$PRIMECLUSTER^{\text{IM}}$

Web-Based Admin View Operation Guide 4.1 for Solaris

Edition 2002.09

Preface

This manual outlines the functions and operation of the Web-Based Admin View. Web-Based Admin View is a common base to utilize GUI (operation management view) with PRIMECLUSTER, and is provided along with each operation management product.

Target Readers

This manual is intended for all the users operating the products with Web-Based Admin View (e.g. PRIMECLUSTER.)

Organization

This manual consists of four parts, Appendices, and glossary. The content of each category is described below. When you use this product for the first time, be sure to read Part 1 first, and then work on the necessary operations.

Part 1 Introduction

Describes the functions and topology of the Web-Based Admin View.

Part 2 Web-Based Admin View GUI screen

Describes how to operate the GUI screen.

Part 3 Web-Based Admin View tools menu

Details the functions provided as the Web-Based Admin View tools menu.

Part 4 Web-Based Admin View operating setup

Details the operation method (e.g. shut-down, restart) and modify the original settings.

Part 5 Download package

Installation procedure of a download package and operating instructions are described below.

Appendix A Message

Explains the message texts and corrective actions.

Appendix B Troubleshooting

Explains how to take corrective actions in the event of a failure and collect required data for the request of troubleshooting.

Glossary

This part defines the terms and expounds the meaning of each technical term. Refer to this part if necessary.

Related documentation

The documents listed in this section contain information relevant to Web-Based Admin View and may be ordered through your sales representative. Before beginning to work with Web-based Admin View, read the following document:

- PRIMECLUSTER Concepts Guide
- PRIMECLUSTER Installation Guide
- PRIMECLUSTER CF Administration and Configuration Guide



Your sales representative will need your operating system release and

product version to place your order.

Manual Printing

Use the PDF file supplied in a CD-ROM for each product to print this manual. Adobe Acrobat Reader Version 4.0 or higher is required to read and print this PDF file.

Notational Conventions

Notation

This document adopts the following notational conventions.

Prompts

Command line examples that require system administrator (or root) rights to execute are preceded by the system administrator prompt, the hash sign (#). Entries that do not require system administrator rights are preceded by a dollar sign (\$).

Manual page section numbers

References to the UNIX operating system commands are followed by their manual page section numbers in parentheses $_$ for example, cp(1).

The keyboard

Keystrokes that represent nonprintable characters are displayed as key icons such as [Enter] or [F1]. For example, [Enter] means press the key labeled *Enter*; [Cntl]+[B] means hold down the key labeled *Cntl* or *Control* and then press the [B] key.

Typefaces / Symbol

The following typefaces highlight specific elements in this manual.

Typeface / Symbol	Usage		
Constant Width	Computer output and program listings; commands, file		
	names, manual page names and other literal programming		
	elements in the main body of text.		
Italic, <italic></italic>	Variables that you must replace with an actual entered		
	value.		
<constant width=""></constant>	Variables that you must replace with an actual		
	displayed value.		
Bold	Items in a command line that you must type exactly		
	as shown.		
"Constant Width"	The title, documentation, screen, and etc of lookup		
	destination.		
[Constant Width]	Tool bar name, menu name, command name, button name,		
	and icon names		

Example 1.

Several entries from an /etc/passwd file are shown below: root:x:0:1:0000-Admin(0000):/:
sysadm:x:0:0:System Admin.:/usr/admin:/usr/sbin/sysadm
setup:x:0:0:System Setup:/usr/admin:/usr/sbin/setup
daemon:x:1:1:0000-Admin(0000):/:

Example 2.

To use the cat(1) command to display the contents of a file, enter the following command line:

\$ cat <file name>

Symbol

Material of particular interest is preceded by the following symbols in this manual:



nt Describes the contents of an important point.



- Note Describes the points the users should pay close attention



xample Gives some examples for users' clear understanding.



Information Provides useful information related to the topic.



Provides manuals for users' reference.

Abbreviated name

- Microsoft(R) Windows NT(R) Server operating System Version4.0 and Microsoft(R) Windows NT(R) Server workstation System Version4.0 are abbreviated as Windows NT(R).
- Microsoft(R) Windows(R) 98 operating system and Microsoft(R)
 Windows(R) 98 Second Edition operating system are abbreviated as
 Windows(R) 98.
- Microsoft(R) Windows(R) 2000 operating system is abbreviated as Windows(R) 2000.
- Microsoft(R) Windows(R) XP operating system is abbreviated as Windows(R) XP.
- Windows(R) 98, Windows NT(R), Windows(R) 2000, Windows(R) Me and Windows(R) XP are abbreviated as Microsoft(R) Windows.
- Solaris(TM) 2.6 Operating Environment is abbreviated as Solaris 2.6 OE.
- Solaris(TM) 7 Operating Environment is abbreviated as Solaris 7 OE.
- Solaris(TM) 8 Operating Environment is abbreviated as Solaris 8 OE.
- Solaris 2.6 OE, Solaris 7 OE and Solaris 8 OE are abbreviated as Solaris OE.

September 2002

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Part 1 Introduction

Part 1 outlines Web-Based Admin View.

Chapter 1 Web-Based Admin View overview

This chapter outlines Web-Based Admin View.

1.1 Function overview

Web-Based Admin View is a common base to utilize GUI (operation management view) with PRIMECLUSTER, and is provided along with each operation management product. It serves the following functions:

1. Authentication function

The operation administrator is able to use the operation management view only if he signs on to Web-Based Admin View. Basically, the authentication process for each operation management product and node is eliminated.

2. GUI view function

A GUI view on the client is provided for each operation management product.

Since PRIMECLUSTER operation management view displays a management / monitoring screen on the client for Web-Based Admin View, an administrator using multiple operation management views can always perform a desired operation from the Web-Based Admin View screen.

3. Multiple node monitoring function

Even when there are two or more nodes (e.g. PRIMECLUSTER), all nodes are monitored by the management server for Web-Based Admin View. This enables the administrator to operate all monitored nodes only by accessing to the management server.

4. Online manual display function

The operation management products offer document information services to administrators by providing online manuals on Web-Based Admin View in concurrence with the operation management view.

1.2 Web-Based Admin View topology

1.2.1 Logical three-tier architecture

Web-Based Admin View adopts a logical three-tier architecture. It focuses on enabling every kind of operation management products running on Web-Based Admin View to configure its topology with complete control.

Each role is described below.

1. Client

The client describes the personal computers or UNIX workstations on which the operation management views of each operation management product are displayed. This operation management view is operated from a client.

2. Management server

The management server receives operation and displaying requests from the operation management view screen and forwards to the monitored nodes. When there are two or more nodes, the management server administers them overall, allowing all those monitoring nodes to be operated on a single screen for the clients. In addition, it is possible to duplicate the management server; primary management server and secondary management server.

In particular, whenever the GUI (operation management view) provided by PRIMECLUSTER is used, the management server is definitely made duplicate.

Also, the node that takes over operations is designed to be turned to the secondary management server when the operation node acting as the primary management server fails. Accordingly, the entire cluster system continues to be administered without down time.

3. Monitoring node

The monitoring node monitors and performs settings for a management server request. Also, it monitors diverse events that occur in the nodes after system startup, and notifies the management server of failure.

1.2.2 System topology

The system is designed to enable clients, management servers, and monitoring nodes to configure with complete control.

Each topology is described below.

Note that the topology to be supported varies depending on the operation management product. For details, refer to the document for each operation management product.

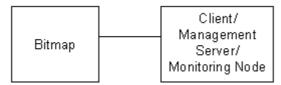


- \bullet For details about setting the management server, refer to 7.3 $^{"}\text{Management server."}$
- For details about setting network environment of management server, refer to 7.5 "Multi-network between server and client by classified

use."

• For configuration of 3-tier model, refer to 2.4 "Management server configuration."

1. Single architecture model



In this configuration, a monitoring node, a management server, and a client are functioning one another in a single node.

2. 2-tier architecture model

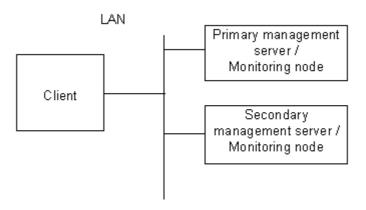
In this configuration, monitoring nodes and management servers share one tier, and a client is independent.

This model is relatively small-scale and is used when a management server is not set for specific purposes. It is a typical model primarily used for the cluster topology such as 1:1 standby and mutual standby in a two-node configuration.

It supports the following two types of topology:

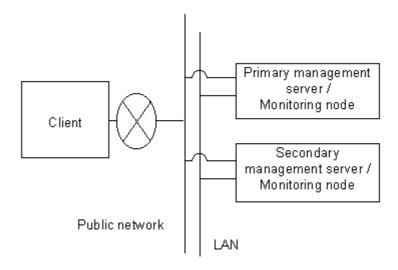
- Generic topology

In this topology, only one LAN is used for the Web-Based Admin View operation. This topology should be adopted only if the range of network and users can be limited and defined.



Topology where multi-network are used by classified use In this topology, two LANs are used for Web-Based Admin View operation. The LAN used for communication among management servers and monitoring nodes and that used for the Web browser of a client are separate. When using a client from a public network, this topology is recommended for security.

For the setup, designate the IP addresses for a client and a monitoring node respectively on the administration server.



3. 3-tier architecture model

In this configuration, monitoring nodes, management servers, and a client are allocated separately.

This model should be used especially when a large-scale PRIMECLUSTER system is managed centrally, or when a monitoring node should not be overloaded as a management server.

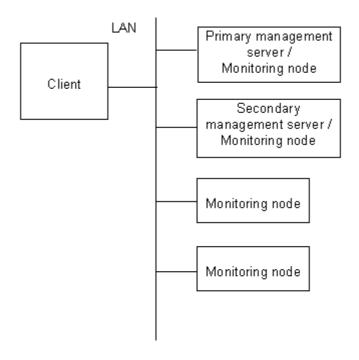
In case of the cluster system with three or more nodes, this model is used for N: 1 standby, mutual standby, or scalable operations.

For the configuration with three or more nodes, Fujitsu recommends this 3-tier architecture model in which the management server is installed separately to assure job continuity and availability.

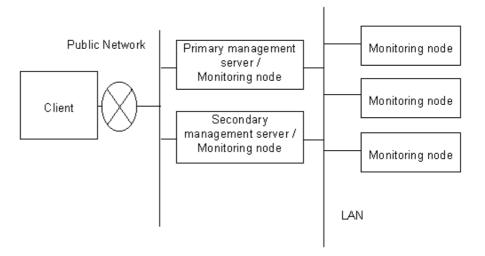
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- Generic topology

In this topology, , only one LAN is used for the Web-Based Admin View operation. This topology should be adopted only if the range of network and users can be limited and defined.



- Topology where multi-network are used by classified use In this topology, two LANs are used for Web-Based Admin View operation. The LAN used for communication among management servers and monitoring nodes and that used for the Web browser of a client are separate. When using a client from a public network, this topology is recommended for security. For the setup, designate the IP addresses for a client and a monitoring node respectively on the management server.



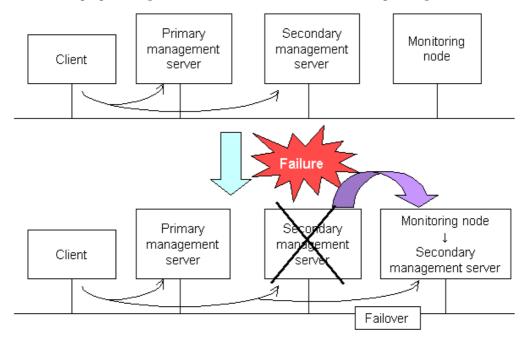


In the normal operation, the client, the management server, and the monitoring node of Web-based Admin View communicate one another by using the IP address of LAN, which is assigned to the displayed node name as a result of executing "uname -n." Note that the node name is referred to the name with which the communication network recognizes the sytem. The IP address is automatically set up when Web-Based Admin View is installed. When the LAN IP address of each host (node) is modified along with the system migration, the IP address should also be changed. For the modification method, refer to 7.1 "Network address."

1.2.3 Dynamic operation of secondary management server

Web-Based Admin view enables to automatically change a secondary management server during operation according to the operating status of the entire cluster system.

