not specify an extended attribute whose attribute name begins with "E.JP1\_" for a JP1 event. If JP1/IM - Manager receives a JP1 event that has an extended attribute whose name begins with "E.JP1\_", JP1/IM - Manager might not operate properly.

#### 6.13 Notes on using the Central Console - View

- The event response status only shows the current status and does not check the validity of the response status transition. Even if you have changed the response status of an event to "responded" using the jcochstat command, by acting when a trouble ticket is closed in such a system as Problem Management System, you can still change the response status of that event to "not responded" from the window. Be careful when you change the response status from a window if the system works in conjunction with another system.
- If you attempt to start JP1/IM View by executing the jcoview command with an incorrect argument specified, the login window appears after either of the following messages is output:
  - KAVB0104-E Failed to authenticate the user.
  - KAVB1210-E A communication error occurred while establishing a connection. Cannot convert the host name into an IP address. Confirm the host name. Host name: <host-name>, Port number: <port-number> Details: <detail-information>

In the login window displayed in this status, you may be unable to select the input fields even with the mouse to enter information in them. If this problem occurs, click the taskbar button for a program other than JP1/IM - View, and then click the login window.

- The time required for searching an event is proportional to the size of the event DB. If the capacity of the event DB reaches the maximum size, more than 30 minutes may be required for searching an event. By specifying [Arrived timeframe] as an event search condition, you may be able to shorten the time required for searching the event.
- If it takes a long time to start the event console service due to such reasons as system load, and if the limits are exceeded in terms of the number of retries and interval of retries when connecting the Event Flow Control Service and the Event Console Service, the past events are no longer displayed in [Monitor Events] page and [Severe Events] page when JP1/IM View is connected. Restart the Event Console Service, and ensure that "KAVB4754-1 Event Console Server was connected." has been output to the integrated trace log, and then restart JP1/IM View.
- If UAC (User Account Control) is enabled, when an administrator or standard user starts and uses JP1/IM View to save displayed events, UAC redirects the file containing the data to a user-dependent virtual folder. The destination folders are as follows:
  - When redirected to %ProgramFiles%

%LocalAppData%\VirtualStore\Program Files

(The default folder is <system-drive>:\Users\<OS-user-name>\AppData\Local\VirtualStore\Program Files)

• When redirected to %WINDIR%

%LocalAppData%\VirtualStore\Windows

(The default folder is <system-drive>:\Users\<OS-user-name>\AppData\Local\VirtualStore\Windows)

When the displayed events are saved, the reply message (KAVB0321-Q or KAVB0322-Q) that appears contains the file name path that was specified before the redirection was performed.

• In Windows Server 2008 R2(x64), Windows 7(x64), Windows Server 2012, Windows Server 2012 R2, Windows 8(x64), Windows 10(x64), or Windows Server 2016 if a file under the %WINDIR%\System32 folder is accessed or a command for that file is executed, the WOW64 redirection function redirects the file to the %WINDIR%\SysWow64 folder or its corresponding subfolder.

This might result in an access or a command execution failure.

In the Execute Command window of JP1/IM - View and the definition file for executing applications, do not specify a command under %WINDIR%\System32 as a command to be executed.

# **System Monitoring from Central Scope**

This chapter explains how to use JP1/IM - View to monitor monitored objects.

#### 7.1 Monitoring from the Monitoring Tree window

You can monitor the statuses of monitored objects from the Monitoring Tree window. You can also perform various types of operations, such as changing the statuses and monitoring statuses for the monitoring nodes (monitoring groups and monitored objects) displayed in the Monitoring Tree window.

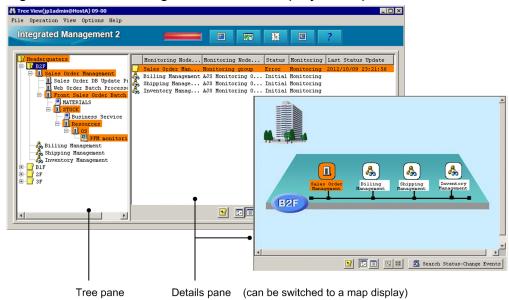
When the monitoring range settings of the monitoring tree are enabled, the monitoring tree displays only the monitoring nodes that are set for the JP1 resource group of the logged-in JP1 user. In this case, a virtual root node is displayed as the highest-order node. If there is no monitoring node that can be displayed, only the virtual root node is displayed. However, if the JP1 resource group is JP1\_Console and if the user has logged in as a JP1 user with JP1\_Console\_Admin permission, all monitoring nodes are displayed.

You can use one of the following three methods to open the Monitoring Tree window:

- Log in to JP1/IM Manager (Central Scope).
- Click the **Central Scope** button in the Event Console window.
- From the menu bar in the Event Console window, choose **File** and then **Central Scope**.

A Monitoring Tree window display example follows.

Figure 7–1: Monitoring Tree window display example



## 7.1.1 Changing the status of monitoring nodes

This subsection explains how to change the status of a monitoring node displayed in the Monitoring Tree window. The status that can be changed and the action that occurs at the time of the change differ depending on the monitoring node type (monitoring group or monitored object). For details, see 5.2.2 Statuses of monitoring nodes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

Changing the status of a monitoring node requires at least <code>JP1\_Console\_Operator</code> permission. When the monitoring range settings of the monitoring tree are enabled, you can change the status of only those monitoring nodes that can be accessed with at least <code>JP1\_Console\_Operator</code> permission from among the monitoring nodes being displayed.

To change the status of a monitoring node:

- 1. Select a monitoring node displayed in the tree pane or details pane.
- 2. Use either of the following methods to change the status of the monitoring node:
  - From the menu bar, choose **Operation** and then **Change Status**, and then change the status to the desired one.
  - From the popup menu that opens when you right-click the mouse, choose **Change Status** and then change the status to the desired one.

A confirmation dialog box opens.

3. In the configuration dialog box, click Yes.

## 7.1.2 Changing the monitoring status of monitoring nodes

This subsection explains how to change the monitoring status of a monitoring node. The action that occurs at the time of the change differs depending on the monitoring node type (monitoring group or monitored object). For details, see 5.2.2 Statuses of monitoring nodes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

Changing the monitoring status of a monitoring node requires at least <code>JP1\_Console\_Operator</code> permission. When the monitoring range settings of the monitoring tree are enabled, you can change the status of only those monitoring nodes that can be accessed with at least <code>JP1\_Console\_Operator</code> permission from among the monitoring nodes being displayed.

To change the monitoring status of a monitoring node:

- 1. Select a monitoring node displayed in the tree pane or details pane.
- 2. Use one of the following methods to change the status of the monitoring node:
  - From the menu bar, choose **Operation** and then **Change Monitoring Status**, and then change the monitoring status to the desired one.
  - From the popup menu that opens when you right-click the mouse, choose **Change Monitoring Status**, and then change the monitoring status to the desired one.
  - From the popup menu that opens when you right-click the mouse, choose **Properties** and select either **Monitoring** or **Not Monitoring** from the **General** page, and then click **OK** or **Apply**.
  - Open the Properties window by double-clicking the selected monitoring node, select either **Monitoring** or **Not Monitoring** from the **General** page, and then click **OK** or **Apply** (limited to monitored objects only).



#### Important

- If the monitoring status of a higher-order monitoring group is set to **Not Monitoring**, you cannot set a lower-order monitoring node alone to **Monitoring**.
- When the monitoring status of a monitoring node is set to **Not Monitoring**, the status returns to the initial status.

## 7.1.3 Searching for monitoring nodes

This subsection explains how to search for monitoring nodes. When the monitoring range settings of the monitoring tree are enabled, you cannot execute a search using the virtual root node as the starting point. Furthermore, the virtual root node cannot be a search target.

To search for monitoring nodes:

- 1. Select a monitoring group displayed in the tree pane or details pane.
  - You can restrict the monitoring nodes that can be searched to the selected monitoring group and the monitoring nodes that are in that monitoring group.
- 2. Use either of the following methods to open the Search window:
  - From the menu bar, choose View and then Search.
  - From the popup menu that opens when you right-click the mouse, choose **Search**.
- 3. Enter a condition into the Search window and click the **Search** button. Monitoring nodes that match the search condition are displayed in a list.

You can perform the following operations on the monitoring nodes that are displayed in the list:

- Change the status or monitoring status of a monitoring node.

  To change the status or monitoring status of a monitoring node, right-click to open the popup menu.
- With the target monitoring node selected, open the Monitoring Tree window. To do so in this case, double-click the mouse.

## 7.1.4 Searching for status-change events

This subsection explains how to search for status-change events.

- 1. Select a monitoring node whose status has changed.
- 2. Use one of the following methods to search for status-change events:
  - From the menu bar, choose View and then Search Status-Change Events.
  - From the popup menu that opens when you right-click the mouse, choose **Search Status-Change Events**.
  - Click the Search Status-Change Events button located in the lower portion of the details pane.

When you execute a status-change event search on a monitored object, up to 100 JP1 events matching the status change condition of that monitored object are displayed sequentially, starting with the earliest event, on the **Search Events** page of the Event Console window (the 101<sup>st</sup> and subsequent events are not displayed). Therefore, if the number of JP1 events displayed as search results has increased, we recommend that you manually change the status of the monitored object as needed.

If the number of JP1 events matching the status change condition of the monitored object exceeds 100, a warning JP1 event (event ID = 00003FB1) is generated. When this JP1 event is generated, check how JP1 events matching the status change condition are handled, and manually change the status of the monitored object.

When you execute a status-change event search on a monitoring group, up to 100 JP1 events matching the status change condition of the monitored objects in that monitored group are displayed sequentially on the **Search Events** page of the Event Console window, starting with the earliest event (the 101st and subsequent events are not displayed). Note that if

a status change condition has been defined for a monitoring group, only up to 100 status-change events requiring action are sequentially displayed, starting with the earliest event, even if there are events that changed the status of lower-order monitoring nodes.



#### **Important**

- When you manually change the status of a monitoring node, you clear the status-change event history. Consequently, you will not be able to search for (display) the status-change events that have occurred in the past. Therefore, before you manually change the status of a monitoring node, check how JP1 events matching the status-change condition are handled.
- The JP1 events that can be searched using a status-change event search are restricted by a user filter (if the user is subject to restriction by a user filter).
- We recommend that you open the Event Console window before searching for status-change events.
- If the number of JP1 events matching the status-change condition of the monitored object exceeds 100, the completed-action linkage function becomes inactive. Therefore, if the number of JP1 events displayed as search results has increased, we recommend that you manually change the status of the monitored object as needed.

## 7.1.5 Displaying the attributes of monitoring nodes

To display the attributes of a monitoring node:

- 1. Select a monitoring node.
- 2. Use one of the following methods to open the Properties window:
  - From the menu bar, choose View and then Properties.
  - From the menu bar, choose **Options** and then **Basic Information**.
  - From the menu bar, choose **Options** and then **Status-Change Condition**.
  - From the menu bar, choose Options and then Event-Issue Conditions.
  - From the popup menu that opens when you right-click the mouse, choose **Properties**.
  - Double-click (limited to a monitored object).

A JP1 user having at least <code>JP1\_Console\_Operator</code> permission can change several of the attributes displayed in the Properties window. To change the attributes of a monitoring node, log in as a user with at least the operating permission of <code>JP1\_Console\_Operator</code>.

## 7.1.6 Displaying guide information

To display guide information:

- 1. Select a monitored object.
- 2. Use either of the following methods to open the Guide window.
  - From the menu bar, choose View and then Guide.
  - From the popup menu that opens when you right-click the mouse, choose **Guide**.

You must define in advance, in a guide information file, the conditions for displaying guide information according to various situations and the guide information content.

About the guide information function, definition file, and settings:

- About the details to set in the guide information and the guide function: See 5.8 Guide function in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.
- About editing the guide information file: See 6.6 Editing guide information in the JP1/Integrated Management 2 - Manager Configuration Guide.
- About the format of the guide information file: See *Guide information file (jcs\_guide.txt)* (in *Chapter 2. Definition Files*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.*

#### 7.1.7 Opening the Visual Monitoring window

To open the Visual Monitoring window:

- 1. Use either of the following methods to display the Open Visual Monitoring Window window.
  - From the menu bar, choose View and then Visual Monitoring.
  - Click the icon in the toolbar.
- 2. Select a Visual Monitoring window name displayed in the Open Visual Monitoring Window window and click **OK**.

#### 7.1.8 Displaying a login user list

To display a list of JP1 users that have logged in to JP1/IM - Manager (Central Scope):

1. In the menu bar, choose **Options** and then **Login User List**.

# 7.1.9 Saving the information in the Monitoring Tree window on the local host

To save the information on the local host:

- 1. From the menu bar, choose **File** and then **Save Monitoring-Tree Status**. The file selection window opens.
- 2. Save the information in the desired folder under a desired name on the local host. The monitoring tree information is saved in a CSV file.

When the monitoring range settings of the monitoring tree are enabled, you cannot save the information in the Monitoring Tree window on the local host. To save the information, save it on the local host from the Monitoring Tree (Editing) window.

#### 7.2 Monitoring from the Visual Monitoring window

You can monitor the statuses of monitored objects from the Visual Monitoring window.

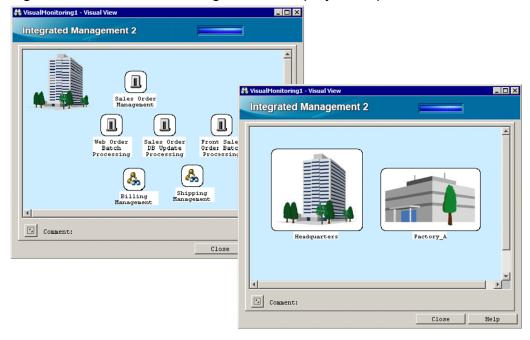
When the monitoring range settings of the monitoring tree are enabled, the Visual Monitoring window displays only the monitoring nodes that are set for the JP1 resource group of the logged-in JP1 user. However, if the JP1 resource group is JP1\_Console and if the user has logged in as a JP1 user with JP1\_Console\_Admin permission, all monitoring nodes are displayed.

To open the Visual Monitoring window:

- 1. Use either of the following methods to open the Open Visual Monitoring Window window.
  - From the menu bar in the Monitoring Tree window, choose View and then Visual Monitoring.
  - Click the icon in the toolbar of the Monitoring Tree window.
- 2. Select a Visual Monitoring window name displayed in the Open Visual Monitoring Window window and click **OK**. When the monitoring range settings of the monitoring tree are enabled, if a visual monitoring window does not contain any monitoring node that can be displayed, it is not displayed in the list in the Open Visual Monitoring Window window.

A Visual Monitoring window display example follows.

Figure 7–2: Visual Monitoring window display example



# 7.2.1 Opening the Monitoring Tree window from the Visual Monitoring window

To open the Monitoring Tree window from the Visual Monitoring window:

1. Select a monitoring node and double-click it.

The Monitoring Tree window opens with the monitoring node selected that you double-clicked in the Visual Monitoring window.

#### 7.2.2 Changing the status of monitoring nodes

This subsection explains how to change the status of a monitoring node displayed in the Visual Monitoring window. The status that can be changed and the action that occurs at the time of the change differ depending on the monitoring node type (monitoring group or monitored object). For details, see 5.2.2 Statuses of monitoring nodes in the JP1/ Integrated Management 2 - Manager Overview and System Design Guide.

Changing the status of a monitoring node requires at least <code>JP1\_Console\_Operator</code> permission. When the monitoring range settings of the monitoring tree are enabled, you can change the status of only those monitoring nodes that can be accessed with at least <code>JP1\_Console\_Operator</code> permission from among the monitoring nodes being displayed.

To change the status of a monitoring node:

- 1. Select a monitoring node.
- 2. From the popup menu that opens when you right-click the mouse, choose **Change Status** and change the status to the desired one.
  - A confirmation dialog box opens.
- 3. In the configuration dialog box, click Yes.

## 7.2.3 Changing the monitoring status of monitoring nodes

This subsection explains how to change the monitoring status of a monitoring node. The action that occurs at the time of the change differs depending on the monitoring node type (monitoring group or monitored object). For details, see 5.2.2 Statuses of monitoring nodes in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

Changing the monitoring status of a monitoring node requires at least <code>JP1\_Console\_Operator</code> permission. When the monitoring range settings of the monitoring tree are enabled, you can change the status of only those monitoring nodes that can be accessed with at least <code>JP1\_Console\_Operator</code> permission from among the monitoring nodes being displayed.

To change the monitoring status of a monitoring node:

- 1. Select a monitoring node.
- 2. Use either of the following methods to change the status of the monitoring node:
  - From the popup menu that opens when you right-click the mouse, choose **Change Monitoring Status**, and then change the monitoring status to the desired one.
  - From the popup menu that opens when you right-click the mouse, choose **Properties** and select either **Monitoring** or **Not Monitoring** from the **General** page, and then click **OK** or **Apply**.

## Important

- If the monitoring status of a higher-order monitoring group is set to **Not Monitoring**, you cannot set a lower-order monitoring node alone to **Monitoring**. Check the monitoring status of the higher-order monitoring group in the Monitoring Tree window.
- When the monitoring status of a monitoring node is set to **Not Monitoring**, the status returns to the initial status.

## 7.2.4 Searching for monitoring nodes

To search for monitoring nodes:

- 1. Select a monitoring group.
  - You can restrict the monitoring nodes that can be searched to the selected monitoring group and the monitoring nodes that are in that monitoring group.
- 2. From the popup menu that opens when you right-click the mouse, choose **Search**.
- 3. Enter a condition into the Search window and click the **Search** button. Monitoring nodes that match the search condition are displayed in a list.

You can perform the following operations on the monitoring nodes that are displayed in the list:

- Change the status or monitoring status of a monitoring node.

  To change the status or monitoring status of a monitoring node, right-click to open the popup menu.
- With the target monitoring node selected, open the Monitoring Tree window. To do so in this case, double-click the mouse.

## 7.2.5 Searching for status-change events

To search for status-change events:

- 1. Select a monitoring node whose status has changed.
- 2. From the popup menu that opens when you right-click the mouse, choose Search Status-Change Events.

When you execute a status-change event search on a monitored object, up to 100 JP1 events matching the status-change condition of that monitored object are displayed sequentially, starting with the earliest event, on the **Search Events** page of the Event Console window (the 101<sup>st</sup> and subsequent events are not displayed). Therefore, if the number of JP1 events displayed as search results has increased, we recommend that you manually change the status of the monitored object as needed.

If the number of JP1 events matching the status-change condition of the monitored object exceeds 100, a warning JP1 event (event ID = 00003FB1) is generated. When this JP1 event is generated, check how JP1 events matching the status-change condition are handled, and manually change the status of the monitored object.

When you execute a status-change event search on a monitoring group, up to 100 JP1 events matching the status-change condition of the monitored objects in that monitored group are displayed sequentially on the **Search Events** page of the

Event Console window, starting with the earliest event (the 101st and subsequent events are not displayed). Note that if a status change condition has been defined for a monitoring group, only up to 100 status-change events requiring action are sequentially displayed, starting with the earliest event, even if there are events that changed the status of lower-order monitoring nodes.

## 0

#### **Important**

- When you manually change the status of a monitoring node, you clear the status-change event history. Consequently, you will not be able to search for (display) the status-change events that have occurred in the past. Therefore, before you manually change the status of a monitoring node, check how JP1 events matching the status-change condition are handled.
- The JP1 events that can be searched using a status-change event search are restricted by a user filter (if the user is subject to restriction by a user filter).
- We recommend that you open the Event Console window before searching for status-change events.
- If the number of JP1 events matching the status change condition of the monitored object exceeds 100, the completed-action linkage function becomes inactive. Therefore, if the number of JP1 events displayed as search results has increased, we recommend that you manually change the status of the monitored object as needed.

## 7.2.6 Displaying the attributes of monitoring nodes

To display the attributes of a monitoring node:

- 1. Select a monitoring node.
- 2. From the popup menu that opens when you right-click the mouse, choose **Properties**. The Properties window opens.

A JP1 user having at least JP1\_Console\_Operator permission can change several of the attributes displayed in the Properties window. To change the attributes of a monitoring node, log in as a user with at least the operating permission of JP1 Console Operator.

## 7.2.7 Displaying guide information

To display guide information:

- 1. Select a monitored object.
- 2. From the popup menu that opens when you right-click the mouse, choose Guide.

You must define in advance, in a guide information file, the conditions for displaying guide information according to various situations and the guide information content.

About the guide information function, definition file, and settings:

- About the details to set in the guide information and the guide function: See 5.8 Guide function in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.
- About editing the guide information file:

See 6.6 Editing guide information in the JP1/Integrated Management 2 - Manager Configuration Guide.
 About the format of the guide information file:
 See Guide information file (jcs\_guide.txt) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

#### 7.3 Cautions on integrated scope

- Do not stop the service while updating the tree. Inconsistencies may occur with the database contents. If consistencies occur with the database, messages such as "KAVB7247-E JP1/IM-CS could not execute the operation request (<request name>) from JP1/IM-View. (Cause: The record in the database is invalid)", and "KAVB7248-E JP1/IM-CS could not execute the operation request (<request name>) from JP1/IM-View. (Cause: The database cannot be operated, <code>)" are displayed.
  - If this occurs, restore the backup of the database, or recreate the database by jcsdbsetup command. For details about the procedure for recovering the monitored object database, see 1.2.2(2) Monitored object database backup and recovery procedures, and 1.2.2(3) Host information database backup and recovery procedures.
- If the central scope service abnormally terminates or is forcibly terminated, the database used by the central scope service may become corrupted. For this reason, back up the database on a regular basis. For details about the procedure for backing up the monitored object database, see 1.2.2(2) Monitored object database backup and recovery procedures, and 1.2.2(3) Host information database backup and recovery procedures.
- When you reinstall JP1/IM Manager after uninstalling it, or if you connect JP1/IM View after executing jcsdbsetup command, the [Monitoring tree] window may display the monitoring tree that existed before JP1/IM Manager was reinstalled or the monitoring tree that existed before the jcsdbsetup command was executed. If that happens, stop the JP1/IM View that is running, and delete the following folder before starting JP1/IM View.

The folder to be deleted:

View-path\log\output

- If you deleted the event DB for JP1/Base, follow these procedures:
  - Start the [Monitoring Tree (being edited)] window of JP1/IM View.
  - Select [File], and then [Obtain tree from server], to obtain the monitoring tree from the server.

If you don't perform the above procedures, the following phenomenon occurs.

- In the [Status Change Event Search] of the [Monitoring Tree] window, a wrong event is displayed.
- In the guide function, another guide is displayed.
- If the host name defined in the system configuration definition of JP1/IM and the host name included in the information collected by the automatic generation function are different, a monitoring object that is identical to the one included in the existing monitoring tree is output as a difference.
  - For example, if the host name written in FQDN format in the system configuration definition of JP1/IM is defined in a format other than FQDN on the job execution host of JP1/AJS2, a jobnet monitoring object is output as a difference. If it is not necessary, manually delete the monitoring object that has been output as a difference.
- If you start the [Monitoring Tree] window of Jp1/IM View soon after you started JP1/IM Manager or while the tree is being updated, a message "KAVB7240-W JP1/IM CS was temporarily unable to perform the operation request (monitoring tree acquisition) from JP1/IM View (Cause: The database is being used by another user) is displayed, and the [Monitoring Tree] window is not displayed. If that happens, wait for a while and then restart the [Monitoring Tree] window.
- When you monitor an event in JP1/SES format, you are not allowed to specify a message and detailed information of a basic attribute as a status change condition for an individual condition or a common condition.
- Regarding the message, detailed information and extended attribute of JP1 events, the character codes supported in status change conditions of the monitoring node are C (English code).
- If the status of the monitoring group is other than the initial status, and basic attributes or extended attributes of JP1 event are included in the guide viewing conditions for the guide information displayed in the monitoring group, the guide information will not change unless the status of the applicable monitoring group changes to the initial status.

For example, consider a situation where a monitoring object with an error status and a monitoring object with a warning status exist directly under a monitoring group.

In this situation, it is assumed that the monitoring group has the error status, and a guide, whose viewing condition is a JP1 event that meets a status change condition for a monitoring object with the error status, is displayed in the monitoring group.

In this situation, changing the status of the monitoring object from error to initial, therefore changing the status of the monitoring group to warning, will not change the guide information displayed in the monitoring group.

Changing the status of the monitoring object from warning to initial, therefore changing the status of the monitoring group to initial, will change or hide the guide information. We recommend that you specify only the monitoring node ID for a viewing guide condition that is displayed in the monitoring group, and provide a definition that does not include basic attributes or extended attributes of a JP1 event. Providing a definition like this allows you to always display the same guide, when you display guide in a monitoring group, regardless of the status of the monitoring group. Furthermore, be sure to provide a definition for a guide in which you specified only a monitoring node ID as a guide viewing condition, before providing a definition for a guide that includes basic attributes or extended attributes of a JP1 event as its viewing condition.

- The default setting for updating data to a monitoring object DB on a server is asynchronous writing.
- The following settings in a cluster configuration enables synchronous writing when the data is updated to the server.
  - (a) Stop all the JP1/IM Managers in physical host and logical host environments.
  - (b) Create a text file with the following contents. (Fill in the name of the logical host to be configured, for "Logical host name" below).

[Logical host name\JP1SCOPE\BMS]

"DB ACC MODE SYNC"=dword:00000000

(c) Specify the text file you created in (b) for the argument, and execute the following command on the active server and on the standby server.

jbssetcnf < The name of the file created>

If you configure settings to enable synchronous writing to a monitoring object DB, the performance of updating data to the server decreases. However, because this makes it less likely that a monitoring object DB will be damaged at the time of logical host failover, the above configuration is recommended for a cluster environment.

- To change the configuration from synchronous writing back to asynchronous writing, use the following procedures:
  - (a) Stop all the JP1/IM Manager in physical host and logical host environments.
  - (b) Create a text file with the following contents. (Fill in the name of the logical host to be configured, for "Logical host name" below).

[Logical host name\JP1SCOPE\BMS]

```
"DB ACC MODE SYNC"=dword:0000001
```

(c) Specify the text file you created in (b) for the argument, and execute the following command on the active server and on the standby server.

jbssetcnf <The name of the file created>

- Specify one of the following names for the host name to be specified as the status change condition for the monitoring object. If you don't specify one of the following host names, the status of the monitoring object may not change even if a JP1 event occurs.
  - (a) The host name returned by hostname command.
  - (b) The host name you registered with the host information DB.

For details on how to configure (b), see *jcshostsimport command* (in *Chapter 1. Command*) in the manual *JP1/Integrated Management 2- Manager Command, Definition File and API Reference.* 

- Specify the following host name for a managed host and a manager host of JP1/IM Manager. If you don't specify the following host name, the monitoring node of the applicable host may not be displayed when using the automatic generation function of the monitoring tree.
  - (a) The host name returned by hostname command

For details on how to configure a managed host and a manager host of JP1/IM - Manager, see the description of the configuration definition file (jbs route.conf) in the JP1/Base User's Guide.

- If you automatically generate a large number of monitoring nodes using the automatic generation function of the monitoring tree, the automatic generation of the monitoring tree may time out. If that happens, execute the setup command for the automatic generation on the managed host and disable the automatic generation to decrease the number of the monitoring nodes that are going to be generated with the automatic generation function.
  - Furthermore, if there is more than one managed host of JP1/IM Manager where JP1/Base has not been started, the automatic generation of the monitoring tree may time out. If that happens, start JP1/Base, or exclude the hosts where JP1/Base has not been started from the managed hosts of JP1/IM Manager.
- If you automatically generate the monitoring tree using the "business-oriented tree" template, monitoring objects for JP1/PFM placed under the monitoring group named <AJS2 host name> are generated to correspond to resources or applications monitored by JP1/PFM on the <AJS2 Host name> host. Manually delete the monitoring objects for resources and applications that are not related to the jobnet represented by the monitoring group named <jobnet name> to which <AJS2 host name> belongs.
  - Similarly, with regard to the monitoring objects for JP1/PFM placed under the monitoring group named <Cosminexus</pre> operation management agent host name>, manually delete the monitoring objects for resources and applications that are not related to J2EE application represented by the monitoring group for <Cosminexus</pre> business operation>.
- If you edit the filter definition file (snmpfilter.conf) for the SNMP trap conversion function of JP1/Base, in order to monitor JP1/Cm2/NNM, add only definitions regarding the SNMP trap to be monitored in your environment from the definitions in the sample file (snmpfilter\_im\_sample.conf) to the filter definition file. Configure the size of the definition within 900 bytes in the filter definition file, by using the following formula.

```
((a1+1)+(a2+1)+(a3+1)+(a4+1)....(an+1))+34 < 900 bytes
```

- an: The OID length of the SNMP trap defined in snmpfilter.conf (If OID is [.1.2.3.4.5], an is 10 bytes.)
- If general traps are defined in snmpfilter.conf, the filter size is the [Result of the above calculation + (Number of general traps \* 2)].
- For the filter, based on what is defined in the filter file (snmpfilter.conf), the applicable object ID (OID) is obtained from trapd.conf of NNM.
- In the list of common conditions in the Common Condition Settings window, the following items are displayed but are not used in an English environment:
  - Common conditions related to JP1/Cm2/SSO, such as a System Alert Event (SSO) or an Application Alert Event (SSO)
  - Common conditions related to SCIM, such as a System Error Event (SCIM) or a System Warning Event (SCIM)
  - Common conditions related to System Manager, such as a Physical Host Emergency Event (System Manager)
- In the list of monitoring node types in the Create New Monitoring Node window, the following items are displayed but are not used in an English environment:
  - Monitoring objects related to JP1/Cm2/SSO, such as a System Alert Event (SSO) or Category Monitoring (SSO)
  - Monitoring objects related to SCIM, such as a System Error Event (SCIM) or a System Warning Event (SCIM)
  - Monitoring objects related to System Manager, such as a Physical Host Emergency Event (System Manager)
- In the list of generation trees in the Auto-generation Select Configuration window the following item is displayed but is not used in an English environment:

- System Configuration Tree
- Tuning to improve performance of JP1 event reception of central scope

When JP1/IM - Manager receives a JP1 event, the received JP1 event is compared by central scope with the state change conditions of each monitored object in the monitoring tree. If the number of monitored objects increases, the number of comparisons also increases. This deteriorates the performance of not only central scope, but also JP1/IM - Manager as a whole.

Tuning to prevent performance deterioration, and to enhance the JP1 event reception performance of central scope, is described below.

- (a) By validating the definition file for on-memory mode of status change conditions, JP1 event reception performance can be expected to improve because the number of times the disk is accessed for central scope processing when a JP1 event is received can be reduced.
- (b) To reduce the state change conditions that are compared, central scope performs filter processing when a JP1 event is received by using the following state change conditions:
- Common conditions
- Host name as an individual condition (the individual condition that set host name comparison as the comparison method)

By setting the items described above in the state change conditions of the monitored object, JP1 event reception performance can be expected to improve because of the number of state change conditions for comparison can be reduced.

• When the system monitoring object [NNMi Monitor] or [Node Monitor (NNMi)] is used, please set the extended attribute NNMI\_FAMILY\_UK for the JP1 event, which is issued by JP1/IM-EG and converted to an NNMi incident (This is not set by default).

When the extended attribute NNMI\_FAMILY\_UK is not set, the system monitoring object [NNMi Monitor] or [Node Monitor (NNMi)] cannot be monitored. For details on how to set up the extended attribute NNMI\_FAMILY\_UK, see the manual *JP1/Integrated Management 2 - Event Gateway for Network Node Manager i.* 

8

## **System Operation Using JP1/IM**

This chapter explains the use of JP1/IM - View for system operations. For details about the windows explained in this chapter, see *Chapter 3. Event Console Window* and *Chapter 4. Monitoring Tree Window* in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

#### 8.1 Executing a command

You can execute commands on an agent host or a manager host. You can also execute the commands (client application) of a client host (viewer host). You can use this function when you are connected to JP1/IM - Manager (Central Scope) from JP1/IM - View.

If JP1/Base on the host stops while a command is being executed, CMD. EXE and the executing command (in Windows) or a shell and the executing command (in UNIX) might remain. In such cases, either manually stop the command or restart the host.

In addition, commands in the queue are discarded if JP1/Base on the host that stops while a command is being executed.

#### 8.1.1 Executing a command by using Command Execution

The following operations require <code>JP1\_Console\_Admin</code> permission or <code>JP1\_Console\_Operator</code> permission.

- Executing a command on an agent host
- Executing a command on a manager host
- Executing a client application

To execute a command that inherits event information, select the JP1 event, and then execute the command.

The following describes the method of operation.

1. In the Event Console window, choose **Options** and then **Execute Command**, or from the toolbar, click the icon



The Execute Command window opens.

#### 2. Select Command type.

If you are executing a command on a managed host (agent host or manager host), select the **Command of managed** host radio button.

If you are executing a client application, select the **Client application** radio button.

3. If necessary, select **Event Information to inherit**.

If you want to inherit event information, select the Inherit event information check box.

4. For **Target host**, specify the host on which the command is to be executed.

For the target host, specify the host name that is specified as the managed host in the system configuration definition. You can also select from the list box a host name that was specified in the past. A maximum of five host names specified in the past are saved in the list box.

If you selected the **Inherit event information** check box in step 3, event information is inherited and automatically entered.

You can also specify a host group name for the command target host. When you specify a host group name, the command will be executed on all hosts that comprise the host group. Host group names that can be specified are those that are defined by the login manager.

For details about the procedure for defining host groups, see 1.15 Setting up a command execution environment (for Windows) or 2.14 Setting up a command execution environment (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

When you set a business group or monitoring group, you can specify a business group or a monitoring group for the target host name. The specification method follows.

Example: When business group management system is specified for the target host name

/Management system

For details about the specification method, see 4.1.4(3) How to specify business groups in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

5. In **Command**, specify the command to be executed. Also specify an **Environment variable file** as needed.

Enter the command line to be executed in **Command**.

You can also select from the list box a command that was specified in the past. To erase the history of commands specified in the past, click the **Clear History** button.

For **Environment variable file**, specify the absolute path to the environment variable file located at the command target host.

The following commands can be executed:

When the command target host is running under Windows

- Executable files (.com and .exe)
- Batch files (.bat)
- JP1/Script script files (.spt) (Association must be set up to allow .spt files to be executed.)
- Data files (.vbs) that have a file type (extension) associated with applications that can execute automatic actions

When the command target host is running under UNIX

- UNIX commands
- · Shell scripts

The following types of commands cannot be executed:

- Commands that require interactive operations
- Commands that open a window
- Commands that come with an escape sequence or control code
- Commands that do not end, such as a daemon
- Commands that must interact with the desktop, such as Windows Messenger and DDE (in Windows)
- Commands that shut down the OS, such as shutdown and halt
- 6. Click the **Execute** button.

When the Inherit event information check box in Event information to inherit is not selected

The command whose command type was selected in **Command type** is executed on the host specified in **Target host**. After the command is executed, **Time**, **Host**, and **Message** appear in **Log**. There is no need to perform the following steps.

When the Inherit event information check box in Event information to inherit is selected

The Preview Command Execution Content window opens. Go to the next step.

7. Check the information in the Preview Command Execution Content window.

Check the information for Target host, Command, and Environment variable file after the variables are replaced.

An item for which **1** is displayed has a setting error. Review the settings.

For details about the Preview Command Execution Content window, see 3.41 Preview Command Execution Content window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

#### 8. Click the **Execute** button.

If there is no problem with the information in the Preview Command Execution Content window, the command is executed, and the Preview Command Execution Content window closes. After the command is executed, **Time**, **Host**, and **Message** appear in **Log** in the Execute Command window.

#### 8.1.2 Executing a command by using the Command button

There are two ways to execute a command previously registered for a **Command** button, depending on the type of host on which the command is executed.

- Executing a command on an agent host or manager host
- Executing a command defined on the source host of the selected event

To execute a command, you need <code>JP1\_Console\_Admin</code> permission or <code>JP1\_Console\_Operator</code> permission. When you move the cursor to the <code>Command</code> button, the information set for the <code>Command</code> button is displayed in the Execute Command window. Before executing a command, make sure that you check the information for the command.

To execute a command that inherits event information, select the JP1 event, and then execute the command.

For details about how to set the **Command** button, refer to the following:

- · For Windows
  - 1.15 Setting up a command execution environment (for Windows) in the JP1/Integrated Management 2 Manager Configuration Guide
- For UNIX
  - 2.14 Setting up a command execution environment (for UNIX) in the JP1/Integrated Management 2 Manager Configuration Guide

## (1) Executing a command on an agent host or manager host

The following describes how to immediately execute a command on an agent host or manager host.

## (a) Immediately executing a command

To immediately execute a command after the **Command** button is clicked, create the following settings.

Event information is not inherited when the command is executed:

Specify true for the qui parameter in the command button definition file. If you specify this parameter, when the **Command** button is clicked, a message asking whether the command is to be executed is not displayed, and the command is immediately executed on the agent host or manager host.

Event information is inherited when the command is executed:

Specify false for the preview parameter in the command button definition file. If you specify this parameter, when the **Command** button is clicked, the Preview Command Execution Content window does not open, and the command is immediately executed.

The following describes the procedure for immediately executing a command:

1. In the Event Console window, select **Option** and then **Execute Command**. Alternatively, on the toolbar, click



The Execute Command window opens.

2. Click the **Command** button to which the command you want to execute has been assigned. The command is executed.

#### (b) Executing a command after changing the information registered for the command

The following describes how to execute a command after changing the information registered for it.

When you execute a command that inherits event information, the Preview Command Execution Content window opens, and you can change the information for the command. The following operation is effective when you execute the command on a managed host that does not inherit events.

1. In the Event Console window, choose **Option** and then **Execute Command**. Alternatively, on the toolbar, click



The Execute Command window opens.

- 2. Right-click the **Command** button to which the command you want to execute has been assigned to display a popup menu.
- 3. On the popup menu, click **Custom Execution**.

The setting information for the **Command** button is displayed in **Command type**, **Event information to inherit**, **Target host**, **Command**, and **Environment variable file** of the Execute Command window. You can now edit the setting information.

Edit Target host, Command, and Environment variable file as needed.

4. Click the **Execute** button.

The command is executed on the agent host or manager host.

## (2) Executing a command defined on the source host of the selected event

The following applies to the source host of the event when the host is undergoing examination or when corrective action for an error is being performed for it. If you do not specify anything in **Target host**, but define a **Command** button, and then click the **Command** button, you can execute a command defined on the source host of the selected event. Note that even if the attribute of another JP1 event is mapped, the source host before the mapping is set in **Target host**.

The following describes the procedure for executing a command defined on the source host of the selected event.

- 1. In the Event Details window, choose the **Execute Command** button. The Event Details window opens.
- 2. Click the Command button to which the command you want to execute is assigned.

Event information is not inherited when the command is executed:

A message asking whether the command is to be executed is displayed. If there is no problem, you can click the **OK** button.

The command defined on the source host of the selected event is executed. Note that when true is specified for the qui parameter in the command button definition file, the command is executed immediately without displaying any message. There is no need to perform the following steps.

Event information is inherited when the command is executed:

When false is specified for the preview parameter in the command button definition file, the command is executed immediately without displaying the Preview Command Execution Content window. There is no need to perform the following steps.

When true is specified, the Preview Command Execution Content window opens. Go to the next step.

3. Check the information in the Preview Command Execution Content window.

Check the information for **Target host**, **Command**, and **Environment variable file** after the variables are replaced.

An item for which **①** is displayed has a setting error. Review the settings.

For details about the Preview Command Execution Content window, see 3.41 Preview Command Execution Content window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

4. Click the **Execute** button.

If there is no problem in the information in the Preview Command Execution Content window, the command is executed, and the Preview Command Execution Content window closes. After the command is executed, **Time**, **Host**, and **Message** appear in **Log** in Execute Command window.

#### 8.1.3 User that executes commands

Commands are executed by mapping the JP1 user who logged in to JP1/IM - Manager (Central Scope) to the user name under the OS, according to the user mapping definition at the command execution host. Commands cannot be executed if user mapping is not defined or if the login JP1 user name is not registered in the user mapping definition.

In UNIX, commands are executed using the shell environment of the OS user that is mapped. If you want to execute a command that uses two-byte characters, you will need change the shell environment of the OS user to support two-byte characters.

For details about user mapping definitions, see the JP1/Base User's Guide.

## 8.1.4 Checking command execution status and deleting a command

After a command is executed from the Execute Command window of JP1/IM - View, if the message reporting execution termination (KAVB2013-I) is not displayed in **Log**, a problem may have occurred at the command execution host.

In this case, follow the procedure described below to check the command execution status, and if necessary, delete the command.



#### **Important**

The procedure described here can be used only when the version of JP1/Base on the command execution host is 07-51 or later. This procedure cannot be used if the JP1/Base version is 07-00 or earlier.

To check the command execution status and delete a command:

1. Using the j cocmdshow command, check the command status.

Execute the jcocmdshow command on the command execution host, and based on the returned information, investigate whether a problem has occurred. Based on the investigation, if it is determined that the command needs to be stopped, proceed to the next step.

2. Using the jcocmddel command, delete the command.

Execute the jcocmddel command on the command execution host to delete the command.

3. Using the jcocmdshow command, check the command status.

Execute the jcocmdshow command to determine whether the command has been correctly deleted.

#### For the command syntax:

See the chapter that explains commands in the JP1/Base User's Guide.

#### 8.2 Executing automated actions and taking necessary steps

You can automatically execute an action (command) when a certain JP1 event is received. This function is called the *automated action function*. You can execute an action not only on the host on which the definition of automated actions is stored, but also on an agent host or manager host.

For details about how to define automated actions, see the following sections:

- For setting up automated actions (using the GUI)
  See 3.32 Action Parameter Definitions window in the manual JP1/Integrated Management 2 Manager GUI Reference.
- For setting up automated actions (using a definition file)
  See Automated action definition file (actdef.conf) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference.

The following three types of status checks can be executed on automated actions:

- Checking the execution status of an automated action
   Checks whether a problem has occurred during execution of the automated action.
- Checking the execution result of the automated action and the operation needed (cancellation or re-execution of the automated action)
  - Checks the execution result of the automated action that was executed. Additionally, checks detailed information or initiates manual re-execution of the automated action as needed.
- Checking the operating status of the automated action function

  Checks whether the automated action function is working. If not, automated actions cannot be executed.

The following subsections explain how to perform these checks and automated actions.

## 8.2.1 Checking the execution status of an automated action

When you enable the automated action execution monitoring (delay monitoring and status monitoring) function, you can quickly detect the occurrence of even the following problems.

- The automated action did not terminate within the expected time. Alternatively, it took a long time to terminate.
- Execution of the automated action failed (the status transitioned to Fail, Error, or Error (Miss)).

You must specify in advance, when you are defining the automated action, whether to enable the execution monitoring (delay monitoring and status monitoring) function. You must also set up a JP1 event to be generated or a notification command to be executed when a problem is detected.

For details about settings, see the following sections:

For setting up automated actions (using the GUI)

See 3.32 Action Parameter Definitions window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

See 3.33.1 Action Parameter Detailed Definitions window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

For setting up automated actions (using a definition file)

See Automated action definition file (actdef.conf) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

For setting up JP1 event generation and notification commands

See Automatic action notification definition file (actnotice.conf) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

The checking procedure is described below. To enable the execution monitoring (delay monitoring and status monitoring) function again after an error has been detected, you need <code>JP1\_Console\_Admin</code> permission or <code>JP1\_Console\_Operator</code> permission. In addition, when the reference and operation permissions are set for a business group, operations in the Event-Information Mapping Definitions window might not be possible depending on the combination of JP1 resource group and JP1 permission level. For details, see 4.1.4(2) Assigning a JP1 resource group and permission level to a JP1 user in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

To check the execution status of an automated action:

- 1. In the Event Console window, check the execution status of the automated action. Alternatively, check whether a notification command has reported that an error occurred.
  - If generation of a JP1 event was set, a JP1 event with event ID 2010 or 2011 is displayed in the events list. If execution of a notification command was set, the notification command reports the error.
  - When you find out that an error has occurred based on the JP1 event or via notification by a notification command, proceed to the next step.
- 2. Using the Action Log window and the List of Action Results window, check the execution status of the automated action and then take the necessary steps.
  - As needed, use the Action Log window and the List of Action Results window to check details or to cancel/re-execute the action. For details, see 8.2.2 Checking the execution results of automated actions.
  - Note that once notification by the delay monitoring function or status monitoring function is executed, further notification is suppressed until the user releases the notification suppression. Therefore, release the notification suppression as needed. To release a suppressed function, proceed to the next step.
- 3. From the menu in the Event Console window, choose **Options** and then **Function-Status Notification Return**, and then from **Action Delay Monitoring**, choose **Action Status Monitoring** and select the function name that is enabled. A suppressed function is displayed in gray letters (to indicate that it is disabled). When you select an enabled function name, a dialog box opens, asking you whether to release the notification suppression.
- 4. In the dialog box, click Yes.

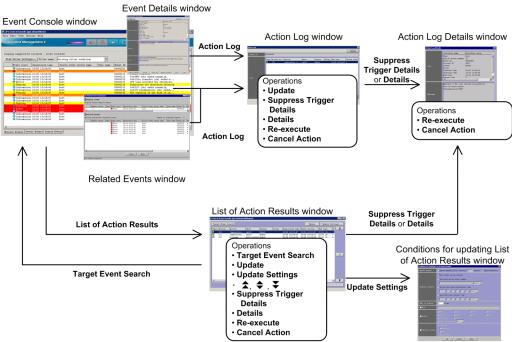
Clicking Yes releases the notification suppression, enabling the monitoring function again.

## 8.2.2 Checking the execution results of automated actions

You can check the execution results of automated actions in the Action Log window or List of Action Results window of JP1/IM - View. You can also check the execution results by using the jcashowa command.

In the Action Log window and List of Action Results window, you can also perform operations such as displaying action details and re-executing actions, in addition to checking execution results. The figure below shows the window transitions and operations related to automated actions.

Figure 8–1: Window transitions and operations related to automated actions



Operations are divided into those that display detailed information about action execution results and those for repeating an operation (re-execution or cancellation) on action execution results.

The procedures for checking the execution results and for repeating an operation (re-execution or cancellation) follow.

## (1) Checking the execution results of automated actions

You can check the execution results of automated actions in the Action Log window or List of Action Results window, or by using the jcashowa command.

## (a) Checking the execution results in the Action Log window

In the Action Log window, you can display the execution results of automated actions that were set for the events selected from the events list in the Event Console window.

To check the execution results in the Action Log window:

- 1. From the events list in the Event Console window, select an event for which the action icon is displayed in the **Action** column.
- 2. Using one of the following methods, open the Action Log window:
  - From the menu bar, choose View and then Action Log.
  - From the popup menu, choose **Action Log**.
  - Click the **Action Log** button.

The Action Log window opens.

The Action Log window displays the selected event IDs and the execution results of the automated actions that are specified for those event IDs.

3. To view the details of the execution result of each automated action, or to view the details about the automated action that became a trigger for suppressing an action, open the Action Log Details window.

To view the execution results of an automated action:

- From Log, select an automated action and click the Details button.
- Double-click an automated action displayed in Log.

To view the automated action that became a suppression trigger:

• From Log, select an automated action that is suppressed, and click the Suppress Trigger Details button.

The Action Log Details window opens.

This window displays the execution results and the message that was issued. For details about the execution results that are displayed, see 3.37 Action Log Details window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

If the Related Events window is open, you can open the Action Log window by selecting an event that has the action icon attached and then choosing **Action Log** from the popup menu. If the Event Details window is open, you can open the Action Log window by clicking the **Action Log** button.

#### (b) Checking the execution results in the List of Action Results window

In the List of Action Results window, you can display the execution results of automated actions that were set by the logged-in manager. Set the condition for the automated actions to be displayed in the Conditions for Updating List of Action Results window.

To check the execution results in the List of Action Results window:

- 1. From the Event Console window, choose View and then List of Action Results.
  - The List of Action Results window opens.
  - From among the automated actions that were set by the logged-in manager, the List of Action Results window displays a list of those execution results for automated actions that satisfy the condition specified in the Conditions for Updating List of Action Results window.
- 2. To change the condition for displaying the execution results of automated actions, click the **Update Settings** button. The Conditions for Updating List of Action Results window opens.
  - In this window, you can specify an updating method (automatic update or manual update) and an action result acquisition range, as well as a display item count and display condition to be used during updating. For details, see 3.39 Conditions for Updating List of Action Results window in the manual JP1/Integrated Management 2 Manager GUI Reference.
- 3. To update the display content of the execution results of automated actions according to an updated condition, click the **Update** button.
  - The display content is updated according to the content that is specified in the Conditions for Updating List of Action Results window.
- 4. To display the execution results of automated actions that occurred before the automated actions currently listed, click the icon. To display the execution results of automated actions that occurred after the automated actions currently listed, click the icon. To re-display execution results according to the updating condition that is specified in the Conditions for Updating List of Action Results window, click the icon.
- 5. To view the details of the execution result of each automated action, or to view the details about the automated action that became a trigger for suppressing an action, use one of the following methods to open the Action Log Details window:

To view the details of the execution result of each automated action:

• From Log, select an automated action and then click the **Details** button.

• Double-click an automated action displayed in Log.

To view the automated action that became a suppression trigger:

• From Log, select an automated action that is suppressed, and then click the Suppress Trigger Details button.

The Action Log Details window opens.

This window displays the execution result and the message that has been issued. For details about the execution results to be displayed, see 3.37 Action Log Details window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

6. To display the JP1 event that triggered execution of the automated action, from **Log**, select an automated action, and then click the **Target Event Search** button.

An event search is executed and the **Search Events** page of the Event Console window displays the JP1 event that triggered execution of the automated action.

#### (c) Using the jcashowa command to check execution results

You can use the jcashowa command to display the execution results of automated actions. When executed, the jcashowa command displays the results of executed automated actions that are stored in the action information file. Use the jcashowa command in an environment in which JP1/IM - View is not used, or when you want to output the execution results of automated actions to a file.

A command execution example follows. To display the execution results of automated actions that were taken for JP1 events received between 16:00 and 17:00 on July 1, enter the following from the manager:

```
jcashowa -d 07/01/16:00,07/01/17:00
```

For details about the jcashowa command syntax and the execution result display method, see *jcashowa* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## (2) Canceling automated actions

When an automated action is in one of the following statuses, you can cancel that automated action:

- Wait, Queue, or Running
- Send (Miss), Wait (Miss), Queue (Miss), or Running (Miss)

You can cancel an automated action in the Action Log window, List of Action Results window, Action Log Details window, or by using the <code>jcacancel</code> command. To use one of these windows to cancel an automated action, you need <code>JPl\_Console\_Admin</code> permission or <code>JPl\_Console\_Operator</code> permission. In addition, when the reference and operation permissions are set for a business group, operations in the Event-Information Mapping Definitions window might not be possible depending on the combination of <code>JPl</code> resource group and <code>JPl</code> permission level. For details, see <code>4.1.4(2)</code> Assigning a <code>JPl</code> resource group and permission level to a <code>JPl</code> user in the <code>JPl/Integrated</code> Management <code>2-Manager</code> Overview and System Design Guide.

# (a) Canceling an automated action from the Action Log window or List of Action Results window

To cancel an automated action from the Action Log window or List of Action Results window:

- 1. Open the Action Log window or List of Action Results window.

  For details about how to open windows, see 8.2.2(1) Checking the execution results of automated actions.
- 2. Select the automated action you want to cancel.

#### 3. Click the Cancel Action button.

The cancellation confirmation dialog box opens.

#### 4. Click OK.

The request to cancel the selected automated action is accepted.

5. To check the status following the cancellation, click the **Update** button.

#### (b) Canceling an automated action from the Action Log Details window

To cancel an automated action from the Action Log Details window:

1. Open the Action Log Details window.

For details about how to open windows, see 8.2.2(1) Checking the execution results of automated actions.

#### 2. Click the **Cancel Action** button.

The cancellation confirmation dialog box opens.

#### 3. Click OK.

The request to cancel the selected automated action is accepted.

4. To check the status following the cancellation, click the **Close** button and return to the Action Log window or List of Action Results window, and then click the **Update** button.

#### (c) Using the jcacancel command to cancel automated actions

You can use the <code>jcacancel</code> command to cancel automated actions. Use this command when you want to cancel automated actions in batches by host or system. Before executing the <code>jcacancel</code> command to cancel automated actions, confirm which automated actions will be canceled. For details about the confirmation method, see 8.2.2(1) Checking the execution results of automated actions.

A command execution example follows. To cancel all automated actions that are queued or running on host01 in a single batch, enter the following from the manager:

```
jcacancel -s host01
```

For details about the <code>jcacancel</code> command syntax and the execution result display method, see <code>jcacancel</code> (in <code>Chapter 1. Commands</code>) in the manual <code>JP1/Integrated Management 2 - Manager Command</code>, <code>Definition File and API Reference</code>.

## (3) Re-executing an automated action

When an automated action is in one of the following statuses listed, you can re-execute that automated action:

- Deterrent, Ended, Error, Cancel, or Kill
- Ended (Miss) or Error (Miss)

You can re-execute an automated action from the Action Log window, List of Action Results window, or Action Log Details window. To use one of these windows to re-execute an automated action, you need <code>JP1\_Console\_Admin</code> permission or <code>JP1 Console Operator</code> permission.

In addition, when the reference and operation permissions are set for a business group, operations in the Event-Information Mapping Definitions window might not be possible depending on the combination of JP1 resource group and JP1 permission level. For details, see 4.1.4(2) Assigning a JP1 resource group and permission level to a JP1 user in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

# (a) Re-executing an automated action from the Action Log window or List of Action Results window

To re-execute an automated action from the Action Log window or List of Action Results window:

- 1. Open the Action Log window or List of Action Results window.

  For details about how to open windows, see 8.2.2(1) Checking the execution results of automated actions.
- 2. Select the automated action you want to re-execute.
- 3. Click the **Re-execute** button.

The re-execution request confirmation dialog box opens.

4. Click OK.

The request to re-execute the selected automated action has been accepted.

5. To check the status following the re-execution, click the **Update** button to update the List of Action Results window.

#### (b) Re-executing an automated action from the Action Log Details window

To re-execute an automated action from the Action Log Details window:

1. Open the Action Log Details window. For details about how to open windows, see 8.2.2(1) Checking the execution results of automated actions.

2. Click the **Re-execute** button.

The re-execution request confirmation dialog box opens.

3. Click OK.

The request to re-execute the selected automated action has been accepted.

4. To check the status following the re-execution, click the **Close** button to return to the Action Log window or the List of Action Results window, and then click the **Update** button.

## 8.2.3 Checking the operating status of the automated action function

If the automated action function is not running, no automated action is executed even if an event that triggers automated action is registered in the JP1/Base of the manager. You can use the jcastatus command to check the operating status of the automated action function.

When the jcastatus command is executed, information indicating a status (RUNNING, STANDBY, or STOP) is output to standard output according to the operating status (running, standby, or stopped). If the operating status is RUNNING, the automated action function is running. If the operating status is STANDBY, the automated action function is not running and therefore the automated action is not executed. To change the status to RUNNING, you need to execute the jcachange command. If the operating status is STOP, JP1/IM - Manager may have stopped. In this case, you need to restart JP1/IM - Manager.

For details, see the following sections:

For the jcastatus command and the display format

See *jcastatus* (in *Chapter 1*. Commands) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

For the jcachange command and the display format

See *jcachange* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

For details about how to start and stop JP1/IM - Manager:

See Chapter 3. Starting and Stopping JP1/IM - Manager.

## 8.3 Opening other application windows from the Tool Launcher

The Tool Launcher window displays a list of programs linked to JP1/IM, and you can start a program from this window. You can start the following two types of programs:

Application programs in the viewer

These are application programs that are installed on the same host as JP1/IM - View. When you select a program from the Tool Launcher, an executable file is started.

#### Web page

When an application on the system provides a Web page, you can display that Web page. When you select a program from the Tool Launcher, a Web browser starts and displays the Web page.

To use these functions, you must set the URL of the Web page in advance. For details about the setting, see *Web page call definition file (hitachi\_jpl\_product-name.html)* (in *Chapter 2. Definition Files*) in the manual *JPl/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

Furthermore, before using the Tool Launcher to link to another product, check the operating environment (supported OS and browsers, for example) of that product.

An example of the Tool Launcher window follows.



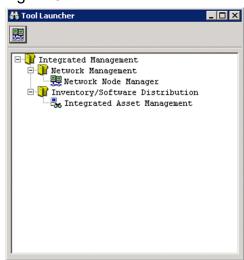
#### Important

You can't start Microsoft Edge from the Tool Launcher, even if the product you work with supports Microsoft Edge. When you launch a web browser with The Tool Launcher feature, If Microsoft Edge is specified as the OS default browser, follow these steps to change it to Internet Explorer:

#### Steps

- 1. In Control Panel, select Default Programs and then Set your default programs.
- 2. From the list of programs, select **Internet Explorer**.
- 3. Click Set this program as default.

Figure 8–2: Tool Launcher window example



The above figure shows the Tool Launcher window when no application program linked to JP1/IM has been installed in the viewer. When an application program is installed in the viewer, that installed application program is added to the tree in the display.

For details about the programs to be linked, see 8.3.2 Functions that can be operated from the Tool Launcher window.

#### 8.3.1 Operations in the Tool Launcher window

The Tool Launcher window displays the functions of the programs linked to JP1/IM in a tree format. A folder expresses a function category. By double-clicking the end of the tree, you can open a Web page or application program window.