If the secondary management server fails, or both the primary and secondary management servers fail, one unit is selected from the other running monitoring nodes. This single selected monitoring node provides high reliability by taking over the function of the secondary management server.



It is possible to locate two or more candidate monitoring nodes as they can serve as a secondary management server. Each node should be predetermined whether or not it be a candidate for a secondary management server. Normally, the secondary management server is determined from active monitoring nodes in descending order of **mip** (IP addresses for identifying the Web-Based admin View's own host). For this IP address, refer to 4.4.1 "IP address / Host name." For details of dynamic operation of the secondary management server, refer to 7.4 "Secondary management server automatic migration."

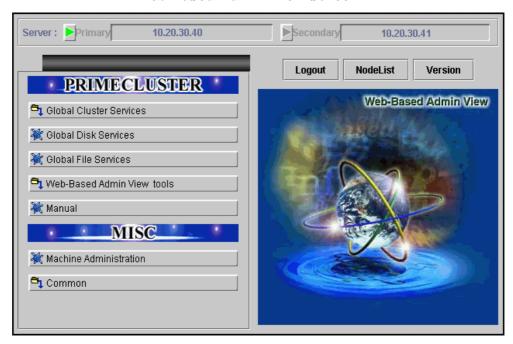
1.3 Version / Level reference

The version of Web-Based Admin View is automatically updated when each product is installed.

In order to display the current version of, take the following steps:

Confirm with the Web-Based Admin View screen
 Access to the management server from a client, and then select
 [Version] of the following Web-Based Admin View screen.





Confirm by command

Execute the following command, and confirm the version in the node.

/etc/opt/FJSVwvbs/etc/bin/wvversion

• Check a version level in the Web-Based Admin View screen. When selecting "Version," the following screen appears.

Version display example



In case of the above figure, the package of the FJSVwvcnf version is 2.0.3, and that of the FJSVwvbs version is 4.1.0.



The version is indicated next to the parenthesis.

Chapter 2 Web-Based Admin View installation

This chapter outlines the operatng environment and subsequent upgrading of Web-Based Admin View.

The initial installation of Web-Based Admin View is performed at the same time as the installation of each operation management product.

For details, refer to the documentations related to the installation of each operation management product.

2.1 Prerequisite server environment

The management server and the monitoring node of Web-Based Admin View support the following prerequisite environment:

- For Solaris OE
 - Memory

More than 256MB of memory is required.

Environment setup when using both a management server and a client, more than 256MB of memory is required.

- Prerequisite software
 - Any of Java(TM) 2 Runtime Environment, Standard Edition
- Required HDD disk space

For the standard configuration, 60 MB of disk space is required or size of each tracing information is maximized in the environment setup, another 32MB of space is required.

- For Linux(R)
 - CPU

More than PentiumIII.

- Memory

More than 256MB of memory is required.

- O.S

Red Hat Linux Advanced Server release 2.1 SuSE SLES-7 (i386)

- Prerequisite software

IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version



Refer to 3.1.2 "Prerequisite client environment" for details of prerequisite environment for the client of Web-Based Admin View.



To make "Web-Based Admin View" work on Linux, it is necessary to register the name and IP address of own host to the "/etc/hosts" file before installing "Web-Based Admin View".

Just after Linux is installed, the "/etc/hosts" file is as the following "Before change". Correct it according to the following "After change".

- Before change
 - # Do not remove the following line, or various programs
 - # that require network functionality will fail.
 - 127.0.0.1 node_name localhost.localdomain localhost
- After change
 - # Do not remove the following line, or various programs
 - # that require network functionality will fail.
 - #127.0.0.1 node_name localhost.localdomain localhost
 - 127.0.0.1 localhost.localdomain localhost
 - 10.20.30.40 node_name

In this case, "127.0.0.1" is set as the set value of "Web-Based Admin View".

Add the host information to the "/etc/hosts" file. Change the network address and IP address of the management server by referring Chapter 7 "Web-Based Admin View setup modification".

2.2 Upgrading

Web-Based Admin View is upgraded for the management server and the monitoring node at the same time as the operation management products. For details, refer to the documentation for each operation management product listed up as **Operation management product name** of 3.3.1 "Menu functions."

2.3 Setup with GLS

The Redundant Control Function of GLS (Global Link Services) allows the network interface used by Web-Based Admin View to be duplex. This will ensure the consistency of GUI monitoring operations.

This section describes a setup method how to make the network interface to be duplex by using GLS.

The setting procedure is explained for each following function;

- Fast switching mode
- NIC (Network Interface Card) switching mode

2.3.1 Fast switching mode

You need to set up Web-Based Admin View, as described below, after setting up Fast Switching mode on GLS (Redundant Line Control Function):

• Operation Procedure:

- 1. Set up an IP address
 - Change the IP addresses for all management servers and monitoring nodes to the virtual IP addresses for GLS. Refer to 7.1 "Network address."
- 2. Set up a management server
 If the changed monitoring node is a cluster management server, modify a cluster management server by a command.
- 3. Set up a client
 - When the client is Windows(R)PC
 - Using the MS-DOS command prompt, define the followings for each client;
 - C:\Windows>route add <virtual IP address A> <subnet mask>
 <TP address A>
 - C:\Windows>route add <virtual IP address B> <subnet mask>
 <IP address B>
 - When the client is Solaris OE and Linux(R) Define the followings for each client;
 - # route add host <virtual IP address A> <IP address A>
 # route add host <virtual IP address B> <IP address B>
 Virtual IP address A, IP address A

Should be connected to the same network as the client out of the virtual IP addresses defined by GLS on a primary management server, and of the IP addresses corresponded to the physical interface names composed by those virtual IP addresses.

Virtual IP address B, IP address B

Should be connected to the same network as the client out of the virtual IP addresses defined by GLS on a secondary management server, and of the IP addresses corresponded to the physical interface names composed by those virtual IP addresses.

Subnet mask

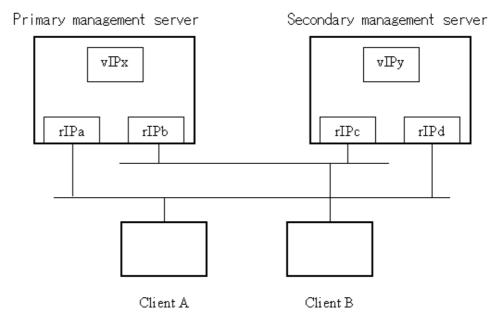
255.255.255.255 is set up.



Since information set up by the route command is deleted if the client is re-IPL, you need to register it in a batch file or log procedure in the startup folder.

4. Setup example

These are the setup examples by wvSetparam and wvSetup commands in the following environment;



vIPx, vIPy : Virtual-IP-address

rIPa, rIPb: Physical interface names to be bundled with virtual-IP-addresses rIPc, rIPd

- a) Setup for primary management server
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <vIPx>
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <vIPx>
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetup <vIPx> <vIPy>
 - # /etc/opt/FJSVwvbs/etc/bin/wvCntl restart
 - # /etc/init.d/fjsvwvcnf restart
- b) Setup for secondary management server
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <vIPy>
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <vIPy>
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetup <vIPx> <vIPy>
 - # /etc/opt/FJSVwvbs/etc/bin/wvCntl restart
 - # /etc/init.d/fjsvwvcnf restart
- c) Setup for client A
 - C:\Windows>route add <vIPx> 255.255.255.255 <rIPa>
 - C:\Windows>route add <vIPy> 255.255.255.255 <rIPd>
- d) Setup for client B
 - C:\Windows>route add <vIPx> 255.255.255.255 <rIPb>
 - C:\Windows>route add <vIPy> 255.255.255.255 <rIPc>

2.3.2 NIC switching mode

The NIC switching method for GLS (Redundant Line Control Function) allows the following IP addresses used for Web-Based Admin View to be duplex.

- IP address for identifying own host (Hereafter referred to as mip)
- IP address used for connecting to the management server from the client (Hereafter referred to as httpip)

This section describes how to make the above IP addresses in LAN duplex. For the method done by GLS, refer to the GLS manual.

Note when setting the operating environment for Web-Based Admin View

The setup to automatically make any monitoring node act as a management server (operating modification of the secondary management server) is not validated when making **mip** used duplex by the NIC switching mode of GLS (Redundant Line Control Function).

While Web-Based Admin View adopts the multi-cast IP address for selecting the secondary management server, the NIC switching mode of GLS does not support this multi-cast IP address. Therefore, when the NIC switching is done by GLS, the primary management server is not switched over to the secondary server.

· Note when setting IP address

There are two types of IP addresses that can be set to take over for the NIC switching method by GLS.

- In case of logical IP address takeover

 Make both the logical and physical IP addresses duplex.
- In case of physical IP address takeover
 Make only the physical IP address duplex.

When the IP address, which is made duplex by GLS, is used as a takeover IP address for the cluster system operation (userApplication), the monitoring and the business operation from Web-Based Admin View might be stopped because of the state transition. Accordingly, it is necessary to set up the IP address, which is constantly available regardless of the state transition, to mip or httpip.

The IP address setup varies as described below depending on the fact if the management server (the node operated by Web-Based Admin View) is used as a cluster system node.

- a) When the management server is $\boldsymbol{used}\ \boldsymbol{as}$ a cluster system node
 - In case of the logical IP address takeover
 Only the physical IP address can be set.
 - In case of the physical IP address takeover
 No IP address can be set.
- b) When the management server is **not used as** a cluster system node Since the state transition of the cluster system does not affect on the Web-Based Admin View operation, either logical IP address or physical IP address can be set.

• 3-tier architecture model

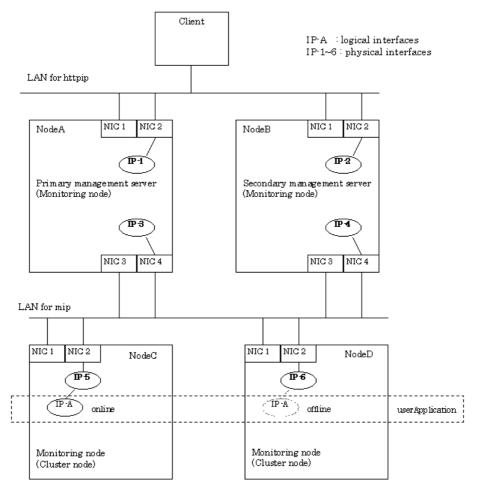
In this model, the IP address setup varies depending on the node roles.

a) In case of management server
Either duplex logical IP address or physical IP address can be set up

by either logical IP address takeover or physical IP address takeover.

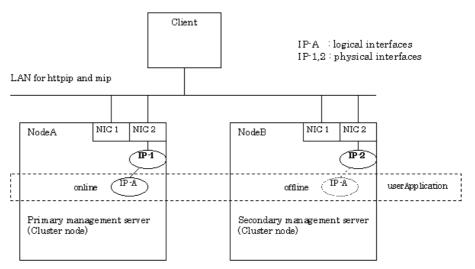
b) In case of monitoring node

The duplex physical IP address is set up by the logical IP address takeover.



• 2-tire architecture model

In this model, the physical IP address is set up by the logical IP address takeover.



Each component and its definition are as follows;

• NIC

Abbreviation for Network Interface Card. It is inserted into a computer or workstation so that it can be connected to the LAN transmission media.

• Physical IP (address)

Stands for the IP address assigned to the physical interface.

Logical IP (address)

Stands for the IP address assigned to the logical interface to communicate with other node.

Set up IP address

Take the following steps to set up the duplex IP address.

1. Stop Web-Based Admin View

Stop Web-Based Admin View of the management server or the monitoring node where the IP address is changed. Refer to 6.1 "Stop."

2. Modify definition file

Execute the following commands on the management server or the monitoring node where the IP address is changed.

/etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <mip>

/etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <httpip>

 $<\!mip>$ indicates \min . Set up either logical or physical IP address. $<\!httpip>$ indicates httpip . Set up either logical or physical IP address.

3. Modify management server

If the modified node is the management server, modify the setup of the management server. Refer to 7.3 "Management server."

For the IP address indicated as <IP address of primary management server> and <IP address of secondary management server>, set up mip for each management server.

4. Restart Web-Based Admin View

Refer to 6.2 "Restart." Restart the Web-Based Admin View on the management server or monitoring node on which the IP address is changed.



The NIC switching method takes 10 seconds to 3 minutes (default: 25 - 30 seconds) from the failure occurrence to switchover, and the connection between the client and the management server might be dropped during this time. In such a case, close the active browser, and reconnect to the management server after confirming switchover completion. Otherwise, the connection to the available management server can be established by clicking <Yes> to the 0007 message if it is displayed.

If the time of monitoring connection (default: 10 sec.) between the client and the management server is extended in the environment setup for Web-Based Admin View, the connection can be sustainable when the NIC switching is done. On the other hand, the failure detection of the session in the event of node stop and panic disorder is delayed. Based on this fact, the setup of monitoring time should be done.

For this monitoring time of connection, be aware of setting the value (10 - 180 sec.) exceeding the time from occurrence of a NIC failure to completion

of switchover.

For the setup of monitoring time, refer to Chapter 4 "Environment settings" In the screen of the environment setup screen, up to 60 seconds can only be set at the maximum. Using a command allows a user to set 60 seconds or more.

2.4 Management server configuration

This section explains about the configuration method of the 3-tier architecture where the management server is independent of monitoring nodes.

It is not necessary to follow this procedure if the management server is set up when installed. Take the following steps according to below "Verification" to check if the setup is correctly done.

Verification

Take the following procedure to check if the setup is correctly done.

Check if the management server is configured for the 3-tier model.

1. Check if the primary management server is recognized by each node is identical with the active primary management server.

Execute the following command on the management server and all cluster nodes.

/etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server

Confirm if the displayed IP address corresponds to **mip** (the IP address for identifying own host) of the active primary management server. **If not**, the primary management server is not correctly configured. Set up the configuration according to "Configuration procedure of the management server" of "Configuration procedure."

2. Check if the secondary management server is recognized by each node is identical with the active secondary management server.

Execute the following command on the management server and all cluster nodes.

/etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server

Confirm if the displayed IP address corresponds to **mip** of the active secondary management server.

If not, the secondary management server is not correctly configured.
Set up the configuration according to "Configuration procedure of the
management server" of "Configuration procedure."

· Check if the topology is multi-network by classified use.

This cases is applicable only to the multi-network by classified use. Verification should be done on all primary and secondary management servers.

1. Check if the mip value is correctly set.

Execute the following command:

/etc/opt/FJSVwvbs/etc/bin/wvGetparam mip

Confirm if the displayed IP address corresponds to **mip** (the IP address for identifying own host) on the active management server.

If not, the mip value of the active management server is not correctly set. Set up the mip value according to "Configuration procedure of multi-network by classified use" of "Configuration procedure."

2. Check if the httpip value is correctly set.

Execute the following command:

/etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip

Confirm if the displayed IP address corresponds to **httpip** (the IP address used for client) from the active management server.

If not, the httpip value of the active management server is not correctly set. Set up the httpip value according to "Configuration"

procedure of multi-network by classified use" of "Configuration procedure."

3. Check if the topology is multi-network by classified use.

Compare the output (mip) done by Step1 to that (httpip) by Step2.

If both values are the same, the topology of multi-network is not configure. Set up the configuration according to "Configuration procedure of multi-network by classified use" of "Configuration procedure."

· Configuration procedure

Take the following steps to configure the management server.



Modifications should be done only to the values of the management server and the monitoring node where the setup was incorrect.

1. Configure the management server.

Set up the IP addresses of the primary and secondary management server. This setup should be done **only when** creating multi-network between the management server and the client by classified use.

Configuration procedure of the management server:

Take the following steps to set up configuration according to "Setup by command" of 7.3 "Management server." Regarding this setup, Step 1, and 2 should be done on all management servers and monitoring nodes.

- 1) Stop Web-Based Admin View according to Step 1.
- 2) Set up the IP address of the management server according to Step $^{\circ}$

Configuration procedure of multi-network by classified use:

Take the following steps to set up configuration according to "Setup by command" of 7.5 "Multi-network between server and client by classified use." Regarding this setup, only Step 1 should be done on all management servers.

- Set up httpip according to Step 1.
 Modify httpip on the management servers.
- 2. Restart Web-Based Admin View

Restart to validate the setup on all management servers and monitoring nodes.

For details about restarting, refer to 6.2 "Restart."



In the file (/etc/inet/hosts) on all nodes configuring the cluster system and the management server, define the host information (IP address, host name) on all these nodes by a tool (e.g. vi(1)

Part 2 Web-Based Admin View GUI screen

This part explains the operating method for all the Web-based Admin View users.

Chapter 3 Web-Based Admin View screen startup

This chapter explains about the startup of Web-Based Admin View. Check the Web-Based Admin View functions following the registration of user names.

Then, register those user names into appropriate user groups.

3.1 Prerequisite for screen startup

Take the following steps for preparations:

- Determine the user group
- · Set up the prerequisite client environment
- · Set up the Web environment

3.1.1 User group determination

To use Web-Based Admin View, you first need to create a user group administered by the operating system for all the nodes, and register a user name.

A specific user group name is defined for each operation management product. A user registers his user name into this assigned user group. This enables the user to limit his operating range.

3.1.1.1 User group type

For details on the user group to be created, refer to the manual of the operation management product.

This section explains about the enabled user group provided as Web-Based Admin View.

wvroot

"wvroot" is a Web-Based Admin View administrator group, and is created automatically when Web-Based Admin View is installed. This permits availability of all kinds of operation management products running on Web-Based Admin View, such as environment setup, logging view, and all. Also, the users belonging to the system administrator (root) can use those products.



As users who belong to wvroot have authority equivalent to those who belong to the system administrator group, you need to register a user group with sufficient care.

3.1.1.2 Register to a user group

Use commands to register user names into the user groups.



Register the user name first, and then, follow up with registration into the user group. The system administrator should initially install by the user name "root."



It's recommended that the user be registered into the wvroot group as the Supplementary Group. In case of registration as a Primary Group, the registration needs to be redone when Web-Based Admin View is uninstalled and installed again.

As a example for inputting user name "wvroot" into the group name as Supplementary Group, the registration way is described ad fallows.

- Adding a user group for a registered user
 - # usermod -G wvroot <user name>
- · Registering a new user
 - # useradd -G wvroot <user name>

3.1.2 Prerequisite client environment

The clients of Web-Based Admin View support the following type of hardware, OS, and Web browser:

- PC client
 - CPU

Equivalent to Pentium II 233 MHz or higher

- Memory
 - 128 MB or more
- OS

 $\label{eq:windows} \begin{tabular}{lll} Windows(R) & 98. & Windows(R) & 98. & Second Edition, Windows NT(R), \\ Windows(R) & 2000, & Windows(R) & Me or Windows(R) & XP. \\ \end{tabular}$



There are some restrictions in the display environment of Japanese. For details, refer to "Note" below.

- Web browser

Netscape Communicator 4.5 - 4.7X, Netscape 6.2, or Internet Explorer 5.0 or higher (Java Plug-in is required)

- Java Plug-in
 - Java(TM) 2 Runtime Environment Standard Edition v1.3.1
- Display unit

 $800 \times 600 \text{ dots or higher, supports high color (16 bits, 65,536 colors) display}$

- Solaris OE
 - Memory

128 MB or more (256 MB or more is recommended when many browsers start or many operation managment views start.)

- Web browser

Netscape Communicator 4.5 - 4.7X

In case of using Java Plug-in, use the 4.72 - 4.7X.

- Java Plug-in

10.1.2.2, REV=1999.12.06.10.02 or higher

20.1.2.2, REV=1999.10.14.18.04 or higher

Java(TM) 2 Runtime Environment Standard Edition Version 1.3.1 For details on the supported OS and Web browser, refer to the operation guide for each hardware and the documentation for each operation management product.

System Management Console attached to PRIMEPOWER800/1000/2000 and GP7000F Model 1000/2000 is also available for a client.

- Linux(R)
 - CPU

PentiumIII or more.

- Memory

256 MB or more

- 0.9

Red Hat Linux Advanced Server release 2.1 SuSE SLES-7 (i386)



If SuSE is used as a client, Japanese cannot be displayed.

- Web browser

Use the Web browser bundled in OS.

- Red Hat Linux Advanced Server release 2.1 Netscape Communicator 4.79
- SuSE SLES-7 (i386)
 Netscape Communicator 4.77
- Java Plug-in

IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version



- To display Japanese on Web-Based Admin View, the following requirements need to be met for an OS environment
 - The Japanese version of Windows® is installed, and
 - Japanese is installed for the linguistic environment
 - The Japanese package is installed on Solaris OE. Also, the language environment is set to Japanese.
- The conditions of the Web browser (including Java Plug-in) and clients are vary depending on each operation management product. For details, refer to the documentation of the management product.
- The Web browser might not work properly depending on its version. In such a case, use the latest version.
- Use the format, "http://<host name> or <IP address>:<port number>/Plugin.cgi" for the URL designation on the Internet Explorer.

 If the product is unavailable to Java Plug-in, use Netscape Communicator.
- It is necessary to apply the following patch when Java Plug-in 10.1.2.2 used on Solaris 2.6 OE or Solaris 7 OE.

<Solaris 2.6 OE>

105490-07, 105568-13, 105210-19, 105181-14, 105633-21, 105669-07

<Solaris 7 OE>

106980-04, 107078-10

• It is necessary to apply the following patch when Java(TM) 2 Runtime Environment, Standard Edition Version 1.3.1 used on Solaris 2.6 OE, Solaris 7 OE or Solaris 8 OE.

<Solaris 2.6 OE>

105633-56, 106040-16, 105568-23, 106842-09, 107733-09, 105210-38, 105181-26, 105669-10, 105284-41, 108091-03, 105591-09, 106125-11, 106429-02

<Solaris 7 OE>

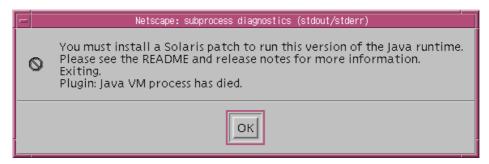
107226-17, 106980-16, 106541-16, 108374-05, 107636-07,

107544-03, 108376-24, 106950-13, 107081-33, 106300-09, 107656-07, 107702-07

<Solaris 8 OE>

108652-33, 108921-12, 108940-24

When the applicable patch is missing, the following error message might disappear:





- For the operating environment of the management server or the monitoring node, refer to 2.1 "Prerequisite server environment."
- For details on the Java Plug-in settings, refer to 3.1.3.2 "Required for the Web Browser Environment".

3.1.3 Web environment

This section explains how to set up and use the Web browser.

Take the following steps:

- Set up the Web browser.
- $\bullet\,$ Set up the client in compliance with the Web browser environment.

3.1.3.1 Preparing the Web browser

You need to set up the Web browser environment for the client.

As the supported OS and Web browser varies depending on each operation management product, be sure to check the documentation first.

For the basic browser supported for Web-Based Admin View, refer to 3.1.2 "Prerequisite client environment."

For the installation method and environment configuration, follow the instructions for each browser.

Web-Based Admin View uses a Web browser cookie to identify the client.

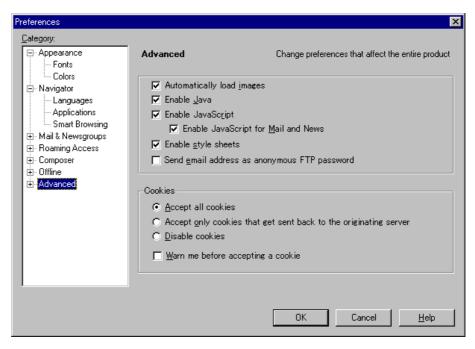
For the method of setup to handle cookies, follow the instructions for each browser.

The following explains the settings on Netscape Navigator:

Setup method on Netscape Navigator

- 1. Select [Preferences] from the [Edit] menu of the Web browser.
- 2. Select [Advanced] in Category.
- 3. Select [Accept all cookies] in the "Cookies" menu.

- 4. De-select [Warn me before accepting a cookie].
- 5. Select [OK].



This completes the setup.

Perform the following confirmation work.

· Proxy setting

• Setup method on Netscape Communicator

- 1. Select [Preferences] from the [Edit] menu of the Web browser.
- 2. Select [Proxies] in the [Advanced] category.
- 3. Select [Direct connection to the Internet].
- 4. Click [OK].