To display a Web page or open an application program window:

1. In the Event Console window, from the **Monitoring Tree** page, choose **Options** and then **Start Integrated Function**Menu. Alternatively, from the toolbar, click the icon.

The Tool Launcher window opens.

If MENU\_AUTO\_START=ON is specified in the tuning.conf file of JP1/IM - View, the Tool Launcher window automatically opens when you log in. For details about the tuning.conf file of JP1/IM - View, see *IM-View settings file (tuning.conf)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

2. Expand the tree in the Tool Launcher and double-click the item you want to display.

The window for the selected function opens.

Note:

When an application program is invoked from the Tool Launcher, the application program cannot start if the OS user that started JP1/IM - View does not have the necessary permissions to execute the application program being invoked.

You must also start JP1/IM - View using the permissions that can execute the application program being invoked.

The functions listed in the table below can also be invoked from toolbar icons.

Table 8–1: Functions that can be invoked from toolbar icons

Function name	Icon
Network node manager	<del>2</del> 8
Windows Remote Controller	*
Inventory/Software Distribution	<b>ॐ</b> #

<sup>#:</sup> The Windows edition of JP1/IM - View cannot link to the Web page of JP1/Software Distribution Manager; therefore, the **Inventory/Software Distribution** icon is not displayed.

## 8.3.2 Functions that can be operated from the Tool Launcher window

The table below shows the functions that are displayed in the Tool Launcher window.

If the window type is an application window and the applicable program is not installed in the viewer, the function name is not displayed in the viewer.

For details about the supported versions of linkage products and the supported OSs, see the documentation of the applicable linkage product.

Table 8–2: Functions displayed in the Tool Launcher window

Menu item		Description of the function that starts			
Folder name	Subfolder name	Function name	Window type	Program name	Installation destination
Network Management		Network Node Manager	Web page	JP1/Cm2/NNM	Host within the system
				HP NNM	
		Internet Gateway	Application window	JP1/Cm2/Internet Gateway Server	Host on which JP1/IM - View is installed
Job Management		Job Scheduler	Application window	JP1/AJS - View	Host on which JP1/IM - View is installed
		Scenario Operation	Application window	JP1/AJS2 - Scenario Operation View	Host on which JP1/IM - View is installed
		Print Service	Application window	JP1/NPS	Host on which JP1/IM - View is installed
	File Transmi ssion	Transmission Regist. & Exe.	Regist. & window	JP1/FTP	Host on which JP1/IM - View is installed
		Log Information	Application window		
		Auto-Start Program Registration	Application window		
Inventory/ Software Distribution		Integrated Asset Management	Web page	JP1/Asset Information Manager	Host within the system
		Inventory/ Software Distribution	Web page	JP1/Software Distribution Manager	Host within the system
		Facilities Asset Management	Application window	JP1/NetInsight II - Facility Manager	Host on which JP1/IM - View is installed
		Windows Remote Controller	Application window	JP1/NETM/Remote Control Manager	Host on which JP1/IM - View is installed
		Distribution /Asset Management	Application window	JP1/Software Distribution Manager	Host on which JP1/IM - View is installed
Storage Management	Storage Area Managem ent	Storage System Operation Management	Web page	Hitachi Tuning Manager software	Host within the system
		Storage Hardware Management	Web page	Hitachi Device Manager software	

Menu item		Description of the function that starts			
Folder name	Subfolder name	Function name	Window type	Program name	Installation destination
		Storage Resource Management	Web page	Hitachi Provisioning Manager	
		Storage Replication Management	Web page	Hitachi Replication Manager software	
		Tiered Storage Resource Management	Web page	Hitachi Tiered Storage Manager software	
		Global I/O Path Operation Management	Web page	Hitachi Global Link Manager software	
Server Management		Management Console	Application window	JP1/Server Conductor	Host on which JP1/IM - View is installed
		Web Console	Web page		Host within the system
Hardware Management		SANRISE2000 Remote Console	Application window	SANRISE	Host on which JP1/IM - View is installed
	-	SANRISE H512/H48 Remote Control XP	Application window		
Automated Notification		Notification Rule Setting	Application window	TELstaff or JP1/TELstaff	Host on which JP1/IM - View is installed
Mainframe Linkage		VOS3 Console Operation	Application window	VOS3 AOMPLUS(AOMPLUS CIF)	Host on which JP1/IM - View is installed
Cosminexus Operation Management		Cosminexus Operation Management Portal	Application window	Cosminexus Application Server	Host on which JP1/IM - View is installed

Legend:

--: None

# 9

# Managing the System Hierarchy Using IM Configuration Management

This chapter explains how to use IM Configuration Management to manage the system hierarchy (IM configuration). For details about the windows described in this chapter, see *Chapter 5. IM Configuration Management Window* in the manual *JP1/Integrated Management 2 - Manager GUI Reference*.

#### 9.1 Managing hosts

If you change the JP1/IM system configuration or the host information, such as the name or IP address of a managed host, you must review the information related to the hosts managed in the IM Configuration Management database.

Perform the following tasks from the IM Configuration Management - View to manage host information.

#### Registering hosts

To register a new host in the IM Configuration Management database, use the Register Host window, which you can open from the IM Configuration Management window.

For details about the method, see 3.1.1 Registering hosts in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Deleting a host

You can delete a host registered in the IM Configuration Management database on the **Host List** page of the IM Configuration Management window.

For details about the method, see 3.1.6 Deleting hosts in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Collecting information from hosts

You can collect host information from the **Host List** page or **IM Configuration** page of the IM Configuration Management window.

For details about when host information is collected or the collection method, see 3.1.3 Collecting information from hosts in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Changing the host information

To change the host information registered in the IM Configuration Management database, use the Edit Host Properties window, which you can open from the IM Configuration Management window.

For details about the method, see 3.1.5 Changing the attributes of host information in the JP1/Integrated Management 2 - Manager Configuration Guide.

If you edit the host name registered in the system hierarchy (IM configuration), you must re-apply the system hierarchy. For details about the procedure for applying the system hierarchy, see 3.2.4(3) Applying a system hierarchy to a system managed by IM Configuration Management in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Displaying a host list

To display a list of the hosts registered in the IM Configuration Management database, use the **Host List** page of the IM Configuration Management window.

For details about the method, see 3.1.4 Displaying host information in the JP1/Integrated Management 2 - Manager Configuration Guide.

## 9.2 Managing the system hierarchy

If you change the system hierarchy (IM configuration), you must review the system configuration definition information registered in the IM Configuration Management database.

Perform the following tasks from the IM Configuration Management - View to manage the system hierarchy.

#### Collecting system hierarchy information

To collect the system configuration definition information, use the **Host List** page or **IM Configuration** page of the IM Configuration Management window. You can collect system configuration definition information from all hosts that constitute a system.

For details about the method, see 3.2.1 Collecting the system hierarchy in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Displaying the system hierarchy

To display the system hierarchy, use the **IM Configuration** page of the IM Configuration Management window. For details about the method, see 3.2.2 Displaying the system hierarchy in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Verifying the system hierarchy

You can verify whether the collected configuration definition information matches the configuration definition information maintained by IM Configuration Management. To verify the configuration definition information, use the **Host List** page or **IM Configuration** page of the IM Configuration Management window.

For details about the method, see 3.2.3 Verifying the system hierarchy in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Editing the system hierarchy

You can edit the configuration definition information to add, move, and delete hosts. To edit the configuration definition information, use the Edit Agent Configuration window or the Edit Remote Monitoring Configuration window, which you can open from the IM Configuration Management window.

For details about the method, see 3.2.4 Editing the system hierarchy in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Applying the system hierarchy

You can apply the configuration definition information edited in the Edit Agent Configuration window or the Edit Remote Monitoring Configuration window to all the hosts constituting a system. To apply the configuration definition information, use the Edit Agent Configuration window or the Edit Remote Monitoring Configuration window.

For details about the method, see 3.2.4(3) Applying a system hierarchy to a system managed by IM Configuration Management in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Synchronizing system hierarchies

When the system hierarchy is defined separately by the integrated manager and the site managers, you must synchronize the system hierarchies used by the integrated manager and the site managers. To synchronize the system hierarchies, use the **IM Configuration** page of the IM Configuration Management window.

For details about the method, see 3.2.5 Synchronizing the system hierarchy in the JP1/Integrated Management 2 - Manager Configuration Guide.

## 9.3 Managing the configuration of a virtual system

This section explains how to manage a system hierarchy that contains a virtual host (virtual system configuration) by operating IM Configuration Management - View or by executing a command.

The management of a virtual configuration requires virtualization software and virtual environment management software. For details about the software you can use, see 7.3 Virtualization configuration management in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

# 9.3.1 Registering a virtual system host

To register a virtual host into IM Configuration Management, open the Register Host window from the IM Configuration Management window.

For details about the method, see 3.3.1(2) Setting virtualization configuration information in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 9.3.2 Displaying host information in a virtual system

This subsection explains how to display information about a host that is registered as a virtual host in the system hierarchy. To display host information, invoke the **Host List** page of the IM Configuration Management window.

- In the IM Configuration Management window, click the Host List tab.
   The Host List page opens.
- 2. From the tree pane, select a virtual host.
- 3. Use either of the following methods to collect host information:
  - From the menu bar, choose **Operation** and then **Collect Host Information**.
  - From the popup menu that opens when you right-click the mouse, choose Collect Host Information.

If you want to collect host information, JP1/Base must be running on the virtual host.

Note that, because JP1/Base cannot be installed on VMware ESX and Hitachi Compute Blade logical partitioning feature, executing **Collect Host Information** causes an error.

4. Click the **Basic Information** button, **Product Information** button, or **Service Information** button.

Depending on the button you clicked, the node information display area displays different host information. You cannot click the **Lower Host Information** button.

# 9.3.3 Applying the management information to the Central Scope monitoring tree

To use Central Scope to monitor a virtual host registered in the system hierarchy, you need to export the management information of IM Configuration Management and import it into the monitoring tree information of Central Scope. The procedure follows:

1. Execute the jcfexport command.

Export the configuration information of IM Configuration Management.

- 2. Execute the jcsdbexport command.
  - Export the monitoring tree information of Central Scope.
- 3. Using the output files of both the jcfexport and jcsdbexport commands as arguments, execute the jcfmkcsdata command.
  - Merge the configuration information of IM Configuration Management with the monitoring tree information.
- 4. Execute the jcsdbimport command.
  - Import the merged management information of IM Configuration Management and the monitoring tree information.

Using Central Scope - View, make sure that the merged virtual host is displayed.

#### 9.4 Managing business groups

When monitoring targets are set as business groups, you must create, edit, and delete the business groups at the same time you review the configuration of business groups.

#### Creating a new business group

For details about the procedure for creating a new business group, see 3.4.1(1)(a) Creating a business group in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Editing the registration information of a business group

For details about the procedure for editing the registration information of a business group, see 3.4.1(1)(b) Editing the properties of a business group in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Deleting unnecessary business groups

For details about the procedure for deleting unnecessary business groups, see 3.4.1(1)(c) Deleting a business group in the JP1/Integrated Management 2 - Manager Configuration Guide.

After creating, editing, or deleting business groups, you need to apply the hierarchy of the business groups and the monitoring groups to the monitoring tree. For details about the procedure for applying the management hierarchy, see 3.4.4(2) Applying business group information and monitoring group information to the Central Scope monitoring tree in the JP1/Integrated Management 2 - Manager Configuration Guide.

## 9.5 Managing profiles

If you change the content of a profile during system update or maintenance or apply the content of a profile to the profile of another host, you must review the profile registered in the IM Configuration Management database.

Perform the following tasks from the IM Configuration Management - View to manage profiles.

There are two types of profiles: one for valid configuration information and the other for the content of the configuration file.

#### Obtaining profiles

You can obtain the following profiles:

- Valid JP1/Base configuration information on an agent host
- The JP1/Base configuration file on an agent host (event forwarding settings file, log file trap action-definition file, log-file trap startup definition file, event log trap action-definition file, and local action definition file)
- Valid configuration information for a monitored remote host

For details about the method, see 3.5.1(2) Collecting profiles in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Obtaining a list of profiles

You can obtain a list of profiles managed by JP1/Base on an agent host. This information is displayed in the tree pane of the Display/Edit Profiles window.

For details about the method, see 3.5.1(1) Collecting profile lists in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Displaying profiles

You can display the profiles for JP/Base on an agent host and a monitored remote host in the Display/Edit Profiles window.

For details about the method, see 3.5.1(3) Displaying profiles in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Editing settings files

You can edit settings files in the Display/Edit Profiles window. The following types of profiles can be edited by using a settings file:

- Event Forwarding
- Log File Trapping
- Event Log Trapping
- Local Action
- Log File Trapping under Remote Monitoring
- Event Log Trapping under Remote Monitoring

For details about the method, see 3.5.1(5) Editing configuration files in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### Applying edited settings file information

You can apply edited settings file information.

For details about the method, see 3.5.1(6) Applying edited information in configuration files in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 9.6 Managing service operation status

This chapter explains how to use IM Configuration Management - View to manage the status of service operations on each host.

## 9.6.1 Collecting service operation information

In an agent configuration, you can collect information about the operation of services that are running on each host from the system hierarchy.

Note that in a remote monitoring configuration, you cannot collect service operation information.

To collect service operation information, use the **Host List** page or **IM Configuration** page of the IM Configuration Management window. The procedure differs according to the page you select.

# (1) Collecting service operation information from the Host List page

To collect service operation information from the **Host List** page of the IM Configuration Management window:

- 1. In the IM Configuration Management window, click the **Host List** tab. The **Host List** page opens.
- 2. From the tree pane, select a host.

You cannot collect service operation information by selecting **Host List**. Furthermore, the range of hosts from which operation information can be collected varies depending on the manager on which IM Configuration Management is running. For details about the range of hosts that can be selected, see 7.7.2 Collecting service activity information in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

3. Click the **Service Information** button.

The collected service operation information is displayed in the node information display area.

4. From the menu bar, choose **Display** and then **Refresh**.

The latest service option information is collected from the host, and the display in the node information display area is refreshed.

# (2) Collecting service operation information from the IM Configuration page

To collect service operation information from the **IM Configuration** page of the IM Configuration Management window:

- 1. In the IM Configuration Management window, click the **IM Configuration** tab. The **IM Configuration** page opens.
- 2. From the tree pane, select a host.

The range of hosts from which operation information can be collected varies depending on the manager on which IM Configuration Management is running. For details about the range of hosts that can be selected, see 7.7.2 Collecting service activity information in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

3. Use either of the following methods to collect host information.

- From the menu bar, choose **Operation** and then **Collect Host Information**.
- From the popup menu that opens when you right-click the mouse, click Collect Host Information.

#### 4. Click the **Service Information** button.

The collected service operation information is displayed in the node information display area.

5. From the menu bar, choose **Display** and then **Refresh**.

The latest service option information is collected from the host, and the display in the node information display area is refreshed.

#### 9.6.2 Service operation information display

For details about how to display the operation information of services that are running on each host from the system hierarchy (IM configuration), see 9.6.1 Collecting service operation information.

The information on services in the IM Configuration Management window displays the following types of operation information:

Table 9–1: Operation information that is displayed for each service

Product name	Service name	Operating status
JP1/Base	JP1/Base	The operating status of the service is displayed as one of the
	Event Service	following:  • Running
	Log file trap	• Stopped
JP1/IM - Manager	JP1/IM - Manager	Partially running
31 1/11v1 - ividilagei	31 1/11v1 - Ivianagei	Collection failed

**Detailed Information** in the IM Configuration Management window displays the execution results of the commands that collect information from individual services as follows.

Table 9-2: Commands that collect information about individual services

Service name	Collection command
JP1/Base	jbs_spmd_status
Event Service	jevstat
Log file trap	jevlogstat ALL
JP1/IM - Manager	jco_spmd_status
Log file trap (remote)	jcfallogstat <sup>#</sup>
Event log trap (remote)	jcfaleltstat <sup>#</sup>

<sup>#:</sup> Information corresponding to the collection command is output.

# 9.7 Exporting and importing management information of IM Configuration Management

This section explains how to execute commands to export and import the management information of IM Configuration Management.

# 9.7.1 Exporting management information of IM Configuration Management

By outputting (exporting) management information managed by IM Configuration Management and then inputting (importing) it, you can copy management information from one host to another. In addition, by editing the system configuration information that has been exported, you can easily modify it. This subsection explains the management information that is exported by the jcfexport command. For details about the jcfexport command, see *jcfexport* in *Chapter 1. Commands* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

# (1) Host information

Information related to the host managed by IM Configuration Management is exported to the host input information file and the collected host information file.

For details about the host input information file, see *Host input information file (host\_input\_data.csv)* in *Chapter 2*. *Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*.

For details about the collected host information file, see *Collected host information file (host\_collect\_data.csv)* in *Chapter 2. Definition Files* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

# (2) System hierarchy information

The system hierarchy information is exported to a file. You can edit the exported file and import it.

The information that is output differs according to the system monitoring method:

- Agent monitoring
- Remote monitoring

#### (a) Configuration information for agent monitoring

The name of the file that is exported is system tree information.txt.

The following table describes the configuration information for agent monitoring that is output to the file.

Table 9–3: JP1/IM's system hierarchy information that is exported

Output item	Description of output value
[managing-host]	<ul> <li>Indicates the integrated manager, a site manager, or a relay manager that manages JP1/Base hosts.</li> <li>The first managing host that is defined is the integrated manager, and the managing hosts subsequently defined are either site managers or relay managers.</li> <li>Hosts are treated as managed hosts until the next host in square brackets [] appears.</li> <li>If the system hierarchy is divided and defined, the host name is preceded by an asterisk (*).</li> </ul>

Output item	Description of output value	
managed-host	<ul> <li>A JP1/Base host that is managed by a managing host.</li> <li>A site manager or relay manager is defined as a host managed by the integrated manager.</li> <li>If the system hierarchy is divided and defined, the host name is preceded by an asterisk (*).</li> </ul>	

#### (b) Configuration information for remote monitoring

The configuration information for remote monitoring is exported to a file. The name of the file to be exported is system\_remote\_tree\_information.txt.

The following table describes the configuration information for remote monitoring that is output to the file.

Table 9–4: Configuration information for remote monitoring that is exported

Output item	Description of output value
[managing-host]	<ul> <li>Indicates the integrated manager or site manager that manages the remote monitoring configuration.</li> <li>For a site manager, the host name is preceded by an asterisk (*).</li> </ul>
managed-host	A host that is managed remotely in IM Configuration Management

# (3) Profile information

The profile information that is running on the host is exported. The files that are exported differ according to the system monitoring method:

- · Agent monitoring
- · Remote monitoring

## (a) Profile information for agent monitoring

The profile information of the JP1/Base that is running on the host is exported. The file is exported to the first-level directory (host-name) and the second-level directory (JP1Base) under the definition\_files directory. The log file trap action definition file is exported to the third-level directory (cf\_log\_file\_trap). The following table describes the profile information that is exported.

Table 9–5: Name of the files for exporting profile information for agent monitoring

Profile information	Export file name	
Event forwarding settings file	forward	
Log-file trap action definition file	Any name	
Log-file trap startup definition file	jevlog_start.conf	
Event log-trap action definition file	ntevent.conf	
Local action execution definition file	jbslcact.conf	

Note: There is no data to be exported for a host for which profile settings files are not collected (in such a case, the directories are not created).

#### (b) Profile information for remote monitoring

The profile information of JP1/IM - Manager is exported to a file, and cannot be edited.

The file is exported to the first-level directory (host-name) and the second-level directory (al) under the definition\_files directory. The log file trap action-definition file is exported to the third-level directory (cf\_log\_file\_trap), and the event log trap action definition file is exported to the third-level directory (cf\_event\_log\_trap). The following table describes the profile information that is exported.

Table 9-6: Names of the files for exporting profile information for remote monitoring

Profile information	Export file name	
Remote-monitoring log file trap action-definition file	Any name	
Remote monitoring startup definition file	jevlog_start.conf	
Remote-monitoring event log trap action-definition file	ntevent.conf	

# (4) Remote authentication information

When remote monitoring is used, remote authentication information is exported. The name of the file to be exported is wmi.ini or ssh.ini.

# (5) Business group information

When business groups are used, information about the business groups is exported to a file named monitoring\_system\_data.csv. The following table describes the business group information output to monitoring system data.csv.

Table 9–7: Exported business group information

Line	Output item	Output value	
First line (header   Product name		JP1/IM-CF	
information)	File format version	File format version For example, if the version of JP1/IM - Manager is 09-50, 095000 is output.	
T d		Character code This depends on the setting of the LANG environment variable on the manager. For details, see <i>Table 2-79 Character encoding of files</i> in <i>Host input information file</i> (host_input_data.csv) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.	
Second line Business group name		Monitoring_system_name	
(header information)	Assigned JP1 resource group name	JP1_resource_group_name	
	Comment	Comment	
	Host name	Host_name_list	
Third and Business group name Name of the business group		Name of the business group	
subsequent lines	Assigned JP1 resource group name	Name of the JP1 resource group assigned to the business group	
	Comment	Comment	
	Host name	Name of the host registered in the business group (If there are multiple hosts, hosts are delimited with a comma (, ) and the entire string of hosts is enclosed in double quotation marks (""))	

Note: Business group information is sorted in ascending order of business group name before being output.

The following shows an example of outputting business group information:

```
JP1/IM-CF;095000;UTF-8,,,
Monitoring_system_name, JP1_resource_group_name, Comment, Host_name_list
System1,, This is the empty system,
System2, Resource_A, This is System2, "host21, host22, host23, host24"
System3, Resource A, This is System3, "host31, host32"
```

# (6) Monitoring group information

When business groups are used, the monitoring group information of IM Configuration Management is exported to a file named monitoring\_group\_data.csv. The following table describes the monitoring group information that is output to monitoring group data.csv.

Table 9–8: Exported monitoring group information

Line	Output item	Output value	
First line (header	Product name	JP1/IM-CF	
information)	File format version	File format version For example, if the version of JP1/IM - Manager is 10-50, 101000 is output.	
This detail (host		Character code This depends on the setting of the LANG environment variable of the manager. For details, see Table 2-79 Character encoding of files in Host input information file (host_input_data.csv) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.	
Second line Monitoring group path		Monitoring_group_path	
(header information)	Comment	Comment	
Host name Host_name_list		Host_name_list	
Third and	Monitoring group path	Monitoring group path	
subsequent lines	Comment	Comment	
	Host name	Name of the host registered in the monitoring group (If there are multiple hosts, hosts are delimited with a comma (, ) and the entire string of hosts is enclosed in double quotation marks (""))	

Note: Monitoring group information is sorted in ascending order of monitoring group path and before being output.

The following shows an example of outputting monitoring group information:

```
JP1/IM-CF;101000;UTF-8,,

Monitoring_group_path,Comment,Host_name_list
/System1/Group1,This is the empty group,
/System1/Group2,This is Group2,host2
/System2/Group1,This is Group1,"host11,host12,host13,host14"
```

# 9.7.2 Importing management information of IM Configuration Management

If necessary, you can edit the management information of IM Configuration Management that has been output (exported) from a host, and you can input (import) the edited information onto a different host. You use the jcfimport command for the import operation, but you cannot import collected host information.

Since importing will change the data held by IM Configuration Management, we recommend that you back up the data before executing the import operation.

This subsection explains the system configuration information that is imported by the jcfimport command. For details about how to apply the imported management information of IM Configuration Management to a system, see 9.7.3 Applying the imported management information of IM Configuration Management to a system.

For details about the jcfimport command, see *jcfimport* in *Chapter 1. Commands* of the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

# (1) Host information

In the case of manually-entered information, the content of the export file (host\_input\_data.csv) is imported.

The table below shows the items that are imported from the export file (host\_input\_data.csv) for manually-entered information, and the input range for each item.

Table 9–9: Host information that is imported (manually-entered information)

Item	Input range	Required/Optional	Default
Host	A character string of up to 255 bytes may be input.  Permitted characters are alphanumeric characters, periods (.) and the hyphen (-), excluding control codes.  Required#1		
IP address	Permitted characters are alphanumeric characters, periods (.), and colons (;). Control codes are not permitted.	Optional	Blank
Host name list	Host names can be input. Permitted characters are alphanumeric characters periods ( . ) and the hyphen (-), excluding control codes.	Optional	Blank
Comment	A character string of up to 80 bytes may be input.	Optional	Blank
Host type	You can input one of the following:  • physical  • logical  • virtual  • unknown	Optional	physical
Active host	A character string of up to 255 bytes may be input. Permitted characters are alphanumeric characters periods (.) and the hyphen (-), excluding control codes.	Optional	Blank
Standby host	Host names can be input. For each host name, a character string of up to 255 bytes may be input. Permitted characters are alphanumeric characters periods (.) and the hyphen (-), excluding control codes.	Optional	Blank

Item	Input range	Required/Optional	Default
VMM host	A character string of up to 255 bytes can be input. Permitted characters are alphanumeric characters periods (.) and the hyphen (-), excluding control codes.	Optional	Blank
Virtual manager type	One of the following can be input. This item is not case sensitive.  For a virtualization system management host:  - vCenter  - JP1/SC/CM  - SCVMM  - HCSM  For a VMM host:  - ESX <sup>#2</sup> - Hyper-V  - KVM  - Virtage <sup>#3</sup>	Optional	Blank
User name	A character string of up to 255 bytes can be input. Permitted characters are alphanumeric characters other than control codes.	Optional	Blank
Password <sup>#4</sup>	A character string of up to 255 bytes can be input. Permitted characters are alphanumeric characters other than control codes.	Optional	Blank
Domain name#5	A character string of up to 255 bytes can be input. Permitted characters are alphanumeric characters other than control codes.	Optional	Blank
Communication type#6	Either http, https, or ssh can be input. This item is not case sensitive. Which communication types you can specify depends on the virtual manager type:  When the virtual manager type is vCenter:  https or http can be input.  When the virtual manager type is HCSM:  http can be input.  When the virtual manager type is KVM:  ssh can be input.	Optional	When the virtual manager type is vCenter:    https  When the virtual manager type is HCSM:    http  When the virtual manager type is KVM:    ssh
Port number <sup>#7</sup>	A numeric value from 1 to 65535 can be entered.	Optional	When the virtual manager type is HCSM: 23015 When the virtual manager type is KVM: 22
Private key file name <sup>#8</sup>	A character string of up to 256 bytes can be input. This item is case sensitive. Permitted characters are alphanumeric characters other than control codes.	Optional	Blank
Virtualization management former host name	A character string of up to 255 bytes can be input. Permitted characters are alphanumeric characters, periods (.) and hyphens (-). Control codes are not permitted.	Optional	Blank
Remote communication type	This item can be used for remote monitoring. You can input one of the following:	Optional	disable

<sup>9.</sup> Managing the System Hierarchy Using IM Configuration Management

Item	Input range	Required/Optional	Default
	• disable • ssh • wmi		
Authentication information category#9	This item can be used for remote monitoring. You can input one of the following:  • common  • host  • Blank	Optional	Blank

#### Legend:

--: There is no default value.

Note: The length (in bytes) of the character string is in UTF-8.

- #1: If the required item is not specified, an error occurs. If an optional item is not specified, the default value is imported.
- #2: ESX indicates VMware ESX.
- #3: Virtage indicates the Hitachi Compute Blade logical partitioning feature.
- #4: This item must be input when the virtual manager type is vCenter, SCVMM, or HCSM.
- #5: This item must be input when the virtual manager type is SCVMM.
- #6: This item must be input when the virtual manager type is vCenter, HCSM, or KVM.
- #7: This item must be input when the virtual manager type is HCSM or KVM.
- #8: This item must be input when the virtual manager type is KVM.
- #9: When you change the host name of the host whose authentication information category is set to host, the authentication information used for remote monitoring is not inherited. In such cases, reset the remote communication settings in the IM Configuration Management window after the import is complete.

If characters that do not have code compatibility or model-dependent characters are used in the host information, these characters may become garbled when they are imported.

If any of the conditions listed below applies to the export file (host\_input\_data.csv) for manually-entered information, an error occurs and the file is not imported.

- A host name is duplicated.
- A host name is longer than 255 bytes.
- The number of hosts exceeds the number supported (1,024 if the IM database size is S or M, and 10,000 if the size is L).
- A value outside the permitted input range is specified.
- The number of input data columns is insufficient (the number of commas is insufficient).
- The host name described for the active host, standby host, or VMM host does not exist in the host information file.
- A value other than physical or virtual is specified as the host type for the active host or standby host.
- A value other than physical is specified as the host type for the VMM host.
- A value other than physical, logical, virtual, or unknown is specified as a host type.
- A value other than ESX, Hyper-V, KVM, Virtage, vCenter, JP1/SC/CM, SCVMM, vCenter, or Virtage is specified as the virtual manager type.
- The virtual manager type is specified as a host with type logical or unknown.
- The host name described for the virtualization management former source host name does not exist in the host information file.

- A value other than physical or virtual is specified as the host type described for the virtualization management former source host name.
- A value other than SCVMM is specified as the virtual manager type of a host for which a domain name is set.
- A value other than vCenter, HCSM, or KVM is specified as the virtual manager type of a host for which a communication type is specified.
- A character string other than https or http is specified as the communication type of a host whose virtual manager type is vCenter.
- A character string other than http is specified as the communication type of a host whose virtual manager type is HCSM.
- A character string other than ssh is specified as the communication type of a host whose virtual manager type is KVM.
- The virtual system configuration information does not correspond to the information in the following table.

Host type	Virtual manager type	Configuration information corresponding to virtual manager type	Required/Optional	Remarks
Physical host		N		
	vCenter	Virtual management former host name	Optional	SCVMM is specified as the virtual
		User name	Optional	management former host name.
		Password	Optional	
		Communication type	Optional	
	JP1/SC/CM	N		
	SCVMM	User name	Optional	
		Password	Optional	
		Domain name	Optional	
	HCSM	User name	Optional	
		Password	Optional	
		Port number	Optional	
		Communication type	Optional	
	ESX	Virtual management former host name	Optional	vCenter is specified as the virtual management former host name.
	Hyper-V	Virtual management former host name	Optional	SCVMM is specified as the virtual management former host name.
	KVM	User name	Optional	
		Port number	Optional	
		Private key file name	Required	
		Communication type	Optional	
	Virtage	Virtual management former host name	Optional	JP1/SC/CM or HCSM is specified as

<sup>9.</sup> Managing the System Hierarchy Using IM Configuration Management

Host type	Virtual manager type	Configuration information corresponding to virtual manager type	Required/Optional	Remarks
				the virtual management former host name.
Virtual host		VMM host name	Required	A value other than vCenter, JP1/SC/CM, SCVMM, or HCSM is specified as the VMM host name.
	vCenter	VMM host name	Required	A value other than
		Virtual management former host name	Optional	vCenter, JP1/SC/CM, SCVMM, or HCSM is
		User name	Optional	specified as the VMM host name.
		Password	Optional	SCVMM is specified as
		Communication type	Optional	the virtual management former host name.
	JP1/SC/CM	VMM host name	Required	A value other than vCenter, JP1/SC/CM, SCVMM, or HCSM is specified as the VMM host name.
	SCVMM	VMM host name	Required	A value other than
		User name	Optional	vCenter, JP1/SC/CM,
		Password	Optional	SCVMM, or HCSM is specified as the VMM
		Domain name	Optional	host name.
	HCSM	VMM host name	Required	A value other than
		User name	Optional	vCenter, JP1/SC/CM,
		Password	Optional	SCVMM, or HCSM is specified as the VMM
		Port number	Optional	host name.
		Communication type	Optional	
	KVM	VMM host name	Required	A value other than
		User name	Optional	vCenter, JP1/SC/CM,
		Port number	Optional	SCVMM, or HCSM is specified as the VMM
		Private key file name	Optional	host name.
		Communication type	Optional	
Logical host		N		
Unknown		N		

#### Legend:

--: Not applicable

N: Cannot be input (Input of the item causes an error)

- A value other than disable, ssh, or wmi is specified as the remote communication type.
- A value other than common, host, or a blank is specified as the authentication information category.
- When ssh or wmi is specified as the remote communication type, a blank is specified for the authentication information category.

If a host has the same host name as the import destination host, that host is not registered in IM Configuration Management as a managed host after the export file (host\_input\_data.csv) for manually-entered information has been imported.

# (2) System hierarchy information

The content of the export file for the system hierarchy information is imported. The export file differs according to the system monitoring method:

- Agent monitoring
- Remote monitoring

#### (a) Configuration information for agent monitoring

The name of the file to which the configuration information for agent monitoring is exported is system\_tree\_information.txt.

If any of the conditions listed below applies to the content of the export file for the configuration information for agent monitoring, an error occurs and the file is not imported.

- The same host is described on multiple lines (the managed host has multiple higher hosts).
- The host configuration is looped.
- The host name specified for the managing host is not enclosed in square brackets [ ] (] is missing).
- No host name is specified for the managing host.
- More than 10,000 hosts are defined.
- The local host is defined as the managed host.

After the export file (host\_input\_data.csv) for host information (manually-entered information) or the export file for the configuration information for agent monitoring is edited, the host name specified in the export file for the configuration information for agent monitoring might not be specified in the export file for the host information (manually-entered information) in some cases. In those cases, after the export file for the configuration information for agent monitoring is imported, an import warning message is displayed and the undefined host is automatically registered in IM Configuration Management as a managed host.

When you are trying to import the configuration information for agent monitoring, if the export file for the configuration information for agent monitoring is not found in the specified directory, an error message is displayed and the import operation is halted.

#### (b) Configuration information for remote monitoring

The name of the file to which the configuration information for remote monitoring is exported is  $system\_remote\_tree\_information.txt$ .

If any of the conditions listed below applies to the content of the export file for the configuration information for remote monitoring, an error occurs and the file is not imported.

- The same host is specified on multiple lines. (The managed host has multiple higher hosts.)
- The host configuration is looped.
- The host name specified for the managing host is not enclosed in square brackets [] (] is missing).
- No host name is specified for the managing host.
- More than 1,024 hosts are defined.
- The local host is defined as the managed host.

After the export file (host\_input\_data.csv) for host information (manually-entered information) or the export file for the configuration information for remote monitoring is edited, the host name specified in the export file for the configuration information for remote monitoring might not be specified in the export file for the host information (manually-entered information) in some cases. In those cases, after the export file for the configuration information for remote monitoring is imported, an import warning message is displayed and the undefined host is automatically registered in IM Configuration Management as a managed host.

When you are trying to import the configuration information for remote monitoring, if the export file for the configuration information for remote monitoring is not found in the specified directory, an error message is displayed and the import operation is halted.

# (3) Profile information

The content of the export files for the profile information is imported. The file that is imported differs according to the system monitoring method:

- Agent monitoring
- Remote monitoring

Table 9–10: Export file for agent monitoring profile information to be imported

Profile information	Export file name
Event Forwarding Settings File	forward
Log-file trap action definition file	Any name
Log-file trap startup definition file	jevlog_start.conf
Event Log-Trap Action Definition File	ntevent.conf
Local Action Execution Definition File	jbslcact.conf

When agent monitoring profile information is imported, the destination is determined using the directory name under definition\_files directory. The directory name on the hierarchy one step below the definition\_files directory is read as a host name, and the directory name on the hierarchy two steps below the definition\_files directory is read as a product name. The file stored in each directory is registered on the applicable host as settings information. Consequently, if you change the host name in the export file (host\_input\_data.csv) for host information (manually-entered information), you must also change the directory name. If you do not change it, the profile information cannot be imported.

The profile information file is loaded as a character code described in encode of the export file (data\_information.txt) for the export data information. For this character code, the environment variable LANG of the OS of the server that executed the export operation is set. When you import profile information, make sure that the character code described in the export file (data\_information.txt) matches the character code of the profile information file.

If characters that do not have code compatibility or model-dependent characters are used in the host information, these characters may become garbled when they are imported.

If more than 10,000 hosts are defined, an error occurs and no file is imported.

If the export file for the profile (configuration file) contains an unsupported product or unsupported profile, these are ignored and processing continues.

#### (a) Remote monitoring profile information

When remote monitoring is used, the content of the export file for the remote monitoring profile information is imported. The remote monitoring profile information cannot be edited.

The following table describes the export files for remote monitoring profile information to be imported.

Table 9–11: Remote monitoring profile information to be imported and the export file names

Profile information	Export file name
Remote-monitoring log file trap action-definition file	Any name
Remote monitoring startup definition file	jevlog_start.conf
Remote-monitoring event log trap action-definition file	ntevent.conf

When remote monitoring profile information is imported, the destination is determined using the directory name under definition files directory.

The directory name on the hierarchy one step below the definition\_files directory is read as a host name, and the directory name on the hierarchy two steps below the definition\_files directory is read as a product name. The file stored in each directory is registered on the applicable host as settings information. Consequently, if you change the host name in the export file (host\_input\_data.csv) for host information (manually-entered information), you must also change the directory name. If you do not change it, the profile information cannot be imported.

The profile information file is loaded in the encoding described in <code>encode</code> of the export file (data\_information.txt) for the export data information. For this encoding, the value of the LANG environment variable of the OS of the server that executed the export operation is set. When you import profile information, make sure that the character encoding described in the export file (data\_information.txt) matches the character encoding of the profile information file. If characters without code compatibility or model-dependent characters are used in the host information, these characters might be unreadable when they are imported.

# (4) Remote authentication information

When remote monitoring is used, the content of the export file for the remote authentication information is imported. The name of the file to be imported is wmi.ini or ssh.ini.

When you use remote monitoring, after the remote authentication information is imported, invoke the System Common Settings window from the IM Configuration Management - View, check the settings, and then click the **OK** button.

# (5) Business group information

When business groups are used, the content of the export file for the monitoring group information of IM Configuration Management is imported. If any of the conditions listed below applies to the content of the export file (monitoring system data.csv) for the business group information, an error occurs and the file is not imported.

• Business groups that have the same name exist at the same level.

- A value outside the permitted input range is specified.
- The number of input data columns is insufficient (the number of commas does not match).

Save the export file for business group information (monitoring\_system\_data.csv) with the character encoding specified in line 1 (header information). If you save this file in UTF-8, make sure that no BOM (byte order mark) is included.

The following table describes items that are imported and the input range of each item.

Table 9–12: Imported items (business group information)

Item	Input range	Required/Optional	Default
Business group name	A maximum of 255 bytes of characters can be entered in UTF-8. All characters are permitted except control characters, forward slashes (/), and single-byte commas (,). The first and the last characters cannot be a single-byte space. The characters are case sensitive. To specify a double quotation mark ("), specify two double quotation marks in succession and then enclose the entire string in double quotation marks.  Do not use environment-dependent characters for business group names. Such characters can cause character corruption in the definition.	Required	
Assigned JP1 resource group name	A character string of up to 64 bytes can be input. Permitted characters are ASCII codes other than symbols (" / [ ]; :, $  = +? < >$ ), a tab, or a space.	Optional	Blank
Comment	A maximum of 80 bytes of characters can be entered in UTF-8. All characters are permitted except control characters. To specify a double quotation mark ("), specify two double quotation marks in succession and then enclose the entire string in double quotation marks. If you specify a comma (, ), enclose the	Optional	Blank

Item	Input range	Required/Optional	Default
	entire string in double quotation marks.		
Host name	A maximum of 2,500 host names can be specified delimited by a comma (,). When you specify multiple host names, enclose the entire string in double quotation marks ("). For an input range consisting of a single host name, see Table 9-9 Host information that is imported (manually-entered information).	Optional	Blank

#### Legend:

# (6) Monitoring group information

When business groups are used, the content of the export file for the business group information is imported. If any of the conditions listed below applies to the content of the export file (monitoring\_group\_data.csv) for the monitoring group information, an error occurs and the file is not imported.

- Monitoring groups or hosts that have the same name exist at the same level.
- A value outside the permitted input range is specified.
- The number of input data columns is insufficient (the number of commas does not match).
- A higher-level monitoring group is not defined on a line whose line number is younger than that of lower-level monitoring groups.

Save the export file for business group information (monitoring\_group\_data.csv) with the character encoding specified in line 1 (header information). If you save this file in UTF-8, make sure that no BOM (byte order mark) is included.

The following table describes items that are imported and the input range of each item.

Table 9–13: Imported items (monitoring group information)

Item	Input range	Required/Optional	Default
Monitoring group path	A maximum of 2,048 bytes of characters can be entered in UTF-8. All characters are permitted except control characters. The characters are case sensitive. To specify a double quotation mark ("), specify two double quotation marks in succession and then enclose the entire string	Required	

<sup>--:</sup> There is no default value.

Item	Input range	Required/Optional	Default
	in double quotation marks.  Do not use environment-dependent characters for monitoring group names. Such characters can cause character corruption in the definition.		
Comment	A maximum of 80 bytes of characters can be entered in UTF-8. All characters are permitted except control characters. To specify a double quotation mark ("), specify two double quotation marks in succession and then enclose the entire string in double quotation marks. If you specify a comma (, ), enclose the entire string in double quotation marks.	Optional	Blank
Host name	A maximum of 2,500 host names can be specified delimited by a comma (,). If you specify multiple host names, enclose the entire string in double quotation marks ("). For an input range consisting of a single host name, see Table 9-9 Host information that is imported (manually-entered information).	Optional	Blank

Legend:

--: There is no default value.

# 9.7.3 Applying the imported management information of IM Configuration Management to a system

After you have imported the management information of IM Configuration Management by executing the jcfimport command, perform the procedures described below to apply the imported management information.

# (1) Collecting host information

To collect host information:

1. In the IM Configuration Management window, click the **Host List** or **IM Configuration** tab. The **Host List** page or **IM Configuration** page opens.

<sup>9.</sup> Managing the System Hierarchy Using IM Configuration Management

2. From the tree pane, select a host.

If the selected host has lower-order hosts, you can also select a host from the **Lower Host Information** list that is displayed when you click the **Lower Host Information** button. In this case, you can select multiple hosts at the same time.

- 3. Use either of the following methods to collect host information:
  - From the menu bar, choose Operation and then Collect Host Information.
  - From the popup menu that opens when you right-click the mouse, choose Collect Host Information.

When a message confirming collection of information from the selected host is issued, click **Yes**. Information is collected from the selected host.

## (2) Applying the system hierarchy information

To apply the system hierarchy information:

#### (a) In an agent configuration

When the system hierarchy information is not applied, the tree in the **IM Configuration** tab in the IM Configuration Management window is displayed in gray.

Perform the following procedure to apply the system hierarchy information.

- 1. From the menu bar in the IM Configuration Management window, choose **Edit** and then **Edit Agent Configuration**. The Edit Agent Configuration window opens.
- 2. In the Edit IM Configuration window, check the **Acquire update right** check box. You can now edit the JP1/IM system configuration.
- 3. Select the highest node in the tree (integrated manager) and use either of the following methods to change the integrated manager:
  - From the menu bar, choose **Operation** and then **Exchange Hosts**.
  - From the popup menu that opens when you right-click the mouse, choose **Exchange Hosts**.

This step is not necessary if the exporting host is the same as the importing host.

4. From the menu bar in the Edit Agent Configuration window, choose **Operation** and then **Apply Agent Configuration**.

The system hierarchy information is applied to the actual system.

5. Clear the **Acquire update right** check box.

If you are acquiring the current system hierarchy, this operation is not necessary. From the menu bar in the IM Configuration Management window, choose **Edit** and then **Collect IM Configuration** to acquire the current system hierarchy.

#### (b) In a remote configuration

Perform the following procedure to apply the system hierarchy information.

1. From the menu bar in the IM Configuration Management window, choose **Edit** and then **Edit Remote Monitoring Configuration**.

The Edit Remote Monitoring Configuration window opens.

- 2. In the Edit IM Configuration window, check the Acquire update right check box.
  - You can now edit the JP1/IM system configuration.
- 3. Select the highest node in the tree (integrated manager) and use either of the following methods to change the integrated manager:
  - From the menu bar, choose **Operation** and then **Exchange Hosts**.
  - From the popup menu that opens when you right-click the mouse, choose Exchange Hosts.

This step is not necessary if the exporting host is the same as the importing host.

4. From the menu bar in the Edit Remote Monitoring Configuration window, choose **Operation** and then **Apply Remote Monitoring Configuration**.

The system hierarchy information is applied to the actual system.

5. Clear the Acquire update right check box.

If you are acquiring the current system hierarchy, this operation is not necessary. From the menu bar in the IM Configuration Management window, choose **Edit** and then **Collect IM Configuration** to acquire the current system hierarchy.

# (3) Applying the profile information

Merely importing the management information of IM Configuration Management does not apply the configuration file to the system. Use either of the following methods to apply the configuration file:

- Batch-apply the configuration file
- Apply the configuration file to hosts individually

For details about how to apply the configuration file, see 3.5.1(6) Applying edited information in configuration files in the JP1/Integrated Management 2 - Manager Configuration Guide.

If you are acquiring a system's current profile information, there is no need to apply the profile information. You can simply batch-collect profiles. For details about how to collect profile lists, see 3.5.1(1) Collecting profile lists in the JP1/Integrated Management 2 - Manager Configuration Guide.

# 9.8 Cautions on the IM configuration

• If you perform unsetup of the IM configuration management database, set it up again, and then connect to the IM configuration management viewer, the host icon might not appear in the system hierarchy in the IM configuration tab.

If this problem occurs, then the system hierarchy will display the configuration from before you performed unsetup of the database. To update the system hierarchy, from the menu bar select [Operations], and then [IM configuration collection].

- In the information of JP1/Integrated Management 2 Manager, which is displayed in [Product Information] on the [Hosts List] page, the version of the following items might differ:
  - JP1/Integrated Management Central Scope
  - JP1/Integrated Management Central Console

For details on the version of JP1/Integrated Management 2 - Manager, see the JP1/Integrated Management 2 - Manager items.

- When using the following functionality in IM Configuration Management, use JP1/Base 09-50-01 or higher:
  - When using references or limiting the operation of a business group (when specifying the -bizmonmode option in jcoimdef)
  - When you want to apply an IM configuration without deleting the system hierarchy (when specifying "APPLY\_CONFIG\_TYPE"=dword:00000001" to the IM configuration reflecting method settings file [jplcf\_applyconfig.conf])
- In the list of virtual Manager types in [Virtual Manager Settings] window, although [JP1/SC/CM] will be displayed, it will not be used in an English environment.

10

# **Linking with BJEX or JP1/AS**

JP1/IM can monitor the response-request messages issued by BJEX or JP1/AS as JP1 events, allowing operators to respond to these messages from JP1/IM - View. This chapter describes the functionality of JP1/IM that allows this to take place, and explains the process of linking JP1/IM with BJEX or JP1/AS. It also describes the command options you can use when linking with BJEX or JP1/AS.

## 10.1 Overview of BJEX and JP1/AS linkage

BJEX is a product that realizes mainframe-like job management in an open system. JP1/AS is a system used to create and execute shell scripts that serve as batch jobs. A job management system that links with JP1/AJS to control batch jobs (jobs that execute batch processing) is called a *batch job execution system*. By deploying JP1/IM in a batch job execution system, you can monitor the execution status and results of batch jobs in JP1/IM - View based on the JP1 events issued by BJEX or JP1/AS.

The messages output by BJEX and JP1/AS include response-request messages that require the operator to respond to them while a batch job is executing. BJEX and JP1/AS issue response-request messages as JP1 events. JP1/IM allows you to monitor these JP1 events and respond to the messages as needed. The JP1 events that correspond to response-request messages are called *response-waiting events*. The functionality of JP1/IM that manages and responds to response-waiting events is called the *response-waiting event management function*. JP1/IM uses this function when linking with BJEX or JP1/AS. It is disabled by default. Enable the response-waiting event management function when linking with BJEX or JP1/AS.

# 10.1.1 System configuration when linking JP1/IM with a batch job execution system

This section describes the configuration of a system in which JP1/IM links with a batch job execution system.

Scope of systems managed by the configuration management feature of JP1/IM - Manager Integrated manager Viewer JP1/IM - View JP1/IM - Manager JP1/Base Viewer JP1/IM - View Site manager# Site manager# JP1/IM - Manager JP1/IM - Manager JP1/Base JP1/Base JP1/IM agent JP1/IM agent (JP1/AJS2 manager) (JP1/AJS2 manager) JP1/AJS2 - Manager JP1/AJS2 - Manager JP1/Base JP1/Base Batch job execution server (JP1/AJS2 agent) JP1/AJS2 - Agent BJEX or JP1/AS JP1/Base

Figure 10–1: Configuration example of batch job execution system with JP1/IM

#: Can be a site manager or relay manager.

In the example in the figure, JP1/IM is configured as a hierarchical system that incorporates site managers. The JP1/IM system in the figure monitors a batch job execution system.

The role and prerequisite products of each server are described below. For a list of supported operating systems, see the documentation for the product concerned. For details about version requirements, see the JP1/IM - Manager release notes.

#### Viewer

Connects to JP1/IM - Manager from JP1/IM - View to monitor and work with events. The prerequisite products for a viewer are:

• JP1/IM - View

#### Integrated manager

A server that manages systems from an integrated perspective. The prerequisite products for an integrated manager are:

- JP1/IM Manager
- JP1/Base

#### Site manager or relay manager

A server subordinate to an integrated manager. You can use site managers and relay managers when you want to manage large-scale systems in a hierarchy. The prerequisite products for a site manager or relay manager are:

- JP1/IM Manager
- JP1/Base

#### JP1/IM agent (JP1/AJS manager)

A server monitored by JP1/IM. In the example in the figure, JP1/IM agents also function as JP1/AJS managers. The prerequisite products for a JP1/IM agent are:

- JP1/AJS Manager
- JP1/Base

#### Batch job execution server (JP1/AJS agent)

A server that executes processing, such as batch jobs, in response to requests from JP1/AJS - Manager. A batch job execution server can link with JP1/IM even if it is not part of the system whose configuration is being managed by JP1/IM. JP1/IM - Manager links with BJEX or JP1/AS on the batch job execution server in a 1:n ratio (where n is an integer of 1 or higher). For details about how to configure linkage with BJEX or JP1/AS, see 10.3 Configuring JP1/IM to link with BJEX and JP1/AS.

The prerequisite products for a batch job execution server are:

- JP1/AJS Agent
- JP1/Base
- BJEX or JP1/AS

# 10.2 JP1/IM functionality for BJEX and JP1/AS linkage

This section describes the JP1/IM functionality that is used when linking with BJEX or JP1/AS.

## 10.2.1 Handling response-waiting events in JP1/IM

The following response-waiting events are issued when a batch job enters a status where it is waiting for a response from an operator:

• In BJEX

Event ID: 00005C21

• In JP1/AS

Event ID: 00007121

To monitor response-waiting events in JP1/IM, you need to configure BJEX or JP1/AS to issue the response-waiting event directly to the JP1/IM - Manager host (the integrated manager). You also need to enable the response-waiting event management function in JP1/IM - Manager.

For details about the response-waiting event (event ID: 00007121), see the JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

## (1) Paths through which response-waiting events are issued

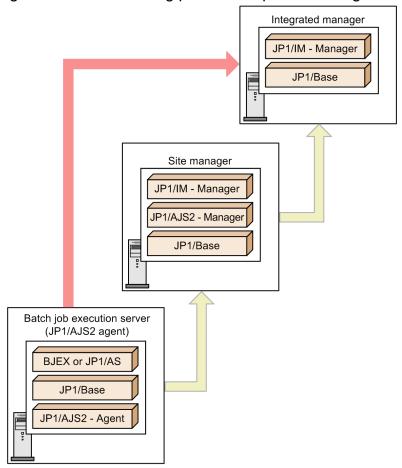
BJEX and JP1/AS issue response-waiting events directly to the integrated manager, not by the usual forwarding paths provided by JP1/Base. To have BJEX issue all response-waiting events directly to the integrated manager, specify the JP1/IM-Manager host name in the JP1IM\_MANAGER\_HOST parameter of the BJEX configuration file (bjex.conf). When JP1/IM is linked with JP1/AS, specify the JP1/IM-Manager host name in the HOSTNAME\_JP1IM\_MANAGER parameter in the JP1/AS environment file.

Order in which response-waiting events from BJEX or JP1/AS and JP1 events from other products arrive on the same host

Products like JP1/AJS and JP1/Base that reside on the BJEX or JP1/AS host use the paths provided by JP1/Base to forward JP1 events to the integrated manager via site managers. For this reason, response-waiting events issued by BJEX or JP1/AS, and JP1 events issued by other products, might not arrive at the integrated manager in the order in which they were issued. You can identify which message belongs to which job by viewing the job ID in the message of the response-waiting event.

The following figure shows the paths through which response-waiting events are forwarded from BJEX and JP1/AS hosts:

Figure 10-2: Forwarding paths of response-waiting events issued by BJEX or JP1/AS



Legend:



: Path through which BJEX or JP1/AS issues a response-waiting event



: Path through which JP1/AJS2 and JP1/Base issue JP1 events (using the forwarding path of JP1/Base)



#### Important

When BJEX or JP1/AS forwards a waiting-response event to an instance of JP1/IM - Manager that is not on the specified host, it is not handled as a response-waiting event at the destination. In this case, you will be unable to respond to the message at the destination host.

# (2) Response-waiting event management function

The response-waiting event management function lets you respond to response-waiting events from JP1/IM - View. You can enable this function in the configuration of the instance of JP1/IM - Manager that links with BJEX or JP1/AS.

After you enable the response-waiting event management function, you must enable the setting that allows individual users to respond to and work with response-waiting events. You can do so in the Preferences window of JP1/IM - View.

For details about how to enable this setting, see 10.3 Configuring JP1/IM to link with BJEX and JP1/AS.

Note that you can still monitor waiting-response events as ordinary JP1 events if you do not enable the response-waiting event management function and the setting that allows users to respond to and work with these events.

# Important

Response-waiting events are handled as such if they are received by JP1/IM - Manager after the response-waiting event management function is enabled. Response-waiting events received before the function is enabled are handled as ordinary JP1 events.

## 10.2.2 Monitoring response-waiting events

Because JP1/IM handles response-waiting events in the same manner as ordinary JP1 events, you can use automated action notification and other JP1/IM features with these events.

The following describes how each of the following features works with waiting-response events. Features that are not described here work the same way as with ordinary JP1 events.

- Monitoring in the Event Console window
- JP1 event filtering
- Monitoring repeated events
- · Searching for events
- Outputting information from JP1/IM View in CSV format

# (1) Monitoring in the Event Console window

Waiting-response events appear in the lists of events on the Monitor Events page, Severe Events page, and Search Events page, like ordinary JP1 events. The Response-Waiting Events page only shows response-waiting events. This page is displayed only when the response-waiting event management function and the setting that allows users to respond to and work with response-waiting events is enabled.

From the list of events in the Event Console window, you can perform the following operations and configuration with respect to response-waiting events in the same manner as ordinary JP1 events:

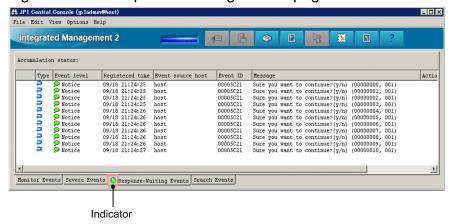
- Display detailed information about a response-waiting event
- Open the monitors of linked products
- Display execution results of automated actions
- Change display items for JP1 events
- Set the background color for JP1 events
- Set the response status for response-waiting events
- Specify the event display period

For details about these features, see 4.1 Centralized monitoring using JP1 events in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

#### (a) Monitoring on the Response-Waiting Events page

The Response-Waiting Events page displays a list of response-waiting events for which a response is not yet provided. This page is shown below.

Figure 10-3: Response-Waiting Events page



An indicator on the tab of the Response-Waiting Events page lets the operator know whether there are events that require a response. When there are response-waiting events listed on the Response-Waiting Events page, the indicator on the tab is lit green.

In addition to the event database, response-waiting events are stored in a *file for accumulated response-waiting events* in a process called *response-waiting event accumulation*. The Response-Waiting Event page displays information about the events recorded in the file for accumulated response-waiting events.

Response-waiting events are removed from the Response-Waiting Events page when:

- An operator responds to the response-waiting event
- The response-waiting event is released from the hold-and-accumulate state
- The response-waiting event is canceled

For details about what causes response-waiting events to be released from the hold-and-accumulate state, see 10.2.3 Accumulation of response-waiting events.

The indicator on the tab becomes unlit after all response-waiting events have disappeared from the Response-Waiting Events page.

To allow the operator to distinguish response-waiting events, the icon appears in the **Type** column for these events on each page of the Event Console window.

Note that the Response-Waiting Events page does not display the background colors that have been assigned to JP1 events.

# (2) Filtering response-waiting events

You can use the following filters to filter response-waiting events:

- Event receiver filter
- Severe events filter
- · View filter

When you enable the response-waiting event management function, items that allow the operator to select whether to display response-waiting events appear in the condition definition windows for the event receiver filter and severe events filter. To filter response-waiting events using the view filter, the response-waiting event management function and the setting that allows users to respond to and work with response-waiting events must be enabled.

For details about the windows in which filter conditions are defined, see 3.44.8 Filter condition definition windows in the manual JP1/Integrated Management 2 - Manager GUI Reference.

Note that event acquisition filters do not allow you to specify conditions that specifically identify response-waiting events. Configure event acquisition filters so that they filter events at the product level for products that issue response-waiting events.

# (3) Consolidated display of response-waiting events

If a network problem or some other issue causes the same batch job to issue the same response-waiting event several times in succession, the events are displayed as a single *consolidated event*. Events are only consolidated on the Monitor Events page and Severe Events page.