• Setup method on Internet Explorer

- 1. Select [Internet Options] from the [Tools] menu of the Web browser.
- 2. Select the [Connections] tab, on the [Internet Options] screen.
- 3. Click [LAN setting] in the LAN setting area.
- 4. De-select all the check boxes on the [Local Area Network (LAN) settings] screen.
- 5. Click [OK] on the [Local Area Network (LAN) settings] screen.
- 6. Click [OK] on the [Internet Options] screen.

3.1.3.2 Required for the Web Browser Environment

Web-Based Admin View is available with Netscape Communicator only if a Web browser is supplied for a client. Also, it supports the following environment in accordance with the user's Web browser environment:.

[Java Plug-in environment]

Use Java Plug-in in case of the following conditions:

- The operation management product requires Java Plug-in.
- Internet Explorer is used for the Web browser.
- The time for Web-Based Admin View screen to be displayed after access should be shortened.

The supported Java Plug-in versions are clarified in 3.1.2 "Prerequisite client environment". Java Plug-in, which Sun Microsystems provides for free, may come with some operation management product packages.

Follow the setup method described in "Setting up Java Plug-in."

· Setting up Java Plug-in

· PC client

- 1. Check if Java Plug-in is installed.
 - Start [Add or delete Application], and then check if the following Java Plug-in is installed:
 - Java 2 Runtime Environment Standard Edition v1.3.1
- 2. Install Java Plug-in.

Execute the following Java Plug-in installer in a CD-ROM. <CDROM drive name>: \plugins\solaris\win\j2re1_3_1-02-win-i.exe
Install following the procedure displayed on the screen.

This completes the setup.

• Solaris OE

The setup procedure varies depending on the version of Java Plug-in as follows;

• Java(TM) 2 Runtime Environment, Standard Edition Version 1.3.1

1. Copy Java(TM) 2 Runtime Environment, Standard Edition Version 1.3.1 for Solaris OE to the working directory from CD-ROM.

Set up CD-ROM on the CD-ROM device.

cd <CDROM-mountpoint>/plugins/solaris/sparc

Normally, $<\!CDROM\!-\!mountpoint\!>$ will be /cdrom/cdrom0

When the working directory is /var/tmp:

cp <CDROM-mountpoint>/plugins/solaris/sparc/

j2re-1_3_1_02-solsparc.sh /var/tmp

2. Make sure that the execute permissions are set on the self-extracting binary.

In case of sparc:

chmod +x j2re-1_3_1_02-solsparc.sh

- 3. Move directory to the location where the files should be installed.
 - # cd <Installed directory>
- 4. Run the self-extracting binary.

A directory called j2re1_3_1_02 is created in the current directory. This directory can be renamed at user's discretion after installation.

5. Set up the environment variable

Execute the following command to set the environment variable to the shell variable:

[For C shell]

setenv NPX_PLUGIN_PATH < Java Plug-in path>

[For shell and Kornshell]

NPX_PLUGIN_PATH= <Java Plug-in path>

export NPX_PLUGIN_PATH

<Java Plug-in path> is designated the following directory containing
the javaplugin.so file.

<Installed directory>/j2re1_3_1_02/plugin/sparc/ns4

Example : When < Installed directory> is /var/tmp

<Java Plug-in path>=/var/tmp/j2re1_3_1_02/plugin/sparc/ns4

- 6. Start your Netscape browser, or restart it if it is already activated.
- 7. Restart your browser again. The browser needs to be restarted twice to avoid the Netscape problem.

Other version

- 1. Check if Netscape Communicator is installed.
- 2. Check if Java Plug-in is installed.

pkginfo -1 SUNWj2pi

Execute the above command. If the version is newer than below, it is not necessary to install.

If it is older than below, delete the version, and install an recommended version.

VERSION: 10.1.2.2, REV=1999.12.06.10.02 VERSION: 20.1.2.2, REV=1999.10.14.18.04

3. Install Java Plug-in.

Install Java Plug-in in a super-user mode.

su

passwd:XXXXX

Load CD-ROM into the CD-ROM drive.

cd <CDROM mountpoint>/plugins/solaris/sparc

Typically, <CDROM mountpoint> will be: /cdrom/cdrom0

pkgadd -d `pwd` SUNWj2pi

When the package "SUNWj2pi" is installed, install in response to a confirm prompt.

When installation is completed, exit from a super-user mode by control-d.

4. Set up the environment variable.

Execute the following command to set the environment variable to the shell variable:

[For C shell]

setenv NPX_PLUGIN_PATH <Java Plug-in path>
[For shell and Kornshell]

NPX_PLUGIN_PATH= <Java Plug-in path>

export NPX_PLUGIN_PATH

<Java Plug-in path> is designated as default </opt/NSCPcom/plugins>
unless otherwise specified.

Linux(R)



For the Java Plug-in setup, see README attached to IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version.

 Check if IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version is installed.

rpm -q IBMJava2-JRE

IBMJava2-JRE-1.3.1-2.0

If not installed, go to No.2

2. Copy IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version for Linux to the working directory from CD-ROM. Set CD-ROM on the CD-ROM device.

cd <CDROM mountpoint>/plugins/linux

Typically, <CDROM mountpoint> will be: /cdrom/cdrom0

The following is an example when copying IBM(R) Runtime Environment for Linux(R), Java(TM)2 Technology Edition, Version 1.3.1, 32-bit version to the /var/tmp directory.

cp <CDROM-mountpoint>/plugins/linux/RedHat/ IBMJava2-JRE-1.3.1-2.0.i386.rpm /var/tmp

- 3. Move to the directory where the file is present.
 - #cd <file directory>
- 4. Install the package.

rpm -i IBMJava2-JRE-1.3.1-2.0.i386.rpm

- 5. Set up Java Plug-in
 - When logged in with system administrator's access privileges. Create symbolic link in one of the following directories from a library file /opt/IBMJava2-131/jre/bin/javaplugin.so.

/usr/lib/netscape/plugins -Gives all users privileges to use Java Plug-in

\$HOME/.netscape/plugins - Gives users with root privileges
to use Java Plug-in

- When a user logs in without system administrator's access privileges
 - 1- If the Plugins directory is not present under the /\$HOME/.netscape directory, create this directory.
 - 2- Create symbolic link to the /\$HOME/.netscape/plugins directory from the library file /opt/IBMJava2-131/jre/bin/javaplugin.so.



- When linking to the netscape/plugins directory from the javaplugin.so file, Netscape is not enabled. When it is started from the command line, the Bus error message appears. This error is not detected when Netscape is started next time, the error message appears. A user can ignore it.
- When using RedHat, execute the following command as the font server can detect the Java True Type font. This should be done with system administrator's access privileges.

/usr/sbin/chkfontpath --add /opt/IBMJava2-131/jre/lib/fonts

6. Start the Netscape browser from your terminal. If it's activated, restart the browser.



- If the version of the installed Java Plug-in is older than that described above, install a recommended version.
- Java Plug-in should be installed after the Web browser. If you uninstall the Web browser after installing Java Plug-in, uninstall the Java Plug-in, and then reinstall it again.
- In some versions Java Plug-in on Windows(R), the cache files might remain in the client's system directory. In that case, delete these cache files by disk cleanup function on a regular basis.

• In some Java Plug-in versions on Solaris OE, the cache files might remain in the /var/tmp directory. In such a case, delete these cache files. The files are generated by the name of "jar_cachexxxxx.tmp", and xxxxx is optional numeric.

3.2 Screen startup

When all preparations are completed, start the Web-Based Admin View menu.

• Procedures:

- 1. Start the Web browser on a client.
- 2. Designate the following URL to access the management server:
 - When using Java Plug-in:

http://<host name>:<port number>/Plugin.cgi

<host name>

httpip (host name or IP address used for the client) of the primary or secondary management server.

The default value of **httpip** is set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n."

<port number>

Enter "8081." If the port number was changed according to 7.2.1 "http port number", designate the number.



- If Web-Based Admin View is not activated despite specifying the host name in <host name>, designate the IP Address assigned to the host name directly.
- The access method may vary depending on the operation management product. Pay close attention when interoperating with the operation management products that employ different access methods. Refer to 3.3.4 "Concurrent use of operation management products with different access methods."
- When not using Java Plug-in, designate the following URL and use Netscape Communicator (except for Netscape6.X) since Internet Explorer is not available.
 - http://<host name>:<port number>/WebView.html
 When using Internet Explorer, the 0040 message is displayed or nothing appears on the browser.
- 3. When the Web-Based Admin View is started, the following window is displayed.

Enter a user name and password registered in the management server and then click [OK].





This screen cannot be closed by clicking the [X] button of upper-right corner in the screen.

4. When the authentication terminates, the Web-Based Admin View screen is available.



- Do not click the [Forward], [Back] or [Reload]/[Update] button of the browser to change the pages after starting the Web-Based Admin View screen.
- Some browsers might be hung up during operation.
 - If the browser window disappears, restart the browser, and then reconnect to the URL.
 - If the browser does not work (not responsive), reload URL or restart the browser.
 - If the page looks hung-up right after starting the Web-Based Admin View, try to move a mouse on the browser. It might help to continue operation.
- If URL of Java Plug-in is read by Netscape Communicator or Netscape Navigator, a message stating "Click here to get the plugin" may appear. In this case, Java Plug-in may not be installed or a version older than supported Java Plug-in may be installed. Install Java Plug-in as explained in "Setting up Java Plug-in" of 3.1.3.2 "Required for the Web Browser Environment". If you click the "Click here to get the plugin" icon, a dialog box indicating, "Plug-in is not read" appears. Select [Cancel].
- If "Welcome to Web-Based Admin View" does not appear after a read of URL by Internet Explorer, an appropriate Java Plug-in may not be installed. Confirm if an appropriate Java Plug-in is installed by using "Add or delete application" in the control panel. If necessary, install the Java Plug-in as explained in "Setting up Java Plug-in" of 3.1.3.2 "Required for the Web Browser Environment". Also, if the "security warning" dialog box appears, and prompts you to decide whether "Java Plug-in" should be installed and executed, select [No].
- If dynamic operation of the secondary server is set in 7.4 "Secondary management server automatic migration", the active primary management server or secondary management server may be automatically connected regardless of designating URL of the specific monitoring node. For details, refer to 7.4 "Secondary management server automatic migration".
- If the authentication is failed several times at Step 3, the message 0016 is displayed, and the login process is disabled. Refer to "Corrective action 3" of "Symptom 17" in Appendix B "Troubleshooting."
- The URL input might not be allowed with Netscape6.X. This problem is due to Netscape, and it's under verification.

 In such a case, resize Netscape by using [Minimize], and then [Restore]. Otherwise, restart the Web browser.

3.3 Web-Based Admin View screen

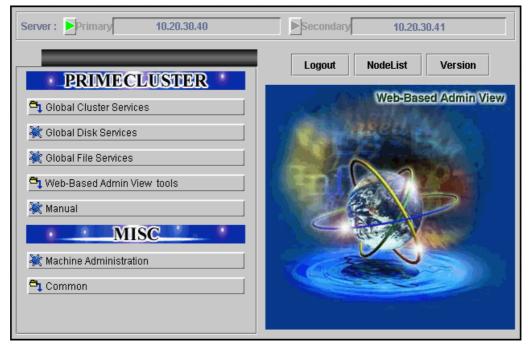
When you start Web-Based Admin View, the Web-Based Admin View screen appears.

The supported functions are indicated as a menu in the left area of the screen.

3.3.1 Menu functions

The Web-Based Admin View screen supports the following facilities. Refer to "The menu outline."

Web-Based Admin View screen



The menu outline

The menu falls into the following 2 categories;

1. PRIMECLUSTER category

The operation management screen and documentation of operation management products provided by PRIMECLUSTER.

2. MISC category

Non-PRIMECLUSTER. The operation management screen and documentation of operation management products provided by Enhanced Support Facility(ESF).

Each category covers the following operations:

• PRIMECLUSTER

The button to start the operation management screen of the installed operation management product is displayed. For details, refer to the document for each operation management product.

- Operation management product name

Handles the following management screen.

- Global Cluster Services (CF, CRM, RMS, SIS)
- Global Disk Services(PRIMECLUSTER GDS)

- Global File Services(PRIMECLUSTER GFS)
- Web-Based Admin View tools Handles the logging view and environment setup. For details, refer to 3.3.2 "Web-Based Admin View tools menu functions."
- Display the documentation of PRIMECLUSTER as online manual.