If identical response-waiting events are issued as a result of an error of some kind, the operator does not need to respond to each and every event. If you respond to one of these waiting-response events, you do not need to respond to the others. However, response-waiting events that no longer require a response remain on the Response-Waiting Events page until they are released from the hold-and-accumulate state. For details about how to release these events, see 10.2.3 Accumulation of response-waiting events.

# (4) Searching for response-waiting events

When searching for JP1 events, you can specify a response-waiting event as a search condition. Conditions that apply to response-waiting events only appear in the Event Search Conditions window if you enable the response-waiting event management function and the setting that allows users to respond to and work with response-waiting events.

For details about the Event Search Conditions window, see 3.44.7 Event Search Conditions window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

You can only respond to response-waiting events from the search results if you search the logged-in JP1/IM manager host for response-waiting events. If you do not specify the logged-in manager host, you cannot respond to the response-waiting events that appear in the search results.

# (5) Outputting information from JP1/IM - View in CSV format

You can output information about response-waiting events displayed in the list of events in CSV format. You can output CSV information in two ways:

- Save the information in the list of events to a file
  You can save a snapshot of the event information displayed in JP1/IM View to a CSV file. A snapshot means information extracted at a specific time.
- Copy JP1 event information, action execution results, or other information to the clipboard
  If the feature that allows you to copy information to the clipboard is enabled, you can copy selected parts of responsewaiting event information, action execution results, and other information to the clipboard in CSV format. This
  feature is enabled by default.

The following table shows the events lists whose response-waiting events can be saved to a CSV file or copied to the clipboard in CSV format.

Table 10–1: Events lists that can be output to a CSV file or copied to the clipboard

Operation	Monitor Events page	Severe Events page	Related Events window	Response-Waiting Events page	Search Events page
CSV output	Y	Y	N	Y	Y

Operation	Monitor Events page	Severe Events page	Related Events window	Response-Waiting Events page	Search Events page
Copy to clipboard	Y	Y	Y	Y	Y

#### Legend:

- Y: Can be saved or copied.
- N: Cannot be saved or copied.

When you save information about response-waiting events to a CSV file or copy it to the clipboard, the icon in the **Type** column is replaced with the text Response-waiting event in the CSV data. If icons indicating a repeated event and a response-waiting event are output for an event, the icons are replaced with the text Repeated event, Response-waiting event in the CSV data. When you output the information on the Response-Waiting Events page in CSV format, **Response-Waiting Events** appears as the name of the source window in the header information.

For details about how to enable the copy to clipboard feature, see 1.19.2 Customizing operation of JP1/IM - View (Central Console viewer and Central Scope viewer) (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide.

#### 10.2.3 Accumulation of response-waiting events

When you enable the response-waiting event management function, response-waiting events that arrive in the event database on the manager host are recorded in a *file for accumulated response-waiting events* in addition to the event database. A maximum of 2,000 response-waiting events are stored in this file. This process is called *accumulation of response-waiting events*.

The Response-Waiting Events page displays information about the response-waiting events in the file for accumulated response-waiting events.

## (1) When response-waiting events are released from the hold-and-accumulate state

Response-waiting events are deleted from the file for accumulated response-waiting events and released from the hold-and-accumulate state when:

- An operator successfully responds to a response-waiting event
- The response-waiting event is canceled in BJEX or JP1/AS
- An operator manually releases the event from the hold-and-accumulate state
- There are more than 2,000 response-waiting events

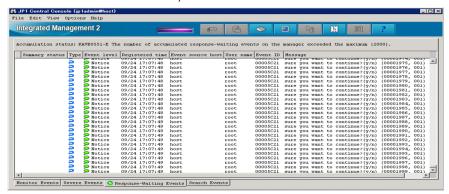
  In this case, accumulated response-waiting events are released in order from the oldest.
- You disable the response-waiting event management function and restart JP1/IM Manager

A response-waiting event that is released from the hold-and-accumulate state disappears from the Response-Waiting Events page when you next refresh the list of events in JP1/IM - View. Note that such events, while no longer appearing in the Response-Waiting Events page, still appear in search results in the Search Events page as long as they remain in the event database.

# (2) Notification when the number of response-waiting events exceeds 2,000

JP1/IM - Manager monitors the number of response-waiting events in the hold-and-accumulate state, and notifies the operator when the number exceeds 2,000 by issuing a JP1 event (event ID: 00003F41). The message KAVB0551-E also appears on the Response-Waiting Events page.

Figure 10–4: Response-Waiting Events page when the number of response-waiting events exceeds 2,000



The JP1 event reporting that the number of response-waiting events in the hold-and-accumulate state has exceeded the maximum is issued only once. The message KAVB0551-E remains on the Response-Waiting Events page. When the number of events in the hold-and-accumulate state exceeds the limit, take action as described in the message to resume monitoring events in the hold-and-accumulate state in the usual way. Then the message KAVB0551-E disappears from the Response-Waiting Events page. The JP1 event is issued again when the number of events next exceeds 2,000.

For details about how to resume monitoring of events in the hold-and-accumulate state, see 10.4.4 Resuming monitoring of events in the hold-and-accumulate state.

Responding to response-waiting events that have been released from the hold-and-accumulate state

You can respond to a response-waiting event that was removed from the Response Waiting Events page after exceeding the maximum number of events by searching for the event from the Search Events page. You can identify an event that was released from the hold-and-accumulate state by viewing the KAVB1801-E message in the integrated trace log on the manager host.

If the response-waiting event was also deleted from the event database, you can respond to the event by executing the response command (bjexchmsg or adshchmsg) on the host that issued the event. For details about how to respond using the response command (adshchmsg) of JP1/AS, see JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

#### 10.2.4 Responding to response-waiting events

You can respond to response-waiting events from JP1/IM - View. For example, a message might ask the operator if he or she wants to continue batch processing, to which the operator can respond yes in text format. You can enter responses in the Enter Response window displayed from a response-waiting event.

You can display the Enter Response window by clicking a response-waiting event in the list of events in the following pages:

- Response-Waiting Events page
- Search Events page

You can only respond to events from this page if the events in the search results are found on the logged-in manager host

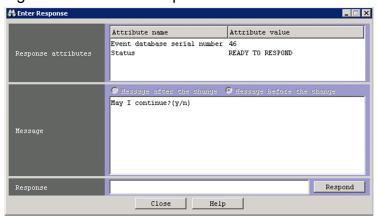
#### · Related Events window

You can respond to events in this window if the window was displayed from the Response-Waiting Events page. If you displayed the Related Events window from the Search Events page, you can only respond if the events in the search results are on the logged-in manager host.

#### (1) Framework in which responses are made to response-waiting events

You can only respond to response-waiting events if the process that issued the event still exists and is in a status that allows it to accept the response. You can view the status of the source process as the value of the **Status** attribute in the **Response attributes** area of the Enter Response window. JP1/IM - Manager checks the status of the source process when you open the Enter Response window. If a communication error prevents it from contacting the process and identifying its status, the message KAVB0555-E appears and the Enter Response window does not open.

Figure 10-5: Enter Response window



The following table lists the statuses that appear as the value of the **Status** attribute in the **Response attributes** area:

Table 10–2: Statuses of source processes for response-waiting events

Source process status	Description	Can response be entered
READY TO RESPOND	The job that issued the event is waiting for a response.	Y
NO LONGER MANAGED BY BJEX  or  NO LONGER MANAGED BY JP1/AS	One of the following applies:  The job that issued the event was canceled by JP1/AJS  The job that issued the event was terminated by a KILL command  When you displayed or refreshed the Enter Response window for an event for which a response had been issued, BJEX was no longer monitoring the status of the event	N
RESPONDED SUCCESSFULLY	You have successfully responded to the response-waiting event in the Enter Response window. This status appears only in the Enter Response window when you have just entered a response.	N
ALREADY RESPONDED	An operator has already responded to the event. This status appears when you display or refresh an Enter Response window for an event for which a response has already been entered.	N

#### Legend:

Y: A response can be entered.

N: A response cannot be entered.

You can enter a response if the status of the source process is READY TO RESPOND. You cannot respond to response-waiting events in any other status, because the event has either already been responded to or the source process no longer exists.

When you respond to a response-waiting event, the response you entered is sent to the process that issued the event. If the response reaches the source process and is successful, the status of the response-waiting event changes to *Processed*. The response-waiting event is then released from the hold-and-accumulate state and disappears from the Response-Waiting Events page.

A timeout occurs if JP1/IM - Manager has not successfully communicated with the source process after 60 seconds when attempting to check its status or provide a response. You can change the timeout time. Consider extending the timeout time if you frequently encounter an error message (KAVB0554-E or KAVB0555-E) due to heavy loads on the source server or network congestion. For details about how to set the timeout time, see 10.3.4(1) Setting the timeout time for connections.

### (2) Conditions for responding to response-waiting events

You can respond to response-waiting events under the following conditions:

- The operating permission of the responding JP1 user is JP1 Console Operator or higher.
- You have not yet responded to the event.

  You can only respond once to a response-waiting event, even if you acquire the event again by changing the event acquisition start location of the event acquisition filter.
- The response-waiting event was received after you enabled the response-waiting event management function. You cannot respond to response-waiting events received while the response-waiting event management function is disabled.
- When searching for events, the logged-in manager host is specified as the search target.

### (3) Using the response command of BJEX or JP1/AS

If a communication error between the source process and JP1/IM - Manager prevents you from responding to an event from JP1/IM - View, you can use the response command (bjexchmsg or adshchmsg) provided by the source process on the source host. You can also use this approach to respond to events that were released from the hold-and-accumulate state and removed from the event database. For details about how to respond using the response command (adshchmsg) of JP1/AS, see JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

#### 10.2.5 Canceling response-waiting events

In some circumstances, such as after canceling a BJEX or JP1/AS job from JP1/AJS or deleting a job in BJEX or JP1/AS, a response-waiting event might remain in the system despite no longer requiring a response. In this scenario, BJEX issues a cancelation event (event ID: 00005C22, 00005C23, or 00005C24) to JP1/IM - Manager as soon as the job is canceled. JP1/AS also sends a cancelation event (event ID: 00007122, 00007123, or 00007124) to JP1/IM - Manager. When JP1/IM - Manager receives this cancelation event, it releases the response-waiting event from the hold-and-accumulate state and the event disappears from the Response-Waiting Events page. The response status of the response-waiting event then changes to *Processed*.

For details about cancelation events of JP1/AS, see JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

You can also cancel response- no longer required, release the	ou can also cancel response-waiting events manually from JP1/IM - View. To cancel a response-waiting event that longer required, release the event from the hold-and-accumulate state in JP1/IM - View.			waiting event that is

#### 10.3 Configuring JP1/IM to link with BJEX and JP1/AS

This section describes how to configure JP1/IM - Manager to link with BJEX or JP1/AS. The descriptions in this section assume that JP1/IM - Manager is already set up.

We recommend the following configuration for JP1/Base and JP1/IM - Manager:

- JP1/Base and JP1/IM Manager are in a cluster configuration on the manager host.
- The health check function is enabled for JP1/Base and JP1/IM Manager.

#### 10.3.1 Configuring JP1/IM - Manager

The following describes how to configure JP1/IM - Manager.

#### (1) Enabling the response-waiting event management function

Enable the response-waiting event management function in JP1/IM - Manager. After enabling the response-waiting event management function, you can:

- Accumulate response-waiting events
- Cancel response-waiting events
- Enable the settings that allow users to respond to and work with response-waiting events The relevant settings appear in the Preferences window.
- Filter response-waiting events

  Items that allow you to select whether to filter response-waiting events appear in the Detailed Settings for Event Receiver Filter window and the Severe Event Definitions window.

To enable the response-waiting event management function:

- 1. Execute the jcoimdef command.

  Execute jcoimdef -resevent ON.
- 2. Restart JP1/IM Manager.

Note: The feature is not enabled if you use the jco spmd reload command.

For details about the -resevent option of the jcoimdef command, see 10.5.1 jcoimdef.

#### (2) Configuring the event acquisition filter

Configure the event acquisition start location so that processing continues from where it last stopped.

To set the start location of the event acquisition filter:

- 1. Execute the jcoimdef command.

  Execute jcoimdef -b -1.
- 2. Execute the jco\_spmd\_reload command or restart JP1/IM Manager.

For details about the jcoimdef command, see *jcoimdef* in *Chapter 1. Commands* of the *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

For details about the <code>jco\_spmd\_reload</code> command, see <code>jco\_spmd\_reload</code> in Chapter 1. Commands of the <code>JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.</code>

#### 10.3.2 Configuring JP1/IM - View

The following describes how to configure JP1/IM - View.

# (1) Enabling the setting that allow users to respond to and work with response-waiting events

In the Preferences window of JP1/IM - View, you can enable the setting that allows individual users to respond to and work with response-waiting events. After you enable this setting, users can:

- Monitor response-waiting events
   The Response-Waiting Events page appears in the Event Console window.
- Respond to response-waiting events
   Users can respond to these events in the Enter Response window.
- Search for response-waiting events

  Items that relate to response-waiting events can now be specified as search conditions in the Search Events window.
- Filter response-waiting events

  Items that allow the operator to select whether to display response-waiting events appear in the Settings for View Filter window.

To allow users to respond to and work with response-waiting events:

- Display the Preferences window.
   In the Event Console window, from the Options menu, choose User Preferences.
- 2. In the **Response-waiting event** area, select the **Enable** check box.
- 3. Click OK.

For details about the Preferences window, see 3.44.6 Preferences window in the manual JP1/Integrated Management 2 - Manager GUI Reference.

### (2) Configuring the event receiver filter

You can use an event receiver filter to limit which JP1 events each user can monitor. If you do not wish for a particular user to view response-waiting events, configure the event receiver filter to hide those events. By default, response-waiting events are displayed.

For details about how to create and modify an event receiver filter, see 5.2.2 Settings for event receiver filters in the JP1/Integrated Management 2 - Manager Configuration Guide.

For details about the Detailed Settings for Event Receiver Filter window, see 3.44.8 Filter condition definition windows in the manual JP1/Integrated Management 2 - Manager GUI Reference.

#### 10.3.3 Configuring JP1/Base

In JP1/Base on the authentication server, assign the appropriate operating permissions to JP1 users who will work with response-waiting events.

The following operations require JP1 Console Operator permission or higher:

- Responding to waiting-response events
- Manually releasing response-waiting events from the hold-and-accumulate state

The following operations require JP1 Console Admin permission or higher:

• Resuming monitoring of response-waiting events in the hold-and-accumulate state

For details about how to assign permissions, see the chapter describing user management setup in the JP1/Base User's Guide.

# 10.3.4 Communication settings between BJEX or JP1/AS and JP1/IM - Manager

This section describes the settings that govern communication between BJEX or JP1/AS and JP1/IM - Manager.

#### (1) Setting the timeout time for connections

You can change the length of time after which a timeout occurs for connections established for purposes such as checking the status of the source process or entering a response. Under most circumstances, you do not need to change this setting. If you frequently encounter error messages (KAVB0554-E or KAVB0555-E) due to network congestion or heavy loads on the source server, set a longer timeout time. You can set the timeout time in JP1/IM - Manager.

To change the timeout time for connections:

1. Define the following parameter in a file you create on the manager.

```
[logical-host-name\JP1CONSOLEMANAGER]
```

```
"RESEV TIMEOUT MAX"=dword: hexadecimal-value
```

Replace *logical-host-name* with JP1\_DEFAULT if the host is a physical host, and the logical host name if the host is a logical host.

Specify the timeout time as a hexadecimal value within a range from 60 to 3,600 seconds. The default is dword: 0000003c (60 seconds).

2. Execute the jbssetcnf command.

Execute the jbssetcnf command with the definition file you created specified in a command argument. When you execute the jbssetcnf command, the setting in the definition file is applied to the common definition information. For details about the jbssetcnf command, see the *JP1/Base User's Guide*.

3. Execute the jco spmd reload command or restart JP1/IM - Manager.

The new definition takes effect.

For details about the jco\_spmd\_reload command, see jco\_spmd\_reload in Chapter 1. Commands of the JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

#### (2) Configuring packet filtering in firewall environments

In an environment that uses a firewall, configure packet filtering so that BJEX or JP1/AS can communicate with JP1/IM - Manager through the firewall. The following table shows the port numbers used for communication between BJEX or JP1/AS and JP1/IM - Manager, and the direction in which packets pass through the firewall:

Table 10–3: Port numbers used for communication between BJEX or JP1/AS and JP1/IM - Manager

Service	Port	Traffic direction	
jp1bsplugin	20306/tcp	JP1/IM - Manager -> BJEX or JP1/AS	
jp1imevt	20098/tcp	BJEX or JP1/AS -> JP1/IM - Manager	

#### Legend:

For details about the other port numbers used by JP1/IM and JP1/Base, see the following references:

- Port numbers used by JP1/Base: Description of port numbers in the JP1/Base User's Guide
- Port numbers used by JP1/IM: Appendix C. Port Numbers in the JP1/Integrated Management 2 Manager Overview and System Design Guide

#### 10.3.5 Configuring BJEX or JP1/AS

This section describes how to configure BJEX or JP1/AS when linking with JP1/IM - Manager.

#### (1) Specifying the link-target JP1/IM - Manager

BJEX and JP1/AS can link with one JP1/IM - Manager host, which you must specify in the appropriate configuration file. To specify the link-target JP1/IM - Manager host for BJEX, specify the JP1/IM - Manager host name in the BJEX configuration file (bjex.conf). To specify the link-target host for JP1/AS, specify the host name in the JP1/AS environment file.

For details about the environment file of JP1/AS, see JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

#### (2) Setting the maximum number of response-waiting events

You can set the maximum number of response-waiting events that BJEX or JP1/AS can issue. Because the maximum number of events that can be in the hold-and-accumulate state is 2,000, estimate the number of response-waiting events so that the result of the following equation is 2,000 or less:

Total value of USERREPLY\_WAIT\_MAXCOUNT parameter across all hosts that output response-waiting events + Maximum number of response-waiting events output by all other products

You can set the maximum number of response-waiting events that BJEX can issue in the BJEX configuration file (bjex.conf). For JP1/AS, you can set this value in the JP1/AS environment file. For details about the number of response-waiting events that JP1/AS issues, see JP1/Advanced Shell Description, User's Guide, Reference, and Operator's Guide.

<sup>-&</sup>gt;: Direction of established connection

#### 10.4 Working with response-waiting events

This section describes the operations you can perform on response-waiting events.

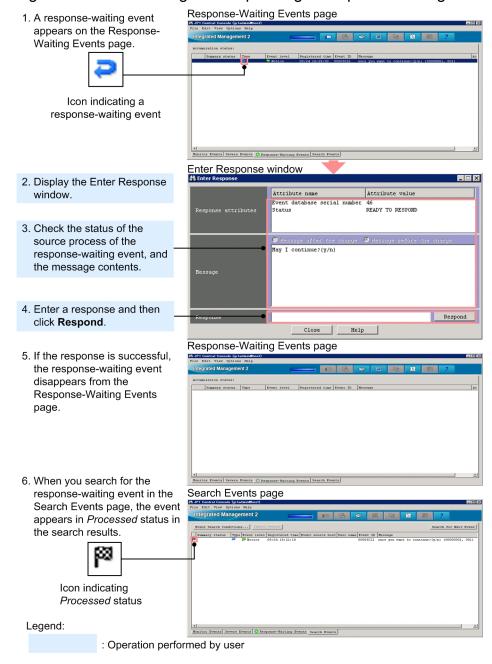
#### 10.4.1 Flow of tasks for responding to response-waiting events

This section describes the flow of tasks for monitoring and responding to response-waiting events in Central Console and Central Scope.

#### (1) Monitoring response-waiting events in Central Console

The following figure shows an overview of how to monitor and respond to response-waiting events in Central Console:

Figure 10-6: Monitoring and responding to response-waiting events in Central Console



The numbers in the figures correspond to the steps below:

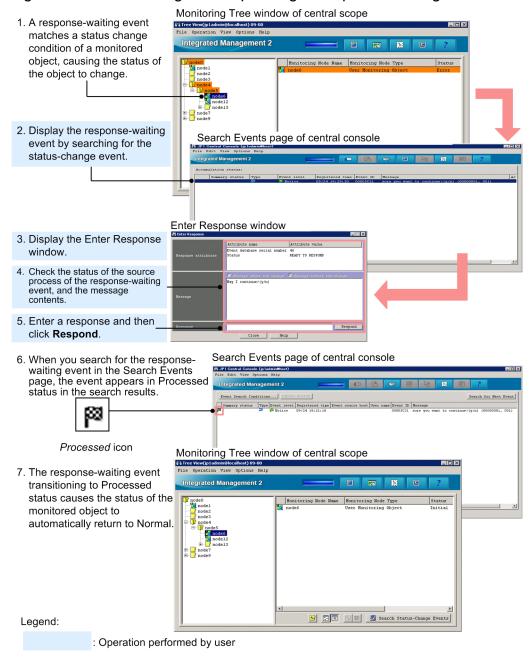
- 1. When JP1/IM Manager receives a response-waiting event, the event appears on the Response-Waiting Events page of the Event Console window.
- 2. Display the Enter Response window for the response-waiting event.
- 3. Check the status of the source process and the message contents.

  Make sure that the status of the source process is READY TO RESPOND.
- 4. Enter a response in the **Response** area and then click **Respond**.
- 5. If the response is successful, the response-waiting event disappears from the Response-Waiting Events page.
- 6. When you search for a response-waiting event from the Search Events window, the event appears in the search results with the status *Processed*.

### (2) Monitoring response-waiting events in Central Scope

The following figure shows an overview of how to monitor and respond to response-waiting events in Central Scope:

Figure 10-7: Monitoring and responding to response-waiting events in Central Scope



The numbers in the figures correspond to the steps below:

- 1. When JP1/IM Manager receives a response-waiting event that matches the status change condition for a monitored object, the status of the monitored object changes.
- 2. Search for the status change event from the monitored object and display response-waiting events in the Search Events page.
- 3. Display the Enter Response window for the response-waiting event.
- 4. Check the status of the source process and the message contents.

  Make sure that the status of the source process is READY TO RESPOND.
- 5. Enter a response in the **Response** area and then click **Respond**.
- 6. If the response is successful, the response-waiting event appears in the search results with the status *Processed* when you search from the Search Events window again.

7. With the response to the response-waiting event now complete, the status of the monitored object in the Monitoring Tree window returns to normal.

#### 10.4.2 Responding to response-waiting events

The conditions under which you can respond to a response-waiting event are described in 10.2.4(2) Conditions for responding to response-waiting events. You must have <code>JP1\_Console\_Operator</code> permission or higher to perform this operation.

To respond to a response-waiting event:

- 1. Use one of the following methods to display the Enter Response window:
  - On the Response-Waiting Events page or Search Events page, select a response-waiting event, and from the **View** menu, choose **Enter Response**.
  - On the Response-Waiting Events page, Search Events page, or Related Events window, right-click a response-waiting event and choose **Enter Response** from the popup menu.
  - In the Event Details window, click Enter Response.
- 2. Enter a response in the **Response** area of the Enter Response window.

Check the message contents and enter an appropriate response.

- You can enter a maximum of 512 bytes.
- You can enter characters in the 0x20 to 0x7E range of the ASCII character set.

#### 3. Click Respond.

A confirmation dialog box appears. Click **Yes** to submit the response to the response-waiting event. Click **No** to return to the Enter Response window without submitting the response.

If the response is successful, the response-waiting event disappears from the Response-Waiting Events page, and the response status of the event changes to *Processed*.

## 10.4.3 Manually releasing response-waiting events from the hold-and-accumulate state

If an event no longer requires a response, or the event was not released from the hold-and-accumulate state despite a successful response, you can manually release the event from the hold-and-accumulate state. Note that this operation requires <code>JP1\_Console\_Operator</code> permission or higher.

To release a response-waiting event from the hold-and-accumulate state:

- 1. Display the Response-Waiting Events page of the Event Console window.
- 2. Check the status of the source process of the response-waiting event you want to release.

  Display the Enter Response window by selecting the response-waiting event you want to release. Make sure that the status of the source process is NO LONGER MANAGED BY BJEX or ALREADY RESPONDED.
- 3. Change the response status of the response-waiting event to *Processed*.

  If the event can be released, change the status of the event to *Processed* by choosing **Processed** from the **View** menu.

4. Select the response-waiting event that you want to release from the hold-and-accumulate state, and from the **View** menu, choose **Remove Accumulated Events**. Alternatively, right-click the event and choose **Remove Accumulated Events** from the popup menu.

You can select multiple response-waiting events. When you click **Remove Accumulated Events**, the selected events are removed from the hold-and-accumulate state.

The response-waiting events disappear from the Response-Waiting Events page when you refresh the list of events.

You cannot accumulate an event again after releasing it. If you inadvertently release a response-waiting event, you can respond to the event by searching for it from the Search Events page.

#### 10.4.4 Resuming monitoring of events in the hold-and-accumulate state

When normal monitoring of events in hold-and-accumulate state is resumed after the number of accumulated response-waiting events has exceeded 2,000, you can be notified by a JP1 event when the number of accumulated events once again exceeds 2,000. This operation requires JP1 Console Admin permission.

Before you resume monitoring accumulated events, identify and respond to the overflowed response-waiting events by reviewing the integrated trace log on the manager. For details about how to respond to response-waiting events that have been released from the hold-and-accumulate state, see 10.2.3(2) Notification when the number of response-waiting events exceeds 2,000.

To resume monitoring of events in the hold-and-accumulate state:

1. In the Event Console window, from the **Options** menu, choose **Function-Status Notification Return** and then **Monitor Accumulation Status**.

The system resumes monitoring the events in the hold-and-accumulate state. The message KAVB0551-E disappears from the **Accumulation status** area of the Response-Waiting Events page when you next refresh the Event Console window.

#### 10.5 Command usage when linking with BJEX or JP1/AS

This section describes the command options you need to use when linking with BJEX or JP1/AS. For information about other options and details of the commands themselves, see *Chapter 1. Commands* in the *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*. Note that the *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference* does not describe the options for linking with BJEX.

#### 10.5.1 jcoimdef

The jcoimdef command is used to set up the system environment for JP1/IM - Manager, and to reference settings. When you execute this command, the settings are output to standard output.

You can specify the following option when linking with BJEX or JP1/AS:

```
-resevent {ON | OFF}
```

Specify the -resevent ON option to enable the response-waiting event management function. To disable the function, specify -resevent OFF.

If you execute the <code>jcoimdef</code> command with the <code>-resevent</code> option to enable or disable the response-waiting event management function while JP1/IM - Manager is running, you will need to restart JP1/IM - Manager. You will also need to restart any instances of JP1/IM - View that are connected to JP1/IM - Manager.

For details about the jcoimdef command, see *jcoimdef* in *Chapter 1*. Commands of the *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference*.

#### 10.5.2 jim\_log.bat (Windows only)

jim\_log.bat is a tool for collecting data when an error occurs 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.

You can specify the following option when linking with BJEX or JP1/AS:

-a

Specify this option to prevent the tool from collecting the file for accumulated response-waiting events.

The file for accumulated response-waiting events collected by jim\_log.bat is stored in the following folders as primary data:

Internal folder for primary data on physical hosts

```
data-folder\jp1 default\imm 1st\cons\log\response
```

Internal folder for primary data on logical hosts

```
data-folder\logical-host-name\imm 1st\cons\log\response
```

For details about the jim\_log.bat tool, see *jim\_log.bat* (Windows only) in Chapter 1. Commands of the JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

#### 10.5.3 jim\_log.sh (UNIX only)

jim\_log.sh is a tool for collecting data when an error occurs 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.

You can specify the following option when linking with BJEX or JP1/AS:

-a

Specify this option to prevent the tool from collecting the file for accumulated response-waiting events.

The file for accumulated response-waiting events collected by jim\_log.sh is stored in the following directories as primary data:

Internal directory for primary data on physical hosts

./var/opt/jplcons/log/response

Internal directory for primary data on logical hosts

./shared-disk/jplcons/log/response

For details about the jim\_log.sh tool, see *jim\_log.sh* (UNIX only) in Chapter 1. Commands of the JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

11

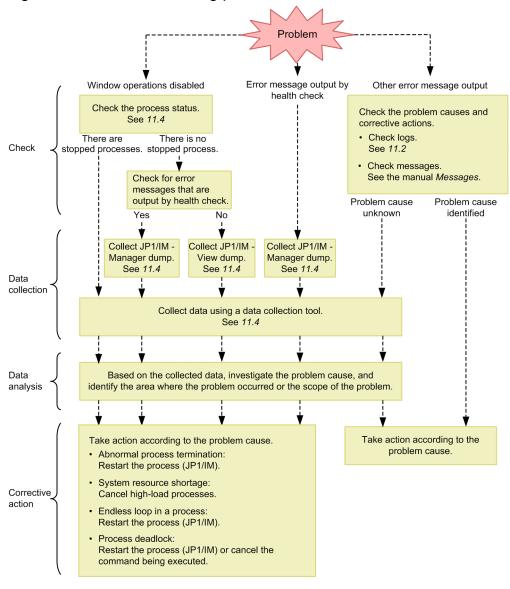
## **Troubleshooting**

This chapter explains how to handle problems if they occur in JP1/IM. It also explains items that tend to cause problems.

#### 11.1 Troubleshooting procedure

The figure below shows the procedure to follow when a problem occurs in JP1/IM.

Figure 11-1: Troubleshooting procedure



#### 11.2 Log information types

The following three types of logs are output by JP1/IM:

- Common message log
- Integrated trace log
- · Operation log

This section explains these three types of log information.

#### 11.2.1 Common message log

The common message log contains log information for the system administrator and reports system problems. The common message log reports a minimal amount of necessary problem information.

The common message log is output to the syslog file in UNIX, and to the Windows Event Log in Windows.

In SUSE Linux 15 or later, the common message log is not output to syslog by default. Instead, the common message log is output to a log file called a *journal*. In this manual, read *syslog* as *journal*.

In UNIX, the common message log is output to the following files:

/var/log/messages (in Linux)



#### **Important**

In UNIX, a message whose output destination is the syslog file might not actually be output, depending on the behavior of the syslog file.

#### 11.2.2 Integrated trace log

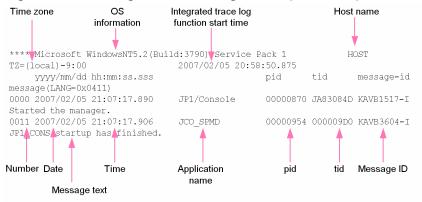
The integrated trace log contains log information that is obtained by using the Hitachi Network Objectplaza Trace Library (HNTRLib2) to integrate the trace information that is output by individual programs into a single output file. The integrated trace log outputs more detailed messages than the common message log.

The default output destination of the integrated trace log is as follows:

```
In Windows (32 bit):
    system-drive\Program Files\Hitachi\HNTRLib2\spool\hntr2{1|2|3|4}.log
In Windows (64 bit):
    system-drive\Program Files\Hitachi\HNTRLib2\spool\hntr2{1|2|3|4}.log
    or
        system-drive\Program Files(x86)\Hitachi\HNTRLib2\spool\hntr2{1|2|3|4}.log
In UNIX:
    /var/opt/hitachi/HNTRLib2/spool/hntr2{1|2|3|4}.log
```

You can view the integrated trace log file from a text editor of your choice. The figure below shows an output example of the integrated trace log.

Figure 11–2: Integrated trace log file output example



The header information that is output to the integrated trace log file and the output items are explained below.

Table 11–1: Integrated trace log file header information

Header information	Explanation
OS information	Information on the OS under which the Hitachi Network Objectplaza Trace Library (HNTRLib2) started.
Host name	The name of the host on which the Hitachi Network Objectplaza Trace Library (HNTRLib2) started.
Time zone	In Windows: OS's time zone In UNIX: Environment variable TZ of the integrated trace process. If the environment variable TZ is not set up, Unknown is output.
Integrated trace log function start time	Time at which the Hitachi Network Objectplaza Trace Library (HNTRLib2) started.

Table 11-2: Integrated trace log file output items

Output items	Explanation	
Number (4 digits)	Trace code serial number	
	A number is assigned to each process that outputs a log.	
Date (10 bytes)	Trace collection date: yyyy/mm/dd (year/month/day)	
Time (12 bytes)	Trace collection time (local time): hh: mm:ss.sss (hour:minutes:seconds.milliseconds)	
AP name (16 bytes or shorter)	Name that identifies an application (application identifier)	
	The following AP names are output by JP1/IM - Manager:	
	JP1/IM-Manager Service	
	JP1/IM-Manager	
	Event Base Service	
	evflow	
	Automatic Action Service	
	jcamain	
	Intelligent Integrated Management Base Service	
	jddmain	
	Event Generation Service	

Output items	Explanation	
	evgen	
	Central Scope Service	
	jcsmain	
	IM Configuration Management Service	
	jcfmain	
	Process management	
	JCO_SPMD	
	• jcochstat command	
	jcochngstat	
	Other commands	
	command-name	
	The following AP names are output by JP1/IM - View:	
	Central Console - View	
	JP1/IM-View	
	<ul> <li>Central Scope - View         JP1/IM-View     </li> <li>IM Configuration Management - View</li> </ul>	
	JP1/IM-View	
	Edit Tree window	
	JP1/IM-Edit	
pid	Process ID assigned by the OS	
tid	Thread ID for identifying a thread	
Message ID	Message ID explained in the message output format. Message ID used by this product.	
Message text	Message text that is output to the integrated trace log. Message text that is output from this product.	

The log time that is output to the integrated trace log is formatted according to the time zone of the process that output the log.

Consequently, if a user who has changed the environment variable TZ starts a service or executes a command, a time that is different from the time zone that is set in the OS may be output.

### 11.2.3 Operation log

The operation log of JP1/IM - Manager contains log information about the login and logout history, including who attempted login or logout when and where, and whether the attempt was successful or failed. The operation log is used to find the cause of security problems such as unauthorized access, and to collect information necessary to ensure secure system operation. For details about the operation log, see *Appendix K. Operation Log Output* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

### 11.2.4 Log files and directory list

This subsection explains the types of log information that are output by JP1/IM, default file names, and directory names.

Note that the files explained here are output for product maintenance purposes. Therefore, there is no need for the user to view or modify these files. If a problem such as a system error occurs, the user may be asked to temporarily retain these files on site for the purpose of collecting data.

#### (1) In Windows

The tables below show the default log files and folders that are output by the Windows version of JP1/IM.

The Log type column lists the log types that are output by JP1/IM.

The *Default file name and folder name* column describes log file names as absolute paths when JP1/IM - Manager, JP1/IM - View, or JP1/Base is installed in the default mode. *Default file name and folder name* in a cluster operation system describes the log file names of shared folders as absolute paths.

The *Maximum disk usage* column shows the maximum disk space used by each log file. When there are multiple log files, the combined total is given.

The *File-switching timing* column shows how JP1/IM times output destination log file switching. When the file reaches the size shown in this column or when the event shown in this column occurs, the output destination is switched. If there are multiple log files and if the maximum disk usage is reached, files are overwritten, beginning with the ones that have the oldest update dates.

Table 11–3: JP1/IM - Manager (common to all components) log files and folders (Windows)

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Operation log	<pre>Manager-path\log\operationlog \imm_operation{none 1 2 16}.log<sup>#1</sup></pre>	55 MB <sup>#1</sup>	5 MB <sup>#1#2</sup>
jimnodecount command $\log^{\#3}$	<pre>Manager-path\log\nodecount \jimnodecount_cmd{1 2}.log</pre>	20 MB	10 MB

<sup>#1:</sup> You can change the output destination, the number of files that can be saved, and the file size. For details, see *Operation log definition file* (imm\_operationlog.conf) (Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference. The number of bytes shown in the Maximum disk usage and File-switching timing columns are the values used when the number of files that can be saved and the file size are set to initial values.

Table 11–4: JP1/IM - Manager (Central Console) log files and folders (Windows)

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Process management	Console-path\log\JCO_SPMD{1 2 3}.log	384 KB	128 KB
log <sup>#9</sup>	<pre>Console-path\log\JCO_SPMD_COMMAND{1 2  3}.log</pre>	384 KB	128 KB
	<pre>shared-folder\jp1cons\log\JCO_SPMD{1 2  3}.log</pre>	384 KB	128 KB
	<pre>shared-folder\jp1cons\log \JCO_SPMD_COMMAND{1 2 3}.log</pre>	384 KB	128 KB
Stack trace log <sup>#9</sup>	Console-path\log\javalog0{1 2 3 4}.log	1 MB	At startup or 256 KB
	<pre>shared-folder\jp1cons\log\javalog0{1 2 3  4}.log</pre>	1 MB	At startup or 256 KB
Logical host settings program log <sup>#9</sup>	<pre>Console-path\log\jp1hasetup.{log  log.old}</pre>	2,000 KB	1,000 KB

<sup>#2:</sup> For details about the operation when switching the operation log file, see *K.2 Storage format of operation log output* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

<sup>#3:</sup> The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Setup log <sup>#9</sup>	Console-path\log\command \comdef[_old].log	512 KB	256 KB
Event console log#9	<pre>Console-path\log\console\EVCONS{1 2  3}.log</pre>	30,720 KB	10,240 KB
	Console-path\log\console\jp1cons{1 2 3  4 5 6 7 8}.log	40,960 KB	5,120 KB <sup>#1</sup>
	<pre>Console-path\log\console\evtcon_exe{1 2  3}.log</pre>	256 KB × 3	256 KB
	<pre>Console-path\log\console\JCOAPI{1 2  3}.log</pre>	96KB	32KB
	<pre>Console-path\log\console\jp1consM{1  2 60}.log</pre>	300 MB	5 MB <sup>#1</sup>
	<pre>Console-path\log\console \jp1eventStormDef{1 2 3 4 5}.log</pre>	100 MB	20 ME
	<pre>Console-path\log\console\jp1filterDef{1  2 3 4 5}.log</pre>	100 MB	20 ME
	Console-path\log\console \jp1bizGroupDef{1 2}.log	10 MB	5 MB
	<pre>Console-path\log\console \jp1cmdButtonDef{1 2 3 4 5}.log</pre>	25 MB	5 ME
	<pre>Console-path\log\console \jp1exattrnameDef{1 2 3 4 5}.log</pre>	25 MB	5 ME
	<pre>shared-folder\jp1cons\log\console \EVCONS{1 2 3}.log</pre>	30,720 KB	10,240 KE
	<pre>shared-folder\jp1cons\log\console \jp1cons{1 2 3 4 5 6 7 8}.log</pre>	40,960 KB	5,120 KB <sup>#</sup>
	<pre>shared-folder\jp1cons\log\console \evtcon_exe{1 2 3}.log</pre>	256 KB × 3	256 KE
	<pre>shared-folder\jp1cons\log\console \JCOAPI{1 2 3}.log</pre>	96 KB	32 KF
	<pre>shared-folder\jp1cons\log\console \jp1consM{1 2 60}.log</pre>	300 MB	5 MB#
	<pre>shared-folder\jp1cons\log\console \jp1eventStormDef{1 2 3 4 5}.log</pre>	100 MB	20 ME
	<pre>shared-folder\jp1cons\log\console \jp1filterDef{1 2 3 4 5}.log</pre>	100 MB	20 ME
	<pre>shared-folder\jp1cons\log\console \jp1bizGroupDef{1 2}.log</pre>	10 MB	5 ME
	<pre>shared-folder\jp1cons\log\console \jp1cmdButtonDef{1 2 3 4 5}.log</pre>	25 MB	5 ME
	<pre>shared-folder\jp1cons\log\console \jp1exattrnameDef{1 2 3 4 5}.log</pre>	25 MB	5 ME
Automated action trace log <sup>#9</sup>	<pre>Console-path\log\action\JCAMAIN{1 2 3 4  5}.log</pre>	25,600 KB <sup>#2</sup>	5,120 KB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>shared-folder\jp1cons\log\action \JCAMAIN{1 2 3 4 5}.log</pre>	25,600 KB#2	5,120 KB
Product information log <sup>#9</sup>	Console-path\log\hliclib\hliclibtrc{1 2  3 4 5}.log	5 MB	1 MB
	Console-path\log\hliclib\hlicliberr{1 2  3 4 5}.log	5 MB	1 MB
	Console-path\log\hliclib \hliclibmgrtrc{1 2 3 4 5}.log	5 MB	1 MB
	Console-path\log\hliclib \hliclibmgrerr{1 2 3 4 5}.log	5 MB	1 MB
	<pre>shared-folder\jp1cons\log\hliclib \hliclibtrc{1 2 3 4 5}.log</pre>	5 MB	1 MB
	<pre>shared-folder\jp1cons\log\hliclib \hlicliberr{1 2 3 4 5}.log</pre>	5 MB	1 MB
	<pre>shared-folder\jp1cons\log\hliclib \hliclibmgrtrc{1 2 3 4 5}.log</pre>	5 MB	1 MB
	<pre>shared-folder\jp1cons\log\hliclib \hliclibmgrerr{1 2 3 4 5}.log</pre>	5 MB	1 MB
Action information file#9	Console-path\log\action\actinf.log	626 KB <sup>#3</sup>	No switching
	<pre>shared-folder\jp1cons\log\action \actinf.log</pre>	626 KB <sup>#3</sup>	No switching
Action host name file#9	Console-path\log\action\acttxt{1 2}.log	48.9 MB <sup>#4</sup>	When the action information file wraps around
	<pre>shared-folder\jp1cons\log\action \acttxt{1 2}.log</pre>	48.9 MB <sup>#4</sup>	When the action information file wraps around
Action re-execution file	Console-path\log\action\actreaction	300 MB	When the service is started
	<pre>shared-folder\jp1cons\log\action \actreaction</pre>	300 MB	When the service is started
jcochstat, and	Console-path\log\command\CMD{1 2 3}.log	3,072 KB	1,024 KB
jcoevtreport command trace logs#5#9	<pre>Console-path\log\command\jp1cons_cmd{1  2}.log</pre>	12,288 KB	6,144 KB
	<pre>Console-path\log\command\jp1consM_cmd{1  2}.log</pre>	12,288 KB	6,144 KB
	<pre>Console-path\log\command \jp1exattrnameDef_cmd{1 2 3 4 5}.log</pre>	25 MB	5 MB
Plug-in log <sup>#9</sup>	<pre>Console-path\log\command\jcoplugin{1 2  3}.log</pre>	3 MB	1 MB
Reporting status storage	Console-path\log\notice\notice_stat.dat	72B	No switching
file <sup>#9</sup>	<pre>shared-folder\jp1cons\log\notice \notice_stat.dat</pre>	72B	No switching

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Action definition backup	Console-path\log\action\actdefbk.conf	2,048 KB	No switching
file <sup>#9</sup>	<pre>shared-folder\jp1cons\log\action \actdefbk.conf</pre>	2,048 KB	No switching
Event base trace log#9	Console-path\log\evflow\EVFLOW{1 2 3 4  5 6 7 8 9 10}.log	100 MB	10 MB
	Console-path\log\evflow\jplevflowM{1  2 60}.log	300 MB	5 MB
	<pre>Console-path\log\evflow\jp1actDef{1 2 3  4 5}.log</pre>	25 MB	5 MB
	<pre>Console-path\log\evflow\jp1chsevDef{1 2  3 4 5}.log</pre>	25 MB	5 MB
	<pre>Console-path\log\evflow\jp1chmsgDef{1 2  3 4 5}.log</pre>	25 MB	5 MB
	<pre>Console-path\log\evflow\jp1hostmapDef{1  2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>Console-path\log\evflow\evflow_exe{1 2  3}.log</pre>	256 KB × 3	256 KB
	shared-folder\jp1cons\log\evflow \EVFLOW{1 2 3 4 5 6 7 8 9 10}.log	100 MB	10 MB
	<pre>shared-folder\jp1cons\log\evflow \jp1evflowM{1 2 60}.log</pre>	300 MB	5 MB
	<pre>shared-folder\jp1cons\log\evflow \jp1actDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-folder\jp1cons\log\evflow \jp1chsevDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-folder\jp1cons\log\evflow \jp1chmsgDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-folder\jp1cons\log\evflow \jp1hostmapDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-folder\jp1cons\log\evflow \evflow_exe{1 2 3}.log</pre>	256 KB × 3	256 KB
Matching information	Console-path\log\evflow\evflowinf.log	12B	No switching
file <sup>#9</sup>	<pre>shared-folder\jp1cons\log\evflow \evflowinf.log</pre>	12B	No switching
Event base error log#9	Console-path\log\evflow\jplevflow{1 2 3  4 5 6 7 8}.log	40,960 KB	5,120 KB
	<pre>shared-folder\jp1cons\log\evflow \jp1evflow{1 2 3 4 5 6 7 8}.log</pre>	40,960 KB	5,120 KB
Event base stack trace#9	<pre>Console-path\log\evflow\javalog0{1 2 3  4}.log</pre>	1 MB	At startup or 256 KB
	<pre>shared-folder\jp1cons\log\evflow \javalog0{1 2 3 4}.log</pre>	1 MB	At startup or 256 KB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Automated action error log <sup>#9</sup>	<pre>Console-path\log\action\jp1act{1 2  3}.log</pre>	15,360 KB	5,120 KB
	<pre>shared-folder\jp1cons\log\action \jp1act{1 2 3}.log</pre>	15,360 KB	5,120 KB
Correlation event generation history file	Console-path\operation\evgen \egs_discrim{1 2 3}.log#6	30 MB <sup>#6</sup>	10 MB <sup>#6</sup>
	<pre>shared-folder\jp1cons\operation\evgen \egs_discrim{1 2 3}.log#6</pre>	30 MB <sup>#6</sup>	10 MB <sup>#6</sup>
Common exclusion history file	Console-path\operation\comexclude \comexclude {1 2 3 4 5}.log	100 MB	20 MB
	<pre>shared-folder\jp1cons\operation \comexclude\comexclude{1 2 3 4 5}.log</pre>	100 MB	20 MB
Common exclusion- conditions definition	Console-path\operation\comexclude \comexcludeDef{1 2 3 4 5}.log	100 MB	20 MB
history file	<pre>shared-folder\jp1cons\operation \comexclude\comexcludeDef{1 2 3 4  5}.log</pre>	100 MB	20 MB
Correlation event	Console-path\log\evgen\EVGEN{1 2 3}.log	15 MB	5 MB
generation trace log <sup>#9</sup>	Console-path\log\evgen\evgen_exe{1 2  3}.log	256 KB × 3	256 KB
	<pre>shared-folder\jp1cons\log\evgen\EVGEN{1  2 3}.log</pre>	15 MB	5 MB
	<pre>shared-folder\jp1cons\log\evgen \evgen_exe{1 2 3}.log</pre>	256 KB × 3	256 KB
Correlation event	Console-path\log\evgen\jp1egs{1 2}.log	20 MB	10 MB
generation individual log <sup>#9</sup>	Console-path\log\evgen\jp1egsM{1 2}.log	20 MB	10 MB
	<pre>shared-folder\jp1cons\log\evgen\jp1egs{1  2}.log</pre>	20 MB	10 MB
	<pre>shared-folder\jp1cons\log\evgen \jp1egsM{1 2}.log</pre>	20 MB	10 MB
Correlation event generation individual log	<pre>Console-path\log\evgen\jp1egs_cmd{1 2 3  4}.log</pre>	20 MB	5 MB
(for commands) #9	<pre>Console-path\log\evgen\jp1egsM_cmd{1 2  3 4}.log</pre>	20 MB	5 MB
Correlation event generation stack trace	<pre>Console-path\log\evgen\javalog0{1 2 3  4}.log</pre>	1 MB	At startup or 256 KB
$\log^{\#9}$	<pre>shared-folder\jp1cons\log\evgen \javalog0{1 2 3 4}.log</pre>	1 MB	At startup or 256 KB
Correlation event generation process	<pre>Console-path\log\evgen \egs_discrim_info{1 2 3 4}.dat</pre>	312 MB <sup>#7</sup>	At termination
inheriting definition file#9	<pre>shared-folder\jp1cons\log\evgen \egs_discrim_info{1 2 3 4}.dat</pre>	312 MB <sup>#7</sup>	At termination

Log type	Default file name and folder name	Maximum disk usage	File-switching timing	)
Correlation event generation definition	<pre>Console-path\log\evgen\jplegsDefine{1  2}.log</pre>	10 MB		5 MB
application log <sup>#9</sup>	<pre>shared-folder\jp1cons\log\evgen \jp1egsDefine{1 2}.log</pre>	10 MB		5 MB
File for accumulated	Console-path\log\response\resevent.dat	40 MB	No switching	
response-waiting events <sup>#8#9</sup>	<pre>shared-folder\jp1cons\log\response \resevent.dat</pre>	40 MB	No switching	
Backup file for accumulated response-	<pre>Console-path\log\response \resevent.dat.dump</pre>	40 MB	No switching	
waiting events <sup>#9</sup>	<pre>shared-folder\jp1cons\log\response \resevent.dat.dump</pre>	40 MB	No switching	
Command execution	Base-path\log\COMMAND\	See the JP1/Base User's Gu	ıide.	
history folder#9	<pre>shared-folder\jp1base\log\COMMAND\</pre>			
Remote command log <sup>#9</sup>	<pre>Base-path\log\JCOCMD\jcocmd_result{1 2  3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdapi{1 2  3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdapi_trace{1  2 3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdcom{1 2  3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdcom_trace{1  2 3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdexe{1 2  3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdexe_trace{1  2 3}.log</pre>			
	<pre>Base-path\log\JCOCMD\jcocmdrouter{1 2  3}.log</pre>			
	<pre>Base-path\log\JCOCMD \jcocmdrouter_trace{1 2 3}.log</pre>			
	<pre>Base-path\log\JCOCMD\JCOCMDCMD{1 2  3}.log</pre>			
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmd_result{1 2 3}.log</pre>			
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdapi{1 2 3}.log</pre>			
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdapi_trace{1 2 3}.log</pre>			
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdcom{1 2 3}.log</pre>			
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdcom_trace{1 2 3}.log</pre>			

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdexe{1 2 3}.log</pre>		
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdexe_trace{1 2 3}.log</pre>		
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdrouter{1 2 3}.log</pre>		
	<pre>shared-folder\jp1base\log\JCOCMD \jcocmdrouter_trace{1 2 3}.log</pre>		
	<pre>shared-folder\jp1base\log\JCOCMD \JCOCMDCMD{1 2 3}.log</pre>		
Configuration	Base-path\log\route\JBSRT{1 2 3}.log	-	
management log#9	<pre>shared-folder\jp1base\log\route\JBSRT{1  2 3}.log</pre>		
Trace log file#9	<pre>Base-path\sys\tmp\event\logtrap \jelallog\jelallog{1 2 3 4 5}.log</pre>		
	<pre>Base-path\sys\tmp\event\logtrap \jelalelt\jelalelt{1 2 3 4 5}.log</pre>		
Integrated monitoring database application $\log^{\#9}$	Console-path\log\evflow\EVFLOW_DBAPI{1  2 16}.log	200 MB	12.5 MB
	Console-path\log\console\EVCONS_DBAPI{1  2 3 4 5}.log	50 MB	10 MB
	Console-path\log\command\CMD_DBAPI{1 2  3 4 5}.log	50 MB	10 MB
	<pre>shared-folder\jp1cons\log\evflow \EVFLOW_DBAPI{1 2 16}.log</pre>	200 MB	12.5 MB
	<pre>shared-folder\jp1cons\log\console \EVCONS_DBAPI{1 2 3 4 5}.log</pre>	50 MB	10 MB
API log for the IM Configuration	Console-path\log\evflow \EVFLOW_CFDBAPI{1 2 3}.log	30 MB	10 MB
Management database <sup>#9</sup>	Console-path\log\console \EVCONS_CFDBAPI{1 2 3}.log	30 MB	10 MB
	Console-path\log\command\CMD_CFDBAPI{1  2 3}.log	30 MB	10 MB
	<pre>shared-folder\jp1cons\log\evflow \EVFLOW_CFDBAPI{1 2 3}.log</pre>	30 MB	10 MB
	<pre>shared-folder\jp1cons\log\console \EVCONS_CFDBAPI{1 2 3}.log</pre>	30 MB	10 MB
jcodbsetup command log <sup>#9</sup>	<pre>Console-path\log\imdb\jcodbsetup{1  2}.log</pre>	512 KB	256 KB
jcodbunsetup command log <sup>#9</sup>	<pre>Console-path\log\imdb\jcodbunsetup{1  2}.log</pre>	512 KB	256 KB
jimmail command $\log^{\#9}$	<pre>Console-path\log\mail\jimmail_cmd{1 2  3}.log</pre>	15 MB	5 MB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>Console-path\log\mail\jimmail_cmdM{1 2  3}.log</pre>	15 MB	5 MB
	Console-path\log\mail\JIMMAIL{1 2 3}.log	15 MB	5 MB
	<pre>Console-path\log\mail\jimmail_exe{1 2  3}.log</pre>	15 MB	5 MB
jimmailpasswd command $\log^{\#9}$	<pre>Console-path\log\mail \jimmailpasswd_cmd{1 2 3}.log</pre>	768 KB	256 KB
	Console-path\log\mail \jimmailpasswd_cmdM{1 2 3}.log	768 KB	256 KB
	<pre>Console-path\log\mail\JIMMAILPASSWD{1 2  3}.log</pre>	768 KB	256 KB
	<pre>Console-path\log\mail \jimmailpasswd_exe{1 2 3}.log</pre>	768 KB	256 KB

<sup>#1:</sup> The file size may be dozens of kilobytes larger than this value.

- #3: You can set this value to be from 1 to 4,096 kilobytes, as described in *Automated action environment definition file (action.conf.update)* (in *Chapter 2. Definition Files*) in the manual *JP1/Integrated Management 2 Manager Command, Definition File and API Reference.*
- #4: This is the value when the size of the action information file is the default value (626 kilobytes). You can use the following estimation formula to estimate the maximum disk usage by this file. Each time an action is performed, the size increases by 5 kilobytes.

((action information file size  $\div$  64 bytes) - 1)  $\times$  5 kilobytes

- #5: The files are output to the jcochstat and jcoevtreport command trace logs on the physical host in a cluster operation system as well.
- #6: You can change the file count and file size as described in the Correlation event generation environment definition file (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference.
- #7: This file is used to output the memory information for inheriting data during correlation event generation, and therefore its size varies depending on the correlation event generation condition and the correlation-source event. For details about estimating the size of this file, see the JP1/IM Manager release notes.
- #8: This file is created when you start JP1/IM Manager after enabling the response-waiting event management function.
- #9: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11–5: JP1/IM - Manager (Central Scope) log files and folders (Windows)

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Central Scope trace log	Scope-path\log\jcsmain{1 2 3}.log	6 MB	2 MB
	Scope-path\log\jcsmain_trace{1 2 3}.log	6 MB	2 MB
	<pre>shared-folder\JP1Scope\log\jcsmain{1 2  3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1Scope\log \jcsmain_trace{1 2 3}.log</pre>	6 MB	2 MB
Communication trace log	Scope-path\log\jcsmain_trace_com{1 2  3}.log	6 MB	2 MB
	<pre>shared-folder\JP1Scope\log \jcsmain_trace_com{1 2 3}.log</pre>	6 MB	2 MB

<sup>#2:</sup> You can set this value to be from 65,536 bytes (64 kilobytes) to 104,857,600 bytes (100 megabytes), as described in *Automated action* environment definition file (action.conf.update) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>Scope-path\log\jcsmain_trace_ping{1 2  3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1Scope\log \jcsmain_trace_ping{1 2 3}.log</pre>	6 MB	2 MB
Logical host settings program log	Scope-path\log\jp1hasetup.{log log.old}	2,000 KB	1,000 KB
Database operation API trace log	<pre>Scope-path\log\jcsmain_trace_db{1 2  3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1Scope\log \jcsmain_trace_db{1 2 3}.log</pre>	6 MB	2 MB
jcshostsexport	$Scope-path \setminus \log jcshostsexport \{1 2 3\}.log$	6 MB	2 MB
command log	<pre>shared-folder\JP1Scope\log \jcshostsexport{1 2 3}.log</pre>	6 MB	2 MB
jcshostsimport	$Scope-path \setminus \log jcshostsimport \{1 2 3\}.log$	6 MB	2 MB
command log	<pre>shared-folder\JP1Scope\log \jcshostsimport{1 2 3}.log</pre>	6 MB	2 MB
jcsdbsetup command	Scope-path\log\jcsdbsetup{1 2 3}.log	6 MB	2 MB
log	<pre>shared-folder\JP1Scope\log\jcsdbsetup{1  2 3}.log</pre>	6 MB	2 MB
jcschstat command	Scope-path\log\jcschstat{1 2 3}.log	6 MB	2 MB
log	<pre>shared-folder\JP1Scope\log\jcschstat{1 2  3}.log</pre>	6 MB	2 MB
jcsdbexport command log	Scope-path\log\jcsdbexport{1 2 3}.log	6 MB	2 MB
command log	<pre>shared-folder\JP1Scope\log\jcsdbexport{1  2 3}.log</pre>	6 MB	2 MB
jcsdbimport command log	Scope-path\log\jcsdimport{1 2 3}.log	6 MB	2 MB
command log	<pre>shared-folder\JP1Scope\log\jcsdbimport{1  2 3}.log</pre>	6 MB	2 MB
jcsdbconvert	Scope-path\log\jcsdbconvert{1 2 3}.log	6 MB	2 MB
command log	<pre>shared-folder\JP1Scope\log \jcsdbconvert{1 2 3}.log</pre>	6 MB	2 MB
jplcsverup command log	<pre>Scope-path\log\jp1csverup_front{1 2  3}.log</pre>	6 MB	2 MB
jp1cshaverup command log	<pre>shared-folder\JP1Scope\log \jp1cshaverup_front{1 2 3}.log</pre>	6 MB	2 MB

Note: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11–6: JP1/IM - Manager (IM Configuration Management) log files and folders (Windows)

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
IM Configuration Management trace log	Manager-path\log\imcf\jcfallogtrap{1 2  3 4 5 6 7 8 9 10}.log	200 MB	10 MB
	<pre>Manager-path\log\imcf \jcfallogtrap_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	Manager-path\log\imcf \jcfallogtrap_trace_auth{1 2 3 4 5 6  7 8 9 10}.log	20 MB	2 MB
	Manager-path\log\imcf\jcfmain{1 2 3 4  5 6 7 8 9 10}.log	20 MB	2 ME
	Manager-path\log\imcf\jcfmain_trace{1  2 3 4 5 6 7 8 9 10}.log	20 MB	2 ME
	<pre>Manager-path\log\imcf \jcfmain_VM_trace{1 2 3}.log</pre>	3 MB	1 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogtrap{1 2 3 4 5 6 7 8 9  10}.log</pre>	200 MB	10 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogtrap_VM_trace{1 2 3}.log</pre>	3 MB	1 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogtrap_trace_auth{1 2 3 4 5 6  7 8 9 10}.log</pre>	20 MB	2 ME
	$shared-folder \label{log_log} shared-folder \label{log_log} $$ 2 3 4 5 6 7 8 9 10 \}. log$	20 MB	2 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfmain_trace{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfmain_VM_trace{1 2 3}.log</pre>	3 MB	1 ME
Communication trace log	<pre>Manager-path\log\imcf \jcfmain_trace_com{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 ME
	Manager-path\log\imcf\jcfmain_ping{1 2  3 4 5 6 7 8 9 10}.log	20 MB	2 ME
	<pre>shared-folder\JP1IMM\log\imcf \jcfmain_trace_com{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfmain_ping{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 ME
Authentication trace log	<pre>Manager-path\log\imcf \jcfmain_trace_auth{1 2 3 4 5 6 7 8  9 10}.log</pre>	20 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfmain_trace_auth{1 2 3 4 5 6 7 8  9 10}.log</pre>	20 MB	2 MB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Logical host settings program log	<pre>Manager-path\log\imcf\jp1hasetup.{log  log.old}</pre>	2,000 KB	1,000 KB
Database operation API trace log	<pre>Manager-path\log\imcf \jcfmain_trace_db{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
	$shared-folder \label{loglim} shared-folder \label{loglim} shared-folder \label{loglim} $$ \sl = 10 \label{loglim} $$ 10 \label{loglim} $$ .10g $$$	20 MB	2 MB
Command common log	<pre>Manager-path\log\imcf\jcfcommand{1 2  3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfcommand{1 2 3}.log</pre>	3 MB	1 MB
jcfallogstart command log	<pre>Manager-path\log\imcf\jcfallogstart{1  2 3}.log</pre>	9 MB	3 MB
	<pre>Manager-path\log\imcf \jcfallogstart_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstart{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstart_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogstat command log	<pre>Manager-path\log\imcf\jcfallogstat{1 2  3}.log</pre>	9 MB	3 MB
	<pre>Manager-path\log\imcf \jcfallogstat_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstat{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstat_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogstop command log	<pre>Manager-path\log\imcf\jcfallogstop{1 2  3}.log</pre>	9 MB	3 MB
	<pre>Manager-path\log\imcf \jcfallogstop_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstop{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogstop_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogreload command log	<pre>Manager-path\log\imcf\jcfallogreload{1  2 3}.log</pre>	9 MB	3 MB
	<pre>Manager-path\log\imcf \jcfallogreload_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogreload{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogreload VM trace{1 2 3}.log</pre>	3 MB	1 MB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
jcfallogdef command log	<pre>Manager-path\log\imcf\jcfallogdef{1 2  3}.log</pre>	9 MB	3 MB
	<pre>Manager-path\log\imcf \jcfallogdef_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogdef{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfallogdef_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfaleltstart command log	<pre>Manager-path\log\imcf\jcfaleltstart{1  2 3}.log</pre>	6 MB	2 MB
	<pre>Manager-path\log\imcf \jcfaleltstart_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstart{1 2 3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstart_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfaleltstat command log	<pre>Manager-path\log\imcf\jcfaleltstat{1 2  3}.log</pre>	6 MB	2 MB
	<pre>Manager-path\log\imcf \jcfaleltstat_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstat{1 2 3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstat_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfaleltstop command log	<pre>Manager-path\log\imcf\jcfaleltstop{1 2  3}.log</pre>	6 MB	2 MB
	<pre>Manager-path\log\imcf \jcfaleltstop_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstop{1 2 3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltstop_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfaleltreload command log	<pre>Manager-path\log\imcf\jcfaleltreload{1  2 3}.log</pre>	6 MB	2 MB
	<pre>Manager-path\log\imcf \jcfaleltreload_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltreload{1 2 3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltreload_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfaleltdef command log	<pre>Manager-path\log\imcf\jcfaleltdef{1 2  3}.log</pre>	6 MB	2 MB
	<pre>Manager-path\log\imcf \jcfaleltdef VM trace{1 2 3}.log</pre>	3 MB	1 MB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltdef{1 2 3}.log</pre>	6 MB	2 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfaleltdef_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfcolvmesx command log	<pre>Manager-path\log\imcf \jcfcolvmesx_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfcolvmscvmm command log	Manager-path\log\imcf \jcfcolvmscvmm_trace{1 2 3}.log	3 MB	1 MB
jcfcolvmvirtage command log	<pre>Manager-path\log\imcf \jcfcolvmvirtage_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfcolvmvc command log	Manager-path\log\imcf \jcfcolvmvc_trace{1 2 3}.log	3 MB	1 MB
jcfcolvmkvm command log	<pre>Manager-path\log\imcf \jcfcolvmkvm_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfcolvmhcsm command log	<pre>Manager-path\log\imcf \jcfcolvmhcsm_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfexport command log	<pre>Manager-path\log\imcf \jcfexport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfexport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfimport command log	<pre>Manager-path\log\imcf \jcfimport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-folder\JP1IMM\log\imcf \jcfimport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfmkhostsdata command log	<pre>Manager-path\log\imcf \jcfmkhostsdata_trace{1 2 3}.log</pre>	3 MB	1 MB
Stack trace log	<pre>Manager-path\log\imcf\javalog{1 2 3  4}.log</pre>	1 MB	At startup or 256 KB

Note: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11-7: Intelligent Integrated Management Base log files and folders

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Intelligent Integrated Management Base service	<pre>Manager-path\log\imdd\jddmain \jddmain.log{.1-7}</pre>	1 GB	128 MB
individual log	<pre>shared-folder\jp1imm\log\imdd\jddmain \jddmain.log{.1-7}</pre>		
Definition file <sup>#1</sup> , node file history log	<pre>Manager-path\log\imdd\jddmain \jimddDef.log{.1-10}</pre>	80 MB	8 MB
	<pre>shared-folder\jplimm\log\imdd\jddmain \jimddDef.log{.1-10}</pre>		

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>Manager-path\log\imdd\jddmain \jimddMaster.log{.1-30}</pre>	240 MB	8 MB
	<pre>shared-folder\jp1imm\log\imdd\jddmain \jimddMaster.log{.1-30}</pre>		
jddsetaccessuser command trace log	<pre>Manager-path\log\imdd\jddsetaccessuser \jddsetaccessuser.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-folder\jp1imm\log\imdd \jddsetaccessuser \jddsetaccessuser.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd\jddsetaccessuser \jddsetaccessuser_exe{1 2 3}.log</pre>	768 KB	256 KB
	<pre>shared-folder\jp1imm\log\imdd \jddsetaccessuser \jddsetaccessuser_exe{1 2 3}.log</pre>		
	<pre>Manager-path\log\imdd\jddsetaccessuser \javalog0{1 2 3 4}.log</pre>	1,024 KB	At startup or 256 KB
	<pre>shared-folder\jp1imm\log\imdd \jddsetaccessuser\javalog0{1 2 3  4}.log</pre>		
jddcreatetree command trace log	<pre>Manager-path\log\imdd\jddcreatetree \jddcreatetree.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-folder\jp1imm\log\imdd \jddcreatetree \jddcreatetree.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd\jddcreatetree \jddcreatetree_exe{1 2 3}.log</pre>	768 KB	256 KB
	<pre>shared-folder\jp1imm\log\imdd \jddcreatetree\jddcreatetree_exe{1 2  3}.log</pre>		
	<pre>Manager-path\imdd\jddcreatetree \javalog0{1 2 3 4}.log</pre>	1,024 KB	At startup or 256 KB
	<pre>shared-folder\jp1imm\log\imdd \jddcreatetree\javalog0{1 2 3 4}.log</pre>		
jddupdatetree command trace log	<pre>Manager-path\log\imdd\jddupdatetree \jddupdatetree.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-folder\jp1imm\log\imdd \jddupdatetree \jddupdatetree.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd\jddupdatetree \jddupdatetree_exe{1 2 3}.log</pre>	768 KB	256 KB
	<pre>shared-folder\jp1imm\log\imdd \jddupdatetree\jddupdatetree_exe{1 2  3}.log</pre>		
	<pre>Manager-path\log\imdd\jddupdatetree \javalog0{1 2 3 4}.log</pre>	1,024 KB	256 KB

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
	<pre>shared-folder\jp1imm\log\imdd \jddupdatetree\javalog0{1 2 3 4}.log</pre>		
jddsetproxyuser command trace log	<pre>Manager-path\log\imdd\jddsetproxyuser \jddsetproxyuser.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-folder\jp1imm\log\imdd \jddsetproxyuser \jddsetproxyuser.log{.1-6}</pre>		
	Manager-path\log\imdd\jddsetproxyuser \jddsetproxyuser_exe{1 2 3}.log	768 KB	256 KB
	<pre>shared-folder\log\imdd \jddsetproxyuser \jddsetproxyuser_exe{1 2 3}.log</pre>		
	Manager-path\log\imdd\jddsetproxyuser \javalog0{1 2 3 4}.log	1,024 KB	256 KB
	<pre>shared-folder\log\imdd \jddsetproxyuser\javalog0{1 2 3  4}.log</pre>		
jddupdatesuggesti on command trace log	<pre>Manager-path\log\imdd \jddupdatesuggestion \jddupdatesuggestion.log{.1-6}</pre>	70MB	10MB
	<pre>shared-folder\jp1imm\log \jddupdatesuggestion \jddupdatesuggestion.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd \jddupdatesuggestion \jddupdatesuggestion_exe{1 2 3}.log</pre>	768KB	256KB
	<pre>shared-folder\log\imdd \jddupdatesuggestion \jddupdatesuggestion_exe{1 2 3}.log</pre>		
	<pre>Manager-path\log\imdd \jddupdatesuggestion\javalog0{1 2 3  4}.log</pre>	1,024KB	256KB
	<pre>shared-folder\log\imdd \jddupdatesuggestion\javalog0{1 2 3  4}.log</pre>		
jddsetopinfo command trace log	<pre>Manager-path\log\imdd\jddsetopinfo \jddsetopinfo.log{.1-6}</pre>	70MB	10MB
	<pre>shared-folder\jp1imm\log\jddsetopinfo \jddsetopinfo.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd\jddsetopinfo \jddsetopinfo_exe{1 2 3}.log</pre>	768KB	256KB
	<pre>shared-folder\log\imdd\jddsetopinfo \jddsetopinfo_exe{1 2 3}.log</pre>		
	<pre>Manager-path\log\imdd\jddsetopinfo \javalog0{1 2 3 4}.log</pre>	1,024KB	256KB
	<pre>shared-folder\log\imdd\jddsetopinfo \javalog0{1 2 3 4}.log</pre>		

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
jddupdatessomap command trace log	<pre>Manager-path\log\imdd\jddupdatessomap \jddupdatessomap.log{.1-6}</pre>	70MB	10MB
	<pre>shared-folder\jp1imm\log \jddupdatessomap \jddupdatessomap.log{.1-6}</pre>		
	<pre>Manager-path\log\imdd\jddupdatessomap \jddupdatessomap_exe{1 2 3}.log</pre>	768KB	256KB
	<pre>shared-folder\log\imdd \jddupdatessomap \jddupdatessomap_exe{1 2 3}.log</pre>		
	<pre>Manager-path\log\imdd\jddupdatessomap \javalog0{1 2 3 4}.log</pre>	1,024KB	256KB
	<pre>shared-folder\log\imdd \jddupdatessomap\javalog0{1 2 3  4}.log</pre>		
Logs of the response action execution history	Manager-path\log\suggestion \jddSuggestionHistory.log{.1-3}	240MB	60MB
file #4	<pre>shared-folder\jp1imm\log\suggestion \jddSuggestionHistory.log{.1-3}</pre>		
User-created plug-ins	Manager-path\log\imdd\user-created-plug-in-name \user-created-plug-in.log{1-21}**3	220MB	10MB
	shared-folder\JP1IMM\log\imdd\user-created-plug-in-name\user-created-plug-in.log{1-21} <sup>#3</sup>		
Other logs	<pre>Manager-path\log\imdd\jddmain \jddmain_exe{1 2 3}.log</pre>	768 KB	256 KB
	<pre>shared-folder\jp1imm\log\imdd\jddmain \jddmain_exe{1 2 3}.log</pre>		
	Manager-path\log\imdd\jddmain \javalog0{1 2 3 4}.log	1,024 KB	At startup or 256 KB
	<pre>shared-folder\jp1imm\log\imdd\jddmain \javalog0{1 2 3 4}.log</pre>	_	
	Manager-path\log\imdd\jcoapi{1-50}.log	500 MB	10 MB
	<pre>shared-folder\jplimm\log\imdd\jddmain \jcoapi{1-50}.log</pre>		
	Manager-path\log\imdd\jcoapiM{1-50}.log	500 MB	10 MB
	<pre>shared-folder\jp1imm\log\imdd\jddmain \jcoapiM{1-50}.log</pre>		
	$\begin{tabular}{ll} \it Manager-path \log imdd \component-name \end{tabular} $$ name^{\#2} \component-name \end{tabular} . log $$$	220 MB	10 MB
	$shared-folder \log \log \log \log \log \log \log \log$		

Note: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

#1

The logs for the following definition files are output to the definition file log for the Intelligent Integrated Management Base:

System node definition file, category name definition file for IM management nodes, host name definition file, target host definition file for configuration collection, IM management node link definition file, IM management node link file, IM management node file

#2

One of the following is displayed as the component name:

- jp1ajs
- jp1pfm
- jp1im

#3

{1-21} indicates the file count. You can view the log files in a text editor of your choice.

#4

The log is created when a response action is taken. Users can check the logs of response actions by themselves in order to examine the causes of failures, for example.

Table 11-8: JP1/IM - View log files and folders

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
JP1/IM - View log <sup>#1</sup>	View-path\log\VIEW{1 2 3}.log	30,720 KB	10,240 KB
	View-path\log\jp1conv{1 2 3 4}.log	20,480 KB	5,120 KB <sup>#2</sup>
	View-path\log\jp1convM{1 2 60}.log	102,400 KB	5,120 KB <sup>#2</sup>
	View-path\log\jp1csov[_old].log	6,144 KB	3,072 KB <sup>#2</sup>
	View-path\log\jp1csovM[_old].log	6,144 KB	3,072 KB <sup>#2</sup>
	<pre>View-path\log\imrm\jp1rmJP1-IM-RM View{1 2  3}.log#3</pre>	3,072 KB	1,024 KB
	<pre>View-path\log\imrm\jp1rmJP1-IM-RM View_dbg{1 2  3}.log<sup>#3</sup></pre>	3,072 KB	1,024 KB
	<pre>View-path\log\jrmview\view{1 2 3}.log#3</pre>	3,072 KB	1,024 KB
Stack trace log#1	View-path\log\javalog0{1 2}.log	512 KB	At startup or 256 KB
Integrated trace log	<pre>system-drive:\Program Files\Hitachi \HNTRLib2\spool\hntr2{1 2 3 4}.log</pre>	1,024 KB	256 KB
Product information log <sup>#1</sup>	<pre>View-path\log\hliclib\hliclibtrc{1 2 3 4  5}.log</pre>	5 MB	1 MB
	<pre>View-path\log\hliclib\hlicliberr{1 2 3 4  5}.log</pre>	5 MB	1 MB
	<pre>View-path\log\hliclib\hliclibmgrtrc{1 2 3 4  5}.log</pre>	5 MB	1 MB
	<pre>View-path\log\hliclib\hliclibmgrerr{1 2 3 4  5}.log</pre>	5 MB	1 MB

Note: When you use Windows, replace  $\textit{View-path} \setminus \text{programData} \to \text{hitachi} jp1 \_default \JP1CoView \log\.$ 

#2: The file size may be dozens of kilobytes larger than this value.

<sup>#1:</sup> This log is a process-by-process trace log. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11-9: JP1/IM - IM Configuration Management - View log files and folders

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
IM Configuration  Management trace log <sup>#</sup>	<pre>View-path\log\jcfview\VIEW{1 2 3}.log</pre>	30 MB	10 MB
Stack trace log#	<pre>View-path\log\jcfjavalog{1 2}.log</pre>	512 KB	At startup or 256 KB
Integrated trace log	<pre>system-drive:\Program Files\Hitachi \HNTRLib2\spool\hntr2{1 2 3 4}.log</pre>	1,024 KB	256 KB

Note: When you use Windows, replace  $\textit{View-path} \setminus \text{System-drive}: \ProgramData\Hitachi\jp1\jp1_default\JP1CoView \log\.$ 

For Windows, the location represented by *system-drive*: \Program Files is determined at installation by an OS environment variable and might differ depending on the environment.

#: This log is a process-by-process trace log. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

#### (2) In UNIX

The tables below show the default log files and folders that are output by the UNIX version of JP1/IM.

The Log type column lists the log types that are output by JP1/IM.

The *Default file name and folder name* column describes log file names as absolute paths when JP1/IM - Manager or JP1/Base is installed in the default mode. *Default file name and folder name* in a cluster operation system describes the log file names of shared folders as absolute paths.

The *Maximum disk usage* column shows the maximum disk space used by each log file. When there are multiple log files, the combined total is given.

The *File-switching timing* column shows how JP1/IM times output destination log file switching. When the file reaches the size shown in this column or when the event shown in this column occurs, the output destination is switched. If there are multiple log files and if the maximum disk usage is reached, files are overwritten, beginning with the ones that have the oldest update dates.

Table 11–10: JP1/IM - Manager (common to all components) log files and folders (UNIX)

Log type	Default file name and folder name	Maximum disk usage	File-switching timing
Operation log	/var/opt/jplimm/log/operationlog/ imm_operation{none 1 2 16}.log <sup>#1</sup>	55 MB <sup>#1</sup>	5 MB <sup>#1#2</sup>
jimnodecount command $\log^{\#3}$	<pre>/var/opt/jplimm/log/nodecount/ jimnodecount_cmd{1 2}.log</pre>	20 MB	10 MB

<sup>#1:</sup> You can change the output destination, the number of files that can be saved, and the file size. For details, see *Operation log definition file* (imm\_operationlog.conf) (Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference. The number of bytes shown in the Maximum disk usage and File-switching timing columns are the values used when the number of files that can be saved and the file size are set to initial values

<sup>#2:</sup> For details about the operation when switching the operation log file, see *K.2 Storage format of operation log output* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

<sup>#3:</sup> The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11-11: JP1/IM - Manager (Central Console) log files and directories (UNIX)

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
Process management log <sup>#1</sup>	/var/opt/jp1cons/log/JCO_SPMD{1 2  3}.log	384 KB	128 KB
	/var/opt/jp1cons/log/ JCO_SPMD_COMMAND{1 2 3}.log	384 KB	128 KB
	<pre>shared-directory/jp1cons/log/JCO_SPMD{1 2  3}.log</pre>	384 KB	128 KB
	<pre>shared-directory/jp1cons/log/ JCO_SPMD_COMMAND{1 2 3}.log</pre>	384 KB	128 KB
Stack trace log#1	/var/opt/jp1cons/log/javalog0{1 2 3  4}.log	1 MB	At startup or 256 KB
	<pre>shared-directory/jp1cons/log/javalog0{1 2  3 4}.log</pre>	1 MB	At startup or 256 KB
JP1/IM startup log <sup>#1</sup>	/var/opt/jp1cons/log/ jco_start.log[.old]	1 KB	At startup
	<pre>shared-directory/jp1cons/log/ jco_start_logical-host-name.log[.old]</pre>	1 KB	At startup
JP1/IM kill log <sup>#1, #2</sup>	<pre>shared-directory/jp1cons/log/ jco_killall.cluster{none 1 2 3 4}</pre>	2 KB	When the jco_killall.cl uster command is executed
Setup log <sup>#1</sup>	/var/opt/jp1cons/log/JCO_SETUP/ jco_setup.log	100 KB	During installation
	/var/opt/jp1cons/log/JCO_SETUP/ jco_inst.log	100 KB	During installation
	/var/opt/jp1cons/log/jco_setup/logical-host-name/jco_setup.log	100 KB	During installation
	/var/opt/jp1cons/log/jco_setup/logical-host-name/reg.txt	100 KB	During installation
	/var/opt/jp1cons/log/jco_setup/logical-host-name/reg_def.txt	100 KB	During installation
	/var/opt/jp1cons/log/command/comdef[_old].log	512 KB	256 KB
Event console log <sup>#1</sup>	/var/opt/jp1cons/log/console/ EVCONS{1 2 3}.log	30,720 KB	10,240 KB
	/var/opt/jp1cons/log/console/ jp1cons{1 2 3 4 5 6 7 8}.log	40,960 KB	5,120 KB <sup>#3</sup>
	/var/opt/jp1cons/log/console/ JCOAPI{1 2 3}.log	96 KB	32 KB
	/var/opt/jp1cons/log/console/ jp1consM{1 2 60}.log	300 MB	5 MB <sup>#3</sup>
	/var/opt/jp1cons/log/console/ jp1eventStormDef{1 2 3 4 5}.log	100 MB	20 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	/var/opt/jp1cons/log/console/ jp1filterDef{1 2 3 4 5}.log	100 MB	20 MB
	/var/opt/jp1cons/log/console/ jp1bizGroupDef{1 2}.log	10 MB	5 MB
	/var/opt/jp1cons/log/console/ evtcon_exe{1 2 3}.log	256 KB × 3	256 KB
	/var/opt/jp1cons/log/console/ jp1cmdButtonDef{1 2 3 4 5}.log	25 MB	5 MB
	/var/opt/jp1cons/log/console/ jp1exattrnameDef{1 2 3 4 5}.log	25 MB	5 MB
	<pre>shared-directory/jp1cons/log/console/ EVCONS{1 2 3}.log</pre>	30,720 KB	10,240 KB
	<pre>shared-directory/jp1cons/log/console/ jp1cons{1 2 3 4 5 6 7 8}.log</pre>	40,960 KB	5,120 KB <sup>#3</sup>
	<pre>shared-directory/jplcons/log/console/ JCOAPI{1 2 3}.log</pre>	96 KB	32 KB
	<pre>shared-directory/jp1cons/log/console/ jp1consM{1 2 60}.log</pre>	300 MB	5 MB <sup>#3</sup>
	<pre>shared-directory/jp1cons/log/console/ jp1eventStormDef{1 2 3 4 5}.log</pre>	100 MB	20 MB
	<pre>shared-directory/jp1cons/log/console/ jp1filterDef{1 2 3 4 5}.log</pre>	100 MB	20 MB
	<pre>shared-directory/jp1cons/log/console/ jp1bizGroupDef{1 2}.log</pre>	10 MB	5 MB
	<pre>shared-directory/jp1cons/log/console/ evtcon_exe{1 2 3}.log</pre>	256 KB × 3	256 KB
	<pre>shared-directory/jp1cons/log/console/ jp1cmdButtonDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-directory/jp1cons/log/console/ jp1exattrnameDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
Automated action trace $\log^{\#1}$	/var/opt/jp1cons/log/action/ JCAMAIN{1 2 3 4 5}.log#4	25,600 KB	5,120 KB
	<pre>shared-directory/jp1cons/log/action/ JCAMAIN{1 2 3 4 5}.log#4</pre>	25,600 KB	5,120 KB
Action information file#1	/var/opt/jp1cons/log/action/ actinf.log	626 KB <sup>#5</sup>	No switching
	<pre>shared-directory/jp1cons/log/action/ actinf.log</pre>	626 KB <sup>#5</sup>	No switching
Action host name file <sup>#1</sup>	<pre>/var/opt/jp1cons/log/action/acttxt{1  2}.log</pre>	48.9 MB <sup>#6</sup>	When the action information file wraps around
	<pre>shared-directory/jp1cons/log/action/ acttxt{1 2}.log</pre>	48.9 MB <sup>#6</sup>	When the action information file wraps around

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
Action re-execution file	/var/opt/jp1cons/log/action/ actreaction	300 MB	When the service is started
	<pre>shared-directory/jp1cons/log/action/ actreaction</pre>	300 MB	When the service is started
jcochafmode, jcochstat, and	/var/opt/jplcons/log/command/CMD{1 2  3}.log	3,072 KB	1,024 KB
jcoevtreport command trace logs#1,#7	/var/opt/jp1cons/log/command/ jp1cons_cmd{1 2}.log	12,288 KB	6,144 KB
	/var/opt/jp1cons/log/command/ jp1consM_cmd{1 2}.log	12,288 KB	6,144 KB
	/var/opt/jp1cons/log/command/ jp1exattrnameDef_cmd{1 2 3 4 5}.log	25 MB	5 MB
Plug-in log <sup>#1</sup>	/var/opt/jp1cons/log/command/ jcoplugin{1 2 3}.log	3 MB	1 MB
Reporting status storage file#1	/var/opt/jplcons/log/notice/ notice_stat.dat	72B	No switching
	<pre>shared-directory/jplcons/log/notice/ notice_stat.dat</pre>	72B	No switching
Action definition backup file#1	/var/opt/jplcons/log/action/ actdefbk.conf	2,048 KB	No switching
	<pre>shared-directory/jplcons/log/action/ actdefbk.conf</pre>	2,048 KB	No switching
Event base trace log <sup>#1</sup>	/var/opt/jp1cons/log/evflow/EVFLOW{1  2 3 4 5 6 7 8 9 10}.log	100 MB	10 MB
	/var/opt/jp1cons/log/evflow/ jp1evflowM{1 2 60}.log	300 MB	5 MB
	/var/opt/jp1cons/log/evflow/ jp1actDef{1 2 3 4 5}.log	25 MB	5 MB
	/var/opt/jp1cons/log/evflow/ jp1chsevDef{1 2 3 4 5}.log	25 MB	5 MB
	/var/opt/jp1cons/log/evflow/ jp1chmsgDef{1 2 3 4 5}.log	25 MB	5 MB
	/var/opt/jp1cons/log/evflow/ jp1hostmapDef{1 2 3 4 5}.log	25 MB	5 MB
	/var/opt/jp1cons/log/evflow/ evflow_exe{1 2 3}.log	256 KB × 3	256 KB
	shared-directory/jp1cons/log/evflow/ EVFLOW{1 2 3 4 5 6 7 8 9 10}.log	100 MB	10 MB
	<pre>shared-directory/jplcons/log/evflow/ jplevflowM{1 2 60}.log</pre>	300 MB	5 MB
	<pre>shared-directory/jp1cons/log/evflow/ jp1actDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-directory/jp1cons/log/evflow/ jp1chsevDef{1 2 3 4 5}.log</pre>	25 MB	5 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>shared-directory/jp1cons/log/evflow/ jp1chmsgDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-directory/jp1cons/log/evflow/ jp1hostmapDef{1 2 3 4 5}.log</pre>	25 MB	5 MB
	<pre>shared-directory/jp1cons/log/evflow/ evflow_exe{1 2 3}.log</pre>	256 KB × 3	256 KB
Matching information file#1	/var/opt/jplcons/log/evflow/ evflowinf.log	12B	No switching
	<pre>shared-directory/jp1cons/log/evflow/ evflowinf.log</pre>	12B	No switching
Event base error log#1	/var/opt/jp1cons/log/evflow/ jp1evflow{1 2 3 4 5 6 7 8}.log	40,960 KB	5,120 KB
	shared-directory/jp1cons/log/evflow/ jp1evflow{1 2 3 4 5 6 7 8}.log	40,960 KB	5,120 KB
Automated action error $\log^{\#1}$	/var/opt/jplcons/log/action/jplact{1  2 3}.log	15,360 KB	5,120 KB
	<pre>shared-directory/jp1cons/log/action/ jp1act{1 2 3}.log</pre>	15,360 KB	5,120 KB
Correlation event generation history file	/var/opt/jp1cons/operation/evgen/ egs_discrim{1 2 3}.log <sup>#8</sup>	30 MB <sup>#8</sup>	10 MB <sup>#8</sup>
	<pre>shared-directory/jp1cons/operation/evgen/ egs_discrim{1 2 3}.log#8</pre>	30 MB <sup>#8</sup>	10 MB <sup>#8</sup>
Common exclusion history file	<pre>/var/opt/jp1cons/operation/ comexclude/comexclude{1 2 3 4 5}.log</pre>	100 MB	20 MB
	<pre>shared-directory/jp1cons/operation/ comexclude/comexclude{1 2 3 4 5}.log</pre>	100 MB	20 MB
Common exclusion- conditions definition history file	<pre>/var/opt/jp1cons/operation \comexclude/comexcludeDef{1 2 3 4  5}.log</pre>	100 MB	20 MB
	<pre>shared-directory/jp1cons/operation/ comexclude/comexcludeDef{1 2 3 4  5}.log</pre>	100 MB	20 MB
Correlation event generation trace log #1	/var/opt/jp1cons/log/evgen/EVGEN{1 2  3}.log	15 MB	5 MB
	/var/opt/jp1cons/log/evgen/ evgen_exe{1 2 3}.log	256 KB × 3	256 KB
	<pre>shared-directory/jp1cons/log/evgen/ EVGEN{1 2 3}.log</pre>	15 MB	5 MB
	<pre>shared-directory/jp1cons/log/evgen/ evgen_exe{1 2 3}.log</pre>	256 KB × 3	256 KB
Correlation event generation individual log	<pre>/var/opt/jp1cons/log/evgen/jp1egs{1  2}.log</pre>	20 MB	10 MB
(for Event Generation Service) <sup>#1</sup>	/var/opt/jp1cons/log/evgen/jp1egsM{1  2}.log	20 MB	10 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>shared-directory/jp1cons/log/evgen/ jp1egs{1 2}.log</pre>	20 MB	10 MB
	<pre>shared-directory/jp1cons/log/evgen/ jp1egsM{1 2}.log</pre>	20 MB	10 MB
Correlation event generation individual log	/var/opt/jplcons/log/evgen/ jplegs_cmd{1 2 3 4}.log	20 MB	5 MB
(for commands) <sup>#1</sup>	/var/opt/jp1cons/log/evgen/ jp1egsM_cmd{1 2 3 4}.log	20 MB	5 MB
Correlation event generation stack trace	/var/opt/jp1cons/log/evgen/ javalog0{1 2 3 4}.log	1 MB	At startup or 256 KB
$\log^{\#1}$	<pre>shared-directory/jp1cons/log/evgen/ javalog0{1 2 3 4}.log</pre>	1 MB	At startup or 256 KB
Correlation event generation process	/var/opt/jplcons/log/evgen/ egs_discrim_info{1 2 3 4}.dat	312 MB <sup>#9</sup>	At termination
inheriting definition file#1	<pre>shared-directory/jp1cons/log/evgen/ egs_discrim_info{1 2 3 4}.dat</pre>	312 MB <sup>#9</sup>	At termination
Correlation event generation definition	/var/opt/jplcons/log/evgen/ jplegsDefine{1 2}.log	10 MB	5 MB
application log <sup>#1</sup>	<pre>shared-directory/jp1cons/log/evgen/ jp1egsDefine{1 2}.log</pre>	10 MB	5 MB
File for accumulated response-waiting	/var/opt/jp1cons/log/response/ resevent.dat	40 MB	No switching
events#1, #10	<pre>shared-directory/jp1cons/log/response/ resevent.dat</pre>	40 MB	No switching
Backup file for accumulated response-	/var/opt/jplcons/log/response/ resevent.dat.dump	40 MB	No switching
waiting events#1,#10	<pre>shared-directory/jplcons/log/response/ resevent.dat.dump</pre>	40 MB	No switching
Integrated monitoring database application log <sup>#1</sup>	/var/opt/jp1cons/log/evflow/ EVFLOW_DBAPI{1 2 16}.log	200 MB	12.5 MB
	/var/opt/jp1cons/log/console/ EVCONS_DBAPI{1 2 3 4 5}.log	50 MB	10 MB
	/var/opt/jp1cons/log/command/ CMD_DBAPI{1 2 3 4 5}.log	50 MB	10 MB
	<pre>shared-directory/jp1cons/log/evflow/ EVFLOW_DBAPI{1 2 16}.log</pre>	200 MB	12.5 MB
	<pre>shared-directory/jp1cons/log/console/ EVCONS_DBAPI{1 2 3 4 5}.log</pre>	50 MB	10 MB
API log for the IM Configuration	/var/opt/jplcons/log/evflow/ EVFLOW_CFDBAPI{1 2 3 4 5}.log	30 MB	10 MB
Management database <sup>#1</sup>	/var/opt/jp1cons/log/console/ EVCONS_CFDBAPI{1 2 3}.log	30 MB	10 MB
	/var/opt/jp1cons/log/command/ CMD_CFDBAPI{1 2 3}.log	30 MB	10 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing	
	<pre>shared-directory/jp1cons/log/evflow/ EVFLOW_CFDBAPI{1 2 3 4 5}.log</pre>	30 MB	10 MB	
	<pre>shared-directory/jp1cons/log/console/ EVCONS_CFDBAPI{1 2 3}.log</pre>	30 MB	10 MB	
jcodbsetup command log <sup>#1</sup>	<pre>/var/opt/jplcons/log/imdb/ jcodbsetup{1 2}.log</pre>	512 KB	256 KB	
jcodbunsetup command log <sup>#1</sup>	<pre>/var/opt/jp1cons/log/imdb/ jcodbunsetup{1 2}.log</pre>	512 KB	256 KB	
Command execution	/var/opt/jp1base/log/COMMAND/	See the JP1/Base User's Gu	ide.	
history directory#1	shared-directory/jp1base/log/COMMAND			
Remote command log#1	/var/opt/jp1base/log/JCOCMD/ jcocmd_result{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdapi{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdapi_trace{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdcmc{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdcmc_trace{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdcom{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdcom_trace{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdexe{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdexe_trace{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdrouter{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ jcocmdrouter_trace{1 2 3}.log			
	/var/opt/jp1base/log/JCOCMD/ JCOCMDCMD{1 2 3}.log			
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmd_result{1 2 3}.log</pre>			
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdapi{1 2 3}.log</pre>			
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdapi_trace{1 2 3}.log</pre>			
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdcmc{1 2 3}.log</pre>			

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdcmc_trace{1 2 3}.log</pre>		
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdcom{1 2 3}.log</pre>		
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdcom_trace{1 2 3}.log</pre>		
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdexe{1 2 3}.log</pre>	_	
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdexe_trace{1 2 3}.log</pre>	_	
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdrouter{1 2 3}.log</pre>		
	<pre>shared-directory/jp1base/log/JCOCMD/ jcocmdrouter_trace{1 2 3}.log</pre>		
	<pre>shared-directory/jp1base/log/JCOCMD/ JCOCMDCMD{1 2 3}.log</pre>		
Configuration management log <sup>#1</sup>	/var/opt/jplbase/log/route/JBSRT{1 2  3}.log		
	<pre>shared-directory/jp1base/log/route/ JBSRT{1 2 3}.log</pre>		
Trace log file#1	<pre>/var/opt/jp1base/sys/tmp/event/ logtrap/jeallog/jeallog{1 2 3 4  5}.log</pre>		

- #1: This log is a process-by-process trace log. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.
- #2: This log is created only in a cluster environment.
- #3: The file size may be dozens of kilobytes larger than this value.
- #4: You can set this value to be from 64 kilobytes to 100 megabytes, as described in *Automated action environment definition file* (action.conf.update) (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference.
- #5: You can set this value to be from 1 to 4,096 kilobytes as described in *Automated action environment definition file (action.conf.update)* (in *Chapter 2. Definition Files*) in the manual *JP1/Integrated Management 2 Manager Command, Definition File and API Reference.*
- #6: This is the value when the size of the action information file is the default value (626 kilobytes). You can use the following estimation formula to estimate the maximum disk usage by this file. Each time an action is performed, the size increases by 5 kilobytes.
- ((action information file size  $\div$  64 bytes) 1)  $\times$  5 kilobytes
- #7: The files are output to the jcochstat and jcochafmode command trace logs on the physical host in a cluster operation system as well.
- #8: You can change the file count and file size as described in Correlation event generation environment definition file (in Chapter 2. Definition Files) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference.
- #9: This file is used to output the memory information for inheriting data during correlation event generation, and therefore its size varies depending on the correlation event generation condition and the correlation-source event. For details about estimating the size of this file, see the JP1/IM Manager release notes.
- #10: This file is created when you start JP1/IM Manager after enabling the response-waiting event management function.

Table 11–12: JP1/IM - Manager (Central Scope) log files and directories (UNIX)

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
Central Scope trace log	/var/opt/jp1scope/log/jcsmain{1 2  3}.log	6 MB	2 MB
	/var/opt/jp1scope/log/ jcsmain_trace{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/jcsmain{1 2  3}.log</pre>	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsmain_trace{1 2 3}.log</pre>	6 MB	2 MB
Communication trace log	/var/opt/jp1scope/log/ jcsmain_trace_com{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsmain_trace_com{1 2 3}.log</pre>	6 MB	2 MB
	/var/opt/jp1scope/log/ jcsmain_trace_ping{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsmain_trace_ping{1 2 3}.log</pre>	6 MB	2 MB
Database operation API trace log	/var/opt/jp1scope/log/ jcsmain_trace_db{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsmain_trace_db{1 2 3}.log</pre>	6 MB	2 MB
jcshostsexport command log	/var/opt/jp1scope/log/ jcshostsexport{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcshostsexport{1 2 3}.log</pre>	6 MB	2 MB
jcshostsimport command log	/var/opt/jp1scope/log/ jcshostsimport{1 2 3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcshostsimport{1 2 3}.log</pre>	6 MB	2 MB
jcsdbsetup command log	/var/opt/jp1scope/log/jcsdbsetup{1 2  3}.log	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsdbsetup{1 2 3}.log</pre>	6 MB	2 MB
jcschstat command log	/var/opt/jp1scope/log/jcschstat{1 2  3}.log	6 MB	2 MB
	<pre>shared-directory/jplscope/log/jcschstat{1  2 3}.log</pre>	6 MB	2 MB
jcsdbimport command log	<pre>/var/opt/jp1scope/log/jcsdbimport{1  2 3}.log</pre>	6 MB	2 MB
	<pre>shared-directory/jp1scope/log/ jcsdbimport{1 2 3}.log</pre>	6 MB	2 MB
jcsdbexport command log	/var/opt/jplscope/log/jcsdbexport{1  2 3}.log	6 MB	2 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>shared-directory/jp1scope/log/ jcsdbexport{1 2 3}.log</pre>	6 MB	2 MB
Setup log	/var/opt/jp1scope/log/JCS_SETUP/ jcs_setup.log	100 KB	During installation
	/var/opt/jp1scope/log/jcs_setup/logical-host-name/jcs_setup.log	100 KB	During installation
	/var/opt/jplscope/log/jcs_setup/logical- host-name/reg.txt	100 KB	During installation
	<pre>/var/opt/jplscope/log/jcs_setup/logical-host- name/reg_def.txt</pre>	100 KB	During installation

Note: This log is a process-by-process trace log. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11–13: JP1/IM - Manager (IM Configuration Management) log files and folders (UNIX)

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
IM Configuration Management trace log	<pre>/var/opt/jp1imm/log/imcf/ jcfallogtrap{1 2 3 4 5 6 7 8 9  10}.log</pre>	200 MB	10 MB
	<pre>/var/opt/jp1imm/log/imcf/ jcfallogtrap_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>/var/opt/jp1imm/log/imcf/ jcfallogtrap_trace_auth{1 2 3 4 5 6  7 8 9 10}.log</pre>	20 MB	2 MB
	/var/opt/jp1imm/log/imcf/jcfmain{1 2  3 4 5 6 7 8 9 10}.log	20 MB	2 MB
	<pre>/var/opt/jp1imm/log/imcf/ jcfmain_trace{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
	/var/opt/jp1imm/log/imcf/ jcfmain_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogtrap{1 2 3 4 5 6 7 8 9  10}.log</pre>	200 MB	10 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfallogtrap_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogtrap_trace_auth{1 2 3 4 5 6  7 8 9 10}.log</pre>	20 MB	2 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfmain{1 2 3 4 5 6 7 8 9 10}.log</pre>	20 MB	2 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfmain_trace{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>shared-directory/jp1imm/log/imcf/ jcfmain_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
Communication trace log	/var/opt/jp1imm/log/imcf/ jcfmain_trace_com{1 2 3 4 5 6 7 8 9  10}.log	20 MB	2 MB
	/var/opt/jp1imm/log/imcf/ jcfmain_ping{1 2 3 4 5 6 7 8 9  10}.log	20 MB	2 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfmain_trace_com{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfmain_ping{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
Authentication trace log	<pre>/var/opt/jp1imm/log/imcf/ jcfmain_trace_auth{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfmain_trace_auth{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
Database operation API trace log	/var/opt/jp1imm/log/imcf/ jcfmain_trace_db{1 2 3 4 5 6 7 8 9  10}.log	20 MB	2 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfmain_trace_db{1 2 3 4 5 6 7 8 9  10}.log</pre>	20 MB	2 MB
Command common log	/var/opt/jplimm/log/imcf/ jcfcommand{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfcommand{1 2 3}.log</pre>	3 MB	1 MB
jcfallogstart command log	/var/opt/jplimm/log/imcf/ jcfallogstart{1 2 3}.log	9 MB	3 MB
	/var/opt/jplimm/log/imcf/ jcfallogstart_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfallogstart{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogstart_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogstat	/var/opt/jplimm/log/imcf/ jcfallogstat{1 2 3}.log	9 MB	3 MB
	/var/opt/jplimm/log/imcf/ jcfallogstat_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogstat{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogstat_VM_trace{1 2 3}.log</pre>	3 MB	1 MB

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
jcfallogstop command log	/var/opt/jplimm/log/imcf/ jcfallogstop{1 2 3}.log	9 MB	3 MB
	/var/opt/jplimm/log/imcf/ jcfallogstop_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfallogstop{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfallogstop_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogreload command log	<pre>/var/opt/jplimm/log/imcf/ jcfallogreload{1 2 3}.log</pre>	9 MB	3 MB
	/var/opt/jplimm/log/imcf/ jcfallogreload_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogreload{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfallogreload_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfallogdef command log	/var/opt/jp1imm/log/imcf/ jcfallogdef{1 2 3}.log	9 MB	3 MB
	/var/opt/jplimm/log/imcf/ jcfallogdef_VM_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogdef{1 2 3}.log</pre>	9 MB	3 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfallogdef_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfcolvmesx command log	/var/opt/jp1imm/log/imcf/ jcfcolvmesx_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfcolvmesx_trace{1 2 3}.log</pre>		
jcfcolvmvirtage command log	/var/opt/jp1imm/log/imcf/ jcfcolvmvirtage_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfcolvmvirtage_trace{1 2 3}.log</pre>		
jcfcolvmvc command log	/var/opt/jp1imm/log/imcf/ jcfcolvmvc_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfcolvmvc_trace{1 2 3}.log</pre>		
jcfcolvmkvm command log	/var/opt/jp1imm/log/imcf/ jcfcolvmkvm_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfcolvmkvm_trace{1 2 3}.log</pre>		
jcfcolvmhcsm command log	/var/opt/jplimm/log/imcf/ jcfcolvmhcsm_trace{1 2 3}.log	3 MB	1 MB
	<pre>shared-directory/jplimm/log/imcf/ jcfcolvmhcsm_trace{1 2 3}.log</pre>		

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
jcfexport command log	<pre>/var/opt/jp1imm/log/imcf/ jcfexport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfexport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfimport command log	<pre>/var/opt/jp1imm/log/imcf/ jcfimport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
	<pre>shared-directory/jp1imm/log/imcf/ jcfimport_VM_trace{1 2 3}.log</pre>	3 MB	1 MB
jcfmkhostsdata command log	<pre>/var/opt/jp1imm/log/imcf/ jcfmkhostsdata_trace{1 2 3}.log</pre>	3 MB	1 MB
Stack trace log	<pre>/var/opt/jp1imm/log/imcf/javalog0{1  2 3 4}.log</pre>	1 MB	At startup or 256 KB
Setup log	/var/opt/jp1imm/log/imcf/JCF_SETUP/ jcf_setup.log	100 KB	During installation
	/var/opt/jp1imm/log/imcf/JCF_SETUP/ logical-host-name/jcf_setup.log	100 KB	During installation

Note: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

Table 11-14: Intelligent Integrated Management Base log files and folders

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
Intelligent Integrated Management Base service	<pre>/var/opt/jplimm/log/imdd/jddmain/ jddmain.log{.1-7}</pre>	1 GB	128 MB
individual log	<pre>shared-directory/jp1imm/log/imdd/jddmain/ jddmain.log{.1-7}</pre>		
Definition file <sup>#1</sup> , node file history log	<pre>/var/opt/jplimm/log/imdd/jddmain/ jimddDef.log{.1-10}</pre>	80 MB	8 MB
	<pre>shared-directory/jp1imm/log/imdd/jddmain/ jimddDef.log{.1-10}</pre>		
	<pre>/var/opt/jplimm/log/imdd/jddmain/ jimddMaster.log{.1-30}</pre>	240 MB	8 MB
	<pre>shared-directory/jp1imm/log/imdd/jddmain/ jimddMaster.log{.1-30}</pre>		
jddsetaccessuser command trace log	<pre>/var/opt/jplimm/log/imdd/jddsetaccessuser/ jddsetaccessuser.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-directory/jplimm/log/imdd/ jddsetaccessuser/jddsetaccessuser.log{.1-6}</pre>		
	<pre>/var/opt/jplimm/log/imdd/jddsetaccessuser/ jddsetaccessuser_exe{1 2 3}.log</pre>	768 KB	256 KB
	<pre>shared-directory/jplimm/log/imdd/ jddsetaccessuser/jddsetaccessuser_exe{1 2  3}.log</pre>		

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
	<pre>/var/opt/jplimm/log/imdd/jddsetaccessuser/ javalog0{1 2 3 4}.log</pre>	1,024 KB	At startup or 256 KB
	<pre>shared-directory/jplimm/log/imdd/ jddsetaccessuser/javalog0{1 2 3 4}.log</pre>		
jddcreatetree command trace log	<pre>/var/opt/jplimm/log/imdd/jddcreatetree/ jddcreatetree.log{.1-6}</pre>	70 MB	10 MB
	<pre>shared-directory/jp1imm/log/imdd/jddcreatetree/ jddcreatetree.log{.1-6}</pre>		
	/var/opt/jplimm/log/imdd/jddcreatetree/ jddcreatetree_exe{1 2 3}.log	768 KB	256 KB
	<pre>shared-directory/jp1imm/log/imdd/jddcreatetree/ jddcreatetree_exe{1 2 3}.log</pre>		
	/var/opt/jp1imm/log/imdd/jddcreatetree/ javalog0{1 2 3 4}.log	1,024 KB	At startup or 256 KB
	<pre>shared-directory/jplimm/log/imdd/jddcreatetree/ javalog0{1 2 3 4}.log</pre>		
jddupdatetree command trace log	/var/opt/jplimm/log/imdd/jddupdatetree/jddupdatetree.log{.1-6}	70 MB	10 MB
	<pre>shared-directory/jplimm/log/imdd/jddupdatetree/ jddupdatetree.log{.1-6}</pre>		
	/var/opt/jplimm/log/imdd/jddupdatetree/ jddupdatetree_exe{1 2 3}.log	768 KB	256 KB
	<pre>shared-directory/jplimm/log/imdd/jddupdatetree/ jddupdatetree_exe{1 2 3}.log</pre>		
	/var/opt/jp1imm/log/imdd/jddupdatetree/ javalog0{1 2 3 4}.log	1,024 KB	256 KB
	<pre>shared-directory/jplimm/log/imdd/jddupdatetree/ javalog0{1 2 3 4}.log</pre>		
jddproxyuser command trace log	<pre>/var/opt/jplimm/log/imdd/jddproxyuser/ jddproxyuser.log{.1-6}</pre>	70MB	10MB
	<pre>shared-directory/jp1imm/log/imdd/jddproxyuser/ jddproxyuser.log{.1-6}</pre>		
	/var/opt/jplimm/log/imdd/jddproxyuser/ jddproxyuser_exe{1 2 3}.log	768KB	256KB
	<pre>shared-directory/jp1imm/log/imdd/jddproxyuser/ jddproxyuser_exe{1 2 3}.log</pre>		
	/var/opt/jp1imm/log/imdd/jddproxyuser/ javalog0{1 2 3 4}.log	1,024KB	256KB
	<pre>shared-directory/jp1imm/log/imdd/jddproxyuser/ javalog0{1 2 3 4}.log</pre>		
Logs of the response action execution history file#4	<pre>/var/opt/jplimm/log/suggestion/ jddSuggestionHistory.log{.1-3}</pre>	240MB	60MB
•	<pre>shared-directory/jplimm/log/suggestion/ jddSuggestionHistory.log{.1-3}</pre>		

Log type	Default file name and directory name	Maximum disk usage	File-switching timing
User-created plug-ins	/var/opt/jp1imm/log/imdd/user-created-plug-in-name/user-created-plug-in.log{1-21}#3	220MB	10MB
	<pre>shared-directory/jplimm/log/imdd/user-created-plug-in- name/user-created-plug-in.log{1-21}#3</pre>	_	
Other logs	/var/opt/jp1imm/log/imdd/jddmain/ jddmain_exe{1 2 3}.log	768 KB	256 KB
	<pre>shared-directory/jplimm/log/imdd/jddmain/ jddmain_exe{1 2 3}.log</pre>		
	/var/opt/jp1imm/log/imdd/jddmain/javalog0{1  2 3 4}.log	1,024 KB	At startup or 256 KB
	<pre>shared-directory/jp1imm/log/imdd/jddmain/ javalog0{1 2 3 4}.log</pre>		
	/var/opt/jp1imm/log/imdd/jcoapi{1-50}.log	500 MB	10 MB
	<pre>shared-directory/jp1imm/log/imdd/jddmain/ jcoapi{1-50}.log</pre>	_	
	/var/opt/jp1imm/log/imdd/jcoapiM{1-50}.log	500 MB	10 MB
	<pre>shared-directory/jp1imm/log/imdd/jddmain/ jcoapiM{1-50}.log</pre>		
	/var/opt/jp1imm/log/imdd/component-name <sup>#2</sup> / component-name <sup>#2</sup> {1-21}.log	220MB	10MB
	shared-directory/jp1imm/log/imdd/component-name <sup>#2</sup> / component-name <sup>#2</sup> {1-21}.log		

Note: The logs above are process-by-process trace logs. The process-by-process trace log is the log information that is output by each function of JP1/IM. It is output to a different log file depending on the function that is being used. Since the process-by-process trace log contains product information, its content is not made public.

#1: The logs for the following definition files are output to the definition file log for the Intelligent Integrated Management Base: System node definition file, category name definition file for IM management nodes, host name definition file, target host definition file for

System node definition file, category name definition file for IM management nodes, host name definition file, target host definition file for configuration collection, IM management node link definition file, IM management node link file, IM management node tree file, IM management node file

#2: One of the following is displayed as the component name:

- jp1ajs
- jp1pfm
- jp1im
- #3: {1-21} indicates the file count. You can view the log files in a text editor of your choice.

#4: The log is created when a response action is taken. Users can check the logs of response actions by themselves in order to examine the causes of failures, for example.

## 11.3 Data that needs to be collected when a problem occurs

This section describes the data that needs to be collected when a problem occurs.

Note that JP1 provides *data collection tools* for batch-collecting the necessary data. The data that can be collected using a data collection tool is the OS system information and JP1 information. The following subsections explain data collection in Windows and UNIX.

#### 11.3.1 In Windows

# (1) OS system information

You need to collect the OS-related information listed in the table below. These types of information can be collected using data collection tools.

The two data collection tools (the jim\_log.bat command and the jcoview\_log.bat command) collect different types of data. When the jim\_log.bat command is executed, all of the data listed in the table below is collected. The data that can be collected by executing the jcoview log.bat command is indicated in the far-right column.