• MISC

The button to start the operation management screen of non-PRIMECLUSTER installed operation management product is displayed. For example, this menu category is displayed in the environment where Enhanced Support Facility(ESF) is installed. For details, refer to the documentation of each operation management product.

- Operation management product name
 Handles the following management screen of non-PRIMECLUSTER
 installed operation management product.
 - Machine administration
 - MultiPathDisk view

Common

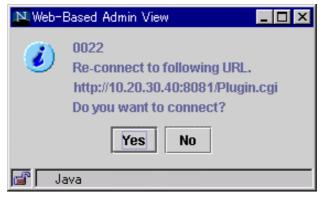
Display the documentation of non-PRIMECLUSTER as online manual.. For details, refer to 3.3.3 "Common menu functions."



- The Web-Based Admin View menu varies depending on the products installed. You must be particularly careful when using products with different access methods because the startup menu of the products may not be displayed. For details, refer to 3.3.4 "Concurrent use of operation management products with different access methods."
- If a dialog is displayed because of a Web-Based Admin View error, the picture on the right area of the screen turns red. Click the red picture, and then a hidden dialog is brought to front. As any errors come into focus, be sure to make the picture viewable.
- Note that the online manual installed or uninstalled after the Web-Based Admin View startup is not displayed unless the Web-Based Admin View is restarted.



• The following message may be output if either menu is selected:



In this case, follow the instructions below:

- When other application is activated
 Exit all active applications, and designate URL specified by the message to re-access.
- 2) When no other application is activated Start up the application in response to the message dialog. Ensure that the displayed URL is automatically connected after the Web-Based Admin View screen is terminated. When you wish to redisplay the Web-Based Admin View screen that was displayed first, start up the new window of the Web browser or other new Web browser and access by the first method (http://host name or IP address:port number).
- The following window might be displayed when you try to start some application with other application active.



In such a case, start up the Web browser separately, and access the designated URL displayed in the "0021" message. Or, terminate all active applications, and then re-select the menu.

• NodeList

A list of nodes connected to a management server is displayed in the following screen.

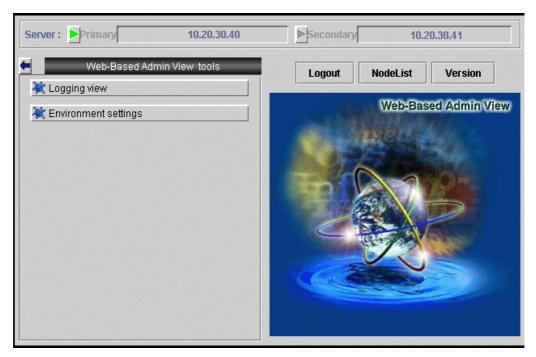


Format: Node name / IP address (classified by OS type)
In this case, it should be "Node name:node1, IP address:10.20.30.40,
OS type:Solaris 8 OE."

3.3.2 Web-Based Admin View tools menu functions

The Web-Based Admin View tools menu supports the following facilities. [Web-Based Admin View tools menu outline] provides facilities overview locations. Click the arrow button on the left side of [Web-Based Admin View tools] to return to the Web-Based Admin View screen.

Web-Based Admin View screen (Web-Based Admin View tools menu)



Web-Based Admin View tools menu outline

· Logging view

Displays the login log and operation log files. For reference, the retrieve facility can be used to fetch information. With the retrieval function, you can narrow down the information.

Reference location: Chapter 5 "Web-Based Admin View log reference"

• Environment setup

You can set up the environment of Web-Based Admin View. This operation environment falls into three types; user environment, system environment, and node environment.

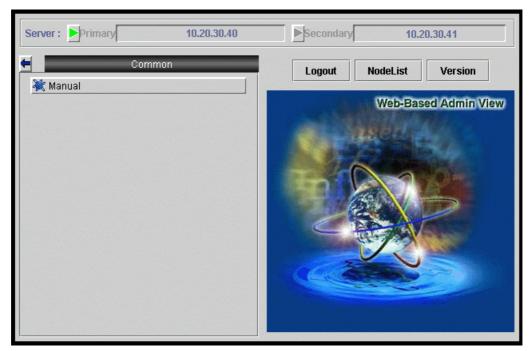
Reference location: Chapter 4 "Environment settings"

3.3.3 Common menu functions

The Common menu supports the following facilities.

[Common menu outline] provides manual reference locations. Click the arrow button on the left side of [Common] to return to the Web-Based Admin View screen.

Web-Based Admin View screen (Common menu)



Common menu outline

• Manual
Display the documentation as online manual.

3.3.4 Concurrent use of operation management products with different access methods

Each operation management product provided on Web-Based Admin View may have a different access method to the management server as described in "Procedure" of 3.2 "Screen startup."

In case of the concurrent use of operation management products with different access methods, start up two Web browsers or a new window from the Web browser. Then, designate URL according to the specified access method on each different browser screen and display the Web-Based Admin View screen.



In case of using a **non**-Java Plug-in access method:

- Use Netscape Communicator since Internet Explorer is not available.

- When starting a menu of the operation management product supporting Java Plug-in within the Web-Based Admin View screen, the automatic connection is created by a Java Plug-in access method. In this instance, other operation management product is not activated. For details, refer to 3.3.1 "Menu functions."

3.4 Screen exiting

Exit from the Web-Based Admin View screen as described below:

• Logout from screen

Take the following steps to log off the Web-Based Admin View screen;

- 1. Close all screens if the management window of the operation management product is displayed.
- 2. Select [Logout] only when the Web-Based Admin View screen is displayed.

· Exit of screen

Take the following steps to exit the Web-Based Admin View screen;

- 1. Log off the Web-Based Admin View screen according to above "Logout from screen."
- 2. The login screen is displayed. To close the login screen and then exit the Web-Based Admin View screen.
 - Exit the web browser.
 - The screen is automatically switched by specifying a new URL or other book mark.
 - click [Back] of the web browser.



- When exiting the web browser, select the [File]-[Close] menu, or click the [X] button on upper-right corner of browser.
 - Note in the case of using Netscape that all web browsers are exited when the [File]-[Exit] menu is selected.
- The login screen cannot be closed by clicking the [X] button of upper-right corner in the screen.
- The login screen might remain in a while after exiting the web browser.

3.5 Screen operation instruction

This provides operating instructions.

3.5.1 Tentative modification of screen display settings (Language, Look & Feel)

If necessary, Look & Feel of the screen can be changed from Web-Based Admin View.

· Changing the Look & Feel

For Look&Feel modifications, select [Web-Based Admin View tool]-[Environment settings], and then change in the [Display setup] property of the [System environment] tab in the Environment setup page.



For details, refer to Chapter 4 "Environment settings."

Changing the Language

The language can be modified depending on the client system environment. This should be set up before starting the Web-browser.

- PC client
 - Windows(R) 98

Select [Start] - [Settings] - [Control Panel] - [Area].

Change Area.

- Windows NT(R)

Select [Start] - [Settings] - [Control Panel] - [Area] - [Area tab].

Change Area.

- Windows(R) Me

Select [Start] - [Settings] - [Control Panel] - [Area] - [Area
tab].

Change Language.

- Windows(R) 2000

Select [Start] - [Settings] - [Control Panel] - [Regional Option]
- [General].

Change Locale.

- Windows(R) XP
 - Category View

Select [Control Panel] - [Date, Time, Language, and Regional Options] - [Change the format of numbers, dates and times] or [Regional Options and Language Options] - [Regional Options] tab - [Standards and formats] Change Language.

- Classic View
 Select [Control Panel] [Regional and Language Options] [Regional Options]tab [Standards and formats] Change
- Solaris OE

There are following two methods:

Language.

- Select [Login screen] [Option] [Language].
- Change the environment variable. Execute the following shell command and change the language type of the shell variable.
 [For C shell]

setenv LANG <language type>

[For shell and Kornshell]

LANG= <language type>

export LANG

• Linux(R)

Change the environment variable. Execute the following shell command and change the language type of the shell variable.

[For C shell]

setenv LANG <language type>

[For shell and Kornshell]

LANG= <language type>

export LANG



- The language font specified in the environment should be set up in advance.
- When SuSE is used as a client, Japanese cannot be displayed.

3.5.2 Switchover of management server

The connecting management server can be switched on Web-Based Admin View if necessary.

· Switching the management server

To switch the management server, click the button on upper-right corner of Web-Based Admin View screen. Each button displays the IP address of currently active primary or secondary management server. The button in green stands for the active management server connected to clients. To switch the management server, log off, and then select the non-green button.





The server switching button is available only when you are logged off.

3.5.3 Screen Size Modification

Note the following when changing the screen size:



The modified screen size is tentative. It is not saved if the browser is terminated. When changing the screen size, the server might log off automatically depending on the browser.

3.5.4 Use Mouse

This shows how to use a mouse tailored to your needs.

Single selection

To select an item such as an icon, button, or menu, position the mouse pointer to the desired item. Then, left-click to select the target of operation. If single selection is repeated, the last selected will be effective.

Multiple selection

Holding the <Shift> key down, position the mouse pointer on an item and click the mouse left button.

Canceling selection

Holding the <Cntl> key down, position the mouse pointer on the item to be canceled and click the mouse left button.

Deselecting text

Position the mouse pointer on an area other than icons or selection items and click the mouse left button to cancel all selections.

Part 3 Web-Based Admin View tools menu

This part explains the functions provided by Web-Based Admin View tools $\ensuremath{\mathtt{menu}}\xspace$.

Chapter 4 Environment settings

Target users

All users of the Web-Based Admin View Set the operation environment for the Web-Based Admin View as described below.



For reference or setup of operation environment, there are two methods; one is execute a command directly on each management server and monitoring node, and the other is on an environment settings screen. The latter one is explained below.

Normally, when the setup is modified on the environment settings screen, all monitoring nodes should be activated, and are connected to the primary management server as well. If there's an inactive monitoring node or non-monitored node by the primary management server, refer to 4.5 "Reference and modification by command" and set up as required on each node.

There are following three kinds of functions with the environment settings screen. Each screen is displayed by selecting a tab.

- User environment
- System environment
- Node environment

The following usage varies according to each function;

	User environment	System environment	Node environment	
Use	Set tentative operating conditions	Determine the operating conditions of the entire system	Specific setting for each monitoring node	
Target user	All users	The root user or the the Web-Based Admin group (wvroot) [*1]		
Setup timing	As long as the Web-Based Admin View is active.			
Setup validation timing [*2]	[End] -> 0052 message : select [Yes] -> the value is validated right.	9	select [Yes]	

[*1] The user who login by authority of another user group, except administrator group (wvroot), cannot set the system environment and the node

environment because the tabs for those environments are not displayed.

[*2] Explain the operation procedure from selecting [End] in the environment settings screen to validating of setting value.

00xx: Indicates the number of a displayed message.

[*3] Be sure to log off all clients connecting to the management server. Web-Based Admin View waits for the timing when all clients are logged off, and then restarts automatically. When selecting [Yes] to 0051 or 0059 message, 0015 message is displayed on all clients. Be sure to log off all clients.

When any client is logged in, Web-Based Admin View is started up again automatically if some time (10 minutes) passes. So the logged-in clients must be logged off, and then 0007 message is displayed.



Please select [Cancel] if the operating environment setting is ended without any changes for settings.

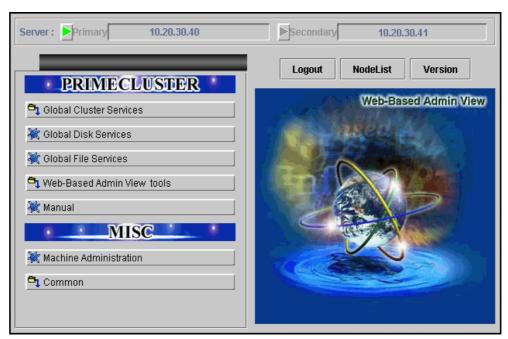
4.1 Environment settings start

Start the environment settings as described below.

Target users: All users of Web-Based Admin View.