Table 11–15: OS system information (Windows)

Information type	Collected data	File name <sup>#1</sup>	View
Data collection date/time	• date /t execution result • time /t execution result	date.log	Y
Hitachi integrated installer log file	Files under Windows-installation-folder \Temp\HCDINST\	Copies of the files indicated at left	Y
JP1/IM - Manager installation/uninstallation log file	Windows-installation-folder\Temp \HITACHI_JP1_INST_LOG \jp1imm_inst{1 2 3 4 5}.log	jp1imm_inst{1 2 3 4 5}.log	Δ
JP1/IM - View installation/ uninstallation log file	Windows-installation-folder\Temp \HITACHI_JP1_INST_LOG \jp1coview_inst{1 2 3 4  5}.log	jp1coview_inst{1 2 3 4 5}.log	Y
JP1/Base installation/ uninstallation log file	Windows-installation-folder\Temp \HITACHI_JP1_INST_LOG \jp1base_inst{1 2 3 4 5}.log	jp1base_inst{1 2 3 4 5}.log	Δ
Product information log file	Files under Windows-installation-folder \Temp\jp1common\	Copies of the files indicated at left	Y
Host name settings that are set in the machine	<pre>system-root-folder \system32\drivers\etc\hosts</pre>	Hosts	Y
Service port settings that are set in the machine	<pre>system-root-folder \system32\drivers\etc \services</pre>	Services	Y
NIC installation status	ipconfig /all execution result	ipconfig.log	Y
Startup service list	net start execution result	netstart.log	Y
Network statistical information	netstat -nao execution result	netstat.log	Y

Information type	Collected data	File name <sup>#1</sup>	View
Machine's environment variable	set execution result	set.log	Y
Machine's system information	msinfo32 / report-file-name execution result	msinfo32.log	Y
Registry information	Content of the registry  HKEY_LOCAL_MACHINE\SOFTWARE  \HITACHI  or  HKEY_LOCAL_MACHINE\SOFTWARE  \Wow6432Node\HITACHI  collected by the reg command	hitachi_reg.txt	Y
Product information file	Files under system-drive: Program Files\HITACHI\jplcommon\	Copies of the files indicated at left	Y
JP1/IM - Manager installation information	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ini</pre>	imm_setup.ini	Δ
JP1/IM - Manager installation log file	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ilg</pre>	imm_setup.ilg	Δ
JP1/Base installation information	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ini</pre>	base_setup.ini	Δ
JP1/Base installation log file	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ilg</pre>	base_setup.ilg	Δ
JP1/IM - View installation information	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ini</pre>	imv_setup.ini	Y
JP1/IM - View installation log file	<pre>system-drive:Program Files \InstallShield Installation Information\setup.ilg</pre>	imv_setup.ilg	Y
JP1/Base access permission	cacls Base-path execution result	cacls_jp1base.log	Δ
information (installation folder)	cacls <i>shared-folder\JP1Base</i> execution result <sup>#2</sup>	cacls_jp1base.log	
JP1/Base access permission	cacls Base-path\log execution result	cacls_jp1base_log.log	Δ
information (log folder)	cacls shared-folder\JP1Base\log execution result <sup>#2</sup>	cacls_jp1base_log.log	
JP1/Base access permission information (command	cacls Base-path\log\COMMAND execution result	cacls_jp1base_log_COMMAND.log	Δ
execution history folder)	cacls shared-folder\JP1Base\log \COMMAND execution result <sup>#2</sup>	cacls_jp1base_log_COMMAND.log	
JP1/Base access permission information (event database folder)	cacls Base-path\sys execution result	cacls_jp1base_sys.log	Δ
JP1/Base access permission information (event database folder)	cacls Base-path\sys\event execution result	cacls_jp1base_sys_event.log	Δ

Information type	Collected data	File name <sup>#1</sup>	View
	cacls $shared$ -folder\JP1Base\event execution result $^{\#2}$	cacls_jp1base_event.log	
JP1/Base access permission information (event database folder)	cacls Base-path\sys\event \servers execution result	cacls_jplbase_sys_event_servers.l og	Δ
JP1/Base access permission information (event database folder)	cacls Base-path\sys\event \servers\default execution result	<pre>cacls_jplbase_sys_event_servers_d efault.log</pre>	Δ
JP1/IM - Manager (Central Console) access permission	cacls Console-path execution result	cacls_jp1cons.log	Δ
information (installation folder)	cacls $shared$ - $folder \setminus JP1Cons$ execution result <sup>#2</sup>	cacls_jp1cons.log	
JP1/IM - Manager (Central Console) access permission information (log folder)	cacls Console-path\log execution result	cacls_jp1cons_log.log	Δ
	cacls $shared$ - $folder \ JP1Cons \ log$ execution result $^{\#2}$	cacls_jp1cons_log.log	
JP1/IM - Manager (Central Console) access permission information (correlation history folder)	cacls Console-path\operation execution result	cacls_jp1cons_operation.log	Δ
	cacls shared-folder\JP1Cons \operation execution result <sup>#2</sup>	cacls_jp1cons_operation.log	
JP1/IM - Manager (Central Console) access permission information (correlation	cacls Console-path\operation \evgen execution result	cacls_jp1cons_operation_evgen.log	Δ
event generation history folder)	cacls shared-folder\JP1Cons \operation\evgen execution result <sup>#2</sup>	cacls_jp1cons_operation_evgen.log	
JP1/IM - Manager (Central Console) access permission information (common exclusion history folder)	cacls Console-path\operation \comexclude execution result	cacls_jp1cons_operation_comexclud e.log	Δ
JP1/IM - View access permission information (installation folder)	cacls View-path execution result	cacls_jp1coview.log	Y
JP1/IM - View access permission information (log folder)	cacls system-drive:\ProgramData \Hitachi\jp1\jp1_default \JP1CoView\log execution result	<pre>cacls_programdata_jplcoview_log.l og</pre>	Y
JP1/IM - Manager access permission information (installation folder)	cacls Manager-path execution result	cacls_jp1imm.log	Δ
JP1/IM - Manager access permission information (log folder)	cacls Manager-path\log execution result	cacls_jplimm_log.log	Δ
JP1/IM - Manager (Central Scope) access permission	cacls Scope-path execution result	cacls_jp1scope.log	Δ
information (installation folder)	cacls <i>shared-folder\JP1Scope</i> execution result <sup>#2</sup>	cacls_jp1scope.log	
JP1/IM - Manager (Central Scope) access permission	cacls Scope-path\log execution result	cacls_jp1scope_log.log	Δ
information (log folder)	cacls $shared$ -folder\JP1Scope\log execution result $^{\#2}$	cacls_jp1scope_log.log	

Information type	Collected data	File name <sup>#1</sup>	View
JP1/IM - Manager (Central Scope) access permission information (database	cacls <i>Scope-path</i> \database execution result	cacls_jp1scope_database.log	Δ
folder)	cacls shared-folder\JP1Scope \database execution result#2	cacls_jp1scope_database.log	
JP1/IM - Manager (Central Scope) access permission information (database	cacls Scope-path\database\event execution result	cacls_jp1scope_database_event.log	Δ
folder)	cacls shared-folder\JP1Scope \database\event execution result#2	cacls_jp1scope_database_event.log	
JP1/IM - Manager (Central Scope) access permission information (database	cacls Scope-path\database\jcsdb execution result	cacls_jp1scope_database_jcsdb.log	Δ
folder)	cacls shared-folder\JP1Scope \database\jcsdb execution result <sup>#2</sup>	cacls_jp1scope_database_jcsdb.log	
JP1/IM - Manager (Central Scope) access permission information (database folder)	cacls Scope-path\database\jcsdb \event execution result	<pre>cacls_jp1scope_database_jcsdb_eve nt.log</pre>	Δ
	cacls shared-folder\JP1Scope \database\jcsdb\event execution result <sup>#2</sup>	<pre>cacls_jp1scope_database_jcsdb_eve nt.log</pre>	
JP1/IM - Manager (Central Scope) access permission information (database folder)	cacls Scope-path\database\jcsdb\pw execution result	<pre>cacls_jp1scope_database_jcsdb_pw. log</pre>	Δ
	cacls shared-folder\JP1Scope \database\jcsdb\pw execution result <sup>#2</sup>	<pre>cacls_jp1scope_database_jcsdb_pw. log</pre>	
JP1/IM - Manager (Central Scope) access permission information (database	cacls Scope-path\database\jcsdb \tree execution result	<pre>cacls_jp1scope_database_jcsdb_tre e.log</pre>	Δ
folder)	cacls shared-folder\JP1Scope \database\jcsdb\tree execution result <sup>#2</sup>	<pre>cacls_jp1scope_database_jcsdb_tre e.log</pre>	
JP1/IM - Manager (Central Scope) access permission	cacls Scope-path\database \jcshosts execution result	<pre>cacls_jp1scope_database_jcshosts. log</pre>	Δ
information (database folder)	cacls shared-folder\JP1Scope \database\jcshosts execution result <sup>#2</sup>	<pre>cacls_jp1scope_database_jcshosts. log</pre>	
JP1/IM - Manager (Intelligent Integrated	cacls Manager-path\log\imdd execution result	cacls_jp1imm_log_imdd.log	
Management Base) access permission information (log folder)	cacls $shared$ - $folder \log imdd$ execution result <sup>#2</sup>	cacls_jp1imm_log_imdd.log	
JP1/IM - Manager (Intelligent Integrated Management Base) access	cacls Manager-path \log \suggestion execution result	cacls_jp1imm_log_suggestion.log	
permission information (response action execution history folder)	cacls <i>shared-folder</i> \log \suggestion execution result <sup>#2</sup>	cacls_jp1imm_log_suggestion.log	
Access permission information for the operation log file output destination	cacls operation-log-output-destination execution result	cacls_jp1imm_operationlog.log	Δ

Information type	Collected data	File name <sup>#1</sup>	View
	operation-log-output-destination indicates the folder specified in the following common definition:  [JP1_DEFAULT\JP1IMM \OPERATION]  "LOGFILEDIR"		
	cacls operation-log-output-destination execution result operation-log-output-destination indicates the folder specified in the following common definition: [logical-host-name\JP1IMM\OPERATION] "LOGFILEDIR"	cacls_jp1imm_operationlog.log	
JP1/Base file list	dir Base-path /s execution result	dir_jplbase.log	Δ
	dir shared-folder\JP1Base/s execution result <sup>#2</sup>	dir_logical-host-name_jp1base.log	
JP1/IM - Manager (Central	dir Console-path /s execution result	dir_jp1cons.log	Δ
Console) file list	dir shared-folder\JP1Cons /s execution result <sup>#2</sup>	dir_logical-host-name_jp1cons.log	
JP1/IM - View file list	dir View-path /s execution result	dir_jp1coview.log	Y
	Only for Windows dir system-drive: \ProgramData \Hitachi\jp1\jp1_default \JP1CoView /s execution result	dir_programdata_jp1coview.log	Y
JP1/IM - Manager file list	dir Manager-path /s execution result	dir_jplimm.log	Δ
JP1/IM - Manager (Central	dir Scope-path /s execution result	dir_jp1scope.log	Δ
Scope) file list	dir shared-folder\JP1Scope/s execution result <sup>#2</sup>	dir_logical-host-name_jp1scope.log	
List of files at the operation log output destination	dir operation-log-output-destination / s execution result operation-log-output-destination indicates the folder specified in the following common definition: [JP1_DEFAULT\JP1IMM \OPERATION] "LOGFILEDIR"	dir_jplimm_operationlog.log	Δ
	dir operation-log-output-destination /s execution result  operation-log-output-destination indicates the folder specified in the following common definition:  [logical-host-name\JP1IMM \OPERATION]  "LOGFILEDIR"	dir_jp1imm_operationlog.log	
Host name for resolving network address	jbsgethostbyname execution result	• jbsgethostbyname.log(standard output)	Δ

Information type	Collected data	File name <sup>#1</sup>	View
		• jbsgethostbyname_err.log(standard error)	
	jbsgethostbyname <i>logical-host-name</i> execution result <sup>#2</sup>	<ul><li>jbsgethostbyname.log(standard output)</li><li>jbsgethostbyname_err.log(standard error)</li></ul>	
Health check	jbshcstatus -debbug -a execution result	• jbshcstatus.log(standard output) • jbshcstatus_err.log(standard error)	Δ
	jbshcstatus -debbug -a -h logical- host-name execution result <sup>#2</sup>	• jbshcstatus.log(standard output) • jbshcstatus_err.log(standard error)	
Process operation status of Event Service	jevstat execution result	• jevstat.log(standard output) • jevstat_err.log(standard error)	Δ
	• jevstat logical-host-name execution result	• jevstat.log(standard output) • jevstat_err.log(standard error)	
Process operation status of items other than Event Service	jbs_spmd_status execution result	• jbs_spmd_status.log(standard output) • jbs_spmd_status_err.log(standard error)	Δ
	jbs_spmd_status -h logical-host- name execution result <sup>#2</sup>	• jbs_spmd_status.log(standard output) • jbs_spmd_status_err.log(standard error)	
Automated action execution result	jcashowa execution result <sup>#3</sup>	• jcashowa.log(standard output) • jcashowa_err.log(standard error)	Δ
	jcashowa -h <i>logical-host-name</i> execution result <sup>#2, #3</sup>	• jcashowa.log (standard output) • jcashowa_err.log (standard error)	
Automated action status	jcastatus execution result	• jcastatus.log (standard output) • jcastatus_err.log (standard error)	Δ
	jcastatus -h <i>logical-host-name</i> execution result <sup>#2</sup>	• jcastatus.log (standard output) • jcastatus_err.log (standard error)	
Automated action definition file content	jcastatus -d execution result	• jcastatus_d.log(standard output) • jcastatus_d_err.log(standard error)	Δ
	jcastatus -d -h <i>logical-host-name</i> execution result <sup>#2</sup>	• jcastatus_d.log(standard output) • jcastatus_d_err.log(standard error)	
Event Generation Service status	jcoegsstatus execution result	• jcoegsstatus.log(standard output) • jcoegsstatus_err.log(standard error)	Δ
	jcoegsstatus -h <i>logical-host-name</i> execution result <sup>#2</sup>	• jcoegsstatus.log(standard output) • jcoegsstatus_err.log(standard error)	
Process operation status	jco_spmd_status execution result	• jco_spmd_status.log(standard output) • jco_spmd_status_err.log(standard error)	Δ
	jco_spmd_status -h logical-host- name execution result <sup>#2</sup>	• jco_spmd_status.log(standard output) • jco_spmd_status_err.log(standard error)	

Information type	Collected data	File name <sup>#1</sup>	View
Data collection command execution result	jim_log.bat command execution result	jim_log_result.log	Y
JP1/IM - Manager license information	Trace logs and error logs that are output by the license library (HLICLIB) at installation	<ul> <li>hlicliberr{n}.log</li> <li>hliclibmgrerr{n}.log</li> <li>hliclibtrc{n}.log</li> <li>hliclibmgrtrc{n}.log</li> </ul>	
JP1/IM - View license information	Trace logs and error logs that are output by the license library (HLICLIB) at installation	<ul> <li>hlicliberr{n}.log</li> <li>hliclibmgrerr{n}.log</li> <li>hliclibtrc{n}.log</li> <li>hliclibmgrtrc{n}.log</li> </ul>	
Windows event log	<ul> <li>Application: system-root-folder     \system32\config     \AppEvent.Evt</li> <li>System: system-root-folder     \system32\config     \SysEvent.Evt</li> </ul>	<ul> <li>AppEvent (Backup) .evt</li> <li>AppEvent (Backup) .txt</li> <li>SysEvent (Backup) .evt</li> <li>SysEvent (Backup) .txt</li> </ul>	Y
jp1hosts2 information registered on the host	• jbshosts2export execution result	• jbshosts2export.log(standard output) • jbshosts2export_err.log(standard error)	Δ
	• jbshosts2export -h logical-host- name execution result	• jbshosts2export.log(standard output) • jbshosts2export_err.log(standard error)	
Media sense functionality's ON/OFF information	Content of the registry  HKEY_LOCAL_MACHINE\System \CurrentControlSet\Services \Tcpip\Parameters \DisableDHCPMediaSense  displayed by the reg command	DisableDHCPMediaSense_reg.txt	
Server certificate information (CN and SAN settings and expiration dates)	openssl x509 -noout -in server- certificate-file -subject -dates execution result	<ul> <li>openssl_x509_server.log(standard output)</li> <li>openssl_x509_server_err.log (standard error)</li> </ul>	
Server certificate and private key compatibility information (modulus)	<ul> <li>openssl rsa -noout -in private- key-file -modulus execution result</li> <li>openssl x509 -noout -in server- certificate-file -modulus execution result</li> </ul>	<ul><li>openssl_keymatching.log(standard output)</li><li>openssl_keymatching_err.log (standard error)</li></ul>	

#### Legend:

 $Y: Collected \ by \ the \ \verb"jcoview_log.bat" \ command.$ 

 $\Delta$ : Collected by the <code>jcoview\_log.bat</code> command only when JP1/Base and JP1/IM - Manager are installed on the same host as JP1/IM - View.

--: Not collected by the jcoview log.bat command.

#1: Indicates the storage destination file name after a data collection tool is executed. For details about the storage destination, see the following sections:

- jim\_log.bat (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference
- jcoview\_log.bat (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference

#2: Can be collected when data in a logical host (cluster) environment is being collected.

## (2) JP1 information

You need to collect the JP1-related information listed in the table below. These types of information can be collected using a data collection tool. If a network connection problem has occurred, you must also collect files from the machine at the connection destination.

The two data collection tools (the jim\_log.bat command and the jcoview\_log.bat command) collect different types of data. When the jim\_log.bat command is executed, all of the data listed in the table below is collected. The data that can be collected by executing the jcoview log.bat command is indicated in the far-right column.

Table 11–16: JP1 information (Windows)

Information type		Collected data	File name <sup>#1</sup>	View
Common to JP1/IM and JP1/Base	Integrated trace log	<pre>system-drive:Program Files\Hitachi \HNTRLib2\spool</pre>	The following files in the default mode: hntr2[1 2 3 4].log	Y
JP1/IM - Manager (common to components)	Patch information	Manager-path\PATCHLOG.TXT	Patchlog_jplimm.txt	
	Model name and version information	Manager-path\Version.txt	Version.txt	
	License type and expiration date	Manager-path\ProductInfo.txt	ProductInfo.txt	
	Settings and definition file	Files under Manager-path\conf\	Copies of the files indicated at left	
	Log file	Files under Manager-path\log\	Copies of the files indicated at left	
	Operation log file	Files under the folder specified in the following common definition:  [JP1_DEFAULT\JP1IMM\OPERATION]  "LOGFILEDIR"	Copies of the files indicated at left	
		Files under the folder specified in the following common definition:  [logical-host\JP1IMM\OPERATION]  "LOGFILEDIR"	Copies of the files indicated at left	
JP1/IM - Manager (Central Console)	Settings and definition file	Files under Console-path\conf\	Copies of the files indicated at left	
		Files under shared-folder\JP1Cons\conf\#2	Copies of the files indicated at left	
	Common definition information	Files under Console-path\default\	Copies of the files indicated at left	
	Log file	Files under Console-path\log\	Copies of the files indicated at left	
		Files under shared-folder\JP1Cons\log\#2	Copies of the files indicated at left	

Information type		Collected data	File name <sup>#1</sup>	View
	File for accumulated response-	Files under Console-path\log\response	Copies of the files indicated at left	
	waiting events <sup>#3</sup>	Files under shared-folder\jp1cons\log \response\	Copies of the files indicated at left	
	Correlation event generation	Files under Console-path\operation \evgen\	Copies of the files indicated at left	
	history file	Files under shared-folder\JP1Cons \operation\evgen\#2	Copies of the files indicated at left	
	Common exclusion	Files under Console-path\operation \comexclude\	Copies of the files indicated at left	
	history file, and common exclusion- conditions definition history file	Files under shared-folder\JP1Cons \operation\comexclude\#2	Copies of the files indicated at left	
JP1/IM - Manager (Central Scope)	Settings and definition file	Files under Scope-path\conf\	Copies of the files indicated at left	
		Files under shared-folder\JP1Scope \conf\#2	Copies of the files indicated at left	
	Common definition information	Files under Scope-path\default\	Copies of the files indicated at left	
	Log file	Files under Scope-path\log\	Copies of the files indicated at left	
		Files under shared-folder\JP1Scope\log\#2	Copies of the files indicated at left	
	Database information	Files under Scope-path\database\	Copies of the files indicated at left	
		Files under shared-folder\JP1Scope \database\*2	Copies of the files indicated at left	
JP1/IM - Manager (Intelligent Integrated	Settings and definition file	Files under Manager-path\conf\imdd\	Copies of the files indicated at left	
Management Base)		$\label{eq:files under shared-folder} Files  under  shared-folder \ \ \   \  \  \  \  \  \  \  \  \  \  \$	Copies of the files indicated at left	
	Log file	Files under Manager-path\log\imdd\	Copies of the files indicated at left	
		Files under $shared$ - $folder \neq 1$ $p1imm \geq 1$ $p1imm \geq 1$	Copies of the files indicated at left	
	Plug-in file	Files under Manager-path\plugin\	Copies of the files indicated at left	
		Files under shared-folder\plugin\#2	Copies of the files indicated at left	
	Response action execution history file	Files under Manager-path\log \suggestion\	Copies of the files indicated at left	

Information type		Collected data	File name <sup>#1</sup>	View
		Files under shared-folder\log \suggestion\*2	Copies of the files indicated at left	
JP1/IM - Manager (IM Configuration	Settings and definition file	Files under Manager-path\conf\imcf\	Copies of the files indicated at left	
Management)		Files under shared-folder\jp1imm\conf \imcf\\#2	Copies of the files indicated at left	
	Common definition information	Files under Manager-path\system \default\new\imcf\	Copies of the files indicated at left	
	Log file	Files under Manager-path\log\imcf\	Copies of the files indicated at left	
		Files under $shared$ -folder \jp1imm\log \imcf\ $^{\#2}$	Copies of the files indicated at left	
JP1/IM - View	Patch information	View-path\Patchlog.txt	Patchlog_jp1coview.t xt	Y
	Model name and version information	View-path\Version.txt	Version.txt	
	License type and expiration date	View-path\ProductInfo.txt	ProductInfo.txt	
	Settings and definition file	Files under View-path\conf\	Copies of the files indicated at left	Y
		Files under system-drive: \ProgramData \Hitachi\jp1\jp1_default \JP1CoView\conf\	Copies of the files indicated at left	Y
	Common definition information	Files under View-path\default\	Copies of the files indicated at left	Y
	Log file	Files under system-drive: \ProgramData \Hitachi\jp1\jp1_default \JP1CoView\log\	Copies of the files indicated at left	Y
JP1/Base	Patch information	Base-path\PatchLog.txt	Patchlog_jp1base.txt	
	Model name and version information	Base-path\Version.txt	Version.txt	
	License type and expiration date	Base-path\ProductInfo.txt	ProductInfo.txt	
	Settings and definition file	Files under Base-path\conf\	Copies of the files indicated at left	
		Files under <i>shared-folder\JP1Base\conf</i> \#2	Copies of the files indicated at left	
	Common definition information	Files under Base-path\default\	Copies of the files indicated at left	

Information type		Collected data	File name <sup>#1</sup>	View
	Log file	Files under Base-path\log\	All files under the folder indicated at left, excluding COMMAND	
		Files under shared-folder\JP1Base\log\#2	All files under the folder indicated at left, excluding COMMAND	
	Plug-in service settings file	Files under Base-path\plugin\conf\	Copies of the files indicated at left	
	Log and temporary file	Files under Base-path\sys\tmp\	Copies of the files indicated at left	
		shared-folder\JP1Base\event <sup>#2</sup>	All files under the folder indicated at left, excluding IMEvent*.*	
	Command execution log	Files under Base-path\log\COMMAND\	Copies of the files indicated at left	
	file	Files under $shared$ - $folder$ \JP1Base\log\COMMAND\ $^{\#2}$	Copies of the files indicated at left	
	Event database	Files under Base-path\sys\event \servers\default\	Copies of the files indicated at left	
		shared-folder\JP1Base\event <sup>#2</sup>	IMEvent*.*	

#### Legend:

- Y: Collected by the jcoview log.bat command.
- --: Not collected by the jcoview log.bat command.

#1: Indicates the storage destination file name after a data collection tool is used. For details about the storage destination, see the following sections:

- jim\_log.bat (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference
- jcoview\_log.bat (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 Manager Command, Definition File and API Reference
- #2: Can be collected when data in a logical host (cluster) environment is being collected.

#3: The file for accumulated response-waiting events is created when you enable the response-waiting event management function. You can prevent the jim log.bat command from collecting this file by specifying a command option. For details, see 10.5.2 jim log.bat (Windows only).

# (3) Operation content

You need the following types of information related to the operation that was being performed when the problem occurred:

- · Operation content details
- Time of problem occurrence
- Machine configuration (version of each OS, host name, and Central Console configuration)
- Reproducibility
- Login user name that was used to log in from JP1/IM View

## (4) Error information on the screen

Collect a hard copy of the following:

• Error dialog box (and the content displayed by the **Details** button, if available)

## (5) User dump (only for Windows)

If a JP1/IM - View process stops due to an application error in Windows, collect a user dump.

## (6) RAS information during remote monitoring

If a problem occurs during remote monitoring, the user must collect RAS information. For details about how to collect RAS information, see 11.4.1(7) Collecting RAS information.

## (7) IM management node-related files

If the Intelligent Integrated Management Base is used, collect the following information:

- Files under the folder specified by the -o option of the jddcreatetree command
- Files under the folder specified by the -i option of the jddupdatetree command

#### 11.3.2 In UNIX

## (1) OS system information

You need to collect the OS-related information listed in the table below. These types of information can be collected using data collection tools.

Table 11–17: OS system information (UNIX)

Information type	Collected data	File name <sup>#1</sup>
Installed Hitachi product information	/etc/.hitachi/pplistd/pplistd	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>pplistd</li></ul>
Information about products installed by Hitachi PP Installer	Output based on /etc/.hitachi/bin/SHOWPP	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>SHOWPP</li></ul>
Hitachi PP Installer installation log file	/etc/.hitachi/.install.log*	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>.install.log*</li></ul>
Hitachi PP Installer uninstallation log file	/etc/.hitachi/.uninstall.log*	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>.uninstall.log*</li></ul>
Common definition information	Files under /opt/jp1/hcclibcnf/	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
JP1/IM - Manager (Central Console) core analysis information (back trace) <sup>#6</sup>	Analysis result from seraph /var/opt/jplcons	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>core_module-name.log</li></ul>
miormation (ouck trace)	Analysis result from seraph  shared-directory/jplcons/log#2	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>core_module-name.log</li></ul>
JP1/IM - Manager (Central Scope) core analysis information (back trace) <sup>#6</sup>	Analysis result from seraph /var/opt/jp1scope	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>core_module-name.log</li></ul>
information (back trace)	Analysis result from seraph	• logical-host-name_imm_1st.tar.{Z gz}

Information type	Collected data	File name <sup>#1</sup>
	shared-directory/jp1scope/log#2	• core_module-name.log
JP1/IM - Manager (Intelligent Integrated Management Base) core	Analysis result from seraph /var/opt/jplimm/log	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>core_module-name.log</li></ul>
analysis information (back trace) #6	Analysis result from seraph  shared-directory/jplimm/log#2	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>core_module-name.log</li></ul>
JP1/IM - Manager distribution release file	Information for identifying which distribution the execution environment is	• Linux /etc/redhat-release • Oracle Linux /etc/oracle-release • CentOS 7 or later /etc/centos-release • SUSE Linux /etc/SuSE-release
JP1/Base installation log file	/tmp/HITACHI_JP1_INST_LOG/ jp1base_inst{1 2 3 4 5}.log	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jp1base_inst{1 2 3 4 5}.log</li></ul>
JP1/IM - Manager installation log file	/tmp/HITACHI_JP1_INST_LOG/ jp1imm_inst{1 2 3 4 5}.log	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jp1imm_inst{1 2 3 4 5}.log</li></ul>
File list	<ul> <li>ls -lRa /opt/jplimm execution result</li> <li>ls -lRa /var/opt/jplimm execution result</li> <li>ls -lRa /opt/jplcons execution result</li> <li>ls -lRa /etc/opt/jplcons execution result</li> <li>ls -lRa /var/opt/jplcons execution result</li> <li>ls -lRa /opt/jplscope execution result</li> <li>ls -lRa /opt/jplscope execution result</li> <li>ls -lRa /etc/opt/jplscope execution result</li> <li>ls -lRa /var/opt/jplscope execution result</li> <li>ls -lRa /opt/jplbase execution result</li> <li>ls -lRa /opt/jplbase execution result</li> <li>ls -lRa /etc/opt/jplbase execution result</li> <li>ls -lRa /var/opt/jplbase execution result</li> <li>ls -lRa user-specified -IMDBENVDIR-value-in-setup-information-file execution result</li> <li>ls -lRa user-specified -IMDBDIR-value-in-setup-information-file execution result</li> <li>ls -lRa /etc/opt/jplimm execution result</li> <li>ls -lRa /etc/opt/jplimm execution result</li> <li>ls -lRa /etc/.hitachi execution result</li> <li>ls -lRa /etc/.hitachi execution result</li> <li>ls -lRa /etc/.hitachi execution result</li> </ul>	• jpl_default_imm_lst.tar.{Z gz} • inst_dir.log

Information type	Collected data	File name <sup>#1</sup>
	• ls -1Ra operation-log-output-destination execution result <sup>#4</sup>	
	<ul> <li>ls-lRa shared-directory/jplcons execution result#2</li> <li>ls-lRa shared-directory/jplscope execution result#2</li> <li>ls-lRa shared-directory/jplbase execution result#2</li> <li>ls-lRa shared-directory/event execution result#2</li> <li>ls-lRa operation-log-output-destination execution result#5</li> </ul>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>share_dir.log</li> </ul>
File list (with the -L option added for referencing the file or folder at the symbolic link destination)	<ul> <li>ls-lRaL/opt/jplimm execution result</li> <li>ls-lRaL/var/opt/jplimm execution result</li> <li>ls-lRaL/opt/jplcons execution result</li> <li>ls-lRaL/etc/opt/jplcons execution result</li> <li>ls-lRaL/var/opt/jplcons execution result</li> <li>ls-lRaL/opt/jplscope execution result</li> <li>ls-lRaL/opt/jplscope execution result</li> <li>ls-lRaL/etc/opt/jplscope execution result</li> <li>ls-lRaL/var/opt/jplscope execution result</li> <li>ls-lRaL/opt/jplbase execution result</li> <li>ls-lRaL/opt/jplbase execution result</li> <li>ls-lRaL/var/opt/jplbase execution result</li> <li>ls-lRaL var/opt/jplbase execution result</li> <li>ls-lRaL user-specified -IMDBENVDIR-value-in-setup-information-file execution result</li> <li>ls-lRaL user-specified -IMDBDIR-value-in-setup-information-file execution result</li> <li>ls-lRaL/etc/opt/jplimm execution result</li> <li>ls-lRaL/tmp/ HITACHI_JPl_INST_LOG execution result</li> <li>ls-lRaL/etc/.hitachi execution result</li> <li>ls-lRaL/etc/.hitachi execution result</li> </ul>	• jpl_default_imm_1st.tar.{Z gz} • inst_dir_lRaL.log
	result  • ls -lRaL operation-log-output-destination execution result  ##4	
	<ul> <li>ls -lRaL shared-directory/jplcons execution result</li> <li>ls -lRaL shared-directory/jplscope execution result</li> </ul>	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>share_lRaL_dir.log</li></ul>

Information type	Collected data	File name <sup>#1</sup>
	<ul> <li>ls -lRaL shared-directory/jplbase execution result</li> <li>ls -lRaL shared-directory/event execution result</li> <li>ls -lRaL operation-log-output-destination execution result<sup>#5</sup></li> </ul>	
Data collection date/time	date execution result	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>jp1_default_imm_2nd.tar.{Z gz}</li> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>date.log</li> </ul>
Disk information	df -k execution result	• jp1_default_imm_1st.tar.{Z gz} • df.log
btrfs file system information	Only when btrfs is installed in Linux  • btrfs filesystem showall-device result	• Linux:jp1_default_imm_1st.tar.gz • df.log
Information about process operation based on the automated startup service (systemd)	Only when systemd is installed in Linux systemctlall, systemctl list-unit-files, systemctl status jp1_base, systemctl status jp1_cons, systemctl status /usr/lib/systemd/system/2248-*start.service result	• jp1_default_imm_1st.tar.gz • systemctl.log
Machine's environment variable	env execution result	• jp1_default_imm_1st.tar.{Z gz} • env.log
Host name settings that are set in the machine	/etc/hosts(Linux)	• jp1_default_imm_1st.tar.{Z gz} • hosts
Status of shared memory for inter-process communication	ipcs -ma execution result	• jp1_default_imm_1st.tar.{Z gz} • ipcs.log
Host name for resolving network address	jbsgethostbyname execution result	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>jbsgethostbyname.log(standard output)</li> <li>jbsgethostbyname_err.log(standard error)</li> </ul>
	jbsgethostbyname <i>logical-host-name</i> execution result <sup>#2</sup>	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>jbsgethostbyname_logical-host-name.log</li></ul>
Health check	jbshcstatus -debbug -a execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jbshcstatus.log (standard output)</li><li>jbshcstatus_err.log (standard error)</li></ul>
	jbshcstatus -debbug -a -h <i>logical-host-name</i> execution result <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>jbshcstatus.log(standard output)</li> <li>jbshcstatus_err.log(standard error)</li> </ul>
Process operation status of Event Service	jevstat execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jevstat.log (standard output)</li><li>jevstat_err.log (standard error)</li></ul>

Information type	Collected data	File name <sup>#1</sup>
	jevstat logical-host-name execution result	<ul><li>logical-host-name_imm_lst.tar.{Z gz}</li><li>jevstat.log(standard output)</li><li>jevstat_err.log(standard error)</li></ul>
Process operation status of items other than Event Service	jbs_spmd_status execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jbs_spmd_status.log(standard output)</li><li>jbs_spmd_status_err.log(standard error)</li></ul>
	jbs_spmd_status -h <i>logical-host-name</i> execution result <sup>#2</sup>	<ul> <li>logical-host-name_imm_lst.tar.{Z gz}</li> <li>jbs_spmd_status.log(standard output)</li> <li>jbs_spmd_status_err.log(standard error)</li> </ul>
Automated action execution result	jcashowa execution result <sup>#3</sup>	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jcashowa.log(standard output)</li><li>jcashowa_err.log(standard error)</li></ul>
	jcashowa -h <i>logical-host-name</i> execution result <sup>#2, #3</sup>	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>jcashowa.log(standard output)</li><li>jcashowa_err.log(standard error)</li></ul>
Automated action function status	jcastatus execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jcastatus.log(standard output)</li><li>jcastatus_err.log(standard error)</li></ul>
	jcastatus -h <i>logical-host-name</i> execution result <sup>#2</sup>	<ul><li>logical-host-name_imm_lst.tar.{Z gz}</li><li>jcastatus.log(standard output)</li><li>jcastatus_err.log(standard error)</li></ul>
Automated action definition file content	jcastatus -d execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jcastatus_d.log(standard output)</li><li>jcastatus_d_err.log(standard error)</li></ul>
	jcastatus -d -h <i>logical-host-name</i> execution result <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>jcastatus_d.log(standard output)</li> <li>jcastatus_d_err.log(standard error)</li> </ul>
Event Generation Service status	jcoegsstatus execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jcoegsstatus.log(standard output)</li><li>jcoegsstatus_err.log(standard error)</li></ul>
	jcoegsstatus -h logical-host-name execution result <sup>#2</sup>	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>jcoegsstatus.log(standard output)</li><li>jcoegsstatus_err.log(standard error)</li></ul>
Process operation status	jco_spmd_status execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jco_spmd_status.log(standard output)</li><li>jco_spmd_status_err.log(standard error)</li></ul>
	jco_spmd_status -h <i>logical-host-name</i> execution result <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>jco_spmd_status.log(standard output)</li> <li>jco_spmd_status_err.log(standard error)</li> </ul>
Data collection command execution result	jim_log.sh command execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jim_log_result.log</li></ul>
IP address acquisition	ifconfig-a	• jp1_default_imm_1st.tar.{Z gz} • ifconfig.log

Information type	Collected data	File name <sup>#1</sup>	
	ip addr show	<ul><li>jp1_default_imm_1st.tar.gz</li><li>ip_addr_show.log</li></ul>	
NIC installation status	netstat -ai execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>netstat_ai.log</li></ul>	
	ip-slink	• jp1_default_imm_1st.tar.gz • ip_s_link.log	
Network statistical information	netstat -nap execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>netstat_na.log</li></ul>	
	ss-nap	• jp1_default_imm_1st.tar.gz • ss_na.log	
List of users that are set in the machine	/etc/passwd	• jp1_default_imm_1st.tar.{Z gz} • passwd	
Process list	ps -elfa execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>ps.log</li></ul>	
Service port settings that are set in the machine	/etc/services	<pre>jp1_default_imm_1st.tar.{Z gz} services</pre>	
Memory information	cat/proc/meminfo	<pre>jp1_default_imm_1st.tar.{Z gz} swapinfo.log</pre>	
System diagnostic information	dmesg execution result	<pre>jp1_default_imm_1st.tar.{Z gz} sys_info.log</pre>	
Syslog(syslog)	/var/log/messages	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>syslog.log</li></ul>	
journal	journalctl -lno-pager execution result Obtained in SUSE Linux 15 or later	journal.log	
JP1/IM - Manager (Central Console) core analysis information (back trace) output by the jcogencore command <sup>#6</sup>	Analysis result from seraph /var/opt/jplcons	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>trace_module-name.log</li></ul>	
	Analysis result from seraph  shared-directory/jplcons/log  (core output by jcogencore)#2	<ul><li>logical-host-name_imm_1st.tar.{Z gz}</li><li>trace_module-name.log</li></ul>	
OS version information	uname -a execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>uname_a.log</li></ul>	
Kernel parameter information	sysctl -a execution result     ulimit -a execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>sysctl.log</li><li>ulimit.log</li></ul>	
Page size information	Nothing (Linux)	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>pagesize.log</li></ul>	
OS patch application information	rpm -qa execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>rpm.log</li></ul>	
Distribution information	/etc/*-release	*-release	

Information type	Collected data	File name <sup>#1</sup>	
JP1/IM - Manager license information	Trace logs and error logs that are output by the license library (HLICLIB) at installation	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>hlicliberr{n}.log</li> <li>hliclibmgrerr{n}.log</li> <li>hliclibtrc{n}.log</li> <li>hliclibtrc{n}.log</li> </ul>	
Process startup information used by the init daemon	• Files under /etc/init In Linux, this information is collected only in Linux 6.	• jp1_default_imm_1st.tar.{Z gz} • For left files under the init directory	
Disk mounting information	/etc/fstab	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>fstab</li><li>filesystems</li></ul>	
jp1hosts2 information registered on the host	jbshosts2export execution result	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>jbshosts2export.log(standard output)</li><li>jbshosts2export_err.log(standard error)</li></ul>	
	jbshosts2export -h logical-host-name execution result	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>jbshosts2export.log(standard output)</li> <li>jbshosts2export_err.log(standard error)</li> </ul>	
Server certificate information (CN and SAN settings and expiration dates)	rmation (CN and SAN ngs and expiration result resul		
Server certificate and private key compatibility information (modulus)	<ul> <li>openssl rsa -noout -in private-key-file -modulus execution result</li> <li>openssl x509 -noout -in server-certificate-file -modulus execution result</li> </ul>	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>openssl_keymatching.log(standard output)</li> <li>openssl_keymatching_err.log(standard error)</li> </ul>	

#1: Indicates the name of the compressed file and uncompressed file after a data collection tool is used (with the compressed file described first, followed by the uncompressed file).

The compressed file is created in .tar.Z format for Windows, and created in .tar.gz format for Linux.

For details about the internal directory configuration of the compressed file, see *jim\_log.sh* (UNIX only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

- #2: Can be collected when data in a logical host (cluster) environment is being collected.
- #3: Can be collected only when /var/opt/jplcons/log/action/action-information-file-name exists.
- #4: operation-log-output-destination indicates the directory specified in the following common definition:

```
[JP1_DEFAULT\JP1IMM\OPERATION]
```

"LOGFILEDIR"

#5: operation-log-output-destination indicates the directory specified in the following common definition:

 $[\textit{logical-host-name} \backslash \texttt{JP1IMM} \backslash \texttt{OPERATION}]$ 

"LOGFILEDIR"

#6: Core dump files might not be generated if the operating system is configured to restrict generating core dump files. For details about the settings for core dump files, see 2.17.5 Specifying settings for handling JP1/IM - Manager failures (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

# (2) JP1 information

You need to collect the JP1-related information listed in the table below. These types of information can be collected using a data collection tool. If a network connection problem has occurred, you must also collect files from the machine at the connection destination.

Table 11–18: JP1 information (UNIX)

Information type		Collected data	File name <sup>#1</sup>
Common to JP1/IM and JP1/ Base	Integrated trace log	All files under /var/opt/hitachi/ HNTRLib2/spool/	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>The following files in the default mode: hntr2[1 2 3 4].log</li> </ul>
JP1/IM - Manager (common to components)	Patch application history	/opt/jplimm/patch_history	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>patch_history</li></ul>
	Patch log information	/opt/jp1imm/update.log	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>update.log</li></ul>
	License type and expiration date	/var/opt/jp1imm/log/ ProductInfo	<ul><li>jpl_default_imm_1st.tar.{Z  gz}</li><li>ProductInfo</li></ul>
	Managed-node count log file	/var/opt/jplimm/log/ nodecount	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>jimnodecount_cmd{1 2}.log</li></ul>
	Operation log file	Files under the directory specified in the following common definition:  [JP1_DEFAULT\JP1IMM \OPERATION]  "LOGFILEDIR"	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
		Files under the directory specified in the following common definition:  [logical-host-name\JP1IMM\OPERATION]  "LOGFILEDIR"	<ul> <li>logical-host-name_imm_lst.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
JP1/IM - Manager (Central Console) <sup>#4</sup>	Automatic startup and automatic termination script	Files under /etc/opt/jp1cons/	• jp1_default_imm_1st.tar.Z • Copies of the files indicated at left
	Settings and defintion file	Files under /etc/opt/jplcons/conf/	• jpl_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
		Files under shared-directory/ jplcons/conf/ <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Common definition information	Files under /etc/opt/jplcons/default/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
	Log file	Files under /var/opt/ jplcons/log/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
		Files under shared-directory/ jp1cons/log/#2	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>

Information type		Collected data	File name <sup>#1</sup>
	File for accumulated response-waiting events#3	Files under /var/opt/ jp1cons/log/response/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
		Files under shared-directory/ jp1cons/log/response/	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
	Core analysis information (CAR file) output by the jcogencore	car command result /var/opt/jp1cons/log (core output by jcogencore)	• jp1_default_imm_2nd.tar.{Z  gz} • car_module-name.tar.Z
	command	car command result  shared-directory/jp1cons/log  (core output by jcogencore)#2	<ul><li>logical-host-name_imm_2nd.tar.{Z  gz}</li><li>car_module-name.tar.Z</li></ul>
	Core analysis information (CAR file)	car command result /var/opt/jp1cons/log	<ul><li>jp1_default_imm_2nd.tar.{Z  gz}</li><li>core_module-name_car.tar.Z</li></ul>
		car command result  shared-directory/jp1cons/log#2	<ul><li>logical-host-name_imm_2nd.tar.{Z gz}</li><li>core_module-name_car.tar.Z</li></ul>
	Correlation event generation history file	Files under /var/opt/jplcons/operation/evgen/	<ul><li>jp1_default_imm_2nd.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
		<pre>shared-directory/jp1cons/ operation/evgen#2</pre>	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Common exclusion history file, and common exclusion- conditions definition history file	Files under /var/opt/jplcons/operation/comexclude/	<ul><li>jp1_default_imm_2nd.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
		<pre>shared-directory/jp1cons/ operation/comexclude#2</pre>	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
JP1/IM - Manager (Central Scope)#4	Settings and definition file	Files under /etc/opt/jp1scope/conf/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
		Files under shared-directory/ jp1scope/conf/#2	<ul><li>logical-host-name_imm_lst.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
	Common definition information	Files under /etc/opt/jplscope/default/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
	Log file	Files under /var/opt/ jp1scope/log/	• jp1_default_imm_1st.tar.{Z  gz} • Copies of the files indicated at left
		Files under shared-directory/ jp1scope/log/#2	<ul> <li>logical-host-name_imm_lst.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>

Information type		Collected data	File name <sup>#1</sup>
	Core analysis information (CAR file)	car command result /var/opt/jp1scope/log	<ul><li>jp1_default_imm_2nd.tar.{Z  gz}</li><li>core_module-name_car.tar.Z</li></ul>
		car command result  shared-directory/jp1scope/log#2	<ul><li>logical-host-name_imm_2nd.tar.{Z gz}</li><li>core_module-name_car.tar.Z</li></ul>
	Database information	Files under /var/opt/jplscope/database/	<ul><li>jp1_default_imm_2nd.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/ jp1scope/database/#2	<ul> <li>logical-host-name_imm_2nd.tar.{Z  gz}</li> <li>Copies of the files indicated at left</li> </ul>
JP1/IM - Manager (Intelligent Integrated	Settings and definition file	Files under /etc/opt/jplimm/ conf/imdd	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
Management Base)#4		Files under shared-directory/jp1imm/conf/imdd	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Log file	Files under /var/opt/ jp1imm/log/imdd	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/ jplimm/log/imdd	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Plug-in file	Files under /etc/opt/jplimm/ plugin	• jpl_default_imm_lst.tar.gz • Copies of the files indicated at left
		Files under shared-directory/jplimm/plugin	• logical-host-name_imm_lst.tar.gz • Copies of the files indicated at left
	Response action execution history file	Files under /var/opt/ jplimm/log/suggestion	• jp1_default_imm_1st.tar.gz • Copies of the files indicated at left
		Files under shared-directory/ jplimm/log/suggestion	• logical-host-name_imm_1st.tar.gz • Copies of the files indicated at left
	Core analysis information (CAR file)	car command result /var/opt/jplim/log/imdd	• jp1_default_imm_2nd.tar.{Z  gz} • core_module-name_car.tar.Z
		car command result  shared-directory/jp1im/log/ imdd <sup>#2</sup>	<ul><li>logical-host-name_imm_2nd.tar.{Z  gz}</li><li>core_module-name_car.tar.Z</li></ul>
JP1/IM - Manager (IM Configuration Management)#4		Files under /etc/opt/jplimm/ conf/imcf/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/jplimm/conf/imcf/#2	• logical-host-name_imm_1st.tar.{Z  gz}

Information type		Collected data	File name <sup>#1</sup>
	Common definition information	Files under /etc/opt/jplimm/ default/imcf/	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
	Log file	Files under /var/opt/jplimm/log/imcf/	<ul><li>jp1_default_imm_1st.tar.{Z gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/ jplimm/log/imcf/#2	<ul><li>logical-host-name_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
	Core analysis information (CAR file)	car command result /var/opt/jplimm/log	<ul> <li>jp1_default_imm_2nd.tar.{Z gz}</li> <li>./var/opt/jp1imm/log/_jp1_default/core/core_module-name_car.tar.Z</li> </ul>
		car command result  shared-directory/jplimm/log#2	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>./var/opt/jp1imm/log/_logical-host-name/core/core_module-name_car.tar.Z</li> </ul>
JP1/Base	Automatic startup and automatic termination script	Files under /etc/opt/jp1base/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
	Settings and definition file	Files under /etc/opt/jp1base/conf/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/ jp1base/conf/ <sup>#2</sup>	<ul><li>logical-host-name_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
	Common definition information	Files under /etc/opt/jp1base/default/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
	Plug-in service settings file	Files under /opt/jplbase/conf/plugin/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
	Patch application history	/opt/jp1base/PatchInfo	<ul><li>jpl_default_imm_1st.tar.{Z  gz}</li><li>PatchInfo</li></ul>
	Patch log information	/opt/jplbase/PatchLog	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>PatchLog</li></ul>
	Log file	/var/opt/jp1base/log	<ul> <li>jp1_default_imm_1st.tar.{Z gz}</li> <li>All files under the directory indicated at left, except COMMAND</li> </ul>
		shared-directory/jp1base/log <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>All files under the directory indicated at left, except COMMAND</li> </ul>

Information type		Collected data	File name <sup>#1</sup>
	Log and temporary file	Files under /var/opt/ jp1base/sys/tmp/	<ul><li>jp1_default_imm_1st.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		shared-directory/event <sup>#2</sup>	<ul> <li>logical-host-name_imm_1st.tar.{Z gz}</li> <li>All files under the directory indicated at left, except IMEvent*</li> </ul>
	SES settings file	<ul> <li>/tmp/.JP1_SES*</li> <li>/usr/tmp/jp1_ses</li> <li>/usr/lib/jp1_ses/log</li> <li>/usr/lib/jp1_ses/sys</li> <li>/usr/bin/jp1_ses/jp*</li> <li>/var/opt/jp1_ses</li> </ul>	<ul> <li>jp1_default_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Command execution history file	Files under /var/opt/ jp1base/log/COMMAND/	<ul><li>jp1_default_imm_2nd.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		Files under shared-directory/ jp1base/log/COMMAND/#2	<ul> <li>logical-host-name_imm_2nd.tar.{Z gz}</li> <li>Copies of the files indicated at left</li> </ul>
	Event database	Files under /var/opt/ jp1base/sys/event/servers/ default/	<ul><li>jp1_default_imm_2nd.tar.{Z  gz}</li><li>Copies of the files indicated at left</li></ul>
		shared-directory/event <sup>#2</sup>	<ul><li>logical-host-name_imm_2nd.tar.{Z gz}</li><li>IMEvent*.*</li></ul>

#1: Indicates the name of the compressed file and uncompressed file after a data collection tool is executed (with the compressed file described first, followed by the uncompressed file).

The compressed file is created in .tar.gz format for Linux.

For details about the internal directory configuration of the compressed file, see *jim\_log.sh* (UNIX only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

- #2: Can be collected when data in a logical host (cluster) environment is being collected.
- #3: The file for accumulated response-waiting events is created when you enable the response-waiting event management function. You can prevent the jim\_log.sh command from collecting this file by specifying a command option. For details, see 10.5.3 jim\_log.sh (UNIX only).
- #4: Core dump files might not be generated if the operating system is configured to restrict generating core dump files.

For details about the settings for core dump files, see 2.17.5 Specifying settings for handling JP1/IM - Manager failures (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide.

## (3) Operation content

You need the following types of information related to the operation that was being performed when the problem occurred:

- · Operation content details
- Time of problem occurrence
- Machine configuration (version of each OS, host name, and Central Console configuration)
- Reproducibility
- Login user name that was used to log in from JP1/IM View

## (4) Error information on the screen

Collect a hard copy of the following:

• Error dialog box

## (5) RAS information during remote monitoring

If a problem occurs during remote monitoring, the user must collect RAS information. For details about how to collect RAS information, see 11.4.2(6) Collecting RAS information.

## (6) IM management node-related files

If the Intelligent Integrated Management Base is used, collect the following information:

- $\bullet$  Files under the directory specified by the  $-\circ$  option of the jddcreatetree command
- Files under the directory specified by the -i option of the jddupdatetree command

## 11.4 Collecting data

This section explains how to collect data when a problem occurs.

#### 11.4.1 In Windows

## (1) Checking the process status

Using Windows Task Manager, check the operating status of processes. This subsection shows the processes that are displayed when the programs are running normally.

### (a) JP1/IM - Manager

For details about JP1/IM - Manager processes, see *Appendix B.1 (1) JP1/IM - Manager* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

## (b) JP1/IM - View

For details about JP1/IM - View processes, see *Appendix B.1 (1) JP1/IM* - *Manager* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

## (c) JP1/IM - IM Configuration Management - View

The table below shows the processes of JP1/IM - IM Configuration Management - View. The value inside parentheses ( ) indicates the number of processes that execute simultaneously.

Table 11-19: JP1/IM - IM Configuration Management - View processes

Parent process name	Function	Child process name	Function
jcfview.exe (3)	Controls the JP1/IM - IM Configuration Management - View	<pre>jcfview_evt.exe (3)</pre>	Sends thread dump output events.
	window.	java.exe (3)	Controls the JP1/IM - IM Configuration Management - View window.

You can start a maximum of three JP1/IM - IM Configuration Management - View instances when you log in from a single machine. Each time JP1/IM - IM Configuration Management - View is started, one process starts.

## (2) Outputting a thread dump for JP1/IM

## (a) JP1/IM - View

Follow the procedure described below to output a dump file.

- 1. Start Task Manager.
- 2. On the Applications page, select JP1/IM View, and then from the pop-up menu, choose **Bring To Front**. In this way, you can determine whether JP1/IM View is disabled. If you have identified a disabled JP1/IM View, proceed to the next step.
- 3. From the pop-up menu, choose **Go To Process**.

The display switches to the **Process** page. Since <code>java.exe</code> of JP1/IM - View is displayed in the selected state, use this to identify the process ID (PID).#

#: If no PID is displayed, from the menu, choose **Display** and then **Select Columns**, and then, from the Select Columns window, select the **PID** (**Process Identifier**) check box.

4. Using the process ID that has been identified as the argument, execute the jcothreaddmp command.

For details about the jcothreaddmp command, see *jcothreaddmp* (Windows only) (in Chapter 1. Commands) in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

### (b) JP1/IM - Manager

When the health check function detects an abnormality in Event Console Service, Event Base Service or Event Generation Service of JP1/IM - Manager, output a dump file for JP1/IM - Manager. Execute the jcogencore command as follows.

jcogencore

For details about the jcogencore command, see *jcogencore* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## (3) Executing the data collection tool

This subsection describes execution of the data collection tool (jim log.bat or jcoview log.bat).

When you execute the jim\_log.bat command, which is provided by JP1/IM - Manager, you can collect the data necessary for troubleshooting JP1/IM - Manager and JP1/IM - View on the same host.

If you execute the <code>jcoview\_log.bat</code> command, which is provided by JP1/IM - View, you can collect the data necessary for troubleshooting JP1/IM - View.

Use one of above commands according to the application that is being used.

Because the total volume of data collected by a data collection tool is massive, you need to estimate it before you execute the command and make sure the machine you are using has sufficient free space.

For the volume of data that will be collected by the  $jim_log.bat$  command, see the JP1/IM - Manager release notes.

For the volume of data that will be collected by the <code>jcoview\_log.bat</code> command, see the JP1/IM - View release notes.

A tool execution example follows.

```
\verb|C:\| Program Files \\| Hitachi \\| JP1IMM \\| tools \\| jim_log.bat" -f \textit{ data-storage-folder}| \\| data-storage-folder| \\| da
```

Specify the data storage folder as an absolute path. If the data storage folder path contains a space, enclose the path in double quotation marks.

When you execute the tool, the jpl\_default folder is created under the folder specified as the data storage folder, and the collected data is copied into this folder. Use a data-compression tool to compress the collected data.

## Important

• If you are using Microsoft (R) Office Outlook (R), the following message box may appear when using the data collection tool.

The program is trying to access an email address stored within Outlook. Would you like to proceed? This is caused by the behavior of the machine configuration information collection program (MSINFO32), which is running within the data collection tool. Because email addresses are not collected by the data collection tool, press [No] in the message box. Note that there are no problems with data collection for JP1/IM - Manager and the operation of Microsoft (R) Outlook (R).

- Do not run multiple instances of the data collection tool.
- Depending on the environment where the data collection tool is executed, it may take a while to collect data.
- When you collect JP1/IM Manager data, some information is obtained by executing JP1/Base and JP1/IM - Manager commands. Some of these commands cannot be executed simultaneously with the same command, or with a different command. Avoid executing JP1/Base and JP1/IM - Manager commands when collecting data.
- If there are no operation records, at the time of data collection execution, "KAVB4153-E Failed to open Action Information File (action-information-file-name). : system-error-message" is output to the event log and the integrated trace log. This is output because the action information file did not exist when the data collection tool was executed. However, because the action information file is generated by operations, even if this message is output, no problems will occur with data collection if there are no operation records. Note that even if you specify a logical host, the data of the physical host is collected. Therefore, even if this message is output, there will be no problems with data collection if there are no operation records on the physical host.
- If there is a Windows event in the Windows event log in which the message format provided by the event log-issuing product and the number of padded characters do not match, an application error might occur during execution of the data collection tool. This is not a problem because the data is collected even in such cases.
  - When this problem occurs, a dialog box is displayed, and execution of the data collection tool might stop (the tool restarts when you respond to the dialog box). If you want to disable the display of the dialog box, execute the following procedure:
- 1. Click the [Start] menu and enter gpedit.msc in [Search for Program and
- 2. **File**] or [**Run**].
  - [Local group policy data editor] appears. Select [Local computer policy], [Computer composition], [Management template], [Windows component], and then [Windows error report] in the tree on the left-hand side.
- 3. In [Settings] on the right-hand side, select [Effective] in [Do not display the user interface in which a severe error occurred], and click the [OK] button.
- If you execute the data collection tool, the system information on the machine may not have been collected when execution of the data collection tool is completed. This is because the process that internally collects the OS information has not been completed, even though execution of the data collection tool has been completed.
  - After ensuring that execution of "msinfo32.exe" has been completed from the [**Processes**] tab or the [**Details**] tab, by starting the Task Manager, perform operations such as compressing the collected data by using a compression tool, or moving or deleting the collected data.

## (4) Checking the operation content

Check the content of the operation that was taking place when the problem occurred, and record it. The following types of information must be checked:

- · Operation content details
- Time of problem occurrence
- · Reproducibility
- Login user name that was used to log in from JP1/IM View
- Machine configuration (version of each OS, host name, and Central Console configuration)

## (5) Collecting the error information on the screen

If an error is displayed on the screen, collect that information as well. Collect a hard copy of the following:

Error dialog box
 Copy the content displayed by the **Details** button, if available.

## (6) Collecting a user dump (Windows only)

If a JP1/IM - View process stops due to an application error in Windows, while the error dialog box is displayed, use the following procedure to collect a user dump:

1. Start Task Manager.

You can use either of the following procedures to start Task Manager:

- Right-click a blank area on the task bar and choose Task Manager.
- Press Ctrl + Shift + Esc keys to start Task Manager.
- 2. Click the **Process** tab.
- 3. Right-click the name of the JP1/IM View process that was stopped by an application error, and then choose **Create Dump File**.
- 4. When a dialog box showing the user dump output destination path opens, collect a dump from there.



### Important

If the error dialog box is closed, a normal dump cannot be collected, and consequently you will not be able to collect a user dump. If you closed the error dialog box by mistake (by clicking **OK**, for example) before collecting a user dump, reproduce the error and then collect a user dump.

## (7) Collecting RAS information

If a problem occurs during remote monitoring, collect RAS information on the manager host and monitored host.

How to collect the information differs depending on the method of connecting monitored hosts. For collecting information from remotely-monitored hosts, the connection method differs depending on the log information to be collected and the OSs on the manager host and monitored hosts. For details about the connection methods for remote monitoring, see 7.6.2 Collectable log information and connection methods for remote monitoring in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

The following describes how to collect information when the OS on the manager host is Windows.

Table 11–20: References about how to collect RAS information (when the OS on the manager host is Windows)

Connection method	Host for collecting data (OS)	References about the collection method
WMI connection	Manager host (Window)	Table 11-20 Collecting data on the Windows manager host (for WMI connection)
	Monitored host (Windows)	Table 11-21 Collecting data on the Windows monitored host (for WMI connection)
NetBIOS connection	Manager host (Windows)	Table 11-22 Collecting data on the Windows manager host (for NetBIOS connection)
	Monitored host (Windows)	Table 11-23 Collecting data on the Windows monitored host (for NetBIOS connection)
SSH connection	Manager host (Windows)	Table 11-24 Collecting data on the Windows manager host (for SSH connection)
	Monitored host (UNIX)	Table 11-27 Collecting data on the UNIX monitored host (for SSH connection)

<sup>#:</sup> To collect host information from remotely monitored hosts, use WMI and WMI/NetBIOS (NetBIOS over TCP/IP) if the OS on the monitored hosts is Windows, and use SSH if the OS on the monitored hosts is UNIX. For details about the connection methods for remote monitoring, see 7.6.2 Collectable log information and connection methods for remote monitoring in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

When collecting container information, in addition to the information to be collected on the monitored host as described in 7.6.2 Collectable log information and connection methods for remote monitoring in the JP1/Integrated Management 2 - Manager Overview and System Design Guide, also collect the following information:

#### For Podman:

• Result of running the podman ps command

#### For Docker:

• Result of running the docker ps command

#### (a) For WMI connection

The following table describes how to collect data on the manager host (Windows) if a problem occurs in WMI connection.

Table 11–21: Collecting data on the Windows manager host (for WMI connection)

No.	Procedure
1	From the command prompt, execute the following commands, and then collect the results:
	• whoami /all
	• nslookup monitored-host-name
	• netsh advfirewall firewall show rule name=all
	• netsh advfirewall show allprofiles
	• tasklist monitored-host-name
	• systeminfo
	• wmic qfe
	• reg export HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\ CurrentVersion\Policies\ System output-file
	• reg export HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Ole output-file

No.	Procedure
	<ul> <li>reg export HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows\System output-file</li> <li>wmic /node:"monitored-host-name" /user:user-name /password:password port (user-specified WMI command)</li> <li>Commands to be executed on the manager host:         date /t         time /t</li> <li>Command to be executed on the monitored host connected via WMI:         wmic /node:"monitored-host-name" /user:user-name /password:password path Win32_LocalTime</li> </ul>
2	Collect the authentication information for WMI connection.  • For physical hosts:  *Manager-path\conf\agtless\targets\wmi.ini*  • For logical hosts:  *shared-folder\JP1IMM\conf\agtless\targets\wmi.ini*
3	Collect the WMI connection log.  • Log file under the directory specified in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WBEM\CIMOM\Logging Directory#
4	Obtain a screenshot showing that runas /user: user-name whemtest has been executed from the command prompt on the manager host.  Make sure that the value of user-name is the same as that specified in the User name text box on the IM Host Account page in the System Common Settings window. If you are prompted to enter a password after executing the command, specify the value set in the Password text box on the IM Host Account page.
5	Obtain a screenshot showing the user-specified values for the namespace and credentials displayed when the <b>Connect</b> button is clicked in the dialog box opened by wbemtest.
6	Obtain a screenshot of the status after the <b>Connect</b> button is clicked in the dialog box opened by whemtes. The status indicating that connection is established correctly is displayed, or an error message is displayed.
7	In the dialog box opened by wbemtest, click the <b>Query</b> button. In the dialog box that opens, enter the query as follows, and then click the <b>Apply</b> button:  • Select * From Win32_NTLogEvent Where ( Logfile='System' Or Logfile='Application' )  After the query is performed, obtain a screenshot of the query results indicated in the Query Result widow.

#: If HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\WBEM\CIMOM\Logging is set to 0 (default value), no data is output to the log. If the value of Logging is 1, only error information is output. If the value of Logging is 2, detailed information is output.

The following table describes how to collect data on the monitored host (Windows) if a problem occurs in WMI connection.

Table 11–22: Collecting data on the Windows monitored host (for WMI connection)

No.	Procedure
1	Log in to the monitored host as the monitored user, execute the following commands from the command prompt, and then collect the results:
	• hostname
	• whoami /all
	• nslookup manager-host-name
	• ipconfig /all
	• netstat -na
	• netsh advfirewall firewall show rule name=all
	• netsh advfirewall show allprofiles
	• tasklist monitored-host-name
	• systeminfo

No.	Procedure
	<ul> <li>%ProgramFiles%\Common Files\Microsoft Shared\MSInfo\msinfo32.exe /report output-file</li> <li>wmic qfe</li> <li>tasklist monitored-host-name</li> <li>reg export HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System output-file</li> <li>reg export HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Ole output-file</li> </ul>
2	Collect the WMI connection log.  • Log file under the directory specified in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WBEM\CIMOM\Logging Directory#
3	<ul> <li>If a firewall is disabled:         Collect the data indicating that the Windows firewall is disabled.</li> <li>If a firewall is enabled:         From the command prompt, execute the following command, and then collect the result:         reg export HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\WindowsFirewall         \StandardProfile\RemoteAdminSettings output-file</li> </ul>
4	Collect the data indicating that the event log is correctly created on the monitored host.  • Click <b>Administrative Tools</b> , and then <b>Event</b> Viewer. Then, in the dialog box that opens, application, system, and security event logs in both binary and text formats.

<sup>#:</sup> If HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\WBEM\CIMOM\Logging is set to 0 (default value), no data is output to the log. If the value of Logging is 1, only error information is output. If the value of Logging is 2, detailed information is output.

## (b) For NetBIOS connection

The following table describes how to collect data on the manager host (Windows) if a problem occurs in NetBIOS connection.

Table 11–23: Collecting data on the Windows manager host (for NetBIOS connection)

No.	Procedure
1	From the command prompt, execute the following commands, and then collect the results:
	• whoami
	• nslookup monitored-host-name
	• nbtstat -s
	• netsh advfirewall firewall show rule name=all
	• netsh advfirewall show allprofiles
	• net use
	• systeminfo
	• wmic qfe
	• date /t <sup>#</sup>
	• time /t <sup>#</sup>
2	Click <b>Administrative Tools</b> , <b>Local Security Policy</b> , <b>Security Settings</b> , <b>Local Policies</b> , and then <b>User Rights Assignment</b> , and then right-click <b>Access this computer from the network</b> . In the menu that opens, select <b>Properties</b> , and then obtain a screenshot that indicates the user name you specified.
3	Log in with the user name specified on the <b>IM Host Account</b> page. In the address bar of Explorer, enter \\remotely-monitored-host-name to establish a connection. Then, obtain a screenshot that indicates that the monitored file has been viewed successfully.

<sup>#:</sup> Execute the same commands also on the monitored host, and then check the time difference between the manager host and the monitored host. Do not provide a long interval between executions.

The following table describes how to collect data on the monitored host (Windows) if a problem occurs in NetBIOS connection.

Table 11-24: Collecting data on the Windows monitored host (for NetBIOS connection)

No.	Procedure
1	Log in to the monitored host as the monitored user, execute the following commands from the command prompt, and then collect the results:
	• hostname
	• nslookup manager-host-name
	• ipconfig /all
	• netsh advfirewall firewall show rule name=all
	• netsh advfirewall show allprofiles
	• net session
	• systeminfo
	• %ProgramFiles%\Common Files\Microsoft Shared\MSInfo\msinfo32.exe /report output-file
	• wmic qfe
	• cacls monitored-file
	• dir /A directory-containing-the-monitored-file
	• net share <i>shared-folder-name</i>
	• reg export HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\LanmanServer \Parameters output-file
	• date /t <sup>#</sup>
	• time /t#
2	Select Administrative Tools, Local Security Policy, Security Settings, Local Policies, User Rights Assignment, and then right-click Access this computer from the network. In the menu that opens, select Properties, and then obtain a screenshot that indicates the user name you specified.
3	Collect the monitored file.

#: Execute the same commands also on the monitored host to check the time difference between the manager host and the monitored host. Do not provide a long interval between executions.

## (c) For SSH connection

The following table describes how to collect data on the manager host (Windows) if a problem occurs in SSH connection.

Table 11–25: Collecting data on the Windows manager host (for SSH connection)

No.	Procedure
1	From the command prompt, execute the following commands, and then collect the results:
	• whoami
	• nslookup <i>monitored-host-name</i>
	• netsh advfirewall firewall show rule name=all
	• netsh advfirewall show allprofiles
	• systeminfo
	• wmic qfe
	Commands to be executed on the manager host:
	date /t
	time /t
	Commands to be executed on the monitored host connected via SSH:
	date
	• dir /A directory-containing-the-private-key

No.	Procedure
2	<ul> <li>Collect the authentication information for SSH connection.</li> <li>For physical hosts:  Manager-path\conf\agtless\targets\ssh.ini</li> <li>For logical hosts:  shared-folder\JP1IMM\conf\agtless\targets\ssh.ini</li> </ul>
3	Collect the data indicating that an SSH connection with the remotely-monitored host was successfully established by using the private key placed on the host.

For details about how to collect data on a monitored host (UNIX) if a problem occurs in SSH connection, see *Table 11-28 Collecting data on the UNIX monitored host (for SSH connection)* in 11.4.2(6)(a) For SSH connection.

#### 11.4.2 In UNIX

## (1) Checking the process status

The process names that are displayed when the ps command is executed are shown below. In UNIX, by using the data collection tool (jim\_log.sh), you can collect the execution results of the ps command along with other data.

## (a) JP1/IM - Manager

For details about JP1/IM - Manager processes, see *Appendix B.2 (1) JP1/IM - Manager* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

## (2) Outputting a dump file for JP1/IM

## (a) JP1/IM - Manager

You only need to output a dump file for JP1/IM - Manager when the health check function detects an abnormality in JP1/IM - Manager. Execute the jcogencore command as follows.

jcogencore

When you execute the jcogencore command, a message appears asking you to select the process from which to output a dump file. Select the process that is included in the message information issued by the health check function. If a dump file already exists, an overwrite confirmation message is displayed. If you choose not to overwrite the dump file, choose n and terminate the command. Next, save the dump file and then re-execute the jcogencore command.

For details about the jcogencore command, see *jcogencore* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

## (3) Executing the data collection tool

This subsection describes execution of the data collection tool (jim\_log.sh).

When you execute the jim\_log.sh command, which is provided by JP1/IM - Manager, you can collect the data necessary for troubleshooting JP1/IM - Manager and JP1/Base on the same host.

Because the total volume of data collected by a data collection tool is massive, you need to estimate it before you execute the command and make sure the machine you are using has sufficient free space. For the volume of data that will be collected by the jim log.bat command, see the JP1/IM - Manager release notes.

A tool execution example follows.

# /opt/jplimm/tools/jim log.sh -f data-storage-directory

When you execute the tool, the collected data is summarized in the tar format and output as compressed data.

## (4) Checking the operation content

Check the content of the operation that was taking place when the problem occurred, and record it. The following types of information must be checked:

- Operation content details
- Time of problem occurrence
- Reproducibility
- Login user name that was used to log in from JP1/IM View
- Machine configuration (version of each OS, host name, and Central Console configuration)

## (5) Collecting the error information on the screen

If an error is displayed on the screen, collect that information as well. Collect a hard copy of the following:

• Error dialog box
If the **Details** button is available, copy its content as well.

## (6) Collecting RAS information

If a problem occurs during remote monitoring, collect RAS information on the manager host and monitored host.

How to collect the information differs depending on the method of connecting monitored hosts. For collecting information from remotely-monitored hosts, the connection method differs depending on the log information to be collected and the OSs on the manager host and monitored hosts. For details about the connection methods for remote monitoring, see 7.6.2 Collectable log information and connection methods for remote monitoring in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

The following describes how to collect information when the OS on the manager host is UNIX.

Table 11–26: References about how to collect RAS information (when the OS on the manager host is UNIX)

Connection method	Host for collecting information (OS)	References about the collection method
SSH connection	Manager host (UNIX)	Table 11-27 Collecting data on the UNIX manager host (for SSH connection)
	Monitored host (UNIX)	Table 11-28 Collecting data on the UNIX monitored host (for SSH connection)

## (a) For SSH connection

The following table describes how to collect data on the manager host (UNIX) if a problem occurs in SSH connection.

Table 11–27: Collecting data on the UNIX manager host (for SSH connection)

No.	Procedure
1	From the console, execute the following commands, and then collect the results:  • whoami  • nslookup monitored-host-name  • Command to be executed on the manager host: date  • Command to be executed on the monitored host connected via SSH: Date  • ls -al directory-containing-the-private-key
2	Collect the authentication information for SSH connection.  • For physical hosts:  **Manager-path\conf\agtless\targets\ssh.ini*  • For logical hosts:  **shared-folder\JP1IMM\conf\agtless\targets\ssh.ini*
3	Collect the data indicating that an SSH connection with the remotely-monitored host was successfully established by using the private key placed on the host.

The following table describes how to collect data on the monitored host (UNIX) if a problem occurs in SSH connection.

Table 11-28: Collecting data on the UNIX monitored host (for SSH connection)

No.	Procedure
1	Log in to the monitored host as the monitored user, execute the following commands from the console, and then collect the results:
	• uname -a
	• nslookup <i>manager-host-name</i>
	• ifconfig -a
	• netstat -i
	• netstat -na
	• iptableslist
	• env
	• which command-name (specify one of the following for command-name)
	uname
	ls
	wc
	tail
	head
	grep
	find
	• ls -ail directory-containing-the-monitored-file
	• ls -al higher-directory-of-the-directory-specified-for-AuthorizedKeysFile-in-the-sshd_config-file
	• ls -al directory-specified-for-AuthorizedKeysFile-in-the-sshd_config-file
	• In Linux:
	dmesg
	rpm -qa
2	Collect the following files:
	• /etc/hosts.allow

No.	Procedure
	• /etc/hosts.deny
	Monitored file
	• In Linux:
	/etc/nsswitch.conf
	/etc/issue
	/etc/ssh/sshd_config
	/var/log/messages
	/var/log/secure

## 11.5.1 Dealing with common problems

This section explains how to correct the problems that can generally be anticipated.

## (1) Actions to take when you cannot log in from JP1/IM - View

The actions to take differ depending on the message that is output.

The message KAVB1200-E: Communication error occurred in establishing the connection. is output.

#### Cause

The following are possible causes:

- JP1/IM Manager has not been started.
- The host name at the connection destination is invalid.

#### Corrective action

Take the corrective action that matches the cause.

- Start JP1/IM Manager.
- Make sure that the host name at the connection destination is correct.

The message KAVB0104-E: Failed to authenticate the user. is output.

#### Cause

The user name or password for the connection destination is invalid.

#### Corrective action

Make sure that the user name or password for the connection destination is valid.

The message KAVB0109-E: Communication error occurred between the connecting host and the authentication server. Connecting host: connecting-host or KAVB0111-E: A connection to the authentication server could not be established. is output.

#### Cause

The authentication server that is set at the connection-destination host has not been started.

#### Corrective action

Make sure of the following and take appropriate action.

- The authentication server has been started.
- Communication between the connection host and the authentication server is possible.
- The authentication server settings are not incorrect.

The message KNAN20100-E: Address resolution for the specified connection destination host name failed. is output.

#### Cause

The following are possible causes:

- The target host name is invalid.
- The target host has not been started.

• An error occurred in communications with the target host.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that the target host name is correct.
- Make sure that the target host has been started.
- Make sure that there are no communication problems with the target host.

The message KNAN20101-E: Communication error occurred in establishing the connection.

#### Cause

The following are possible causes:

- The target host name is invalid.
- The target host has not been started.
- An error occurred in communications with the target host.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that the target host name is correct.
- Make sure that the target host has been started.
- Make sure that there are no communication problems with the connection-target host.

The message KNAN20102-E: Communication error occurred in establishing the connection. is output.

#### Cause

The following are possible causes:

- The target host name is invalid.
- The port number is invalid.
- The target host has not been started.
- An error occurred in communications with the target host.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that the target host name is correct.
- Make sure that the port number is available.
- Make sure that the target host has been started.
- Make sure that there are no communication problems with the connection-destination host.

The message KNAN20103-E: A communication error occurred while sending data. is output.

#### Cause

A communication error occurred between the connecting host and the authentication server.

#### Corrective action

Check the following, and then retry the operation:

- Make sure that the name of the connecting host is correct.
- Make sure that the connecting host is running.
- Make sure that there are no communication problems with the connecting host.

The message KNAN20104-E: A communication error occurred while receiving data. is output.

#### Cause

A communication error occurred during an attempt to connect to the host.

#### Corrective action

Check the following, and then retry the operation:

- Make sure that the target host name is correct.
- Make sure that the port number is correct.
- Make sure that the target host has been started.
- Make sure that there are no communication problems with the target host.

## (2) Actions to take when an attempt to connect to the event service fails

#### Cause 1

The event service on the manager host is not running.

#### Corrective action 1

Use the jbs\_spmd\_status command to check whether the event service is running on the manager host. If the service is not running, start the service.

#### Cause 2

The server parameter is set incorrectly in the API settings file (api).

#### Corrective action 2

Match the setting of the server parameter in the API settings file (api) to the setting of the ports parameter in the event server settings file (conf).

If a host name is specified as the address in the server parameter in the API settings file (api) or the ports parameter in the event server settings file (conf), the host name might not resolve to the correct IP address. This is because the resolution process depends on the operating system.

For details about the API settings file (api) and the event server settings file (conf), see the chapters on these files in the JPI/Base User's Guide.

#### Cause 3

JP1/IM - Manager is running on an IPv6 host.

#### Corrective action 3

JP1/IM - Manager does not support IPv6 hosts. Therefore, when the monitored host is an IPv6 host, install JP1/IM - Manager on an IPv4/IPv6 host. Follow the instructions in error messages to take corrective action.

## (3) Actions to take when the definition menu is not displayed in the Event Console window

In the **Options** menu of the Event Console window, menu-related definitions are disabled.

#### Cause

The JP1 resource group settings are invalid.

#### Corrective action

Make sure that in the JP1 resource group settings, the group name <code>JP1\_Console</code> is specified for the JP1 resource group of the logged-in JP1 user, and <code>JP1\_Console\_Admin</code> or <code>JP1\_Console\_Operator</code> is specified for the permission level.

## (4) Actions to take when the trapped JP1 event message indicates unreadable characters

The following are possible causes:

- The character encoding of the monitored log file does not match the encoding specified on the **Configuration File** page.
- The specified character encoding is not supported on the agent host.

The corrective action to take for each case is described as follows:

The character encoding of the monitored log file does not match the encoding specified on the Configuration File page.

Correct the character encoding of monitored log file, and then retry the operation.

Note that this problem can also occur in remote monitoring.

The specified character encoding is not supported on the agent host.

Even when the character encoding is supported by JP1/IM - Manager, it might not be specifiable for the version of JP1/Base installed on the agent host. Check the version of JP1/Base installed on the agent host, and set a supported character encoding. Then retry the operation.

## (5) Actions to take when you cannot execute a command

In the Execute Command window, the message KAVB0415-E: The command cannot be executed because the business group or monitoring group specified for the execution host name is not defined. (execution host name = execution-host-name) is output.

#### Cause

The business group or monitoring group specified for the execution host name is not defined.

#### Corrective action

Review the business group or monitoring group, and then re-execute the command. Note that the information in this message cannot be checked by using the jcocmdshow command of JP1/Base.

If you are still unable to execute the command, contact the system administrator and confirm the settings of the business group.

In the Execute Command window, the message KAVB0416-E: The command cannot be executed because the host specified for the execution host name is not a management target. (execution host name = execution-host-name) is output.

#### Cause

The host specified for the execution host name is not a managed host.

#### Corrective action

Check the type of host and then re-execute the command. Note that the information in this message cannot be checked by using the jcocmdshow command of JP1/Base.

If you are still unable to execute the command, contact the system administrator and check the settings of the business group.

In the Execute Command window, the message KAVB0417-E: The command cannot be executed because the user does not have the permissions necessary to execute it on the business group specified in the execution host name. (execution host name = execution-host-name) is output.

#### Cause

No permission is required for executing the command for the business group specified for the execution host name.

#### Corrective action

Review the business group or monitoring group, and then re-execute the command. Note that the information in this message cannot be checked by using the jcocmdshow command of JP1/Base.

If you are still unable to execute the command, contact the system administrator and check the settings of the business group.

In the Execute Command window, the message KAVB0418-E: The command cannot be executed because the user does not have the permissions necessary to execute on the host specified in the execution host name. (execution host name = execution-host-name) is output.

#### Cause

No permission is required for executing the command on the host specified for the execution host name.

#### Corrective action

Review the host and then re-execute the command. Note that the information in this message cannot be checked by using the <code>jcocmdshow</code> command of JP1/Base.

If you are still unable to execute the command, contact the system administrator and check the settings of the business group.

In the Execute Command window, the message KAVB0419-E: The command cannot be executed because a host group is defined with the same name as the host name specified for the execution host name. (execution host name = execution-host-name) is output.

#### Cause

The host group name specified for the destination host name is the same as the execution host name.

#### Corrective action

Confirm that no host group has the same name as the host name specified for the execution host name. If there is such a host group, change either name of the host or of the host group.

In the Execute Command window, the message KAVB0422-E: A host is not defined for the business group or monitoring group. (group name = group-name) is output.

#### Cause

No host is defined for the business group or monitoring group specified for the execution host name.

#### Corrective action

Define a host for the specified business group or monitoring group. Also review the coding of the business group or monitoring group path.

In the Execute Command window, the message KAVB0423-E: The business group or monitoring group is not defined. (group name = group-name) is output.

#### Cause

The business group or monitoring group specified for the execution host name is not defined.

#### Corrective action

Define the specified business group or monitoring group. Also review the coding of the business group or monitoring group path.

In the Execute Command window, the message KAVB2027-E: Cannot execute the command. Failed to simulate the user user-name environment. is output.

#### Cause

The user mapping setting is invalid.

#### Corrective action

Check the user mapping setting. If it is not set, set it. This setting is required in Windows.

When the host specified for the mapping source server name is using DNS, a domain name must be included in the setting. If the host name is correct but the simulation still fails, check whether DNS is being used. For details about the user mapping setting, see the chapter related to user mapping in the *JP1/Base User's Guide*.

In the Execute Command window, the message KAVB2031-E: Cannot execute the command. The host (host-name) is not managed by JP1/Console. is output.

#### Cause

The definition of the configuration definition file is invalid. Alternatively, the executing host name cannot be resolved.

#### Corrective action

- Make sure the configuration information is defined in the configuration definition file.
- Make a correction so that the executing host name can be resolved.
- If this message is output in an environment in which both a physical host and a logical host are started under Windows, the network settings are insufficient. For details, see the section on building both a physical host environment and a logical host environment on the same host, in the notes related to cluster operation (Windows only) in the *JP1/Base User's Guide*.

In the Execute Command window, the message KAVB8452-E: The operation cannot be executed because the reference/operation permission function of the business group changed from active to inactive while logged in. is output.

#### Cause

The reference/operation permission of the business group changed from active to inactive while JP1/IM - View was connected.

#### Corrective action

Restart and log in to JP1/IM - View, and then re-execute the command.

The execution result from the DOS prompt differs from the execution result in the Execute Command window, or it differs from the execution result of an automated action.

#### Cause

The OS user environment used for execution is invalid.

#### Corrective action

Enable the -loaduserprofile option of the jcocmddef command. For details, see 8.4.4(3)(c) Environment for command execution in the JP1/Integrated Management 2 - Manager Overview and System Design Guide. See also the chapter that explains commands in the JP1/Base User's Guide.

When the command is executed from the Preview Command Execution Content window, the message KAVB0002-E is output, and then the command is suspended.

#### Cause

The name of an execution host or an execution command was not specified.

#### Corrective action

Specify an execution host or a command, and then re-execute the command.

When the command is executed from the Preview Command Execution Content window, the message KAVB1037-E is output, and then the command is suspended.

#### Cause

The value specified for the execution host name, execution command, or environment variable file exceeds the upper limit.

#### Corrective action

Correct the value of the item that exceeds the upper limit, and then re-execute the command.

The Execute Command window cannot be started, and the message KAVB1046-E is output.

#### Cause

An I/O error occurred when the configuration file for converting information was read.

#### Corrective action

Make sure that the necessary permission is set for the configuration file for converting information, and then reexecute the command.

If you are still unable to perform the operation, contact the system administrator.

## (6) Actions to take when event information cannot be inherited

The attribute value is not inherited. Furthermore, warning information is displayed in the Preview Command Execution Content window.

#### Cause

The event has no attribute corresponding to the variable.

Alternatively, there is no attribute value corresponding to the variable.

#### Corrective action

Check the specified event and the execution content of the command for which the variable is specified, and reexecute the command.

The event to be inherited is not displayed in the Execute Command window.

#### Cause

The menu or button that was clicked was not one for which events are inherited.

#### Corrective action

Select an event that can be inherited, and then click the menu or button for inheriting it.

A special character in the event inheritance information is not converted. Furthermore, the message KAVB1040-W, KAVB1041-W, KAVB1042-W, KAVB1043-W, or KAVB1044-W is output.

#### Cause

The configuration file for converting information is invalid.

#### Corrective action

Review the configuration file for converting information, and restart the Execute Command window.

All of the characters before cutoff are not displayed in the Preview Command Execution Content window. Furthermore, the message KAVB1036-W is output.

#### Cause

The number of characters before truncation after variables are replaced exceeds the maximum number of characters that can be displayed in the text area in the Preview Command Execution Content window.

#### Corrective action

Review the execution content of the command for which the variables are specified, and then re-execute the command.

## (7) Actions to take when you cannot execute a command from the Command button

The message KAVB1035-E is output, and the command is suspended.

#### Cause

Although the executed command is set to inherit an event, nothing is specified as the event to be inherited.

#### Corrective action

Specify an event to be inherited, and then re-execute the command.

*The message* KAVB0002-E *is output, and the command is suspended.* 

#### Cause

After the event information is inherited, the value of the execution host name or execution command is an empty string.

#### Corrective action

Make sure that the variable names of the items set for the executing command and the event to be inherited are correct, and then re-execute the command.

The message KAVB1037-E is output, and the command is suspended.

#### Cause

After the event information is inherited, the value specified for the execution host name, execution command, or environment variable file exceeds the upper limit.

#### Corrective action

Review the value of the item that exceeds the upper limit, and then re-execute the command.

## (8) Actions to take when you cannot start a client application

In the Execute Command window, the message KAVB1034-E is output, and the command is suspended.

The following are possible causes:

- The path to the command execution file was not found.
- You do not have the necessary permission for executing the command.
- An I/O error occurs when the command process starts.

The following describes the corrective action to take for each case:

The path to the command execution file is not found.

Review the command line and make sure that the command can be executed at the command prompt. Then reexecute the command.

You do not have permissions necessary for executing the command.

Confirm that you have execution permission for the command to be executed and make sure that the command can be executed at the command prompt. Then re-execute the command.

An I/O error occurs when the command process starts.

Make sure that the command to be executed can be executed at the command prompt, and then re-execute the command.

## (9) Actions to take when a command execution log file is damaged

If an operation to write data into a command execution log file is interrupted by, for example, a machine stoppage caused by a power failure, the command execution log file for automated actions or the command execution log file for command execution may be damaged.

In such cases, the following messages are issued:

• In the Action Log Details window of JP1/IM - View, or when the jcashowa command is executed to display the execution result of an automated action, the message KAVB5151-W Failed to get data from Command Executed log file. is displayed as the execution result.

The command execution log file for automated actions may be damaged.

• When the jcocmdlog command is executed, the message KAVB2523-E The command-execution log file for the executed command cannot be opened. is output.

The command execution log file for command execution may be damaged.

• When the jcocmdlog command is executed, the message KAVB2525-E The command-execution log file for the automatic action cannot be opened. is output.

The command execution log file for automated actions may be damaged.

- When the jcocmdlog command is executed, the message KAVB2527-E An attempt to read the command-execution log file has failed. is output.
  - If -act is specified for the option, the command execution log file for automated actions may be damaged.
  - If -window is specified for the option, the command execution log file for command execution may be damaged.
  - If neither -act nor -window is specified for the option, the command execution log file for automated actions or command execution may be damaged.
- The message KAVB2064-E Error in writing execution results to Command execution log. is output to the integrated trace log.

The command execution log file for automated actions or the command execution log file for command execution may be damaged.

If any of these messages is output, use the following procedure to check the status of the command execution log file.

- 1. Use the procedure in (a) below to check the file that may have been damaged.
- 2. If it is not damaged, take the correction action prescribed in each message.
- 3. If it is damaged, restored it using the procedure described in (b).
- 4. If the file cannot be restored using the procedure in (b), follow the procedure in (c) to delete the command execution log file.

#### (a) How to check the command execution log files

Checking the command execution log file for automated actions

• In Windows

From the command prompt, execute the following commands:

 ${\tt cd}\, {\it Base-path} {\tt \log} {\tt \command}$ 

(For a logical host: cd shared-folder\jp1base\log\COMMAND)

Jischk -13 Base-path\log\COMMAND\ACTISAMLOGV8

• In UNIX

Execute the following command:

cd /var/opt/jp1base/log/COMMAND

(For a logical host: cd shared-directory/jp1base/log/COMMAND)

/opt/jp1base/bin/Jischk -13 actisamlogv8

Checking the command execution log file for command execution

In Windows

From the command prompt, execute the following commands:

cd  $Base-path \setminus log \setminus COMMAND$ 

(For a logical host: cd shared-folder\jp1base\log\COMMAND)

Jischk -13 Base-path\log\COMMAND\CMDISAMLOGV8

• In UNIX

Execute the following command:

cd/var/opt/jp1base/log/COMMAND

(For a logical host: cd shared-directory/jp1base/log/COMMAND)

/opt/jp1base/bin/Jischk -13 cmdisamlogv8

If the Jischk command does not detect file invalidity, the command execution log file is not damaged. If the Jischk command detects file invalidity, follow the procedure described in (b) below to restore the command execution log file.

For details about the Jischk command, see the JP1/Base User's Guide.

## (b) How to restore the command execution log files

Restoring the command execution log file for automated actions

• In Windows

Perform the following operations with Administrator permissions. Also, for the restoration operation you need free space that is approximately three times the size of ACTISAMLOGV8.DRF.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. From the command prompt, execute the commands listed below to restore the command execution log file.

For details about the Jiscond command, see the JP1/Base User's Guide.

cd Base-path\log\COMMAND

(For a logical host: cd shared-folder\jp1base\log\COMMAND)

Jiscond ACTISAMLOGV8

4. From the command prompt, execute the following command to check whether the command execution log file has been normally restored:

```
Jischk -13 ACTISAMLOGV8
```

If the Jischk command detects file invalidity, the command execution log file cannot be restored. If the file cannot be restored, follow the procedure described in (c) below to delete the command execution log file for automated actions.

- 5. Start JP1/Base.
- 6. Start JP1/IM Manager.
- In UNIX

Perform the following operations with superuser permissions. Also, for the restoration operation you need free space that is approximately three times the size of actisamlogv8.DAT.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Execute the commands listed below to restore the command execution log file.

For details about the Jiscond command, see the JP1/Base User's Guide.

```
cd/var/opt/jp1base/log/COMMAND
```

(For a logical host: cd shared-directory/jp1base/log/COMMAND)

/opt/jp1base/bin/Jiscond actisamlogv8

4. From the command prompt, execute the following command to check whether the command execution log file has been normally restored:

```
/opt/jp1base/bin/Jischk -13 actisamlogv8
```

If the Jischk command detects file invalidity, the command execution log file cannot be restored. If the file cannot be restored, follow the procedure in (c) to delete the command execution log file for automated actions.

- 5. Start JP1/Base.
- 6. Start JP1/IM Manager.

Restoring the command execution log file for command execution

In Windows

Perform the following operations with Administrator permissions. Also, for the restoration operation you need free space that is approximately three times the size of CMDISAMLOGV8.DRF.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. From the command prompt, execute the commands listed below to restore the command execution log file.

For details about the Jiscond command, see the JP1/Base User's Guide.

```
cd Base-path\log\COMMAND
```

(For a logical host: cd shared-folder \jp1base \log \COMMAND)

Jiscond CMDISAMLOGV8

4. From the command prompt, execute the following command to check whether the command execution log file has been normally restored:

```
Jischk -13 CMDISAMLOGV8
```

If the Jischk command detects file invalidity, the command execution log file cannot be restored. If the file cannot be restored, follow the procedure described in (c) below to delete the command execution log file for command execution.

- 5. Start JP1/Base.
- 6. Start JP1/IM Manager.
- In UNIX

Perform the following operations with superuser permissions. Also, for the restoration operation you need free space that is approximately three times the size of cmdisamlogv8.DAT.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Execute the following command:

cd /var/opt/jp1base/log/COMMAND

(For a logical host: cd shared-directory/jp1base/log/COMMAND)

/opt/jp1base/bin/Jiscond cmdisamlogv8

4. From the command prompt, execute the following command to check whether the command execution log file has been normally restored:

/opt/jp1base/bin/Jischk -13 cmdisamlogv8

If the Jischk command detects file invalidity, the command execution log file cannot be restored. If the file cannot be restored, follow the procedure described in (c) below to delete the command execution log file for command execution.

- 5. Start JP1/Base.
- 6. Start JP1/IM Manager.

### (c) How to delete the command execution log files

Deleting the command execution log file for automated actions

When you delete the command execution log file for automated actions, all history on past automated actions is lost. Therefore, if deletion will cause a problem, back up the files. For details, see *1.2.2 Database backup and recovery*.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Delete the command execution log file.

Delete the files listed in the table below if you could not restore the command execution log file for automated actions. For details about the command execution log file, see the *JP1/Base User's Guide*.

In Windows

Table 11–29: Locations of files to be deleted (Windows)

File name	Location
Command execution log file for automated actions	<ul> <li>Base-path\log\COMMAND\ACTISAMLOGV8.DRF</li> <li>Base-path\log\COMMAND\ACTISAMLOGV8.K01</li> <li>Base-path\log\COMMAND\ACTISAMLOGV8.KDF</li> </ul>
	<ul> <li>shared-folder\jp1base\log\COMMAND\ACTISAMLOGV8.DRF</li> <li>shared-folder\jp1base\log\COMMAND\ACTISAMLOGV8.K01</li> <li>shared-folder\jp1base\log\COMMAND\ACTISAMLOGV8.KDF</li> </ul>
Action information file	Console-path\log\action\actinf.log
	<pre>shared-folder\jp1cons\log\action\actinf.log</pre>
Action host name file	Console-path\log\action\acttxt{1 2}.log
	$shared-folder \neq 1/2$ .log

In UNIX

Table 11–30: Locations of files to be deleted (UNIX)

File name	Location
Command execution log file for automated actions	<ul> <li>/var/opt/jp1base/log/COMMAND/actisamlogv8.DAT</li> <li>/var/opt/jp1base/log/COMMAND/actisamlogv8.K01</li> <li>/var/opt/jp1base/log/COMMAND/actisamlogv8.DEF</li> </ul>
	<ul> <li>shared-directory/jp1base/log/COMMAND/actisamlogv8.DAT</li> <li>shared-directory/jp1base/log/COMMAND/actisamlogv8.K01</li> <li>shared-directory/jp1base/log/COMMAND/actisamlogv8.DEF</li> </ul>
Action information file	/var/opt/jp1cons/log/action/actinf.log
	shared-directory/jplcons/log/action/actinf.log
Action host name file	/var/opt/jp1cons/log/action/acttxt{1 2}.log
	<pre>shared-directory/jp1cons/log/action/acttxt{1 2}.log</pre>

#### 4. Start JP1/Base.

#### 5. Start JP1/IM - Manager.

Deleting the command execution log file for command execution

When you delete the command execution log file for command execution, all history on past command execution is lost. Therefore, if deletion will cause a problem, back up the files. For details, see 1.2.2 Database backup and recovery.

- 1. Stop JP1/IM Manager.
- 2. Stop JP1/Base.
- 3. Delete the command execution log file.

Delete the files listed in the table below if you could not restore the command execution log file for command execution. For details about the command execution log file, see the *JP1/Base User's Guide*. *In Windows* 

Table 11–31: Locations of files to be deleted (Windows)

File name	Location
Command execution log file for command execution	<ul> <li>Base-path\log\COMMAND\CMDISAMLOGV8.DRF</li> <li>Base-path\log\COMMAND\CMDISAMLOGV8.K01</li> <li>Base-path\log\COMMAND\CMDISAMLOGV8.KDF</li> </ul>
	<ul> <li>shared-folder\jp1base\log\COMMAND\CMDISAMLOGV8.DRF</li> <li>shared-folder\jp1base\log\COMMAND\CMDISAMLOGV8.K01</li> <li>shared-folder\jp1base\log\COMMAND\CMDISAMLOGV8.KDF</li> </ul>

#### In UNIX

Table 11-32: Locations of files to be deleted (UNIX)

File name	Location
Command execution log file for command execution	<ul> <li>/var/opt/jp1base/log/COMMAND/cmdisamlogv8.DAT</li> <li>/var/opt/jp1base/log/COMMAND/cmdisamlogv8.K01</li> <li>/var/opt/jp1base/log/COMMAND/cmdisamlogv8.DEF</li> <li>shared-directory/jp1base/log/COMMAND/cmdisamlogv8.DAT</li> </ul>

File name	Location
	• shared-directory/jp1base/log/COMMAND/cmdisamlogv8.K01 • shared-directory/jp1base/log/COMMAND/cmdisamlogv8.DEF

- 4. Start JP1/Base.
- 5. Start JP1/IM Manager.

## (10) Actions to take when Unknown is displayed as the automated action execution status

There may be inconsistencies among the files in which automated action execution results are saved (action information file, action host name file, and command execution log file).

If so, you need to delete the files in which automated action execution results are saved. If you delete these files, you will no longer be able to view past automated action execution results. Therefore, if deletion will cause a problem, back up the files. For details, see 1.2.2 Database backup and recovery.

The deletion procedure follows:

- 1. Stop JP1/IM Manager and then stop JP1/Base.

  In the case of a cluster configuration, operate the cluster software to stop the logical hosts. After you have confirmed that they have stopped, mount a shared disk in the shared directory.
- 2. Delete the action information file, action host name file, and command execution log file. The table below shows the locations of the files to delete.

In Windows

Table 11–33: Locations of files to delete (Windows)

File name	Location
Action information file	Console-path\log\action\actinf.log
	<pre>shared-folder\jp1cons\log\action\actinf.log</pre>
Action host name file	Console-path\log\action\acttxt{1 2}.log
	$shared-folder \neq 12$ .log
Command execution log file	All files under Base-path\log\COMMAND\
	All files under shared-folder\jp1base\log\COMMAND\

In UNIX

Table 11–34: Locations of files to delete (UNIX)

File name	Location
Action information file	/var/opt/jplcons/log/action/actinf.log
	shared-directory/jplcons/log/action/actinf.log
Action host name file	/var/opt/jp1cons/log/action/acttxt{1 2}.log
	<pre>shared-directory/jplcons/log/action/acttxt{1 2}.log</pre>

File name	Location
Command execution log file	All files under /var/opt/jp1base/log/COMMAND/
	All files under shared-directory/jp1base/log/COMMAND/

#### 3. Start JP1/Base and then start JP1/IM - Manager.

In the case of a cluster configuration, unmount the shared disk and then operate the cluster software to start the logical hosts.

## (11) Actions to take when an automated action is delayed

When the automated action status remains Running.

First, use the jcocmdshow command# to check the command status. The action to take differs depending on the result. The possible cause for each obtained result and the action to take in each case are explained below.

There is a command whose command execution lapse time (ETIME) is too long.

#### Cause

A command is executing that does not terminate, or that is taking a long time.

#### Corrective action

Using the jcocmdel command, delete the command that does not terminate. For details, see 8.1.4 Checking command execution status and deleting a command in this manual, and see 8.4.4(6) Commands for troubleshooting in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

The message KAVB2239-E: A network connection with the connected host could not be established. is displayed.

#### Cause

JP1/Base on the executing host stopped while the command was being executed.

#### Corrective action

Restart JP1/Base on the executing host.

As a means of monitoring JP1/Base, the JP1/Base health check function is available. For details, see 8.4.8 JP1/Base health check function in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

There are a large number of commands whose execution status (STATUS) is Q.

#### Cause

The number of automated actions to be executed is too large.

#### Corrective action

Check the automated actions being executed and reassess the following:

- Were any unnecessary automated actions set?
- Is it possible to narrow the JP1 events for which automated actions are to be set?

If there are no unnecessary automated actions, use the <code>jcocmddef</code> command\* to increase the number of commands that can be executed simultaneously. For details, see 13.7.6 Command execution environment in the <code>JP1/Integrated Management 2 - Manager Overview and System Design Guide</code>.

#

For details about the jcocmdshow command, jcocmddel command, and jcocmddef command, see the chapter explaining commands in the *JP1/Base User's Guide*.

## (12) Actions to take when the monitored object database is damaged

Messages such as KAVB7247-E: JP1/IM-CS could not execute the operation request (request-name) from JP1/IM-View. (Cause: The record in the database is invalid). and KAVB7248-E: JP1/IM-CS could not execute the operation request (request-name) from JP1/IM-View. (Cause: The database cannot be operated). are output.

#### Cause

The following is the possible cause:

• Logical conflict has occurred in the monitored object database of JP1/IM - Manager.

#### Corrective action

Take the following steps:

- 1. Stop JP1/IM Manager.
- 2. Collect a backup of the *Scope-path*\database folder for problem investigation.
- 3. Execute the jcsdbsetup -f command.
- 4. Delete all files from the  $Scope-path \setminus atabase \setminus jcshosts$  folder.
- 5. Execute the jcshostsimport -r jcshosts command.
- 6. Start JP1/IM Manager.

## (13) Actions to take when the monitored object database cannot be unlocked

The monitored object database stays locked.

#### Cause

The following is the possible cause:

• An attempt to acquire a lock on the monitored object database of JP1/IM - Manager failed.

#### Corrective action

Take the following steps:

- 1. Execute the jco spmd status command to make sure the jcsmain process is not active.
- 2. Execute the Jismlcktr command.
- 3. Determine which process has locked the files under *Scope-path*\database.
- 4. Execute the Jislckfree -p PID command on the process ID determined in Step 3.

The Jismlcktr and Jislckfree commands are provided by JP1/Base. For details, see the chapter that explains commands in the *JP1/Base User's Guide*.

# (14) Actions to take when KAVB5150-W is displayed in the detailed information (message) for the action result

When the Action Log Details window is opened, the message KAVB5150-W: There is no applicable data in the Command Executed log file. is displayed in the message column.

#### Cause

The command execution log file (ISAM) may have wrapped. If it has wrapped, automated action execution results cannot be displayed.

#### Corrective action

If this phenomenon occurs frequently, consider increasing the upper limit for the record count in the command execution log file. Keep in mind, however, that increasing the record count will also use more disk space.

The procedure follows:

Changing the upper limit for the record count

When you increase the upper limit for the record count, you must delete the command execution log file to enable the new setting. When you delete the command execution log file, all history on past automated actions and command execution is lost. Therefore, if deletion will cause a problem, back up the files. For details, see 1.2.2 Database backup and recovery.

- 1. Execute the jcocmddef command to change the record count in the command execution log file.
- 2. Stop JP1/IM Manager and JP1/Base.

In the case of a cluster configuration, operate the cluster software to stop the logical hosts.

After you have confirmed that they have stopped, mount a shared disk in the shared directory.

3. Delete the command execution log files.

This means all files under the command execution log folder. The default command execution log folder is described below

In Windows

Table 11–35: Locations of command execution log files (Windows)

File name	Location
Command execution log file	All files under Base-path\log\COMMAND\
	All files under shared-folder\jp1base\log\COMMAND\

#### In UNIX

#### Table 11–36: Locations of command execution log files (UNIX)

File name	Location
Command execution log file	All files under /var/opt/jp1base/log/COMMAND/
	All files under shared-directory/jp1base/log/COMMAND/

For details about the command execution log file, see the JP1/Base User's Guide.

4. Start JP1/Base and JP1/IM - Manager.

In the case of a cluster configuration, unmount the shared disk and then operate the cluster software to start the logical hosts.

For details about the jcocmddef command, see the chapter that explains commands in the JP1/Base User's Guide.

# (15) Actions to take when an earlier version of JP1/IM - Manager or JP1/IM - View is being used

The actions to take differ depending on the message that is output.

The message KAVB6060-E: The connection destination server did not respond. is displayed.

#### Cause

The version of JP1/IM - Manager is earlier than the version of JP1/IM - View, or an earlier version of the monitored object database is being used.

#### Corrective action

When the version of JP1/IM - Manager is earlier than the version of JP1/IM - View:

Use the following procedure to upgrade the JP1/IM - Manager version.

- 1. In the Monitoring Tree (Editing) window, choose **File** and then **Save Tree**, and save the edited monitoring tree in the csv file.
- 2. Upgrade JP1/IM Manager to the same version as JP1/IM View.
- 3. In the Monitoring Tree (Editing) window, choose **File** and then **Open Tree**, and load the csv file that was saved.
- 4. In the Monitoring Tree (Editing) window, choose **File** and then **Update Server Tree** to update the server tree.

When the version of JP1/IM - View is the same as the version of JP1/IM - Manager Scope, but an earlier version of the monitored object database is being used:

Follow the procedure below to upgrade the monitored object database version.

- 1. In the Monitoring Tree (Editing) window, choose **File** and then **Save Tree**, and save the edited monitoring tree in the csv file.
- 2. Upgrade the monitored object database version.
- 3. In the Monitoring Tree (Editing) window, choose **File** and then **Open Tree**, and load the csv file that was saved.
- 4. In the Monitoring Tree (Editing) window, choose **File** and then **Update Server Tree** to update the server tree.

For details about upgrading the monitored object database version, see the following sections:

• For a physical host

Windows: 1.18.4(1) Executing the Central Scope upgrade command in the JP1/Integrated Management 2 - Manager Configuration Guide

UNIX: 2.17.6(2) Executing the Central Scope upgrade command in the JP1/Integrated Management 2 - Manager Configuration Guide

· For a logical host

Windows: 7.5 Upgrade installation and setup of logical hosts (for Windows) in the JP1/Integrated Management 2 - Manager Configuration Guide

UNIX: 8.5 Upgrade installation and setup of logical hosts (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide

When the version of JP1/IM - Manager is later than the version of JP1/IM - View, and an earlier version of the monitored object database is being used:

Follow the procedure below to upgrade the JP1/IM - View version.

- 1. In the Monitoring Tree (Editing) window, choose **File** and then **Save Tree**, and save the edited monitoring tree in the csv file.
- 2. Uninstall JP1/IM Manager.
- 3. Delete the JP1/IM Manager installation directory.
- 4. Install the version of JP1/IM Manager or JP1/IM Central Scope that matches the version of JP1/IM View.
- 5. In the Monitoring Tree (Editing) window, choose **File** and then **Open Tree**, and load the csv file that was saved.
- 6. In the Monitoring Tree (Editing) window, choose **File** and then **Update Server Tree** to update the server tree.

- 7. Upgrade JP1/IM Manager to the later version.
- 8. Upgrade JP1/IM View to the same version as JP1/IM Manager.

The message KAVB6046-E: The user (user) does not have permission necessary for operations. is displayed.

#### Cause

The version of JP1/IM - View is earlier than the version of JP1/IM - Manager, or the edited data in JP1/IM - View is from an earlier version.

#### Corrective action

Follow the procedure below to upgrade the version of JP1/IM - View.

- 1. In the Monitoring Tree (Editing) window, choose **File** and then **Save Tree**, and save the edited monitoring tree in the csv file.
- 2. Uninstall JP1/IM Manager.
- 3. Delete the JP1/IM Manager installation directory.
- 4. Install the JP1/IM Manager version that is the same version as JP1/IM View.
- 5. In the Monitoring Tree (Editing) window, choose File and then Open Tree, and load the CSV file that was saved.
- 6. In the Monitoring Tree (Editing) window, choose File and then Update Server Tree to update the server tree.
- 7. Upgrade JP1/IM Manager to the later version.
- 8. Upgrade JP1/IM View to the same version as JP1/IM Manager.

# (16) Actions to take when many JP1 events occurred for which correlation events were generated

If an operation such as system maintenance generates a large number of JP1 events for which correlation events are generated, the correlation event generation process may become overloaded.

The following two methods are available for avoiding this situation:

- Pause the correlation event generation process.
- Stop JP1/IM Manager.

Stop JP1/IM - Manager only if the problem cannot be avoided even after the correlation event generation process has been paused.

Pausing the correlation event generation process

Pause the correlation event generation process, and resume it once the situation has improved.

The procedure follows:

- 1. Execute the jcoeqsstop command to pause correlation event generation processing.
  - Executing the jcoegsstop command places Event Generation Service in standby status. This means that JP1 events generated during this period are not processed.
  - Since the command stops only the processing without actually stopping the service, operations can continue without failover during cluster operation.
- 2. To resume correlation event generation processing, execute the jcoeqsstart command.

#### Stopping JP1/IM - Manager

When you stop JP1/IM - Manager, if the startup option is set to cold, there is no need to perform the procedure described below. Perform it only when the startup option is set to warm.

The procedure follows:

- 1. Edit the correlation event generation system profile (egs\_system.conf) and then change the startup option to cold.
- 2. Restart JP1/IM Manager.
- 3. Edit the correlation event generation system profile (egs\_system.conf) and then change the startup option back to warm.
- 4. Execute the jco spmd reload command to enable the startup option setting.

### (17) Actions to take when correlation events cannot be displayed in JP1/IM - View

The following are possible causes:

- Correlation event generation is not enabled.
- Correlation event generation definition has not been created.
- Correlation events are being filtered.
- The applied correlation event generation definition is damaged.

The action to take in response to each cause is described below.

Correlation event generation is not enabled.

Event Generation Service is an optional function and thus does not start by default. If Event Generation Service is not set to start, execute the <code>jcoimdef</code> command to set up the service to start. Event Generation Service will now start when JP1/IM - Manager is restarted.

To check whether the correlation event generation process is running, first restart JP1/IM - Manager and then execute the jcoegsstatus command to check whether Event Generation Service is in RUNNING status.

A correlation event generation definition has not been created.

Event Generation Service generates correlation events according to the correlation event generation definition. Since the correlation event generation definition is not created by default, correlation events are not generated.

After you have created the correlation event generation definition file, execute the jcoegschange command to apply the correlation event generation definition to Event Generation Service. You can use the jcoegsstatus command to check the correlation event generation definition that has been applied.

Correlation events are being filtered.

Check whether correlation events are not being filtered by an event acquisition filter, a user filter, a severe event filter, or a view filter.

Like normal JP1 events, correlation events are also filtered by an event acquisition filter, a user filter, a severe event filter, and a view filter. Furthermore, events for which no severity level has been defined are filtered by an event acquisition filter (in the default setting).

The applied correlation event generation definition is damaged.

If the message described below is output to the integrated trace log, the correlation event generation definition that was applied to Event Generation Service by the jcoegschange command may have been damaged.

• KAJV2246-E An incorrect definition was detected because the correlation event generation definition storage file is corrupt. (line = line-number, incorrect contents = invalid-content)

If this message is output, execute the jcoegschange command and apply the correlation event generation definition again.

## (18) Actions to take when the JP1/IM - View window cannot be displayed after you log in to JP1/IM - View

After you log in to JP1/IM - View, the JP1/IM - View window is not displayed. The task bar shows the JP1/IM - View task bar button.

#### Cause

When you perform the following operation, the JP1/IM - View window is not displayed after you log in to JP1/IM - View:

• Terminating JP1/IM - View while a screen area was displayed in which JP1/IM - View was not shown because of the virtual window configuration.#

#

This configuration, by having more desktops than the display windows in the memory and by displaying each of the partitioned areas as a single virtual desktop, allows the user to use multiple desktops by switching among the windows.

This configuration is also called a *virtual desktop*.

#### Corrective action

Take one of the following corrective actions:

#### Corrective action 1

- 1. Press the **Alt** + **Tab** keys and select JP1/IM View.
- 2. From the task bar, choose **Cascade Windows** to display all windows in a cascade.
- 3. Change the display positions and sizes of the JP1/IM View and other windows.

#### Corrective action 2

- 1. Press the **Alt** + **Tab** keys and select JP1/IM View.
- 2. From the task bar, choose **Tile Windows Horizontally** to display all windows as horizontal tiles.
- 3. Change the display positions and sizes of the JP1/IM View and other windows.

#### Corrective action 3

- 1. Press the **Alt** + **Tab** keys and select JP1/IM View.
- 2. From the task bar, choose **Tile Windows Vertically** and display all windows as vertical tiles.
- 3. Change the display positions and sizes of the JP1/IM View and other windows.

#### Corrective action 4

- 1. Press the **Alt** + **Tab** keys and select JP1/IM View.
- 2. From the Context menu of JP1/IM View, choose **Move** and then use the cursor key to adjust the position.
- 3. Once you have decoded the position of the displayed window or its frame, press the **Enter** key.

#### Corrective action 5

1. Press the **Alt** + **Tab** keys and select JP1/IM - View.

- 2. From the Context menu of JP1/IM View, choose **Maximize**, and with the window maximized, log out of JP1/IM View.
- 3. After you log in to JP1/IM View again, change the window's display position and size.

## (19) Actions to take when command execution or a batch file executed in an automated action does not terminate normally (Windows only)

#### Cause

If all of the following conditions are present, batch file processing is interrupted and cannot be normally executed.

- The OS of the host specified as the command execution destination is Windows 2000.
- A batch file uses the FOR /F command.
- After the execution of the FOR /F command, the result is output to standard error.

#### Corrective action

Take one of the following corrective actions:

- Do not use the FOR / F command.
- Do not output the result to standard error after execution of the FOR /F command.

### (20) Actions to take when an additional common exclusion-condition cannot be set

The message KAVB1155-E is output, and the additional common exclusion-condition cannot be registered.

#### Cause

The number of defined common exclusion-conditions had already reached the maximum number when an attempt was made to display the Common Exclusion-Condition Settings (Extended) window from the **Exclude by Common Exclusion-Conditions** menu, or to register the additional common exclusion-condition.

#### Corrective action

Delete unnecessary common exclusion-conditions groups.

The message KAVB1163-E is output, and the additional common exclusion-condition cannot be registered.

#### Cause

The following are possible causes:

- The event acquisition filter is operating in compatibility mode, or the common exclusion-conditions are operating in basic mode.
- The definition file is invalid.
- An attempt to switch the event acquisition filter failed.

#### Corrective action

Take the corrective action that matches the cause.

- If the common exclusion-conditions of JP1/IM Manager do not operate in extended mode, check the operating mode of the common exclusion-conditions of JP1/IM Manager and change the mode to extended mode. Then restart JP1/IM View and retry the operation.
- Stop JP1/IM Manager, change the operating mode of the common exclusion-conditions to basic mode. Next, change the mode back to extended mode and then initialize the definition of the common exclusion-conditions (extended).

• Confirm that the KAVB4003-I message is output to an integrated trace log of the manager, and then retry the operation. If the KAVB4003-I message has not been output and the integrated management database is being used, execute the jimdbstatus command to check the status of the IM database service. Confirm that the IM database service is running, confirm that the KAVB4003-I message has been output to an integrated trace log, and then retry the operation.

For other causes, check whether OS resources, such as file descriptors, are insufficient.

• For Windows: Windows event log

• For UNIX: Syslog

If OS resources are sufficient, use the data collection tool to collect data and then contact the system administrator.

The message KAVB1157-E is output, and the additional common exclusion-condition cannot be registered.

#### Cause

The filter of the common exclusion-conditions had already reached the maximum size when an attempt was made to display the Common Exclusion-Condition Settings (Extended) window from the **Exclude by Common Exclusion-Conditions** menu, or to register the additional common exclusion-condition.

#### Corrective action

Delete unnecessary common exclusion-conditions groups, or define the common exclusion-conditions groups so that they are within the maximum size of the filter.

The message KAVB0256-E is output, and the additional common exclusion-condition cannot be registered.

#### Cause

The specified common exclusion-conditions group name already existed when an attempt was made to register the additional common exclusion-condition.

#### Corrective action

Specify a different common exclusion-conditions group name, and then retry the operation.

The message KAVB1153-E is output in a log, and the attribute conditions set in the common-exclusion-conditions auto-input definition file are not automatically displayed in Event conditions when you display the Common Exclusion-Condition Settings (Extended) window from the Exclude by Common Exclusion-Conditions menu.

#### Cause

The common-exclusion-conditions auto-input definition file does not exist.

#### Corrective action

Make sure that:

- There is a common-exclusion-conditions auto-input definition file.
- You have permission to access the common-exclusion-conditions auto-input definition file.

Next, execute the jco\_spmd\_reload command or restart JP1/IM - Manager to reload the common-exclusion-conditions auto-input definition file.

The message KAVB1154-W is output in a log, and the automatically-specified conditions are not displayed in Event conditions when you display the Common Exclusion-Condition Settings (Extended) window from the Exclude by Common Exclusion-Conditions menu.

#### Cause

An attempt to read the common-exclusion-conditions auto-input definition file failed.

#### Corrective action

Check whether OS resources are insufficient.

• For Windows: Windows event log

• For UNIX: Syslog

If OS resources are sufficient, use the data collection tool to collect data, and then contact the system administrator.

The message KAVB1158-W is output in a log, and the automatically-specified conditions are not displayed in Event conditions when you display the Common Exclusion-Condition Settings (Extended) window from the Exclude by Common Exclusion-Conditions menu.

#### Cause

The common-exclusion-conditions auto-input definition file contains no definitions.

#### Corrective action

Set an attribute name in the common-exclusion-conditions auto-input definition file, and then either execute the  $jco\_spmd\_reload$  command or restart JP1/IM - Manager to reload the common-exclusion-conditions auto-input definition file.

The message KAVB1159-W or KAVB1160-W is output in a log, and the automatically-specified conditions are not displayed in Event conditions when you display the Common Exclusion-Condition Settings (Extended) window from the Exclude by Common Exclusion-Conditions menu.

#### Cause

The following are possible causes:

- An invalid attribute name is defined in the common-exclusion-conditions auto-input definition file.
- Duplicate attribute names are defined in the common-exclusion-conditions auto-input definition file.

#### Corrective action

Define a valid attribute name in the common-exclusion-conditions auto-input definition file, and then either execute the  $jco\_spmd\_reload$  command or restart JP1/IM - Manager to reload the common-exclusion-conditions auto-input definition file.

The message KAVB1161-W is output in a log, and the whole of Common exclusion-conditions group name in the Common Exclusion-Condition Settings (Extended) window is not displayed.

#### Cause

The common exclusion-conditions group name defined in the common-exclusion-conditions auto-input definition file exceeds 40 bytes.

#### Corrective action

Define the common exclusion-conditions group name in the common-exclusion-conditions auto-input definition file with no more than 40 bytes, and then either execute the jco\_spmd\_reload command or restart JP1/IM - Manager to reload the common-exclusion-conditions auto-input definition file.

The message KAVB1162-W is output in a log, and Common exclusion-conditions group name in the Common Exclusion-Condition Settings (Extended) window is displayed incorrectly.

#### Cause

A character that cannot be used in a common exclusion-conditions group name in the common-exclusion-conditions auto-input definition file was used.

#### Corrective action

Correct the common exclusion-conditions group name in the common-exclusion-conditions auto-input definition file, and then either execute the  $jco\_spmd\_reload$  command or restart JP1/IM - Manager to reload the common-exclusion-conditions auto-input definition file.

# (21) Actions to take when processing of JP1 events received by JP1/IM - Manager (Central Scope) is delayed

#### Cause

Name resolution of the character string (host name or IP address) specified as an attribute value of the individual condition in the status-change condition settings may have failed.