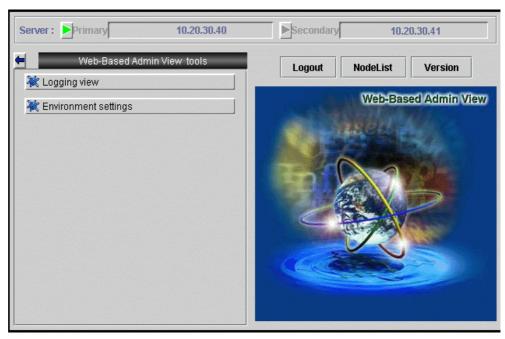
• Select the [Web-Based Admin View tools] button on the menu of Web-Based Admin View screen.

Web-Based Admin View screen



• Select the [Environment settings] button in the [Web-Based Admin View tools] menu.

Web-Based Admin View screen (Web-Based Admin View tools menu)



The Environment settings screen is displayed.

4.2 User environment

Target users

All users of the Web-Based Admin View screen

Notices on user environment settings

- Client detailed trace log

Select this item when specific client information is necessary for maintenance or troubleshooting.

The initial value is "No."

- Inactivity timeout

The inactivity timeout is a security feature which locks Web-Based Admin View after a fixed period, so an unauthorized user cannot perform arbitrary operations when an authorized user is away from his seat.

The initial value is "No."

- Inactivity timeout interval

The inactivity timeout interval is standby time until Web-Based Admin View is locked.

The initial value is "10 minutes."

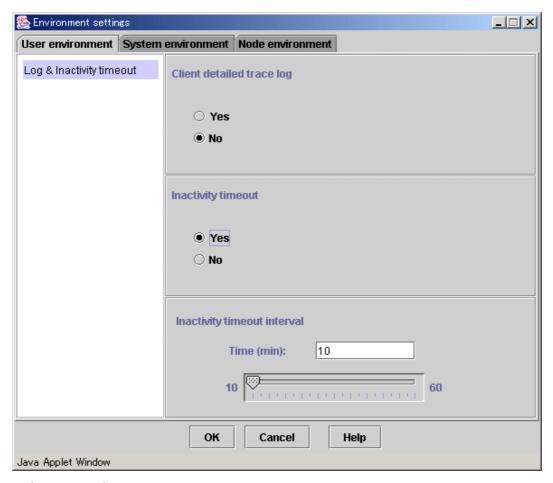


Note that the user environment settings only remains valid until logout. The value is default system setting at the next login.

4.2.1 Log & Inactivity timeout

Set the client detailed trace log, inactivity timeout, and the inactivity timeout interval as described below.

User environment (Log & Inactivity timeout) screen



Client detailed trace log

Specify whether to collect a detailed trace.

Inactivity timeout

Specifies whether the inactivity timeout is used. Specifying [Yes] enables the timeout, and [No] disables it.

Inactivity timeout interval

The inactivity timeout interval is displayed only if the inactivity timeout is enabled. The inactivity timeout interval may be set using the slider bar. You may also enter the time directly and press [Enter]. The timer units are in minutes, and any number from 10 to 60 may be entered.



On the inactivity timeout

The inactivity timeout is a security feature. If the user does not interact with GUI at the specified interval, GUI will force the user to re-enter his password before any further operations are allowed. After the password is successfully entered, the user can continue

working.



4.3 System environment

Target users

Users who belong to the Web-Based Admin View administrator group



- After all of the operation management view are exited, use the environment settings menu.
- The system environment is available only when the environment settings is activated in the primary management server.

Notices on system environment settings

The followings explain setting items and conditions where they are required:

System environment settings item list

Item		Initial value	Use
Display setting	Look & Feel	Metal	Use this item to change the Look & Feel displayed on the screen.
Client detailed trace log		No	The trace log should be set up when the specific client information is required for maintenance and troubleshooting.
Inactivity timeout	Inactivity timeout	No	This blocks improper operations by the unauthorized users by
	Inactivity timeout interval	10 minutes	locking Web-Based Admin View. This function's validation varies depending on each operation management product.
Primary management server		default set at installat ion	To change the IP address of the primary management server.
Secondary server	management	default set at installat ion	To change the IP address of the secondary management server
Secondary server migration	management automatic	No	Execute the 7.4 "Secondary management server automatic migration" setting.
Client - management server connection time		10 seconds	Specify the time interval of the client to monitor the management server. The client checks the state of the management server periodically at the specified time interval. If it takes time to connect to the client because of a network failure, enter a larger value. Then the disconnection might be avoided.
Automatic connection to management server		No	It indicates whether or not the client be connected automatically to an active management server. The displayed value cannot be modified on the GUI screen. Note that this parameter is invalid in this version.

Item	Initial value	Use	
Management server - monitoring node connection time	10 seconds	It specifies the time interval of the management server surveillance for the monitoring node. The management server monitors requests from a monitoring node at regular intervals. If it takes time to connect to the client because of a network failure, enter a larger value. Then the disconnection might be avoided.	
Reconnection interval	30 seconds	It determines the interval of connection requests issued from the monitoring node to the management server.	

Log files / Trace log files

To set up these items when specific information is required for maintenance and troubleshooting.

Normally, setup modification is not required.

Iter	Initial Value	
Login log	File size	100KB
	Number of files	2
Operation log	File size	100KB
	Number of files	5
Event log	File size	100KB
	Number of files	2
Management server trace	File size	200KB
log	Number of files	5
	Detailed trace log	Yes
Monitoring node trace log	File size	200KB
	Number of files	5
	Detailed trace log	Yes

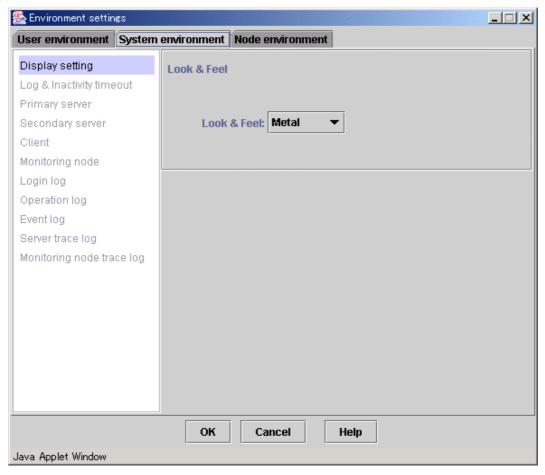


When the system environment settings is modified, the Web-Based Admin View is restarted to make it valid.

4.3.1 Display setup

Set the display language and Look & Feel.

System environment (Display setting) screen



Look & Feel

Select Metal (default), CDE/Motif, Windows, or Any (Client OS dependent) for Look&Feel.



Display language

• Client

The displayed language can be set or modified in the client locale. Refer to Screen operation instruction.

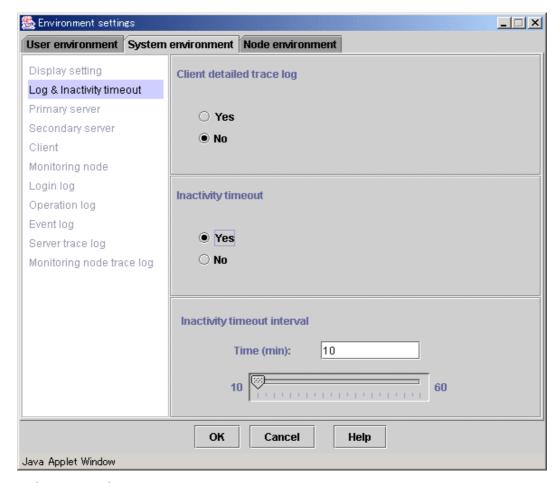


• The displayed language is supported depending on each management product. Refer to the manual of each operation management product.

4.3.2 Log & Inactivity timeout

Set up the client detailed trace log, inactivity timeout, and the inactivity timeout interval as described below.

System environment (Log & Inactivity timeout) screen



Client detailed trace log

Specify whether to collect a detailed trace.

Inactivity timeout

Specifies whether the inactivity timeout is used. [Yes] enables this function, and [No] disables it.

Inactivity timeout interval

The inactivity timeout interval can be set using the slider bar. You may also enter the time in the text field and press [Enter]. The timer units are indicated in minute. Enter any number from 10 to 60. The inactivity timeout interval is displayed only if it is enabled.



On the inactivity timeout

The inactivity timeout is a security feature. If the user does not interact with GUI at the specified interval, GUI will force the user to re-enter his password before any further operations are allowed. After the password is successfully entered, the user can continue working.

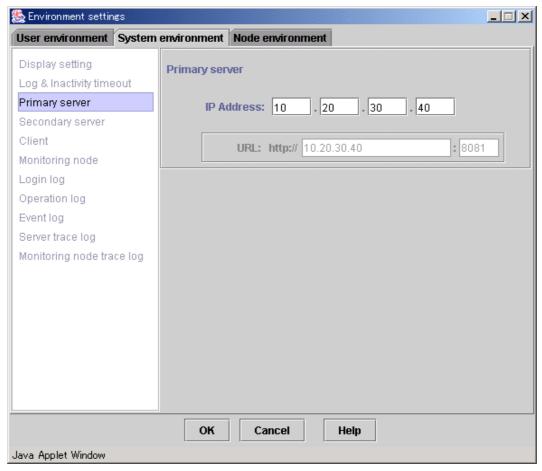


Support varies depending on the operation management product. For details, refer to the manual of each product.

4.3.3 Primary management server

Set the IP address of the primary management server.

System environment (Primary server) screen



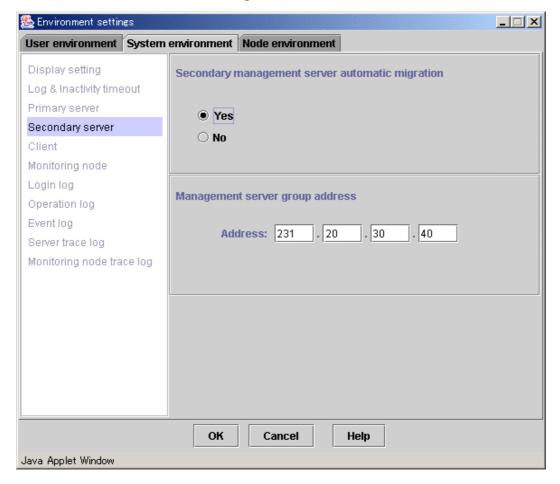
Primary server

Enter the IP address of the primary management server. For example, enter "10," "20," "30," "40" for the IP address "10.20.30.40". Enter the IP address designated to mip ("IP address / host name for identifying own host ") on the primary management server. (Enter the IP address assigned to host name when the host name is designated.) For the mip setup method, refer to 4.4.1 "IP address / Host name." The displayed URL cannot be modified. Also, the current URL of the primary management server is displayed.

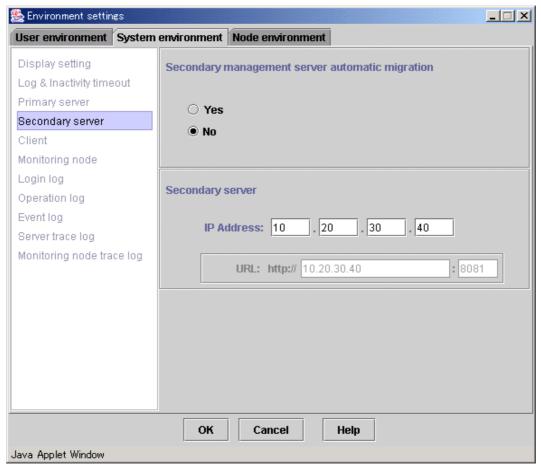
4.3.4 Secondary management server

Set the IP address of the secondary management server.

System environment screen (when the secondary management server automatic migration is selected)



System environment screen (when the secondary management server automatic migration is not selected)



Secondary management server automatic migration

Specify whether or not the secondary management server automatic migration is selected. When "Yes" is selected, the [Management server group address] setting is available. When "No" is selected, the [Secondary management server] setting is available.

Management server group address

Set the **Multicast address** or broadcast address including the potential management server that is automatically selected from the secondary management server.

Secondary server

Enter the IP address of the secondary management server. For example, enter "10," "20," "30," "40" for the IP address "10.20.30.40". The URL of the secondary management server that is currently set is displayed. Enter the IP address designated to **mip** ("IP address / host name for identifying own host ") on the secondary management server. (Enter the IP address assigned to host name when the host name is designated.) For the **mip** setup method, refer to 4.4.1 "IP address / Host name."