#### Corrective action

The host name that could not be resolved is output to the following logs:

In Windows

```
Scope-path \log jcsmain\_trace{1|2|3}.log^{\#}
```

In UNIX

```
/var/opt/jp1scope/log/jcsmain_trace{1|2|3}.log#
```

#

Do not specify this log as the monitoring target of the JP1/Base log file trapping function.

If name resolution failed, one of the following messages is output in the aforementioned log file:

```
... \texttt{fs\_jcsHostsAccessPtr-} \\ \texttt{getHostByName()} \text{ is failed. (host} = \textit{host-name-for-which-name-resolution-failed,} \\ \texttt{jplerror} = \texttt{2001)} \dots
```

Of

...fs\_jcsHostsAccessPtr->getHostByAddr() is failed. (host = *IP-address-for-which-name-resolution-failed*, jplerror = 2001)...

Check one of these messages and specify **Host name comparison** as the individual condition. Then, use one of the methods described below to enable name resolution of the host name or IP address specified as the attribute value.

- Register in the host information database the host name or IP address specified as the attribute value of the individual condition.
- Register in the jplhosts information or the jplhosts2 information of JPl/Base the host name or IP address specified as the attribute value of the individual condition.
- Register in hosts or DNS the host name or IP address specified as the attribute value of the individual condition.

### (22) Actions to take when no response-waiting events are displayed in JP1/IM - View

#### Cause

The following are possible causes:

- The response-waiting event management function is disabled.

  OFF might be specified as the value of the -resevent option of the jcoimdef command.
- No response-waiting events have been issued.
- Response-waiting events have been issued but were filtered by JP1/IM Manager.

#### Corrective action

If the response-waiting event management function is disabled, enable it by executing the jcoimdef command with ON specified in the -resevent option.

If the response-waiting event management function is enabled, follow the steps below to identify the cause of the problem:

1. Check whether response-waiting events are registered in the event database on the JP1/IM - Manager host.

As a JP1 user such as the administrator who is not subject to an event receiver filter, check whether response-waiting events are registered in the event database by conducting an event search.

If there are no response-waiting events registered in the database, investigate further according to Step 2 below. If there are response-waiting events in the database, a filter (an event acquisition filter or an event receiver filter) is filtering the events in JP1/IM - Manager. In this case, review the filter conditions.

2. Check the log files on the BJEX or JP1/AS host for BJEX errors, JP1/AS errors, or communication errors. If an error message was output, take action as described in the message. BJEX or JP1/AS might have been set up incorrectly, or a communication error might have occurred.

# (23) Actions to take when response-waiting events are displayed in JP1/IM - View but as ordinary JP1 events (the arrow icon does not appear and you cannot enter a response)

#### Cause

The following are possible causes:

- The response-waiting event management function is disabled.

  OFF might be specified as the value of the -resevent option of the jcoimdef command.
- The JP1/IM Manager host name is specified incorrectly in the BJEX or JP1/AS configuration. An IP address might be specified instead of a host name.
- The response-waiting event was forwarded to a JP1/IM Manager host other than the one set up in BJEX or JP1/AS.

#### Corrective action

Take the corrective action that matches the cause.

- Enable the response-waiting event management function.

  Execute the jcoimdef command with ON specified in the -resevent option.
- Specify the correct JP1/IM Manager host name in the settings of BJEX or JP1/AS.
- To respond to the response-waiting event, log in to the JP1/IM Manager host specified in the BJEX or JP1/AS settings.

### (24) Actions to take when no JP1 event is displayed in the Event Console window

#### Cause

Because no condition is specified in the exclusion-conditions or valid common exclusion-conditions for a filter, all JP1 events are excluded.

#### Corrective action

When a common exclusion-condition is used in extended mode, check the common exclusion history file to know whether a common exclusion-condition prevents JP1 events from being collected. If JP1 events are excluded, review the common exclusion-condition.

When no common exclusion-condition is used in extended mode or when the problem remains after you review common exclusion-conditions in extended mode, review the following filter exclusion conditions and common exclusion-conditions enabled in basic mode:

- Event acquisition filter
- User filter

- · Severe event filter
- · View filter

### (25) Actions to take when a JP1 event is displayed late in the Event Console window

#### Cause

The following are possible causes:

• When regular expressions are used for event conditions (filter conditions<sup>#</sup>, execution conditions for automated actions, event attribute conditions of the correlation event generation conditions, event conditions of the severity changing function, and event conditions of the mapping function of the event source host), the match processing when JP1 events are received might take a long time.

#

Indicates the pass conditions, exclusion-conditions, or valid common exclusion-conditions for the following filters:

- Event acquisition filter
- User filter
- Severe event filter
- When you set local as the method for obtaining the event-issuing host name in the automated action environment definition, reverse lookup of the host name from the source IP address of the event attributes might take a long time during the match processing of an automated action.
- When Central Scope is used, it might take a long time for JP1 events to be displayed in the Event Console window due to a possible failure to resolve the character string (host name or IP address) specified as an attribute value of the individual condition in the status-change condition settings, or due to the status change condition of the monitoring node.
- The server parameter might be set incorrectly in the API settings file (api), which might cause frequent communication errors while JP1/IM Manager events are received due to a shortage of ports.

#### Corrective action

Take the corrective action that matches the cause.

• When regular expressions are used for event conditions (filter conditions<sup>#</sup>, execution conditions for automated actions, event attribute conditions of correlation event generation conditions, event conditions of the severity changing function, and event conditions of the mapping function of the event source host), review the regular expressions and then restart JP1/IM - Manager. In addition, if you are using Central Scope and you use the status change condition of the monitoring node as an event condition, also review the regular expressions, and then restart JP1/IM - Manager.

#

Indicates the pass conditions, exclusion-conditions, or valid common exclusion-conditions for the following filters:

- Event acquisition filter
- User filter
- Severe event filter

If you use many regular expressions that are matched recursively, such as the expression .\*(matches all characters), the match processing might take a long time. For details, see *Appendix G.4 Tips on using regular expressions* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

• When you set local as the method for obtaining the event-issuing host name in the automated action environment definition, the host name is resolved from the source IP address of the event attributes. In order to

shorten the time for reverse lookup of the host name, review the settings of the hosts file of the OS, or change the method of the event-issuing host name to remote, and then restart JP1/IM - Manager. For details about the method for obtaining the event-issuing host name, see *Automated action environment definition file* (action.conf.update) in Chapter 2. Definition Files of the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference. For details about the hosts setting of the OS, see 13.4.1 Host names and IP addresses in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

- When you use JP1/IM Central Scope, in addition to the actions above, confirm whether name resolution of the character string (host name or IP address) specified as an attribute value of the individual condition in the statuschange condition settings can be performed promptly. For details, see 11.5.1(21) Actions to take when processing of JP1 events received by JP1/IM Manager (Central Scope) is delayed.
  - Furthermore, if you use the memory-resident function for the status change condition of the monitoring object, the match processing time for a change of monitoring object status takes less time. When you estimate the memory requirements for securing sufficient memory, we recommend that you set this function. For details about the memory-resident function for the status change condition of the monitoring object, see 5.2.3 Status change conditions in the JP1/Integrated Management 2 Manager Overview and System Design Guide.
- If the communication type of the server parameter is set to close in the API settings file (api), a temporary port is used each time JP1/IM Manager receives an event, so temporary ports will run short. As a result, a communication error or delay in receiving events might occur. On the event server to which JP1/IM Manager connects, in the API settings file (api), make sure that you set the communication type of the server parameter to keep-alive.

### (26) Actions to take when a status cannot be changed

The following are possible causes:

- Connection cannot be established between the event console and Central Console. Alternatively, connection cannot be established between the event console and the jcochstat command.
- The specified JP1 event was an event that cannot be changed.
- Connection cannot be established between Event Console Service and Event Service.
- Connection cannot be established between Event Console Service and Event Base Service.
- Connection cannot be established between Event Base Service and the IM database service.

The action to take in response to each cause is described below.

Connection cannot be established between the event console and Central Console. Alternatively, connection cannot be established between the event console and the jcochstat command.

The event console on the manager may not have been started, the system (host or network) may be under a heavy workload, or the network settings may be invalid.

· Corrective action

Execute the jco\_spmd\_status command to check whether the event console on the manager has started, and then try to change the status again.

Alternatively, use the ping command, for example, to check whether the logged-in host is running normally, and then try to change the status again.

The specified JP1 event was an event that cannot be changed.

Corrective action

Reassess the serial number inside the event database and then try to change the status again.

Connection cannot be established between Event Console Service and Event Service.

· Corrective action

Check whether Event Service has started, and then try to change the status again.

Connection cannot be established between Event Console Service and Event Base Service.

Event Base Service may not have been started, or the system (host or network) may be under a heavy workload.

Corrective action

Execute the jco\_spmd\_status command to check whether Event Base Service on the manager has started, and then try to change the status again.

Connection cannot be established between the Event Base Service and the IM database service.

The IM database service may not have been started, or the system (host or network) may be under a heavy workload.

Corrective action

First start the IM database service, and then try to change the status again.

### (27) Actions to take when an event search cannot be performed

The following are possible causes:

- Connection cannot be established between the event console and the viewer.
- Connection cannot be established between Event Base Service and Event Console Service.
- Connection cannot be established between Event Base Service and the integrated monitoring database.
- Connection cannot be established between Event Console Service and Event Service.
- A JP1 event search was performed using an unsupported condition.
- The regular expression specified for performing the event search was invalid.
- When an event search was performed with an exclusion-condition specified, the JP1/Base version of the search host was 08-11 or earlier.

The action to take in response to each cause is described below.

Connection cannot be established between the event console and the viewer.

The event console on the manager may not have been started, the system (host or network) may be under a heavy workload, or the network settings may be invalid.

Corrective action

Execute the jco\_spmd\_status command to check whether the event console on the manager has started, and then perform the event search again.

Alternatively, use the ping command, for example, to check whether the logged-in host is running normally, and then perform the event search again.

Connection cannot be established between Event Base Service and Event Console Service.

Event Base Service may not have been started, or the system (host or network) may be under a heavy workload.

Corrective action

Execute the jco\_spmd\_status command to check whether Event Base Service has started on the manager, and then perform the event search again.

Connection cannot be established between Event Base Service and the integrated monitoring database.

The integrated monitoring database may not have been started, or the system (host or network) may be under a heavy workload.

#### Corrective action

First start the integrated monitoring database, and then perform the event search again.

Connection cannot be established between Event Console Service and Event Service.

The Event Service instance at the target host may not have been started, the system (host or network) may be under a heavy workload, or the network settings may be invalid.

#### • Corrective action

Execute the jevstat command to check whether the Event Service instance at the target host has started, and then perform the event search again. For details about the jevstat command, see the *JP1/Base User's Guide*.

Alternatively, use the ping command or other means on the manager host to check whether the target host is running normally, and then perform the event search again.

#### A JP1 event search was performed using an unsupported condition.

A JP1 event search was performed using an unsupported condition (**Is contained**, **Is not contained**, **Regular expression**, or multiple statuses specified) for Event Service of JP1/Base Version 06-00 or earlier. Alternatively, a JP1 event search was performed using an unsupported condition (**Regular expression** specified) for Event Service of JP1/Base Version 06-51 or earlier.

#### Corrective action

Make sure that **Is contained**, **Is not contained**, **Regular expression**, or multiple statuses are not selected, and then perform the search again.

The regular expression specified for performing the event search was invalid.

#### • Corrective action

Make sure the displayed regular expression is valid, and then re-execute the search.

When an event search was executed with an exclusion-condition specified, and the JP1/Base version of the target host was 08-11 or earlier.

#### Corrective action

Check the version of JP1/Base on the host that is specified as the event search target, and if it is 08-11 or earlier, execute the search without using an exclusion-condition.

### (28) Actions to take when memo entries cannot be set up

The following are possible causes:

- Connection cannot be established between the event console and Central Console View.
- Connection cannot be established between Event Console Service and Event Base Service.
- Connection cannot be established between Event Base Service and the integrated monitoring database.

The action to take in response to each cause is described below.

Connection cannot be established between the event console and Central Console - View.

The event console on the manager may not have been started, the system (host or network) may be under a heavy workload, or the network settings may be invalid.

#### • Corrective action

Make sure that Event Console Service or the host is running normally, and then set up memory entries.

Execute the jco\_spmd\_status command to check whether the event console on the manager has started, and then set up memory entries again.

Alternatively, use the ping command, for example, to check whether the logged-in host is running normally, and then set up memory entries again.

Connection cannot be established between Event Console Service and Event Base Service.

Event Base Service may not have been started, or the system (host or network) may be under a heavy workload.

Corrective action

Execute the jco\_spmd\_status command to check whether Event Base Service on the manager has started, and then set up memory entries again.

Connection cannot be established between Event Base Service and the integrated monitoring database.

The integrated monitoring database may not have been started, or the system (host or network) may be under a heavy workload.

• Corrective action

After starting the integrated monitoring database, set up memory entries again.

### (29) Actions to take when the IM database cannot be terminated

Cause

There is a JP1/IM - Manager process that is currently connected.

Corrective action

Check whether JP1/IM - Manager is running. If it is, terminate it first and then terminate the IM database.

### (30) Actions to take when you cannot connect to the IM database

The following are possible causes:

- The system is not set up to use the IM database.
- The IM database has not been started.
- The port number setting is invalid.
- When a logical host in a non-cluster system was set up, standby was specified for the -c option of the jcfdbsetup or jcodbsetup command.

The action to take in response to each cause is described below.

The system is not set up to use the IM database.

· Corrective action

Execute the jcoimdef command without specifying any option, and check whether S\_DB is set to ON. For details about the jcoimdef command, see *jcoimdef* (in *Chapter 1. Commands*) in the manual *JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.* 

The IM database has not been started.

• Corrective action

Make sure that the IM database has been started.

The port number setting is invalid.

· Corrective action

Make sure that the specified port number is not the same as any of the following port numbers:

- •Port number specified during the setup of another logical host
- •Port number described in the services file
- •Port number that is used by a HiRDB instance bundled with another product
- •Temporary port number that is used by another product or by the OS, for example

When a logical host in a non-cluster system was set up, standby was specified for the -c option of the jcfdbsetup or jcodbsetup command.

· Corrective action

When setting up a logical host of a non-cluster system, specify online for the -c option of the jcfdbsetup or jcodbsetup command.

### (31) Actions to take when JP1/IM - Manager cannot be uninstalled

The message KAVB9940-E: Unsetup has not been performed for the IM database service on the physical host. or KAVB9941-E: Unsetup has not been performed for the IM database service on the logical host. (Logical host name: logical-host-name) is output.

#### Cause

The IM database has not been unset up.

#### Corrective action

Make sure that the integrated monitoring database and the IM Configuration Management database have been unset up.

### (32) Actions to take when an error message indicating an invalid port number is issued after the IM database has been set up

The message KNAN11044-E: The setup information file does not exist. is output.

#### Cause

The specified port number is the same as a port number being used elsewhere.

#### Corrective action

Make sure that the specified port number is not the same as any of the following port numbers:

- Port number specified during the setup of another logical host
- Port number described in the services file
- Port number that is used by a HiRDB instance bundled with another product
- Temporary port number that is used by another product or the OS, for example

### (33) Actions to take when IM database setup fails

The message KNAN11084-E: Creation of a database file system area has failed. is output.

The following are possible causes:

- The file system in the path specified in IMDBDIR or SHAREDBDIR does not support large files.
- The kernel parameters have not been set correctly.
- The host name specified in LOGICALHOSTNAME or ONLINEHOSTNAME is invalid.

The action to take in response to each cause is described below.

The file system in the path specified in IMDBDIR or SHAREDBDIR does not support large files.

• Corrective action

In the target OS, enable the large file setting.

The kernel parameters have not been set correctly.

• Corrective action

Make sure that the kernel parameters have been set correctly. For details about kernel parameters, see the JP1/IM - Manager release notes.

The host name specified in LOGICALHOSTNAME or ONLINEHOSTNAME is invalid.

- Corrective action
  - Check the following items:
- Is the host name specified in LOGICALHOSTNAME or ONLINEHOSTNAME appropriate?
- Is the host name specified in the -h option of database-related commands appropriate?
- Is the host name specified in the hosts file described? Are there any duplicate host names?
- Is the IP address corresponding to the specified host name appropriate? Are there any duplicate IP addresses?

## (34) Actions to take when the setup information file is output as invalid during IM database setup

One of the following messages is output:

- KNAN11030-E A required key is not specified in the setup information file. (key = itemname)
- KNAN11038-EA key specified in the setup information file is invalid. (key = item-name)
- KNAN11047-EA key name specified in the setup information file is invalid. (key = itemname)
- KNAN11048-E A key name specified in the setup information file is duplicated. (key = item-name)

The following are possible causes:

- A required item or value is not specified.
- The character string specified for the item name is invalid.
- An invalid value is specified.
- An unnecessary space is inserted before or after the equal sign (=).

The action to take in response to each cause is described below.

A required item or value is not specified.

Corrective action

Check the setup information file and the cluster information file, and specify all required items.

The character string specified for the item name is invalid.

· Corrective action

Check the setup information file and the cluster information file, and specify all required items.

An invalid value is specified.

· Corrective action

Check the specified value and correct it if necessary.

An unnecessary space is inserted before or after the equal sign (=).

· Corrective action

Check whether there is a space before or after the equal sign (=) and delete it if present.

### (35) Actions to take when the IM database cannot be started or databaserelated commands cannot be executed

When executing a database-related command, the message KNAN11037-E: The data storage directory of the IM database service cannot be accessed. or KNAN11143-E: Configuration of the IM database service is invalid. is output.

The following are possible causes:

- In UNIX, the IM database installation directory or data storage directory has been unmounted.
- The host name has been changed.
- The IM database is using a port number that is being used by another product.

The action to take in response to each cause is described below.

In UNIX, the IM database installation directory or data storage directory has been unmounted.

Corrective action

Check whether you can access the directory. If you cannot, mount the directory.

The host name has been changed.

· Corrective action

Restore the host name to the previous name, and then change the host name by following the host name change procedure for the IM database.

The IM database is using a port number that is being used by another product.

· Corrective action

Make sure that the specified port number is not the same as any of the following port numbers:

- Port number specified during the setup of another logical host
- Port number described in the services file
- Port number that is used by a HiRDB instance bundled with another product
- Temporary port number that is used by another product or by the OS, for example

# (36) Actions to take when IM Configuration Management fails to apply the system hierarchy

#### Cause

The following are possible causes:

- JP1/Base is not running on the following hosts on which the system hierarchy is to be applied.
  - · Batch distribution method
  - All hosts included in the system hierarchy
  - Differential distribution method
  - Hosts whose system hierarchy is to be changed and their higher-level manager hosts
- The host onto which the system hierarchy is to be applied is already included in another system hierarchy.

• Name resolution cannot occur among the integrated manager, relay manager, and agent.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that JP1/Base is running on the following hosts for which a system hierarchy could not be applied, and then retry the operation.
  - Batch distribution method
  - All hosts included in the system hierarchy
  - · Differential distribution method
  - Hosts whose system hierarchy is to be changed and their higher-level manager hosts
- Execute the jbsrt\_get command on the host for which system hierarchy application failed, and then check whether the host is included in another system hierarchy. If the host is included in another system hierarchy, delete it from that system hierarchy, apply the desired system hierarchy, and then re-execute the command.
- Check whether host name resolution among various hosts was successful. If it was unsuccessful, change the settings so that name resolution can take place, and then retry the operation.

### (37) Actions to take when IM Configuration Management fails to collect the operation definition file for the log file trap

#### Cause

The action definition file for a log file trap must be unique within the agent. Multiple log file traps may have been started using the same settings file, or multiple log file traps may have been started using action definition files that have the same name but are in different directories.

#### Corrective action

Follow the steps described below.

- 1. On the agent, stop the log file trap.
- 2. Set up the action definition file for a log file trap such that it has a unique name within the agent, and then restart the log file trapping function.
- 3. In the Display/Edit Profiles window of IM Configuration Management View, from the **Operation** menu, choose **Rebuild Profile Tree** to rebuild the profile tree.

### (38) Actions to take when JP1/IM - View cannot display any of the log file traps that are active

#### Cause

The following are possible causes:

- After the log file trapping function was started, the profile tree was not rebuilt.

  The log file trap may have been started or restarted after the Display/Edit Profiles window was started, after the profile tree was rebuilt, or after batch collection of profiles was executed.
- The action definition file specified during startup of the log file trap is not found under *JP1-Base-path*\conf.

#### Corrective action

Take the corrective action that matches the cause.

• You need to collect the latest profile list. In the Display/Edit Profiles window of IM Configuration Management - View, from the **Operation** menu, choose **Rebuild Profile Tree** to rebuild the profile tree.

• Place the action definition file for the log file trap under *JP1-Base-path*\conf, and then restart the log file trapping function.

After the log file trap is started, in the Display/Edit Profiles window of IM Configuration Management - View, from the **Operation** menu, choose **Rebuild Profile Tree** to rebuild the profile tree.

### (39) Actions to take when the content of the profile settings file does not match the content of the valid configuration information

#### Cause

The following are possible causes:

- After the settings file was edited, the edited content was not applied or the application operation failed.
- Part of the description of the settings file is invalid.

If part of the description of the settings file is invalid, the agent sometimes skips the invalid description when it applies the settings file. In this case, if you perform an application operation from IM Configuration Management - View, an error dialog box opens.

#### Corrective action

Take the corrective action that matches the cause.

- In the Display/Edit Profiles window of IM Configuration Management View, verify the content of the settings file, and then execute profile application and make sure that the application operation terminates normally.
- If application of the settings file fails, services may not operate according to the description in the settings file. Correct the description errors and then retry the operation.

# (40) Actions to take when menu items such as Register Host and Edit Agent Configuration are disabled in IM Configuration Management - View

#### Cause

Because the JP1 user who logged in to IM Configuration Management - View is not assigned IM Configuration Management permissions (JP1\_CF\_Admin, JP1\_CF\_Manager, or JP1\_CF\_User), the only operation that is allowed is viewing. The following are possible causes:

- The instance of JP1/Base specified in the authentication server is Version 8 or earlier.
- After the instance of JP1/Base specified in the authentication server was upgraded from Version 8 or earlier by means of overwrite installation, the JP1 user was not assigned IM Configuration Management permissions (JP1\_CF\_Admin, JP1\_CF\_Manager, or JP1\_CF\_User).
- The JP1 user is not assigned IM Configuration Management permissions (JP1\_CF\_Admin, JP1\_CF\_Manager, or JP1\_CF\_User).

#### Corrective action

Take the corrective action that matches the cause.

- Upgrade the instance of JP1/Base specified on the authentication server to version 9 or later.
- Set JP1\_Console for the JP1 resource group name of the JP1 user that logs in, assign one of the IM Configuration Management permissions (JP1\_CF\_Admin, JP1\_CF\_Manager, or JP1\_CF\_User) to the JP1 user, and then have the user log in again.

The scope of a menu's operations differs according to the permission levels of IM Configuration Management. For details, see *Appendix E.4 Operating permissions required for IM Configuration Management* in the *JP1/Integrated Management 2 - Manager Overview and System Design Guide*.

# (41) Actions to take when virtualization system configuration cannot be obtained in IM Configuration Management

The message KNAN22062-E: Collection of the virtualization configuration failed for the host "host-name" because the communication type is not supported. is output.

#### Cause

The following are possible causes:

- The destination host name is different from the intended one.
- The name of the destination host has not been resolved.
- The destination host is not running.
- vCenter, JP1/SC/CM, SCVMM, HCSM, or KVM has not been started or set up on the destination host.
- Communication with the destination host failed.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that the destination host name is correct.
- Make sure that the destination host is running.
- Make sure that vCenter, JP1/SC/CM, SCVMM, HCSM, or KVM has been started and set up on the destination host.
- Make sure that there are no communication problems with the destination host. If the destination VMM host is a KVM, make sure that the SSH connection is set up correctly.

# (42) Actions to take when valid configuration information of a remote monitoring log file trap or a remote monitoring event log trap cannot be viewed in IM Configuration Management

The message KNAN22422-E: Collection of operation definition information for Log File Trapping failed. (Detail information: A required service or process is not running.) or KNAN22422-E Collection of operation definition information for Event Log Trapping failed. (Detail information: A required service or process is not running.) is output.

#### Cause

The following are possible causes:

- Because of an error while the remote monitoring log file trap was running, the remote monitoring log file trap stopped.
- Because of an error while the remote monitoring event log trap was running, the remote monitoring event log trap stopped.

#### Corrective action

A description of the error occurring while the remote monitoring log file trap or the remote monitoring event log trap is running is output to the integrated log. See the corrective action for the error message output to the integrated log and remove the cause of the error. After correcting the error, stop the remote monitoring log file trap or the remote monitoring event log trap and then restart it.

# (43) Actions to take if JP1 events are not received even when the remote monitoring log file trap is running in IM Configuration Management

#### Cause

The following are possible causes:

- The specification of the filter (filter to end-filter) in the remote-monitoring log file trap action-definition file is incorrect.
- Because the monitoring interval of the remote monitoring log file trap is long, differences occurring in log files have not been monitored.
- Although the remotely monitored host or monitored log file is invalid, an error does not occur because, on the Valid Configuration Information page in the Display/Edit Profiles window, you selected the sequence Log File Trapping Startup Options and then enabled Retry specification for opening a log file [-r] or because you executed the jcfallogstart command with the -r option specified.
- Because the filter specification of the startup option for the remote monitoring log file trap is incorrect, the monitored log file data was not transferred from the monitored host.

#### Corrective action

- Check whether the specification of the filter (filter to end-filter) in the remote-monitoring log file trap action-definition file is correct.
- Check whether JP1 events still cannot be received even when a time greater than the file monitoring interval specified by the -t option of the jcfallogstart command has passed.
- If the remotely monitored host is a Windows host, check whether the NetBIOS (NetBIOS over TCP/IP) settings for monitoring logs on the remotely monitored host are correct. For details about NetBIOS (NetBIOS over TCP/IP), see 1.17.2 NetBIOS settings (NetBIOS over TCP/IP) (for Windows) in the JP1/Integrated Management 2 Manager Configuration Guide.
- If the remotely monitored host is UNIX, check whether the SSH settings for monitoring logs on the remotely monitored host are correct. For details about SSH settings, see 2.16.1 Configuring SSH (for UNIX) in the JP1/Integrated Management 2 Manager Configuration Guide.
- Make sure that the monitored log file is in a readable state.
- When the stty, tty, tset, or script command, which requires interactive operation, is coded in the login script of an SSH-connection user, log files might not be able to be read. In such cases, create a new SSH-connection user for remote monitoring, or change the login script of the SSH-connection user so that these commands are not executed.
- Check whether the filter specification of the startup option for the remote monitoring log file trap is correct. If the filter specification is correct, check whether users who use SSH connection on the remotely monitored host can execute the following command:

#### For Linux:

/bin/grep -E 'regular-expression-character-string-specified-in-filter' path-to-monitored-log-file For Solaris:

 $/ \verb|usr/xpg4/bin/grep-E| regular-expression-character-string-specified-in-filter| path-to-monitored-log-file$ 

For OSs other than Linux and Solaris:

/usr/bin/grep -E 'regular-expression-character-string-specified-in-filter' path-to-monitored-log-file Furthermore, check whether the data in a monitored log file is excluded because of the filter specification.

• If you specify -r as an additional option, check the items listed below.

See 11.5.1(50) Actions to take when the remote monitored log file name is incorrect, and then check whether the path is specified correctly.

- •Make sure that the file access permission is set correctly.
- •Operation of the log file trap without the -r option is effective when you check for errors.
- If none of the above actions resolves the problem, use the data collection tool to collect data on the JP1/IM Manager host and the monitored host. The following table shows data that needs to be collected on the monitored host.

OS on monitored host	Data to be collected	Method
Windows	System information	<ol> <li>Choose Run from the start menu.</li> <li>Enter msinfo32 in the text box and then click the OK button.</li> <li>In the System Information window, select File and then Export to save the system information to a text file.</li> </ol>
	Monitored log file	If there are multiple log files, obtain all of them.
	Windows application and system event logs	<ol> <li>In Event Viewer, select the relevant event log.</li> <li>Select Save Log File As, and specify evt for the output format.</li> </ol>
UNIX	Monitored log file	If there are multiple log files, obtain all of them.
	Syslog	Obtain the syslog messages. For details, see 11.3.2 In UNIX.

# (44) Actions to take if JP1 events are not received even when the remote monitoring event log trap is running in IM Configuration Management

#### Cause

- The time settings of the remotely monitored host and the JP1/IM Manager host are different.
- On a remotely monitored host, there is an event log whose time is later than the current time of the monitored host
- The filter specification is incorrect.

#### Corrective action

- Set the time of both the remotely monitored host and the JP1/IM Manager host to the correct current time.
- Make sure that the remotely monitored host does not have any event logs that have a time that is later than the current time of the monitored host.
- Set the filter so that the content indicated in the condition sentence of the filter information displayed in **Valid Configuration Information** can be obtained.
- If none of the above actions resolves the problem, use the data collection tool to collect data on the JP1/IM Manager host and the monitored host. The following table shows the data to be collected on the monitored host.

Data to be collected	Method
System information	<ol> <li>Choose Run from the start menu.</li> <li>Enter msinfo32 in the text box and then click the OK button.</li> <li>In the System Information window, select File and then Export to save the system information in a text file.</li> </ol>

Data to be collected	Method
Windows application and system event logs	<ol> <li>Select the target event log from Event Viewer.</li> <li>Select Save Log File As, and specify evt for the output format.</li> </ol>

# (45) Actions to take when the Processing dialog box continues to open in IM Configuration Management - View

#### Cause

The JP1/IM - Manager host or the agent for the target operation has stopped.

#### Corrective action

Check whether the JP1/IM - Manager host or the agent for the target operation has stopped.

If it has stopped, click the  $\times$  (Close) button in the Processing dialog box to forcibly terminate IM Configuration Management - View.

If it has not stopped, IM Configuration Management processing is in progress. Wait until this processing finishes.

### (46) Actions to take when the tree area on the IM Configuration page in IM Configuration Management - View is displayed in gray

When you execute Collect IM Configuration in IM Configuration Management - View, the tree area is displayed in grey.

#### Cause

The following is the possible cause:

• The jbsrt\_del command was executed on the manager host, but JP1/Base does not hold any configuration definition information.

#### Corrective action

Execute Apply Agent Configuration in IM Configuration Management - View.

When you log in or execute Verify IM Configuration in IM Configuration Management - View, the tree area is displayed in grey.

#### Cause

The configuration definition information held by the IM Configuration Management database does not match the configuration definition information held by JP1/Base. The following are possible causes:

- The agent configuration has not been applied because the action immediately follows an import by the jcfimport command.
- The jbsrt\_del command was executed on the manager host, but JP1/Base does not hold any configuration definition information.
- The configuration definition information held by JP1/Base has changed because the jbsrt\_distrib command was executed.
- The agent configuration has not been applied.
- When you manage the system for each site by using a site manager, the procedure described in 3.2.4(3) Applying a system hierarchy to a system managed by IM Configuration Management in the JP1/Integrated Management 2 Manager Configuration Guide has not been performed.

#### Corrective action

Take the corrective action that matches the cause.

- If the agent configuration has not been applied, execute **Apply Agent Configuration** in IM Configuration Management View.
- Execute **Collect IM Configuration** in IM Configuration Management View. When the configuration is not the configuration you expect from the operation, execute **Apply Agent Configuration**.

### (47) Actions to take when the same JP1 event is received redundantly in the remote monitoring log file trap of IM Configuration Management

#### Cause

• When a log is output during log processing, the same log might be trapped twice.

#### Corrective action

• No action is required. You can safely ignore the redundant JP1 events.

### (48) Actions to take when an attempt to start the profile of a remote monitoring log file trap fails in IM Configuration Management

The message KNAN26039-E: The specified remote log-file trap failed to start. (Host name: Host-name, Monitoring-target-name: monitoring-target-name, Details: message) is output, and an attempt to start the profile fails.

See the actions for KNAN26039-E in 2.13 Messages related to IM Configuration Management (KNAN22000 to KNAN26999) in the manual JP1/Integrated Management 2 - Manager Messages.

If you are still unable to resolve the problem, take action as follows.

How you handle the problem depends on the detailed information.

Cannot connect to the monitored host.

#### Cause

• A connection to the monitored host has not been established.

#### Corrective action

• See 11.5.1(51) Actions to take when you cannot connect to the remotely monitored host to check connectivity with the remotely monitored host.

Cannot access the log file of the monitoring target.

#### Cause

• The path to the log file is not set correctly.

#### Corrective action

• See 11.5.1(50) Actions to take when the remote monitored log file name is incorrect to check correct setting of the path.

### (49) Notes applying before starting a remote monitoring log file trap by using IM Configuration Management

#### Note:

- Make sure that the file type of the log file is correct.
- Make sure that the size of the log file is not too large.

- Make sure that the header size of the log file is not too large.
- Make sure that the JP1/Base LogTrap service does not stop.

### (50) Actions to take when the remote monitored log file name is incorrect

Check whether items are set correctly.

To do so, see Table 5-31 Items additionally displayed on the Configuration File page (when an item under Log File Trapping selected) in 5.9.2 Configuration File page in the manual JP1/Integrated Management 2 - Manager GUI Reference.

The following are examples of mistakes that are easy to make:

- When the remotely monitored host is a Windows host, the path is not set in \shared-folder-name\file-name format.
- When the remotely monitored host is a UNIX host, the full path is not set as the path.
- The path indicates a folder.

### (51) Actions to take when you cannot connect to the remotely monitored host

Check whether the following items are set correctly.

When the JP1/IM - Manager host is a Windows host:

See the following subsections in the JP1/Integrated Management 2 - Manager Configuration Guide:

- 1.17.1 Configuring WMI (for Windows)
- 1.17.2 NetBIOS settings (NetBIOS over TCP/IP) (for Windows)
- 1.17.3 Configuring SSH (for Windows)

When the JP1/IM - Manager host is a UNIX host:

2.16.1 Configuring SSH (for UNIX) in the JP1/Integrated Management 2 - Manager Configuration Guide

Check for the following problems:

- The monitored host is not running.
- Name resolution of the monitored host cannot be performed from the JP1/IM Manager host.

# (52) Actions to take when an attempt to collect host information in IM Configuration Management fails

How you resolve the problem depends on the message type.

The message KNAN22017-E: Collection of host information failed because a connection could not be established with the host "host-name". is output, and an attempt to collect host information fails.

#### Cause

The following are possible causes:

- The destination host name is different from the intended one.
- The name of the destination host has not been resolved.
- The destination host is not running.

- JP1/Base on the destination host is not running.
- Communication with the destination host failed.
- The version of JP1/Base on the destination host is earlier than 07-00.

#### Corrective action

Take the corrective action that matches the cause.

- Execute the command below on the JP1/IM Manager host to check whether the name of the host registered in IM Configuration Management can be resolved, and whether communication with the host registered in IM Configuration Management is possible. If the system operates in an IPv6 environment, check whether the IPv6 address is the primary IP address (whether the IPv6 address is first address displayed in Resolved Host List that is displayed by executing the following command), and whether communication is possible using the IPv6 address.
  - jplping host-name-registered-in-IM-Configuration-Management

Execute the following command on the JP1/IM - Manager host to check whether communication with the host registered in IM Configuration Management is possible for the specified port number.

- telnet agent-host-name or IP-address 20306

If the system operates in an IPv6 environment, specify the IPv6 address as the destination address of the telnet command. By default, the port number to be used for collecting host information is 20306/tcp. If communication with the destination is not possible, a message to that effect is output. If communication with the destination is possible, a black window is displayed.

On a Windows host running Windows Server 2008 R2 or later, no telnet client has been installed by default. You can install a telnet client by using the Windows **Add or Remove Programs** function.

- Check whether the version of JP1/Base on the destination host is 07-00 or later. If the system operates in an IPv6 environment, check whether the version of JP1/Base on the destination host is Version 10 or later.
- Execute the following commands to check whether JP1/Base on the destination host is running.
  - jbs spmd status (for a logical host: jbs spmd status -h logical-host-name)
  - jevstat (for a logical host: jevstat logical-host-name)
- Execute the following command on the destination host to check whether the name the JP1/IM Manager host can be resolved, and whether communication with the JP1/IM Manager host is possible. If the system operates in an IPv6 environment, check whether the IPv6 address is the primary IP address (whether the IPv6 address is first address displayed in Resolved Host List that is displayed by executing the following command), and whether communication is possible using the IPv6 address.
  - jplping JPI/IM Manager-host-name
- If the system operates in an IPv6 environment and the communication method on the JP1/IM Manager host is set to ANY bind address, use the following steps to check whether the version settings of the IP address to be bound are correct.
  - 1. Execute the jbsgetcnf command.

```
jbsgetcnf > config.txt
```

- 2. Open config. txt in a text editor.
- 3. Check whether the value of [JP1 DEFAULT\JP1BASE\JP1\_ANY\_BIND] is ALL.
- If the system operates in an IPv6 environment and the communication method on the collection-destination host is set to ANY bind address, use the following steps to check whether the version settings of the IP address to be bound are correct.
  - 1. Execute the jbsgetcnf command.

```
jbsgetcnf > config.txt
```

2. Open config.txt in a text editor.

- 3. Check whether the value of [JP1 DEFAULT\JP1BASE\JP1 ANY BIND] is ALL or IPv6.
- Make sure that IP address resolved from the short name of the destination host matches the IP address resolved from the FODN.

The following message is output, and an attempt to collect host information fails.

• KNAN21400-W Collection of host information from host "host-name" partially succeeded.

Collection of host information from JP1/Base succeeded while collection of host information from the remote host failed.

Details: details

KNAN21402-E The collection of host information for a host "host-name" failed.

The collection of host information failed from JP1/Base.

Detailed information: details

The collection of remote host information failed.

Detailed information: details

• KNAN21403-E Host "host-name" failed to collect host information from the remote host.

Details: details

#### Cause

When an attempt to collect host information fails in remote monitoring, the following are possible causes:

- The remote communication configuration has not been set.
- A connection to the monitored host cannot be established.
- The collection of log files timed out.
- Authentication processing failed.
- The private key does not exist.
- The creation of the remote monitoring process failed.

#### Corrective action

Take the corrective action that matches the cause.

- Set remote communication on the monitored host, and then retry the operation.
- Check the connection with the remotely monitored host. For details about the method, see 11.5.1(51) Actions to take when you cannot connect to the remotely monitored host.
- Check the following:

When the OS of the host of the monitored host name is a Windows host:

- Whether communication with the host that has the monitored host name is possible
- Whether the password of the user who logs in to the monitored host has expired
- Whether the remote communication type of the host that has the monitored host name is set correctly
- Whether the WMI service is running

At this point, if there is no problem, check whether the WMI connection is set normally.

When the OS of the host of the monitored host name is a UNIX host:

- Whether communication with the host that has the monitored host name is possible
- Whether the remote communication type of the host that has the monitored host name is set correctly
- Whether the SSH server is running on the host that has the monitored host name

At this point, if there is no problem, check whether the SSH connection is set correctly.

• Check the following:

When the OS of the host of the monitored host name is a Windows host:

- Whether the user name, password, and domain name in the System Common Settings window or the Remote Monitoring Settings window are set correctly
- Whether DCOM is set correctly on the host that has the monitored host name
- Whether DCOM is set correctly on the JP1/IM Manager host

At this point, if there is no problem, check whether the WMI connection is set correctly.

When the OS of the host of the monitored host name is a UNIX host:

- Whether the SSH authentication settings are correct
- At this point, if there is no problem, check whether the SSH connection is set correctly.
- Check whether the private key exists.
- Check the settings on the **IM Host Account** page in the System Common Settings window.

# (53) Actions to take when the source host name is different from the host name registered in IM Configuration Management

#### Corrective action

Take corrective action according to the version. For details, see 13.3.11(2)(b) Changing JP1 event attributes (Setting for JP1/IM - Manager) in the JP1/Integrated Management 2 - Manager Overview and System Design Guide.

- For a new installation or an overwrite installation of JP1/IM Manager, perform the following steps:
- 1. Check the content of the common definition configuration file for changes in the JP1 event attributes.
- 2. Execute the jbssetcnf command.
- 3. Restart JP1/IM Manager.
- When the version of JP1/IM Manager is earlier than 10-00, register the host name in IM Configuration Management with both its short name and FQDN name.

### (54) Actions to take when the filter does not work correctly because the source host name is different from the monitored host name

#### Corrective action

For details about how to resolve the problem, see 11.5.1(53) Actions to take when the source host name is different from the host name registered in IM Configuration Management.

# (55) Actions to take when JP1/IM - Manager does not start, or JP1/IM - View cannot be operated after the OS starts or the network settings are changed in Windows

#### Cause

The following are possible causes:

• After OS startup, JP1/IM - Manager startup processing started before the network became available. The time from OS startup until the network becomes available depends on the environment. In an environment in which teaming is used, a few minutes might be needed before the network becomes available. Also, in a teaming environment, JP1/IM - Manager startup processing might start before the network becomes available (for example, when JP1/IM - Manager is started automatically by the startup control function of JP1/Base).

• The network settings (such as the teaming settings) were changed during JP1/IM - Manager startup.

#### Corrective action

On the physical host and all logical hosts, terminate JP1/IM - Manager, JP1/IM - View, JP1/Base, and any programs that require JP1/Base. Execute <code>jp1ping</code> *local-host-name* to make sure that the local host name can be resolved to the intended IP address, and then start JP1/IM - Manager, JP1/IM - View, JP1/Base, and the programs requiring JP1/Base.

The following describes the appropriate actions to be taken in each case.

- After OS startup, JP1/IM Manager startup processing starts before the network became available
  To automatically start JP1/IM Manager when the OS starts, use the startup control function of JP1/Base. To
  do so, configure the settings so that the timing of startup of the JP1/IM Manager service is delayed to postpone
  JP1/IM Manager startup until after the network becomes available. For details about the settings, see the chapter
  related to the explanation for setting the timing of the startup of services in the JP1/Base User's Guide.
- The network settings, such as the teaming settings, were changed during JP1/IM Manager startup To change the network settings, such as the teaming settings, terminate on the physical host and all logical hosts JP1/IM Manager, JP1/IM View, JP1/Base, and programs that require JP1/Base. Also, if you are connected to JP1/IM View, log out.

### (56) Actions to take if characters are unreadable when JP1/SES-format events are received

#### Cause

JP1/SES-format events (events output by an older version of a JP1 product, or events output by products that do not support JP1 event output, such as JP1/Open Job Entry) do not have character encoding information.

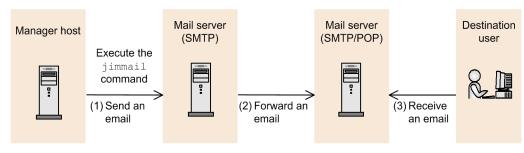
JP1/IM - Manager interprets JP1/SES-format events by using the character encoding that JP1/IM - Manager uses to operate. Therefore, if the character encoding of a JP1/SES-format event is different from the JP1/IM - Manager encoding, the displayed JP1/SES-format event might be unreadable or contain some characters that are not the intended characters.

#### Corrective action

Take either of the following actions to resolve the problem:

- Use the same character encoding for JP1/SES-format events and operation of JP1/IM Manager.
- Use local actions on JP1/Base operating with the same character encoding as that of JP1/SES-format events so that JP1 events are issued when JP1/SES-format events are received. These JP1events are then forwarded to the JP1/IM Manager host. For details about local actions, see the chapter related to the explanation of local actions in JP1/Base User's Guide.

### (57) Actions to take when an email does not reach the destination in the email notification function of JP1/IM - Manager



JP1/IM - Manager

If the jimmail command terminates normally, but an email does not reach the destination:

#### Cause 1

The destination address of the email is incorrect.

#### Corrective action 1

The destination address of the email might be incorrect. Check the destination email address specified for the -to option of the jimmail command, or for DefaultTo in the email environment definition file.

If the destination email address is specified for both the -to option of the jimmail command and DefaultTo in the email environment definition file, the destination email address specified for the -to option of the jimmail command takes precedence.

#### Cause 2

An error occurred between the mail server (SMTP) and the mail server (SMTP/POP3), and forwarding email failed.

#### Corrective action 2

Make sure that the following conditions are satisfied, and then re-execute the jimmail command:

- The mail server (SMTP/POP3) is running.
- No error occurs in the mail server (SMTP) log.
- Transit through a port in the firewall is allowed.
- Host name resolution for the mail server is enabled.

#### Cause 3

Receiving an email between the mail server (SMTP/POP3) and a mail client failed.

#### Corrective action 3

The error cannot be checked in JP1/IM - Manager because the communication is between the mail server and the mail client.

Check the messages and logs on the mail server and the mail client.

Also, make sure that the mail client settings (POP3 server name, POP3 account name, password, and port number) are correct.

If the jimmail command terminates abnormally:

#### Cause

The mail server (SMTP) cannot be connected.

#### Corrective action

The jimmail command outputs an error message according to the contents of the error. Take action according to the output message, make sure that the conditions below are satisfied, and then re-execute the jimmail command.

For details about messages, see *Chapter 2. List of Messages* in the manual *JP1/Integrated Management 2 - Manager Messages*.

- The mail server (SMTP) is running.
- No error occurs in the mail server (SMTP) log.
- Transit through a port in the firewall is allowed.
- Host name resolution for the mail server (SMTP) is enabled.
- The authentication account and password in the email environment definition file is correct.

### (58) Actions to take when an error is displayed on JP1/IM - Manager in which the communication encryption function is enabled

How you handle the problem depends on the message that is output.

#### If JP1/IM - Manager does not start:

- The following message might be output: KAVB8817-E A file specified for a parameter of the communication encryption function for JP1/IM Manager could not be read. (parameter = parameter-name, parameter value = parameter-value)
- The following message might be output: KAVB8818-E A private key specified for a parameter of the communication encryption function for JP1/IM Manager could not be read. (parameter for the private key = parameter-name, parameter value for the private key = parameter-value, parameter for the server authentication certificate = parameter-name, parameter value for the server authentication certificate = parameter-value)

#### Cause

The following are possible causes:

- The file specified by a parameter of JP1/IM Manager's communication encryption function cannot be read.
- The private key specified by a parameter of JP1/IM Manager's communication encryption function cannot be read or is not paired with a server certificate.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that a server certificate is paired with a private key. If this is not the case, provide a server certificate and a private key that form a pair.
- Make sure that the file format of the private key is valid.
- If a passphrase is set for the private key, cancel the passphrase.
- Check the following operating system logs, and make sure that no shortage has occurred in OS resources such as file descriptors:
  - For Windows: Windows event log
  - For UNIX: syslog

If execution of the jcochfilter or jcochstat command fails:

- The following message might be output: KAVB1956-E An error occurred during the initialization of the communication encryption function for the command-name". (cause = cause, file = file-name)
- The following message might be output: KAVB1957-E Failed to encrypt communications by using the communication encryption function for the command "command-name". (host name of connection destination = connection-destination-host-name, cause = cause)

#### Cause

The following are possible causes:

- The root authentication certificate was not found.
- The root authentication certificate could not be read.
- The CN or SAN of the server authentication certificate does not match with the host name of the connection destination.
- A communication error occurred.

• A system error occurred.

#### Corrective action

Take the corrective action that matches the cause.

- If a root certificate is available, check whether you have read permission for the root certificate. If not, set read permission for the root certificate.
- If no root certificate was found, provide one.
- Make sure that the root certificate file is valid.
- Check the following operating system logs, and make sure that no shortage has occurred in OS resources such as file descriptors:
  - For Windows: Windows event log
  - For UNIX: syslog
- Make sure that the manager host name specified in the -h option of the jcochstat command matches the CN or SAN in the server certificate of the manager host at the connection destination. Then, re-execute the command.
- Verify the following and then re-execute the command:
  - In the case of the jcochstat command, make sure that the host on which the command is executed has a root certificate corresponding to the server certificate of the manager host specified by the -h option of the jcochstat command. If not, provide an appropriate root certificate.
  - In the case of the jcochstat command, make sure that the communication encryption function of the manager host specified in the -h option is enabled. If not, enable it.
  - In the case of the jcochstat command, make sure that the server certificate of the manager host specified in the -h option is has not expired. If it has expired, update the server certificate.
  - The settings for the communication encryption function might have been modified after JP1/IM Manager startup. Restart JP1/Base and JP1/IM Manager to apply the settings for the communication encryption function.
- If a system error occurred, use the data collection tool to collect data, and then contact the system administrator.

If the following warning message is output during the execution of the jcochfilter or jcochstat command:

KAVB1972-W The root authentication certificate used by the communication encryption function for the command "command-name" is no longer valid. (file=file-name)

#### Cause

The following is a possible cause:

• The root certificate used by the communication encryption function has expired.

#### Corrective action

Take the corrective action that matches the cause.

• Check whether there is a problem with using the expired root certificate. If there is a problem, contact the system administrator and update the root certificate.

If execution of a command (jcschstat, jcsdbexport, or jcsdbimport) fails:

- The following message might be output: KAVB7602-E Command execution will stop because memory is insufficient.
- The following message might be output: KAVB7810-E An error occurred during the initialization of the communication encryption function for the command-name". (cause = cause)

- The following message might be output: KAVB7818-E A library required for the command "command-name" was not found.
- The following message might be output: KAVB7812-E Failed to encrypt communications by using the communication encryption function for the command "command-name". (host name of connection destination = connection-destination-host-name, cause = cause)

#### Cause

The following are possible causes:

- There is insufficient memory for executing the command.
- The library required by the command was not found.
- A communication error occurred.
- A system error occurred.

#### Corrective action

The settings for the communication encryption function might have been modified after startup of JP1/IM - Manager. Restart JP1/Base and JP1/IM - Manager to apply the settings for the communication encryption function, and then re-execute the command. If the problem persists, use the data collection tool to collect data, and then contact the system administrator.

#### If execution of any of the following commands fails:

jcfvirtualchstat, jcfexport, jcfimport, jcfaleltdef, jcfaleltreload, jcfaleltstart, jcfaleltstat, jcfaleltstop, jcfallogdef, jcfallogreload, jcfallogstart, jcfallogstat, and jcfallogstop

• The following message is output: KNAN24155-E Failed to encrypt communications by using the communication encryption function for the command "command-name". (host name of connection destination = connection-target-host-name, cause = cause)

#### Cause

The following are possible causes:

- A communication error occurred.
- A system error occurred.

#### Corrective action

Take the corrective action that matches the cause.

• The settings for the communication encryption function might have been modified after startup of JP1/IM - Manager. Restart JP1/Base and JP1/IM - Manager to apply the settings for the communication encryption function, and then re-execute the command. If the problem persists, use the data collection tool to collect data, and then contact the system administrator.

#### If execution of IM configuration synchronization fails:

- The following message might be output: KNAN29095-E An error occurred during the initialization of the communication encryption function for the IMConfiguration Management Service. (cause = cause, file=file-name)
- The following message might be output: KNAN29098-E Failed to encrypt communications by using the communication encryption function for the IM Configuration Management Service. (host name of connection destination = connection-target-host-name, cause = cause)

#### Cause

The following are possible causes:

- The root authentication certificate was not found.
- The root authentication certificate could not be read.
- The CN or SAN of the server authentication certificate does not match with the host name of the connection destination.
- A communication error occurred.
- A system error occurred.

#### Corrective action

Take the corrective action that matches the cause.

- Check whether you have read permission for the root certificate. If not, set read permission for the root certificate.
- If no root certificate was found, provide one.
- Make sure that the root certificate file is valid.
- Check the following operating system logs, and make sure that no shortage has occurred in OS resources such as file descriptors:
  - For Windows: Windows event log
  - For UNIX: syslog
- Make sure that the host name of the connection destination matches the CN or SAN in the server certificate of the manager host at the connection destination, and then re-execute the command.
- Check whether the message Failed to read some of the root authentication certificates was output to the integrated trace log. If it was output, take action as described in the message.
- Check whether the manager host has a root certificate corresponding to the server certificate of the connection destination host. If not, provide one.
- Check whether the server certificate of the connection destination host has expired. If it has expired, update the server certificate.
- If a system error occurred, use the data collection tool to collect data, and then contact the system administrator.

If a warning message is output during execution of IM configuration synchronization:

• The following message is output: KNAN29097-W The root authentication certificate used by the communication encryption function for the IM Configuration Management Service is no longer valid. (file = file-name)

#### Cause

The following is a possible cause:

• The root certificate used by the communication encryption function has expired.

#### Corrective action

Take the corrective action that matches the cause.

• Check whether there is a problem with using the expired root certificate. If there is a problem, contact the system administrator and update the root certificate.

### (59) Actions to take when an error is displayed in JP1/IM - View when the communication encryption function is enabled

How you handle the problem depends on the message that is output.

#### If you cannot log in to JP1/IM - View:

- The following message might be output: KAVB1958-E An error occurred during the initialization of the communication encryption function for JP1/IM-View. (cause = cause, directory = directory-name)
- The following message might be output: KAVB6601-E An error occurred during the initialization of the communication encryption function for JP1/IM-View. (cause = cause, directory = directory)
- The following message might be output: KNAN20121-E An error occurred during the initialization of the communication encryption function for CF View. (cause = cause, directory = directory-name)
- The following message might be output: KNAN20141-E An error occurred during the initialization of the communication encryption function for CF View for the base manager. (cause = cause, directory = directory-name)

#### Cause

The following are possible causes:

- No root authentication certificates were found.
- None of the root authentication certificates could be read.
- The placement directory for root authentication certificates could not be found.

#### Corrective action

Take the corrective action that matches the cause.

- If no root certificates could be found, check the following and then log in again.
   Check whether a root certificate is available. If a root certificate is available, check whether you have read permission for the root certificate. If not, set read permission for the root certificate. If no root certificate was found, provide one.
- If none of the root certificates could be read, check the following and then log in again.
  - Check whether a root certificate is available. If a root certificate is available, check whether you have read permission for the root certificate. If not, set read permission for the root certificate.
  - Make sure that the root certificate file is valid.
  - Check the Windows event log and make sure that no shortage has occurred in OS resources such as file descriptors.
- If no root certificate directory exists, create one and place root certificates in it.

#### If connection to the manager fails:

- The following message might be output: KAVB1959-E Failed to encrypt communications by using the communication encryption function for JP1/IM View. (host name of connection destination = connection-destination-host-name, cause = cause)
- The following message might be output: KAVB6602-E Failed to encrypt communications by using the communication encryption function for JP1/IM View. (host name of connection destination = connection-destination-host-name, cause = cause)
- The following message might be output: KNAN20122-E Failed to encrypt communications by using the communication encryption function for CF View. (host name of connection destination = connection-target-host-name, cause = cause)

• The following message might be output: KNAN20142-E Failed to encrypt communications by using the communication encryption function for CF - View for the base manager. (host name of connection destination = connection-target-host-name, cause = cause)

#### Cause

The following are possible causes:

- The CN or SAN of the server authentication certificate does not match with the host name of the connection destination.
- A communication error occurred.
- A system error occurred.

#### Corrective action

Take the corrective action that matches the cause.

- Make sure that the host name of the viewer's connection-destination of the viewer matches the CN or SAN in the server certificate of the manager host at the connection destination, and then log in again.
- Make sure that the communication encryption function of the manager at the connection destination is enabled. If it is enabled, make sure that the host name of the manager at the connection destination is not specified in the non-encryption communication host configuration file.
- Check whether the message Failed to read some of the root authentication certificates is output to the integrated trace log. If it is output, take action as described in the message.
- Check whether a root certificate corresponding to the manager host at the connection destination is provided in JP1/IM View. If not, provide one.
- Check whether the server certificate of the manager host at the connection destination has expired. If it has expired, update it.
- If a system error occurred, use the data collection tool to collect data, and then contact the system administrator.

#### If a warning message is output:

- The following message might be output: KAVB1969-WFailed to read some of the root authentication certificates used by the communication encryption function for JP1/IM View. (directory = directory-name, file = file-name, file-name, ...)
- The following message might be output: KAVB1971-W The root authentication certificate used by the communication encryption function for JP1/IM-View is no longer valid. (directory = directory-name, file = file-name, file-name, ...)
- The following message might be output: KAVB6603-W Failed to read some of the root authentication certificates used by the communication encryption function for JP1/IM View. (directory = directory-name, file = file-name, file-name, ...)
- The following message might be output: KNAN20123-W Failed to read some of the root authentication certificates used by the communication encryption function for CF View. (directory = directory-name, file = file-name, file-name, ...)
- The following message might be output: KNAN20124-W The root authentication certificate used by the communication encryption function for CF View is no longer valid. (directory = directory-name, file = file-name, file-name, ...)
- The following message might be output: KNAN20143-W Failed to read some of the root authentication certificates used by the communication encryption function for CF View for the base manager. (directory = directory-name, file = file-name, file-name, ...)

• The following message might be output: KNAN20144-W The root authentication certificate used by the communication encryption function for CF - View for the base manager is no longer valid. (directory = directory-name, file = file-name, file-name, ...)

#### Cause

The following are possible causes:

- Reading of some of the root certificates used by the communication encryption function of JP1/IM View failed.
- The root certificate used by the communication encryption function of JP1/IM View has expired.

#### Corrective action

Take the corrective action that matches the cause.

- Check whether you have read permission for the root certificate. If not, set read permission for the root certificate.
- Check the Windows event log and make sure that no shortage has occurred in OS resources such as file descriptors.
- Make sure that the root certificate file is valid.
- Check whether there is a problem with using the expired root certificate. If there is a problem, update the root certificate.

If acquisition of remote monitoring configuration fails during IM configuration synchronization:

This subsection describes the causes related to the communication encryption function when the following message is output, along with the actions to take:

• The following message is output: KNAN21404-E There is a host for which IM configuration synchronization failed. Take action according to the manual, and then retry IM configuration synchronization.

#### Cause

The following are possible causes:

- No root certificate file was found on the connection destination manager.
- The root certificate file on the connection destination manager could not be read.
- The host name of the site manager does not match the CN or SAN in the server certificate of the site manager.
- The server certificate of the site manager has expired.

#### Corrective action

Take the corrective action that matches the cause.

- If no root certificate was found, provide one, and set its location in JP1/Base.
- Check whether you have read permission for the root certificate. If not, set read permission for the root certificate.
- Make sure that the root certificate file is valid.
- Check the following operating system logs, and make sure that no shortage has occurred in OS resources such as file descriptors:
  - For Windows: Windows event log
  - For UNIX: syslog
- Make sure that the host name of the site manager matches the CN or SAN in the server certificate of the site manager.

- Check whether the message Failed to read some of the root authentication certificates was output to the integrated trace log of the connection destination manager. If it was output, take action as described in the message.
- Check whether the manager at the connection destination has a root certificate corresponding to the server certificate of the site manager. If not, obtain a root certificate and set its location in JP1/Base.
- Check whether the server certificate of the site manager has expired. If it has expired, update it.

### (60) Actions to take if extended recovery fails

Check the IM database log and determine whether message KFPL15308-E was output.

- In Windows
  - 1. Execute the following command to set up environment variables:

```
set PDDIR=<IM-database-service-installation-directory>\JM<n>
set PDUXPLDIR=%PDDIR%\UXPLDIR
<IM-database-service-installation-directory>\JM<n>\bin\pdcat
```

- In Linux
  - 1. Execute the following command to set up environment variables:

```
export PDDIR=<IM-database-service-installation-directory>/JM<n>
export LD LIBRARY PATH=$PDDIR/lib/:$LD LIBRARY PATH
```

2. Execute the following command to display the IM database log: \$PDDIR/bin/pdcat

<IM-database-service-installation-directory>:

Path specified in the item IMDBENVDIR of the setup information file

<*n*>:

For a physical host, n is 0. For a logical host, n is the value specified for LOGICALHOSTNUMBER in the cluster setup information file.

If message KFPL15308-E is output to the IM database log, you need to match the table schema used for backup file acquisition to the table schema of the IM database service.

Check whether you need to update the IM database by executing the jimdbupdate command, and perform a recovery operation according to the following procedure.

If message KNAN11201-I, indicating that the IM database is the latest, is displayed:

- 1. Perform unsetup for the integrated monitoring database.
- 2. In Windows, restart the OS.
- 3. Execute the jcodbsetup command with the -v option specified.
- 4. Execute the jimdbrecovery command with both the backup file for which extended recovery failed and the -m EXPAND option specified.
- 5. Update the table schema of the database.

Execute the jimdbupdate command with the -i option specified.

If message KNAN11201-I, indicating that the IM database is the latest, is not displayed:

1. Update the table schema of the database.

Execute the jimdbupdate command with the -i option specified.

2. Execute the jimdbrecovery command with both the backup file for which extended recovery failed and the -m EXPAND option specified.

If message KFPL15308-E is not output, check the following and then re-execute the jimdbrecovery command:

- Is the backup file acquired by the same OS specified?
- Is the database configuration the same as when the backup was collected?
- Is the size of the current IM database smaller than when the backup was collected?
- Was the recovery operation performed after the IM database was set up again?
- Is there sufficient space available in the IM database installation directory? Approximately 1 gigabyte is required if the database size is S or M, and 4 gigabytes are required if the database size is L.

### (61) How to extend logs when a log from the time an event occurred cannot be collected because logs for the Central Console viewer or Central Scope viewer wrapped around, causing older logs to be overwritten

You can extend process-specific trace logs for the Central Console viewer or the Central Scope viewer by specifying the following common definition information in a file on the machine on which JP1/IM - View is installed, and then using the jbssetcnf command to apply the information:

### Format

```
[JP1_DEFAULT\JP1CONSOLEVIEW\LOG_CONTROL\VIEW]
"LOGFILENUM"=dword: hexadecimal-value
"LOGSIZE"=dword: hexadecimal-value
"JP1COVIEW_LOGNUM"= dword: hexadecimal-value
"JP1COVIEW_LOGSIZE"= dword: hexadecimal-value
"JP1COVIEW_APILOGNUM"= dword: hexadecimal-value
"JP1COVIEW_APILOGSIZE"= dword: hexadecimal-value
[JP1_DEFAULT\JP1CONSOLEVIEW]
"JP1COVIEW_LOGSIZE"=dword: hexadecimal-value
"JP1COVIEW_APILOGSIZE"=dword: hexadecimal-value
"JP1COVIEW_APILOGSIZE"=dword: hexadecimal-value
```

Estimate the values according to the number of JP1/IM - View instances that will be connected concurrently, so that the maximum amount of disk space to be allocated for each process-specific trace log (maximum size x number of files) is equal to default value x maximum number of JP1/IM - View instances that can be connected concurrently.

This action requires free disk space equivalent to the space to be allocated for the trace log.

### Specification

Specify the following values:

```
[JP1 DEFAULT\JP1CONSOLEVIEW\LOG CONTROL\VIEW]
```

This is a key name in the JP1/IM - View environment settings; this value is fixed.

```
"LOGFILENUM"=dword: hexadecimal-value
```

Specifies the number of VIEWn.log files for the process-specific trace log.

Specify a hexadecimal value in the range from 1 to 16. The default value is dword: 00000003 (3 files).

### "LOGSIZE"=dword: hexadecimal-value

Specifies the maximum size of each VIEWn.log for the process-specific trace log.

Specify a hexadecimal value in bytes in the range from 4,096 to 2,147,483,647 bytes. The default value is dword: 00A00000 (10,485,760 bytes, or 10 MB).

"JP1COVIEW LOGNUM" = dword: hexadecimal-value

Specifies the number of jp1convn.log files for the process-specific trace log.

Specify a hexadecimal value in the range from 2 to 100. The default value is dword: 00000008 (8 files).

"JP1COVIEW LOGSIZE"= dword: hexadecimal-value

Specifies the maximum size of each jplconvn.log file for the process-specific trace log.

Specify a hexadecimal value in bytes in the range from 4,096 to 104,857,600 bytes. The default value is dword: 00500000 (5,242,880 bytes, or 5 MB).

"JP1COVIEW APILOGNUM" = dword: hexadecimal-value

Specifies the number of jplconvMn.log files for the process-specific trace log.

Specify a hexadecimal value in the range from 2 to 100. The default value is dword: 0000003C (60 files).

"JP1COVIEW APILOGSIZE"= dword: hexadecimal-value

Specifies the maximum size of each jplconvMn.log file for the process-specific trace log.

Specify a hexadecimal value in bytes in the range from 4,096 to 104,857,600.

The default value is dword: 00500000 (5,242,880 bytes, or 5 MB).

[JP1 DEFAULT\JP1CONSOLEVIEW]

This is a key name in the JP1/IM - View environment settings; this value is fixed.

"JP1COVIEW\_LOGSIZE"=dword: hexadecimal-value

Specifies the maximum size of the jplcsov[\_old].log file for the process-specific trace log.

Specify a hexadecimal value in the range from 512 to 2,097,152 KB. The default value is dword: 00300000 (3,145,728 bytes, or 3 MB).

"JP1COVIEW APILOGSIZE"=dword: hexadecimal-value

Specifies the maximum size of the <code>jplcsovM[ old].log</code> file for the process-specific trace log.

Specify a hexadecimal value in the range from 512 to 2,097,152 KB. The default value is dword: 00600000 (6,291,456 bytes, or 6 MB).

### Procedures for extending logs

To extend the process-specific trace logs:

- 1. Stop any of the following that are running on the host for which logs are to be extended: Central Console viewer, Central Scope viewer, and any monitoring tree editing viewers. Do this even when you are connecting to the host via Remote Desktop.
- 2. Check the *system-drive*: \ProgramData\Hitachi\jp1\jp1\_default\JP1CoView\log\mmap folder and its subfolders, and if the VIEW.mm file exists, manually delete it.
- 3. Use the jbssetcnf command to apply the file in which the common definition information is set. For details about the jbssetcnf command, see the *JP1/Base User's Guide*.

# (62) How to extend logs when a log from the time an event occurred cannot be collected because logs for the IM Configuration

### Management viewer wrapped around, causing older logs to be overwritten

You can extend process-specific trace logs for the IM Configuration Management viewer by modifying the following file on the machine on which JP1/IM - View is installed, and then restarting the machine.

• The process-specific log settings definition file (jcfview\_reg.conf) for the IM Configuration Management viewer

#### File name

```
jcfview reg.conf
```

### Directory

*View-path*\conf\jcfview\

### Format

```
"TRACELEVEL"=dword:00000028

"SHMTHRESHOLD"=dword:0000001E

"FILETHRESHOLD"=dword:00000000

"LOGFILENUM"=dword:hexadecimal-value
"LOGSIZE"=dword:hexadecimal-value
```

Estimate the values according to the number of JP1/IM - View instances that will be connected concurrently, so that the maximum amount of disk space to be allocated for each process-specific trace log (maximum size x number of files) is equal to default value x maximum number of JP1/IM - View instances that can be connected concurrently.

This action requires free disk space equivalent to the space to be allocated for the trace logs.

### Specification

Specify the following values:

```
"TRACELEVEL"=dword:00000028
```

This parameter is fixed. Do not change it.

"SHMTHRESHOLD"=dword:000001E

This parameter is fixed. Do not change it.

"FILETHRESHOLD"=dword:0000000

This parameter is fixed. Do not change it.

"LOGFILENUM"=dword: hexadecimal-value

Specifies the maximum number of VIEWn.log files for the process-specific trace log.

Specify a hexadecimal value in the range from 1 to 16. The default value is dword: 00000003 (3 files).

"LOGSIZE"=dword: hexadecimal-value

Specifies the maximum size of each VIEWn.log file for the process-specific trace log.

Specify a hexadecimal value in the range from 4,096 to 16,777,216. The default value is dword: 00A00000 (10,485,760 bytes, or 10 MB).

### Procedures for extending logs

To extend the process-specific trace logs:

1. Stop any IM Configuration Management viewers that are running on the host for which logs are to be extended. Do this even when you are connecting to the host via Remote Desktop.

- 2. Check the *system-drive*: \ProgramData\Hitachi\jp1\jp1\_default\JP1CoView\log \jcfview\mmap folder and its subfolders, and if the VIEW.mm file exists, manually delete it.
- 3. In the process-specific log settings definition file (jcfview\_reg.conf) for the IM Configuration Management viewer, set the values for the parameters that are required to expand the logs.

### (63) Actions to take when an automated action is not executed

### Cause

The following are possible causes:

- A common exclusion-condition excludes a collected JP1 event from automated-action execution.
- The automated action definition is disabled.
- No collected JP1 event satisfies the action execution condition in the automated action definition.

#### Corrective action

Take the corrective action that matches the cause.

- When a common exclusion-condition is used in extended mode, check the common exclusion history file to know whether a common exclusion-condition excludes JP1 events from automated-action execution. If JP1 events are excluded, review the common exclusion-condition.
- Check that the automated action definition is not disabled.
- Review action execution conditions in the automated action definition.

### (64) Actions to take when JP1/IM - View does not start

When JP1/IM - View starts, a contiguous memory space is allocated as the Java heap space. This allocation requires a contiguous space. Depending on the condition of the memory used in your environment, the attempt to allocate the Java heap space might fail and JP1/IM - View might not start.

If the Login window does not appear when you attempt to start JP1/IM - View, take the action shown below.

#### Corrective action:

- 1. Make a backup copy of the following file and save it to your working folder: *JP1/IM-View-installation-folder* \conf\jcoview.conf.
- 2. In a text editor, open the following file: *JP1/IM-View-installationfolder*\conf\jcoview.conf. Next, change the value of the -Xmx option so that the resulting value is the current value minus 100.

### Example change:

### Before change

```
[JavaVM]
```

Options=-Xms32m -Xmx768m -Dsun.java2d.noddraw=true

### After change

[JavaVM]

Options=-Xms32m -Xmx668m -Dsun.java2d.noddraw=true

- 3. Start JP1/IM View.
- 4. If JP1/IM View starts, proceed to step 5.

If JP1/IM - View cannot be started, go back to step 2. to further decrease the value of the -Xmx option by 100, and then proceed to step 3..

Repeat steps 2. and 3. until JP1/IM - View starts successfully.

- 5. Terminate JP1/IM View.
- 6. In a text editor, open the following file: *JP1/IM-View-installationfolder*\conf\jcoview.conf. Next, change the value of the -Xmx option so that the resulting value is the current value plus 12.
- 7. Start JP1/IM View.
- 8. If JP1/IM View starts, go back to steps 5. and 6. to further increase the value of the -Xmx option by 12, and then proceed to step 7..
- 9. Repeat steps 7., 5., and 6. until it is confirmed that JP1/IM View cannot be started.

If JP1/IM - View cannot be started, change the current value of the -Xmx option back to the value that was used the last time JP1/IM - View was started.

The resulting value of the -Xmx option is the maximum size of the Java heap space that can be allocated by JP1/IM - View in your environment.

Before using JP1/IM - View, make sure that the value calculated through the above procedure is used.

If you take the corrective action described above, the size of the Java heap space required for using JP1/IM - View decreases. A memory shortage might occur if the size of the heap space is determined by the formula explained in [Memory requirements] in "4. Memory and Disk Space Requirements".

After taking the corrective action described above, review your settings, such as the number of scroll buffers, and make sure that the size of the heap space estimated by the formula is equal to or smaller than the value specified by the -Xmx option.

In addition, conduct thorough testing before using JP1/IM - View.

## (65) Action to taken when IM configuration management successfully collects host information but fails to collect profiles

The message KNAN22403-E: Acquisition of the profile list failed. (Detail Information: A communication error occurred.) is displayed.

### Cause 1

A firewall is blocking communications that are necessary for profile collection.

#### Corrective action 1

Make sure that the settings allow communications to and from the jplbscom service.

For details, see the explanations in the *JP1/Base User's Guide* about the Port numbers for JP1/Base, and about the Direction in which data passes through the firewall.

### Cause 2

If JP1/IM is operated in one of the following ways, communication from the agent host to the manager host (duplicate communication) fails.

- When the IP bind method is used for separated networks (when physical\_ipany.conf or logical ipany.conf is applied)
- When the address is converted (NAT) between the manager and agent hosts

### Corrective action 2

If name resolution is not set up to be performed via duplicate communication protocol using IM configuration management:

Specify settings so that name resolution is performed via duplicate communication protocol usings IM configuration management.

For details, see the explanation in the *JP1/Base User's Guide* on Setting a duplicate communication protocol using IM configuration management.

If name resolution is set up to be performed via duplicate communication protocol using IM configuration management:

Specify settings so that the agent host is able to resolve the name of the manager host. In addition, specify settings so that the IP address of the manager host for which the agent host performed name resolution matches the IP address to which the JP1/Base instance of the manager host is bound.

For details, see the explanation in the *JP1/Base User's Guide* on Setting a duplicate communication protocol using IM configuration management.

# (66) Actions to take when the configuration of linked JP1/AJS is not displayed in the integrated operation viewer

If the configuration of JP1/AJS that has been linked with JP1/IM - Manager (Intelligent Integrated Management Base) is not displayed in the integrated operation viewer, take the action shown below.

#### Cause

A nonexistent file is specified for the cmdpath attribute in the adapter command settings file.

### Corrective action

Review the setting of the cmdpath attribute in the adapter command settings file.

For details about the cmdpath attribute, see 4. User-created Plug-ins in the manual JP1/Integrated Management 2 - Manager Command, Definition File and API Reference.

### (67) Actions to take when JP1/IM - Manager version 12-00-05 or earlier does not start

### Cause

In a Windows environment:

JP1/Base in the same system is version 12-00-31 or a later version and the communication encryption function is enabled.

In a UNIX environment:

JP1/Base in the same system is version 12-00-31 or a later version.

### Corrective action

Upgrade JP1/IM - Manager to version 12-00-31 or a later version.

# (68) Actions to take when JP1/IM - Manager version 12-00-31 or later does not start

#### Cause

JP1/Base in the same system is version 12-00-02 or an earlier version and the communication encryption function is enabled.

### Corrective action

Upgrade JP1/Base to version 12-00-31 or a later version.

# (69) How to respond if the KNAN11199-E message is output after executing the jimdbupdate command, or if the IM database cannot start after executing the jimdbupdate command

The message "KNAN11199-E Failed to update the IM database service." is output after executing the jimdbupdate command, or the IM database cannot start after executing the jimdbupdate command.

### Cause

Open the following file in text editor, and then check the text on line 14.

### For Windows

- On physical host value-of-setup-information-file-IMDBENVDIR\JM0\CONF\pdsys
- On logical host
   value-of-IMDBENVDIR-for-cluster-setup-information-file\JM<n>#\CONF\pdsys

#: < n > is the LOGICALHOSTNUMBER value of cluster setup information file

#### For UNIX

- On physical host value-of-setup-information-file-IMDBENVDIR/JM0/conf/pdsys
- On logical host
   value-of-IMDBENVDIR-for-cluster-setup-information-file/JM<n>#/conf/pdsys

#: < n > is the LOGICALHOSTNUMBER value of cluster setup information file

If the text on line 14 is "set pd max users = 96", this could be due to the following causes.

• After the jimdbupdate command output the following messages and then ended, either the jimdbupdate command was re-executed or the IM database started.

```
\tt KNAN11034-E An attempt to stop the IM database service has failed. \tt KNAN11199-E Failed to update the IM database service.
```

• A procedure that differs from the IM database update procedure listed in the manual *JP1/Integrated Management 2 - Manager Configuration Guide* was performed.

### Corrective action

### For Windows

If the problem occurred on a physical host, perform the following steps. You do not need to re-execute the jimdbupdate command after the steps have been completed.

1. Execute the jimdbstop command (with the -f option specified), and then stop the IM database.

```
jimdbstop -f
```

Check that one of the following messages has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped. KNAN11046-E The service JP1/IM2-Manager DB Server is not running.
```

2. Open the following file using text editor.

```
value-of-setup-information-file-IMDBENVDIR\JM0\CONF\pdsys
```

3. Inside the file opened in step 2, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 96
(After change)
set pd max users = 32
```

- 4. Start JP1/IM2-Manager DB Server service.
- 5. Execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

- 6. Stop JP1/IM2-Manager DB Server service.
- 7. Reopen the file opened in step 2 using text editor.
- 8. Inside the file opened in step 7, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
```

```
set pd_max_users = 32
(After change)
set pd max users = 96
```

- 9. Start JP1/IM2-Manager DB Server service.
- 10. Start JP1/IM2-Manager service.

If the problem occurred on a logical host in a cluster system, perform the following steps. You do not need to re-execute the jimdbupdate command after the steps have been completed.

- 1. By operating the cluster software, place the following services offline and make sure that the following services were stopped on both active host and standby host. If the services are running, stop the services.
  - JP1/IM2 Manager Service on the logical host (service name that is displayed: JP1/IM2-Manager *logical-hostname*)
  - JP1/IM2 Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB ClusterService\_logical-host-name)
  - The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server\_logical-host-name)
- 2. On the active host, start the following service from the service window of the OS:

The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server *logical-host-name*)

3. On the active host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that one of the following messages has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped.
```

4. On active host, open the following file using text editor.

```
value-of-IMDBENVDIR-for-cluster-setup-information-file \JM<n>#\CONF\pdsys#: <n> is the LOGICALHOSTNUMBER value of cluster setup information file
```

5. Inside the file opened in step 4, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
```

```
set pd_max_users = 96
(After change)
set pd max users = 32
```

6. On the active host, start the following service from the service window of the OS:

JP1/IM2 - Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service *logical-host-name*)

7. On the active host, execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus -h logical-host-name
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

8. On the active host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -h logical-host-name
```

Check that KNAN11186-I message has been output.

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

- 9. On the active host, stop the following service from the service window of the OS by order:
  - JP1/IM2 Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service\_logical-host-name)
  - The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server\_logical-host-name)
- 10. On active host, reopen the file opened in step 4 using text editor.
- 11. Inside the file opened in step 10, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

### (Before change)

```
set pd_max_users = 32
(After change)
set pd_max_users = 96
```

- 12. In addition to transferring the shared disk and the logical IP address assigned to the active host to the standby host, make sure that the shared disk and the logical IP address can be used on the logical host.
- 13. On the standby host, start the following service from the service window of the OS:

The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server *logical-host-name*)

14. On the standby host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that one of the following messages has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped.
```

15. On the standby host, start the following service from the service window of the OS:

JP1/IM2 - Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service *logical-host-name*)

If the service started successfully, perform step 24 after stopping the following services from the service window of the OS:

- JP1/IM2 Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service\_logical-host-name)
- The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server *logical-host-name*)

If the service failed to start, perform the procedure beginning with step 16.

16. On standby host, open the following file using text editor.

```
value-of-IMDBENVDIR-for-cluster-setup-information-file \ JM < n > ^{\#} \setminus CONF \setminus pdsys #: < n > is the LOGICALHOSTNUMBER value of cluster setup information file
```

17. Inside the file opened in step 16, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 96
(After change)
set pd_max_users = 32
```

18. On the standby host, start the following service from the service window of the OS:

```
JP1/IM2 - Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service logical-host-name)
```

19. On the standby host, execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus -h logical-host-name
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

20. On the standby host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -h logical-host-name
```

Check that KNAN11186-I message has been output.

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

- 21. On the standby host, stop the following service from the service window of the OS by order:
  - JP1/IM2 Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service\_logical-host-name)
  - The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server *logical-host-name*)
- 22. On standby host, reopen the file opened in step 16 using text editor.
- 23. Inside the file opened in step 22, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 32
(After change)
```

```
set pd max users = 96
```

- 24. In addition to transferring the shared disk and the logical IP address assigned to the standby host to the active host, make sure that the shared disk and the logical IP address can be used on the logical host.
- 25. By operating the cluster software on the active host, place the following services online and start them by order:
  - The IM database service on the logical host (service name that is displayed: JP1/IM2-Manager DB Server *logical-host-name*)
  - JP1/IM2 Manager DB Cluster Service on the logical host (service name that is displayed: JP1/IM2-Manager DB Cluster Service *logical-host-name*)
  - JP1/IM2 Manager Service on the logical host (service name that is displayed: JP1/IM2-Manager\_logical-host-name)

### For Linux

If the problem occurred on a physical host, perform the following steps. You do not need to re-execute the jimdbupdate command after the steps have been completed.

1. Execute the jimdbstop command (with the -f option specified), and then stop the IM database.

```
jimdbstop -f
```

Check that KNAN11186-I or KNAN11183-I message has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped.
```

2. Open the following file using text editor.

value-of-setup-information-file-IMDBENVDIR/JM0/conf/pdsys

3. Inside the file opened in step 2, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
```

```
set pd_max_users = 96
(After change)
set pd_max_users = 32
```

4. Execute jimdbstart command in /opt/jplimm/bin/imdb to start the IM database.

```
jimdbstart
```

5. Execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

6. Execute the jimdbstop command (without option) to stop the IM databases.

```
jimdbstop
```

Check that KNAN11186-I message has been output.

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

- 7. Reopen the file opened in step 2 using text editor.
- 8. Inside the file opened in step 7, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

(Before change)

```
set pd_max_users = 32
(After change)
set pd_max_users = 96
```

9. Start JP1/IM2 - Manager.

If the problem occurred on a logical host in a cluster system, perform the following steps. You do not need to re-execute the jimdbupdate command after the steps have been completed.

- 1. Check that the active logical hosts' JP1/IM2 Manager have stopped. If JP1/IM2 Manager has started, make sure to stop it.
- 2. On the active host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that KNAN11186-I or KNAN11183-I message has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped.
```

3. On active host, open the following file using text editor.

```
value-of-IMDBENVDIR-for-cluster-setup-information-file / JM < n > \# / conf/pdsys #: < n > is the LOGICALHOSTNUMBER value of cluster setup information file.
```

4. Inside the file opened in step 3, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 96
(After change)
set pd_max_users = 32
```

5. On active host, execute jimdbstart command in /opt/jplimm/bin/imdb to start the IM database.

```
jimdbstart -h logical-host-name
```

6. On the active host, execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus -h logical-host-name
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

7. On the active host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that KNAN11186-I message has been output.

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

- 8. On active host, reopen the file opened in step 3 using text editor.
- 9. Inside the file opened in step 8, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 32
(After change)
set pd_max_users = 96
```

- 10. In addition to transferring the shared disk and the logical IP address assigned to the active host to the standby host, make sure that the shared disk and the logical IP address can be used on the logical host.
- 11. On the standby host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that KNAN11186-I or KNAN11183-I message has been output.

```
KNAN11186-I Processing to stop the IM database service ended normally. KNAN11183-I The IM database service is stopped.
```

12. On standby host, execute jimdbstart command in /opt/jplimm/bin/imdb to start the IM database.

```
jimdbstart -h logical-host-name
```

- If the following message is output, perform step 11 again. After stopping the IM database, perform step 20.

KNAN11180-I Processing to start the IM database service ended normally.

- If the following message is output, perform the procedure beginning with step 13.

KNAN11035-E An attempt to start the IM database service has failed.

13. On standby host, open the following file using text editor.

```
value-of-IMDBENVDIR-for-cluster-setup-information-file/\mathtt{JM} < n > ^{\#}/\mathtt{conf/pdsys}
\#: < n >  is the LOGICALHOSTNUMBER value of cluster setup information file.
```

14. Inside the file opened in step 13, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 96
(After change)
set pd_max_users = 32
```

15. On standby host, execute jimdbstart command in /opt/jplimm/bin/imdb to start the IM database.

```
jimdbstart -h logical-host-name
```

16. On the standby host, execute the jimdbstatus command, and then check that the IM database service is operational.

```
jimdbstatus -h logical-host-name
```

The KNAN11182-I message is output.

```
KNAN11182-I The IM database service is running.
```

If the IM database service is not operational, execute the jimdbstatus command every 10 seconds, and then wait until the service is operational.

17. On the standby host, execute the jimdbstop command to stop the IM databases.

```
jimdbstop -f -h logical-host-name
```

Check that KNAN11186-I message has been output.

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

- 18. On standby host, reopen the file opened in step 12 using text editor.
- 19. Inside the file opened in step 18, change the value of line 14 (set pd\_max\_users) to the following value and save the file.

```
(Before change)
set pd_max_users = 32
(After change)
set pd_max_users = 96
```

- 20. In addition to transferring the shared disk and the logical IP address assigned to the standby host to the active host, make sure that the shared disk and the logical IP address can be used on the logical host.
- 21. By operating the cluster software on the active host, start JP1/IM2 Manager on the logical host.

# (70) How to respond if the \_\_configurationGet method is not executed in your user-created plug-in

If the \_\_configurationGet method is not executed in your user-created plug-in, check if the adapter command settings file is saved in the ASCII character code.

For details about the adapter command settings file, see 7.3.2 Adapter command settings file in the manual JP1/ Integrated Management 2 - Manager Command, Definition File and API Reference.

### Index

A	Configuration are disabled in IM Configuration
actions to take when	Management - View 377
additional common exclusion-conditions cannot be	monitored object database cannot be unlocked 357
set 363	monitored object database is damaged 357
attempt to start profile of remote monitoring log file trap fails in IM Configuration Management 382	no JP1 event is displayed in Event Console window 367
automated action is delayed 356	no response-waiting events are displayed in JP1/IM
characters are unreadable JP1/SES-format events are received 387	- View 366
command execution log file is damaged 350	Processing dialog box continues to open in IM Configuration Management - View 381
command execution or batch file executed in automated action does not terminate normally 363	profile settings file does not match valid configuration information 377
connection to JP1/Base fails 344	remote monitored log file name is incorrect 383
correlation events cannot be displayed in JP1/IM - View 361	response-waiting events are displayed as ordinary events 367
definition menu is not displayed in Event Console window 344	same JP1 event is received redundantly in remote monitoring log file trap of IM Configuration
earlier version of JP1/IM - Manager or JP1/IM - View	Management 382
is being used 358 email does not reach destination in email notification	setup information file is output as invalid during IM database setup 374
function of JP1/IM - Manager 387	source host name is different from host name
error message indicating invalid port number is	registered in IM Configuration Management 386
issued after IM database has been set up 373	status cannot be changed 369
event information cannot be inherited 348	trapped JP1 event message shows unreadable
event search cannot be executed 370	characters 345
filter does not work correctly because source host name is different from monitored host name 386	tree area on IM Configuration page in IM Configuration Management - View is displayed in
IM Configuration Management failed to apply	gray 381
system hierarchy 375	unknown is displayed as automated action execution status 355
IM Configuration Management failed to collect operation definition file for log file trap 376	valid configuration information of remote monitoring
IM database cannot be started or database-related	log file trap or remote monitoring event log trap
commands cannot be executed 375	cannot be viewed in IM Configuration Management 378
IM database cannot be terminated 372	virtualization system configuration cannot be
IM database setup fails 373	collected in IM Configuration Management 378
JP1/IM - Manager cannot be uninstalled 373	you cannot connect to IM database 372
JP1/IM - View cannot display any log file traps that are active 376	you cannot connect to remotely monitored host 383
JP1/IM - View window cannot be displayed after you	you cannot execute command 345
have logged in 362	you cannot execute commands from Command button 349
JP1 events are displayed late in Event Console window 368	you cannot log in from JP1/IM - View 342
KAVB5150-W is displayed in detailed information for	you cannot start client applications 349
action result 357	Actions to take when an automated action is not
many JP1 events occurred for which correlation	executed 400
events were generated 360 memo entries cannot be set up 371	actions to take when filter does not work correctly because source host name is different from monitored host name 386

Actions to take when JP1/IIVI - View does not start 400	C
additional common exclusion-condition	canceling automated actions 209
changing additional common exclusion-condition to common exclusion-condition 136	Central Console
Setting an additional common exclusion-condition to	JP1 event grouping 148
exclude a JP1 event from the monitoring target or	Central Console, monitoring system from 111
action execution 135	Central Scope
additional common exclusion-conditions	monitoring from Monitoring Tree window 184
setting additional common exclusion-conditions by using JP1 events that have occurred 135	monitoring from Visual Monitoring window 189
trouble shooting (additional common exclusion-	monitoring system from 183
conditions cannot be set) 363	changing
additional common exclusion-condition to common	additional common exclusion-condition to common exclusion-condition 136
exclusion-condition	changing JP1 event display messages 152
changing 136	database settings 42
applying edited settings file information 223	JP1/IM settings 63
automated actions	monitoring status of monitoring nodes 185, 190
canceling 209	status of monitoring nodes 184, 190
checking execution results of 206	changing monitoring configuration
checking execution status of 205	notes on changing monitoring configuration from
checking operating status of 211	remote to agent 75
executing 205	changing response status
re-executing 210	changing 125
setting up 205	Changing the message displayed for a JP1 event 152
automatic startup and stop, examples of 84	checking
n	command execution status 203
В	execution results of automated actions 206
backing up 36	execution status of automated actions 205
command execution log 36	operating status of automated actions 211
configuration information (UNIX) 27 configuration information (Windows) 20	Checking detailed information about a correlation event and changing the response status 127
database 36	cluster system, operations in 80, 83
event database 39	
	collecting (UNIX)
file for accumulated response-waiting events 39	collecting (UNIX)  RAS information 339
file for accumulated response-waiting events 39 host information database 38	
·	RAS information 339
host information database 38	RAS information 339 collecting (Windows)
host information database 38 IM database 40	RAS information 339 collecting (Windows) RAS information 333
host information database 38 IM database 40 monitored object database 38	RAS information 339 collecting (Windows) RAS information 333 command, executing
host information database 38 IM database 40 monitored object database 38 batch file, abnormally terminated 363	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201
host information database 38 IM database 40 monitored object database 38 batch file, abnormally terminated 363 batch job execution system 245	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199
host information database 38  IM database 40  monitored object database 38  batch file, abnormally terminated 363  batch job execution system 245  system configuration when linking with batch job	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202
host information database 38  IM database 40  monitored object database 38  batch file, abnormally terminated 363  batch job execution system 245  system configuration when linking with batch job execution systems 245	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202 command execution log
host information database 38  IM database 40  monitored object database 38  batch file, abnormally terminated 363  batch job execution system 245  system configuration when linking with batch job execution systems 245  BJEX linkage commands	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202 command execution log backing up 36
host information database 38  IM database 40 monitored object database 38 batch file, abnormally terminated 363 batch job execution system 245 system configuration when linking with batch job execution systems 245 BJEX linkage commands jcoimdef 267	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202 command execution log backing up 36 procedures for backing up and recovering 36
host information database 38  IM database 40 monitored object database 38 batch file, abnormally terminated 363 batch job execution system 245 system configuration when linking with batch job execution systems 245  BJEX linkage commands jcoimdef 267 jim_log.bat (Windows only) 267	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202 command execution log backing up 36 procedures for backing up and recovering 36 recovering 36
host information database 38  IM database 40 monitored object database 38  batch file, abnormally terminated 363  batch job execution system 245 system configuration when linking with batch job execution systems 245  BJEX linkage commands jcoimdef 267 jim_log.bat (Windows only) 267 jim_log.sh (UNIX only) 268	RAS information 339 collecting (Windows) RAS information 333 command, executing by using Command button 201 by using command line 199 defined on source host of selected event 202 command execution log backing up 36 procedures for backing up and recovering 36 recovering 36 re-creating 42

actions to take when you cannot execute 345	recovering event database 39
deleting 203	recovering file for accumulated response-waiting
user who executes 203	events 39
commands, executing 199	recovering host information database 38
common exclusion-condition	recovering IM database 40
using command to switch 134	recovering monitored object database 38
configuration information	reorganizing event database 34
managing 20	reorganizing file for accumulated response-waiting
migrating 58	events 34
consolidated	reorganizing IM database 34
consolidated display when events with same	databases backing up 36
attributes occur consecutively 173	changing settings of 42
consolidated display	managing 34
consolidated display when events with same attributes occur consecutively 173	migrating 58
consolidated event	recovering 36
	re-creating 42
setting response status for repeated events 126 consolidated events in events list, displaying 117	5
conventions	reorganizing 34 data collection tool
	executing (UNIX) 338
diagrams 8	
fonts and symbols 9 mathematical expressions 10	executing (Windows) 331 deleting commands 203
version numbers 10	· ·
	detailed information about repeated events
correlation event generation history 56	checking, and changing the response status for 126
correlation events in events list, displaying 119	diagram conventions 8
correlation source event	disk capacity, managing 54
displaying 128	displaying
from Related Events (Correlation) or Related Events (Correlation fails) window, deleting 129	attributes of monitoring nodes 187, 192
from Related Events (Correlation) or Related Events	consolidated events 173
(Correlation fails) window, setting response status	guide information 187, 192
for 128	login user list 188
CSV file	displaying, detailed JP1 event information 121
outputting events to 56	Displaying extended attributes of JP1 events (mapping of event information) 145
D	displaying performance reports for JP1 events when linking with JP1/PFM 180
data, collecting 330	displaying search results (JP1 event) 142
database management 34	dump files, managing 55
backing up command execution log 36	
backing up event database 39	E
backing up file for accumulated response-waiting	email notification function
events 39	actions to take when email does not reach
backing up host information database 38	destination 387
backing up IM database 40	error information
backing up monitored object database 38	collecting (UNIX) 339
changing IM database port 51	collecting (Windows) 333
expanding IM database size 47	event
recovering command execution log 36	

event by specifying event display start-time, displaying 137	failed, actions to take for 396
consolidated display when events with same attributes occur consecutively 173	F
forwarding from agent, preparing to suppress 158	file for accumulated response-waiting events 253
severity level of, changing 149	backing up 39
event acquisition filter	procedures for backing up and recovering 39
applying filter 120	recovering 39
switching 131	re-creating 46
using jcochfilter command to switch 133	reorganizing 34
Event Console window	filter 130
actions to take when definition menu is not displayed in 344	applying 120 font conventions 9
actions to take when no JP1 event is displayed in 367	
events displayed in events list in 116	G
event database	grouping
backing up 39	JP1 event 148
procedures for backing up and recovering 39	guide information, displaying 187, 192
recovering 39	
re-creating 44	Н
reorganizing 34	handling
event display	general procedures and preparation for handling
displaying event by specifying event display start- time 137	occurrence of large number of events 156 handling occurrence of large number of events 156
event forwarding	historical reports, using 56
handling occurrence of large number of events by suppressing event forwarding from agent 161	host information
on agent, setting threshold for automatically suppressing 166	collecting 218 host information database
event information	backing up 38
actions to take when event information cannot be	procedures for backing up and recovering 38
inherited 348	recovering 38
events	re-creating 43
occurrence of, handling large number of 156	reorganizing 34
occurrence of by suppressing event forwarding from	host management
agent, handling large number of 161	changing information 218
outputting (to CSV file) 56	collecting information 218
stopping, on manager, log file trap that issues large numbers of 172	deleting (IM Configuration Management window)218
event search direction 142	displaying lists 218
event service	registering 218
actions to take when connection to JP1/Base fails	host name
344	actions to take when source host name is different from host name registered in IM Configuration
Exclusion history and definition history of common exclusion conditions 57	Management 386
executing	changing 64
automated actions 205	cluster system, logical 66
commands (on agent or manager host) 201	mail server 66
extended recovery	of manager or agent 64
•	host name, changing 64

host name of manager or agent	changing port of 51
tasks necessary after changing 64	expanding size of 47
host name of manager or agent, procedure for	recovering 40
redistributing system configuration after changing 66	reorganizing 34
hosts	IM database capacity
managing 218	managing 54
How to extend logs	IM database setup
when a log from the time an even occurred cannot be collected because logs for IM Configuration Management viewer wrap around, causing older logs to be overwritten 398	actions to take when error message indicating invalid port number is issued after IM database has been set up 373 actions to take when IM database setup fails 373
	actions to take when setup information file is output
I	as invalid during IM database setup 374
IM Configuration Management	incident
actions to take when attempt to start profile of remote monitoring log file trap fails in IM Configuration	displaying JP1/Service Support from Event Details window 176
Management 382 actions to take when same JP1 event is received	displaying JP1/Service Support from pages of Event Console window 175
redundantly in remote monitoring log file trap of IM Configuration Management 382	displaying JP1/Service Support from Related Events window 175
actions to take when virtualization system	Intelligent Integrated Management Base
configuration cannot be collected in IM Configuration Management 378	Checking performance data and handling the problem (link with JP1/PFM) 104
applying imported management information of 240	Handling errors by viewing suggestions 104
applying management information to Central Scope monitoring tree 220	JP1 events 98
monitoring tree 220 exporting and importing management information of IM Configuration Management 226	Logging in to the system with single sign-on through linkage with external products using OIDC authentication 105
exporting management information of 226	Notes on operating 108
importing management information of 230	Port number is changed 76
managing business groups 222	Sharing information using a direct access URL 106
managing hosts 218	System Monitoring 95
managing profiles 223	Understanding how extensive a problem that
managing service operation status 224	occurred during operation of a job is and handling it
managing system hierarchy using 217	(link with JP1/AJS) 103
IM Configuration Management - View	Understanding in advance which root jobnets are affected before the definition or content of a job is
actions to take when menu items such as Register Host and Edit Agent Configuration are disabled in IM	changed (link with JP1/AJS) 104
Configuration Management - View 377	Using signs to avoid failures (link with JP1/AJS) 103
actions to take when Processing dialog box	Viewing links with other products 103
continues to open in IM Configuration Management	Viewing the system status 96
- View 381	IP address
IM Configuration page	changing 68
actions to take when tree area on IM Configuration	of mail server 69
page in IM Configuration Management - View is displayed in gray 381	of manager or agent 68
IM database	IP address, changing 68
actions to take when IM database cannot be started or database-related commands cannot be executed	IP address of manager or agent, procedure for restarting the system after changing 68
375	items, displayed in events list 112

backing up 40

J	in which communication encryption function is enabled, actions to take when error is displayed on
JP1/AS linkage commands	389
jcoimdef 267	log files (Central Console) (UNIX) 292
jim_log.bat (Windows only) 267	log files (Central Console) (Windows) 274
jim_log.sh (UNIX only) 268	log files (Central Scope) (UNIX) 299
JP1/IM	log files (Central Scope) (Windows) 281
changing configuration of 62	log files and folders (IM Configuration Management)
changing severity level of JP1 events 149	(UNIX) 300
collecting data 330	log files and folders (IM Configuration Management)
correcting problems 342	(Windows) 283
data that needs to be collected when problem occurs	logging in to 91
306	logging out of 94
editing JP1 memo entries 123	login and logout 90
linking with BJEX 244	notes on starting 88
logging in 91	notes on stopping 88
logging in to JP1/IM - Manager 91	starting 77–79
logging out 94	stopping 77, 82
logging out of JP1/IM - Manager 94	Using a Web browser to log in to 91
log information types 271	using command to log in to 92
managing configuration information 20	using GUI to log in to 91
managing databases 34	JP1/IM - Rule Operation
managing disk capacity 54	checking rule startup request status 176
monitoring from Monitoring Tree window 184	displaying Rule Log Details window of 177
monitoring from Visual Monitoring window 189	operating 176
monitoring system from Central Scope 183	JP1/IM system
opening monitor window of application that issued JP1 events 179	applying system hierarchy 219
	collecting system hierarchy information 219
opening other application windows from Tool Launcher 213	displaying system hierarchy 219
outputting dump file for (UNIX) 338	editing system hierarchy 219
outputting thread dump for (Windows) 330	synchronizing system hierarchies 219
searching for JP1 events 140	verifying system hierarchy 219
settings information, changing 63	JP1/IM - View
starting 78	actions to take when no response-waiting events are displayed in 366
stopping 82	actions to take when response-waiting events are
switching event acquisition filter to be applied 131	displayed as ordinary events 367
system maintenance 19	actions to take when you cannot log in from 342
system operation using 198	executing commands by using Command button 201
troubleshooting 269	executing commands by using Command Execution
troubleshooting procedure 270	199
using historical reports 56	log files and folders 290
JP1/IM files for backup 21, 28 JP1/IM filter	opening monitor window of application that issued JP1 events 179
applying 130	opening other application windows from Tool Launcher 213
JP1/IM - Manager	switching common exclusion-condition from Event Acquisition Conditions List window 132

switching common exclusion-condition from System	search method 140
Environment Settings window 132	search procedure 140
switching event acquisition filter from Event Acquisition Conditions List window 132	setting JP1 event response statuses 124 to be displayed by specifying time period, narrowing
switching event acquisition filter from System Environment Settings window 131	138
system operation 198	viewing 112
when communication encryption function is enabled,	JP1 event information
actions to take when error is displayed in 392	by operation, customizing 145
JP1/Navigation Platform	JP1 event response status
displaying operating procedures for JP1 events	setting 124
(linking with JP1/Navigation Platform) 176	settings for 124
JP1/PFM	JP1 events
displaying performance reports for JP1 events when linking with JP1/PFM 180	actions to take if JP1 events are not received even when remote monitoring event log trap is running in IM Configuration Management 380
operating 180	actions to take if JP1 events are not received even
JP1/Service Support	when remote monitoring log file trap is running in IM
from Event Details window, displaying 176	Configuration Management 379
from pages of Event Console window, displaying 175	items that can be displayed 113
from Related Events window, displaying 175	using historical information of 56
operating 175	JP1 events response status
registering JP1 events as incidents in JP1/IM -	from events list, setting 125
Service Support (linking with JP1/IM - Service Support) 175	JP1 memo entry
	editing 123
JP1 event	
as incidents in JP1/IM - Service Support (linking with JP1/IM - Service Support), registering 175	K
by linking with other products, handling 175	KAVB0002-E 347
changing severity level of JP1 events 149	KAVB0104-E 342
displaying 112	KAVB0109-E 342
displaying detailed information 121	KAVB0256-E 364
displaying only severe events 130	KAVB0415-E 345
displaying operating procedures for (linking with JP1/	KAVB0416-E 345
Navigation Platform) 176	KAVB0417-E 346
displaying program-specific extended attributes of (displaying program-specific extended attributes)	KAVB0418-E 346
145	KAVB0419-E 346
	NAV DU4 19-E 340
displaying program-specific extended attributes of	KAVB0419-E 346 KAVB0422-E 346
displaying program-specific extended attributes of (mapping event information) 145	
. ,	KAVB0422-E 346
(mapping event information) 145	KAVB0422-E 346 KAVB0423-E 346
(mapping event information) 145 displaying search results 142	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349
(mapping event information) 145 displaying search results 142 display messages, changing 152	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348 KAVB1037-E 348, 349
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348 KAVB1037-E 348, 349 KAVB1040-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying program-specific extended attributes) 115	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348 KAVB1047-E 348, 349 KAVB1040-W 348 KAVB1041-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying program-specific extended attributes) 115 program-specific extended attributes of (event	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348 KAVB1037-E 348, 349 KAVB1040-W 348 KAVB1041-W 348 KAVB1042-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying program-specific extended attributes) 115 program-specific extended attributes of (event information mapping) 116	KAVB0422-E 346 KAVB0423-E 346 KAVB1034-E 349 KAVB1036-W 348 KAVB1047-E 348, 349 KAVB1040-W 348 KAVB1041-W 348 KAVB1042-W 348 KAVB1043-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying program-specific extended attributes) 115 program-specific extended attributes of (event information mapping) 116 response status 116	KAVB0422-E 346  KAVB0423-E 346  KAVB1034-E 349  KAVB1036-W 348  KAVB1047-E 348, 349  KAVB1040-W 348  KAVB1041-W 348  KAVB1042-W 348  KAVB1043-W 348  KAVB1043-W 348  KAVB1044-W 348
(mapping event information) 145 displaying search results 142 display messages, changing 152 grouping 148 opening monitor window of application that issued 179 program-specific extended attributes of (displaying program-specific extended attributes) 115 program-specific extended attributes of (event information mapping) 116	KAVB0422-E 346  KAVB0423-E 346  KAVB1034-E 349  KAVB1036-W 348  KAVB1047-E 348, 349  KAVB1040-W 348  KAVB1041-W 348  KAVB1042-W 348  KAVB1043-W 348  KAVB1044-W 348  KAVB1044-W 348  KAVB1044-B 348

KAVB1155-E	363	KNAN21404-E 395
KAVB1157-E	364	KNAN22017-E 383
KAVB1158-W	365	KNAN22403-E 401
KAVB1159-W	365	KNAN24155-E 391
KAVB1160-W	365	KNAN26039-E 382
KAVB1161-W	365	KNAN29095-E 391
KAVB1162-W	365	KNAN29097-W 392
KAVB1163-E	363	KNAN29098-E 391
KAVB1200-E	342	
KAVB1956-E	389	L
KAVB1957-E	389	linkage
KAVB1958-E	393	BJEX configuration 261
KAVB1959-E	393	BJEX linkage configuration 258
KAVB1969-W	394	BJEX or JP1/AS configuration 261
KAVB1971-W	394	BJEX or JP1/AS linkage configuration 258
KAVB1972-W	390	communication settings between BJEX and JP1/IN
KAVB2027-E	347	- Manager 260
KAVB2031-E	347	JP1/AS configuration 261
KAVB2239-E	356	JP1/AS linkage configuration 258
KAVB6601-E	393	JP1/IM functionality for BJEX linkage 248
KAVB6602-E	393	JP1/IM functionality for BJEX or JP1/AS linkage 24
KAVB6603-W	394	JP1/IM functionality for JP1/AS linkage 248
KAVB7247-E	357	linking with BJEX 267
KAVB7248-E	357	linking with BJEX or JP1/AS 267
KAVB7602-E	390	linking with JP1/AS 267
KAVB7810-E	390	overview of BJEX linkage 245
KAVB7812-E	391	overview of BJEX or JP1/AS linkage 245
KAVB7818-E	391	overview of JP1/AS linkage 245
KAVB8452-E	347	linked products
KAVB8817-E	389	BJEX 244
KAVB8818-E	389	linking with JP1/AS 244
KNAN20100-E	342	linking
KNAN20101-E	343	handling JP1 events by linking with other products
KNAN20102-E	343	175
KNAN20103-E	343	with BJEX or JP1/AS 244
KNAN20104-E	344	with JP1/AS 244
KNAN20121-E	393	linking with JP1/Navigation Platform
KNAN20122-E	393	operating 176
KNAN20123-W	/ 394	log
KNAN20124-W	1 394	common message 271
KNAN20141-E	393	files and directory list 273
KNAN20142-E	394	integrated trace 271
KNAN20143-W	/ 394	operation 273
KNAN20144-W	/ 395	types of information 271
KNAN21400-W	/ 385	log file size, managing 55
KNAN21402-E	385	log file trap
KNAN21403-E	385	

stopping, on manager, log file trap that issues large numbers of events 172	monitoring tree changing monitoring status of monitoring nodes in
login 91	185
Using a Web browser 91 using GUI 91	changing status of monitoring nodes in 184 displaying attributes of monitoring nodes in 187
login user list, displaying 188	displaying guide information in 187
logout 94	searching for monitoring nodes in 186
	searching for status-change events in 186
M	Monitoring Tree window
maintenance 19	monitoring from 184
management information, exporting and importing 226	opening, from Visual Monitoring window 189
manager or agent, IP address of	saving information in 188
tasks after changing 68	monitor window 179
manager or agent, resetting the date/time of	monitor window of application, opening 179
returning the time 70	N
manager or agent, tasks required when date of is changed 70	
managing	non-cluster system
business groups 222	logical host, operating (startup) 81
configuration information 20	logical host, operating (termination) 83
configuration of virtual system 220	notes on
databases 34	starting JP1/IM - Manager 88
disk capacity 54	stopping JP1/IM - Manager 88
hosts 218	•
IM database capacity 54	0
profiles 223	opening
service operation status 224	Monitoring Tree window from Visual Monitoring window 189
mathematical expression conventions 10	other application windows from Tool Launcher 213
message	Visual Monitoring window 188
changing JP1 event display messages 152	opening monitor window
migrating configuration information and databases 58	opening monitor window of application that issued
monitored host in a remote monitoring configuration, tasks required when date of is changed 73	JP1 events 179
monitored object database	
	operating
•	operating changing severity level of JP1 events 149
backing up 38	operating changing severity level of JP1 events 149 checking rule startup request status 176
backing up 38 procedures for backing up and recovering 38	operating changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125
backing up 38 procedures for backing up and recovering 38 recovering 38	operating changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43	operating changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43 reorganizing 34	operating changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142 displaying only severe events 130
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43	operating changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43 reorganizing 34 monitoring from Monitoring Tree window 184 from Visual Monitoring window 189	changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142 displaying only severe events 130 displaying operating procedures for JP1 events (linking with JP1/Navigation Platform) 176 displaying performance reports for JP1 events when
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43 reorganizing 34 monitoring from Monitoring Tree window 184 from Visual Monitoring window 189 monitoring nodes	changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142 displaying only severe events 130 displaying operating procedures for JP1 events (linking with JP1/Navigation Platform) 176 displaying performance reports for JP1 events when linking with JP1/PFM 180
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43 reorganizing 34 monitoring from Monitoring Tree window 184 from Visual Monitoring window 189 monitoring nodes changing monitoring status of 185, 190	changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142 displaying only severe events 130 displaying operating procedures for JP1 events (linking with JP1/Navigation Platform) 176 displaying performance reports for JP1 events when linking with JP1/PFM 180 editing memo entry 123
backing up 38 procedures for backing up and recovering 38 recovering 38 re-creating 43 reorganizing 34 monitoring from Monitoring Tree window 184 from Visual Monitoring window 189 monitoring nodes	changing severity level of JP1 events 149 checking rule startup request status 176 deleting severe events 125 displaying detailed JP1 event information 121 displaying JP1 event search results 142 displaying only severe events 130 displaying operating procedures for JP1 events (linking with JP1/Navigation Platform) 176 displaying performance reports for JP1 events when linking with JP1/PFM 180

making rule startup request 176	displaying (displaying program-specific extended
opening monitor window 179	attributes) 145
registering JP1 events as incidents in JP1/IM - Service Support (linking with JP1/IM - Service	displaying (mapping event information) 145
Support) 175	R
searching for JP1 events 140	RAS information
setting response status for JP1 events from events list 125	collecting (UNIX) 339
switching event acquisition filter 131	collecting (Windows) 333
operation content	recovering 36
checking (UNIX) 339	command execution log 36
checking (Windows) 333	configuration information (UNIX) 32
operations	configuration information (Windows) 27
displaying login user list 188	database 36
login 91	event database 39
logout 94	file for accumulated response-waiting events 39
opening Visual Monitoring window 188	host information database 38
saving information in Monitoring Tree window on	IM database 40
local host 188	monitored object database 38
searching for monitoring nodes 191	re-creating
searching for monitoring nodes from monitoring tree	command execution log 42
186	databases 42
starting JP1/IM - Manager 78	event database 44
stopping JP1/IM - Manager 82	file for accumulated response-waiting events 46
Tool Launcher window 214	host information database 43
Using a Web browser to log in 91	monitored object database 43
using command to log in 92	re-executing automated actions 210
using GUI to log in 91	regular expression
P	to specify search conditions, using (event search)
	Related Events window
passwords of a monitored host in a remote monitoring configuration, tasks required when changed 74	operating JP1 events from 126
preparing	remote monitoring log file trap
general procedures and preparation for handling	notes applying before starting remote monitoring log
occurrence of large number of events 156	file trap by using IM Configuration Management 382
preparing to suppress event forwarding from agent 158	reorganizing 34 command execution log 34
procedures	event database 34
changing IM database port 51	file for accumulated response-waiting events 34
expanding IM database size 47	host information database 34
troubleshooting 270	IM database 34
process status, checking 330, 338	monitored object database 34
profiles, managing 223	repeated events
displaying profiles 223	consolidated event 126
editing settings files 223	repeated events that are consolidated into
obtaining list of profiles 223	consolidated event
obtaining profiles 223	checking detailed information about 126
	setting response status for 126
program-specific extended attributes of JP1 events	Solding respense states for 120

response-waiting event management function 245, 249	applying filter 120
response-waiting events 245	Severe Events page
accumulating 253	deleting severe events from 125
canceling 256	specifying
handling in JP1/IM 248	specifying repeated event conditions 167
issuing paths 248	starting
manually removing from accumulation 265	JP1/IM - Manager 78
monitoring 250	notes on 88
monitoring in Central Console 262	status-change events, searching 186, 191
monitoring in Central Scope 263	stopping
responding to 254, 265	JP1/IM - Manager 82
resuming monitoring in hold-and-accumulate state	notes on 88
266 rule startup request	stopping, on manager, log file trap that issues large numbers of events 172
checking rule startup request status and making rule	suppressing
startup request (linking with JP1/IM - Rule Operation) 176	handling occurrence of large number of events by suppressing event forwarding from agent 161
0	preparing to suppress event forwarding from agent
S	
saving information in Monitoring Tree window on local	symbol conventions 9 system date, changing of 70
host 188	system hierarchies
searching	managing 217, 219
monitoring nodes 186, 191	system monitoring from Central Console 111
status-change events 191	System Monitoring from the Intelligent Integrated
status-change events from monitoring tree 186 searching for	Management Base 95
JP1 event 140	system time, resetting of
searching for JP1 events	advancing the time 72
operating 140	
search procedure 140	Т
search method (JP1 event) 140	Taking actions for the generation of a large number of
service operation information	events 156
displaying 225 managing 224	Tasks necessary when the host name of the Intelligent Integrated Management Base is changed 67
managing 224 setting	Tasks to be performed when the IP address of the
setting additional common exclusion-conditions by	Intelligent Integrated Management Base is changed 69
using JP1 events that have occurred 135	threshold
setting threshold for automatically suppressing event forwarding on agent 166	setting threshold for automatically suppressing event forwarding on agent 166
setting additional common exclusion-conditions by	Tool Launcher
using JP1 events that have occurred 135	functions that can be operated from 214
Setting an additional common exclusion-condition to	opening other application windows from 213
exclude a JP1 event from the monitoring target or	operations in 214
action execution 135	troubleshooting 269, 342
settings information, changing 63	corrective actions 342
severe event	data collection method 330
displaying 130	data that needs to be collected 306
severe event filter	log information types 271

### U

unreadable characters
actions to take when trapped JP1 event message shows unreadable characters 345
user-defined extended attribute to JP1 events that match condition, adding 148
user dump
collecting (Windows only) 333
user who executes commands 203
Using a Web browser to log in to JP1/IM - Manager (Intelligent Integrated Management Base) 91

### ٧

```
version number conventions
view filter
  applying filter
                 120
viewing, JP1 events 112
Viewing JP1 events (Events window)
                                     98
virtual host, registering 220
virtual system
  displaying host information in 220
  managing configuration of 220
Visual Monitoring window
  changing monitoring status of monitoring nodes in
  changing status of monitoring nodes in
  displaying attributes of monitoring nodes from 192
  displaying guide information from
  monitoring from
                   189
  opening
           188
  opening Monitoring Tree window from
  searching for monitoring nodes in
  searching for status-change events in 191
```

### W

when a log from the time an even occurred cannot be collected because logs for Central Console viewer or Central Scope viewer wrap around, causing older logs to be overwritten 397