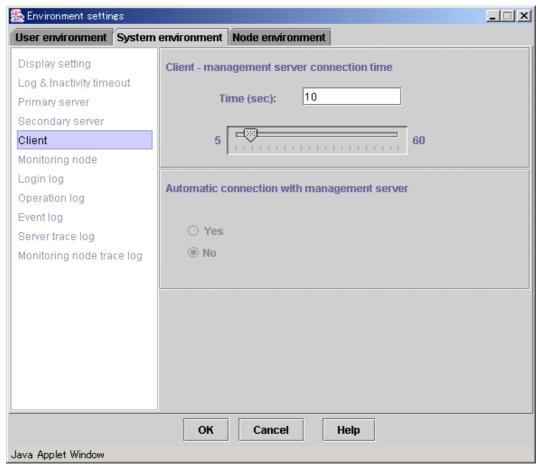
 Whenever possible, set a multicast address for the management server group address. If the IP address of the primary management server is "10.20.30.40," change "10" to "231" to make the management server group

- address to "231.20.30.40."
- When the network interface is multiplexed by using Global Link Services(GLS), "Secondary management server automatic migration" is invalid.

4.3.5 Client

Set the connection monitoring time between the client server and the management server, and display the automatic connection to the management server.

Screen environment (Client) screen



Client - management server connection time

Enter the interval (from 5 to 60 seconds) in the text field and press [Enter], or set the interval by moving the bar (slider) to the left or right.

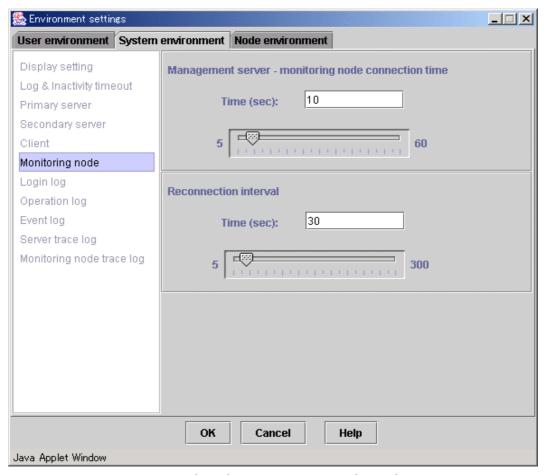
Automatic connection with management server

This parameter is invalid in this version.

4.3.6 Monitoring node

Set the connection monitoring time between the monitoring node and the management server and the reconnection interval as described below.

System environment (Monitoring node) screen



Management server - monitoring node connection time

Enter the interval (from 5 to 60 seconds) in the text field and press [Enter], or set the interval by moving the bar (slider) to the left or right.

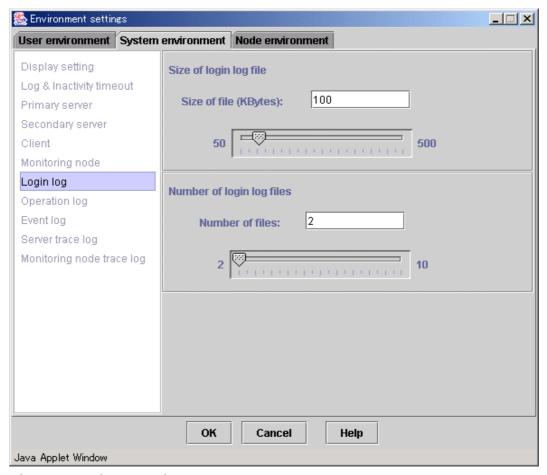
Reconnection interval

Enter the interval (from 5 to 300 seconds) in the text field and press [Enter], or set the interval by moving the bar (slider) to the left or right.

4.3.7 Login log

Set the size and number of login log files for the management server as described below.

System environment (Login log) screen



Size of login log file

Enter the file size (from 50 to 500 KB) in the text field and press [Enter], or set the size by moving the bar (slider) to the left or right.

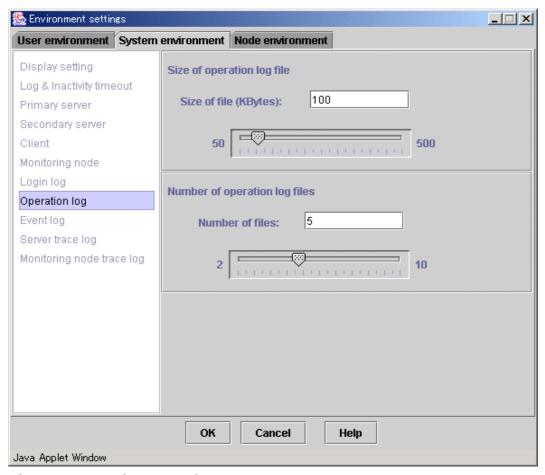
Number of login log files

Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

4.3.8 Operation log

Set the size and number of operation log files for the management server as described below.

System environment (Operation log) screen



Size of operation log file

Enter the file size (from 50 to 500 KB) in the text field and press [Enter], or set the size by moving the bar (slider) to the left or right.

Number of operation log files

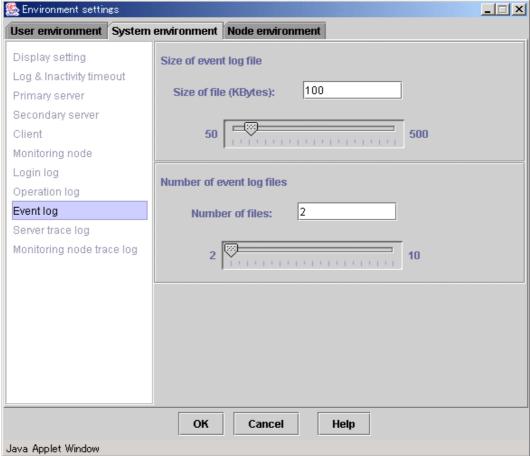
Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

4.3.9 Event log

The following parameters are valid only if the operation management products like PRIMECLUSTER supporting event notification from a monitoring node are installed.

The size and number of event log files to be stacked in the management server are set up.

System environment (Event log) screen



Size of event log file

Enter the file size (from 50 to 500 KB) in the text field and press [Enter], or set the size by moving the bar (slider) to the left or right.

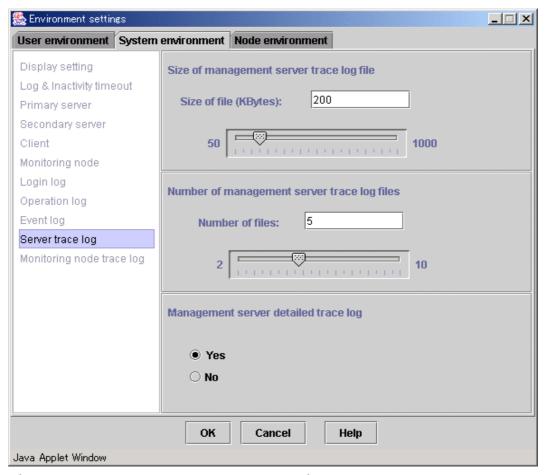
Number of event log files

Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

4.3.10 Server trace log

Set the size and number of management server trace log files, and whether to collect a management server detailed trace log as described below.

System environment (Server trace log) screen



Size of management server trace log file

Enter the file size (from 50 to 1000 KB) in the text field and press [Enter], or set the size by moving the bar (slider) to the left or right.

Number of management server trace log files

Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

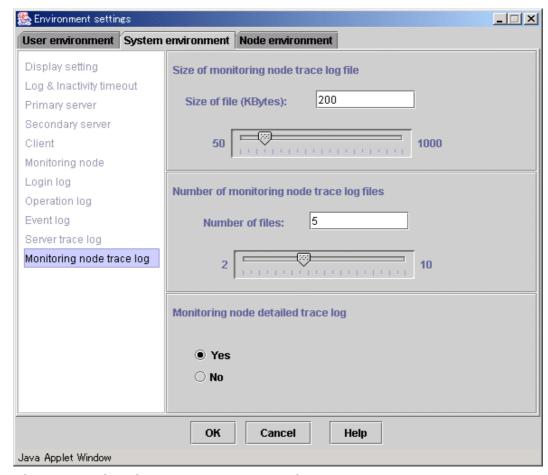
Management server detailed trace log

Select whether to collect a management server detailed trace log.

4.3.11 Monitoring node trace log

Set the size and number of node trace log files, and whether to collect a node detailed trace log as described below.

System environment (Monitoring node trace log) screen



Size of monitoring node trace log file

Enter the file size (from 50 to 1000 KB) in the text field and press [Enter], or set the size by moving the bar (slider) to the left or right.

Number of monitoring node trace log files

Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

Monitoring node detailed trace log

Select whether to collect a monitoring node detailed trace log.

4.4 Node environment

Target users

Users who belong to the Web-Based Admin View administrator group List of node environment settings items

- IP address / Host name for identifying own host:

 Set up when modifying mip (the IP address or the host name for identifying own host) on the management server or the monitoring node for the environment settings. This IP address is used for communication among management servers and monitoring nodes.
- IP address / Host name of the WWW server:
 If the monitoring node for environment settings is a management server,
 httpip (the IP address or the host name that is set for the clients)
 is displayed.

The displayed IP address / host name cannot be modified on the GUI screen. For modification, refer to 7.5 "Multi-network between server and client by classified use."

• Object of secondary management server automatic migration: Specify whether the monitoring node is automatically selected as the secondary management server when 7.4 "Secondary management server automatic migration" is set.

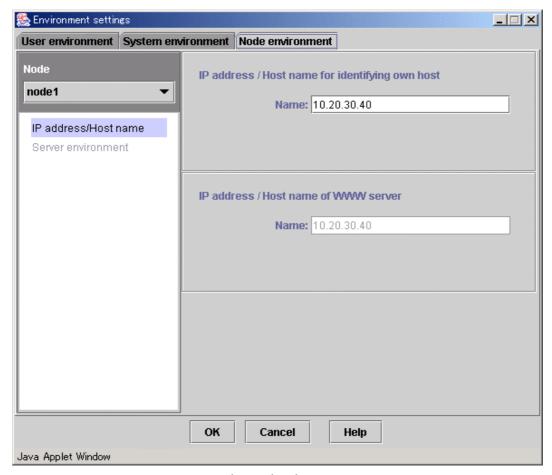


- From [Node], select a management server or node, and then set up respectively.
- When setting the operation environment, exit all other applications of Web-Based Admin View first.
- When the node environment settings items are modified, Web-Based Admin View of the monitoring node is restarted to enable the settings.
- The node environment is available only when the environment settings is activated in the primary management server.

4.4.1 IP address / Host name

Set up and display the **mip** (IP address or host name for identifying own host) and the **httpip** (IP address or host name of WWW server).

Node environment (IP address / Host name) screen



IP address / Host name for identifying own host

Enter the **mip** (the IP address or the host name for identifying own host) value on the management server or monitoring node selected as [Node]. This IP address is used for communication between the management servers and the monitoring nodes.

The initial value is set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n."

IP address / Host name of WWW server

If the monitoring node selected as [Node] is used as a management server, the system displays the **httpip** (the IP address or host name of the client) value.

The initial value is set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n."

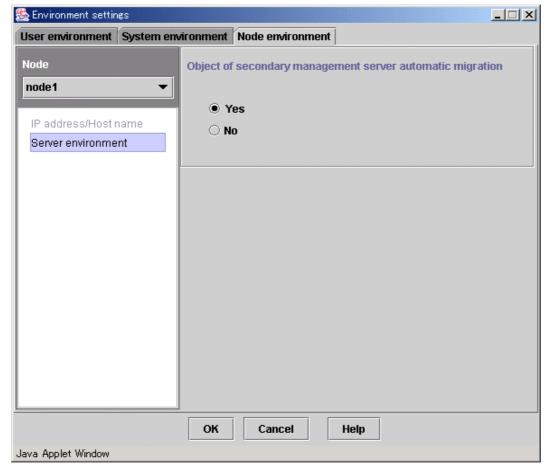


If the IP address or host name for identifying own host is not designated, the environment settings screen cannot be closed.

4.4.2 Server environment

Set whether the server should be a selection target for the secondary management server.

Node environment(Server environment) screen



Object of secondary management server automatic migration

Specify whether the monitoring node selected as [Node] is to be automatically singled out as the secondary management server. The initial value is "Yes."

4.5 Reference and modification by command

The Web-Based Admin View administers setting items as environment variables. These environment variables can be referred or modified by executing a command on a management server and monitoring node as well as on the Environment setup screen.

4.5.1 Environment variable

Web-Based Admin View internally administers is corresponding to which parameter that can be referred and modified on the Environment settings screen.

Operation environment variable list

Attribu	Environment	Setting value		Description	
te	variable		1		
usr	look-and-feel	Metal, CDE/Motif, Look & Feel Windows, Any		Look & Feel	
usr	locale	japanese, english		Language	
usr	c-tlog-debug	on, off		Client detailed trace log	
usr	out-time	nnnn (Min: 0) minut e		Inactivity timeout interval	
sys	primary-serve r	nnn.nnn.nnn		IP address of Primary server	
sys	secondary-ser ver	nnn.nnn.nnn		IP address of Secondary server	
sys	keep-time	<i>nnnn</i> (min: 5, max: 60)	secon d	Client - management server connection time	
sys	health-time	nnnn (min: 5, max: 60)	secon d	Management server - monitoring node connection time	
sys	retry-time	nnnn (min: 5, max: 300)	secon d	Reconnection interval	
sys	s-llog-vol	nnnn (min: 50, max: 500)	kilob yte	Size of login log file	
sys	s-llog-num	nnnn (min: 2, max: 10)		Number of login log files	
sys	s-olog-vol	nnnn (min: 50, max: 500)	kilob yte	Size of operation log file	
sys	s-olog-num	nnnn (min: 2, max: 10)		Number of operation log files	
sys	s-elog-vol	nnnn (min: 50, max: 500)	kilob yte	Size of event log file	
sys	s-elog-num	nnnn (min: 2, max: 10)		Number of event log files	
sys	s-tlog-vol	nnnn (min: 50, max: 1000)	kilob yte	Size of management server trace log file	
sys	s-tlog-num	nnnn (min: 2, max: 10)		Number of management server trace log files	
sys	s-tlog-debug	on, off		Management server detailed trace log	
sys	n-tlog-vol	nnnn (min: 50, max: 1000)	kilob yte	Size of monitoring node trace log file	
sys	n-tlog-num	nnnn (min: 2, max: 10)		Number of monitoring node trace log files	
sys	n-tlog-debug	on, off		Monitoring node detailed trace log	
sys	group-addr	nnn.nnn.nnn		Management server group address	
sys	server-ha	on, off		Secondary management server automatic migration	
local	mip	nnn.nnn.nnn		IP address / Host name for identifying own host	

Attribu te	Environment variable	Setting value	Description	
			(Information to communicate between the management servers and the monitoring nodes)	
local	httpip	nnn.nnn.nnn	IP address / Host name of WWW server	
local	server-electi on	on, off	Object of secondary management server automatic migration	

nnnn: positive number,

nnn: positive number (min: 0, max: 255)



- The specified setting value is not checked by the wvSetparam. **Be aware** that the setting value is proper and correct (within a valid value) in case of setup or modification.
- Web-Based Admin View is not allowed to be started if "255.255.255.255" or any value outside the specified range is set for nnn.nnn.nnn

4.5.2 Environment variable reference

To refer to environment variables, execute the following command from the management server or monitoring node:

wvGetparam <environment variables>

The environment variable corresponding to the specified variable is displayed in the following format:

Display format :

<Attribute>:<Environment variable name> <Value>

When this variable <environment variables> is eliminated, the information related to all variables is displayed in the format above.

EXAMPLES :

1. Normal result

Accessing the primary management server

/etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server
sys:primary-server 10.20.30.40

2. Abnormal result

If the specified variable is inappropriate, the following message appears.

"No such key specified environment variable>"

4.5.3 Environment variable modification

To change an environment variable, execute the following command on the host: wvSetparam <environment-variable> <setting-value>

The specified value is set to the variable "environment variable". When executed, the modified value is displayed in the following format:

Display format:

<Attribute>:<Environment variable name> <Value>

EXAMPLES:

When changing the IP address 10.20.30.41 of a primary management server

1. Stop Web-Based Admin View

/etc/opt/FJSVwvbs/etc/bin/wvCntl stop

2. Modify settings

/etc/opt/FJSVwvbs/etc/bin/wvSetparam primary-server 10.20.30.41

sys:primary-server 10.20.30.41

Restart Web-Based Admin View.
 Refer to the 6.2 "Restart" page.

If there's no operation environment variables identifying with the specified <operation environment variables>, the following error message appears:
"No such key. Specified operation environment variables."



- The specified setting value is not checked by the wvSetparam. When setting or modifying, **be aware** that the setting value is proper and correct (within a valid value).
 - For the effective range of the setting value, refer to 4.5.1 "Environment variable."
- When modifying the value of the variable whose attribute is "sys", be sure to set up the same value on all the management servers and monitoring nodes.
- After modifications are made, restart Web-Based Admin View. Refer to 6.2 "Restart."

4.6 Authentication environment setup

This section describes the environment variable for authentication of Web-Based Admin View.

Operation environment variable for authentication

Attrib ute	Environment variable	Setting value	Description
sys	login-retry	<pre>nnn (positive number) [time] 0: non-stop undefined: 5 times</pre>	The number of failed login attempts that will be allowed before any further login attempts are prohibited for some preset "login-inhibit-time."
sys	login-inhibi t-time	nnn (positive number) [minute] undefined: 30 min Minimum: 10 min	Inhibiting time at login.



Since the operation environment variable for authentication is not set when installed, the initial value is **undefined**.

Procedure

Take the following steps to set up operation environment variable for authentication.

1. Set up the operation environment variable for authentication.

Execute the following command (wvSetparam) on all management servers.

cd /etc/opt/FJSVwvbs/etc/bin

#./wvSetparam -add <Attribute> <Environment variable> <Setting
value>

<Attribute>:<Environment variable> <Setting value>

The set value is output when executing the command. Check if the value is correct.

Example:

./wvSetparam -add sys login-retry 10

sys:login-retry 10

./wvSetparam -add sys login-inhibit-time 20

sys:login-inhibit-time 20

2. Restart Web-Based Admin View.

Restart to validate the setup on all management server.

Refer to 6.2 "Restart."

Chapter 5 Web-Based Admin View log reference

Target users

Users who belong to the Web-Based Admin View administrator group

5.1 Log type

The two types of log files are described below.

Login log file

To save records of all logins and logouts session to the Web-Based Admin View.

Login: The beginning of each client session where the user authenticates themselves to the system.

Logout: The termination of a client session.

Operation log file

To save records of operations in the Web-Based Admin View GUI screen.

5.2 Log file display

This chapter describes the method of displaying log files.

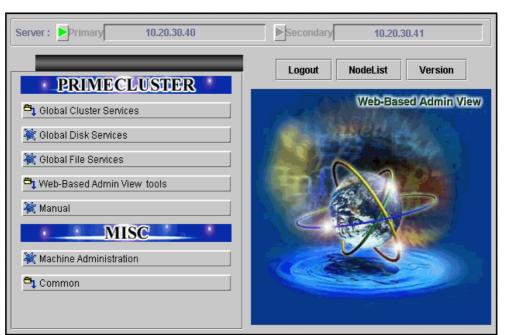
Login log and Operation log can be referred to on a logging view screen.

5.2.1 Logging view startup

Start the logging view as described below.

Target users: Users who belong to the Web-Based Admin View administrator group

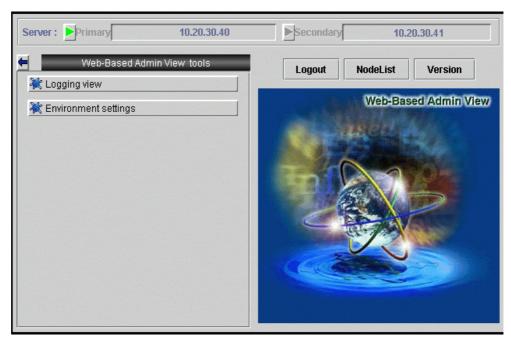
• Select [Web-Based Admin View tools] on the menu of the Web-Based Admin View screen.



Web-Based Admin View screen

• Select < Logging view > on the [Web-Based Admin View tools] menu.

Web-Based Admin View screen (Web-Based Admin View tools menu)



The logging view screen is displayed.

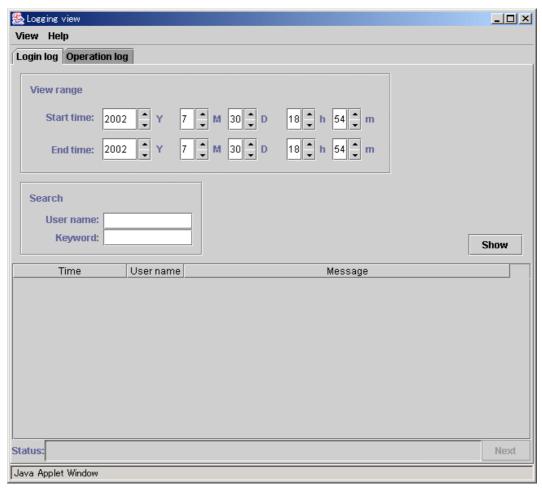
5.2.2 Login log

Select [Login log] on the logging view screen. The <Login log> screen is displayed.

The usage of login log is described as following:

Narrowing down the login log

Logging view screen (Setup screen for login log display)



Start time

Input time the log was started.

End time

Input time the log was completed.

User name

Input one user name.

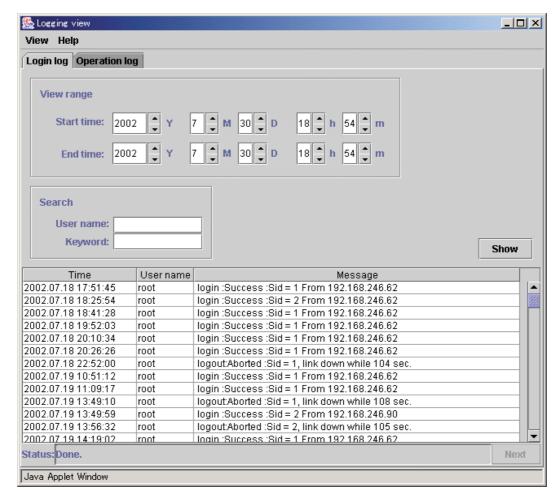
Keyword

Input details to further narrow down. The keyword is valid in the message contents.

Select < Show > after specifying the conditions to display the login log. The logs can be shown up to 200 lines at one time.

· Referring to login log

Logging view screen (Loginlogdisplayscreen)



The system shows the following items:

Time

Shows the times and dates of login and logout in the [YYYY.MM.DD.hh.mm.ss] format.

User name

Shows the name of login/logout user.

Message

- login or logout
- succeed or fail (if fail, the reason)
- logged-in client host name
- session ID



Since the log display cannot be returned to a previous screen, narrow down the search conditions, or reselect the <Show> button.

The logs can be shown up to 200 lines at one time.

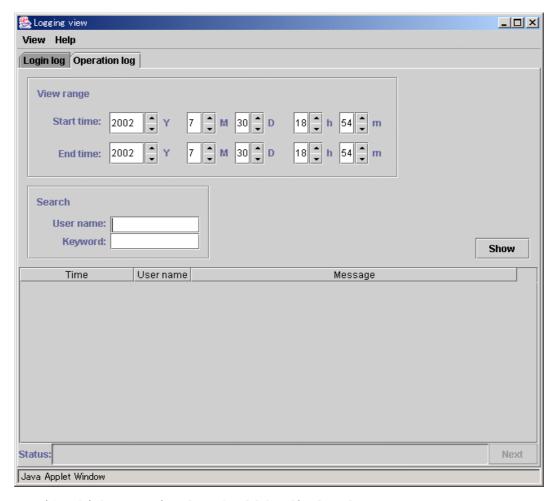
5.2.3 Operation log

Select the [Operation log] tab on the logging view screen. The <Operation log> screen is displayed.

The usage of operation log is described as following:

· Narrowing down the operation log

Logging view screen (Setup screen of operation log)



Specify which operation log should be displayed.

Start time

Input time the log was started.

End time

Input time the log was completed.

User name

Input one user name.

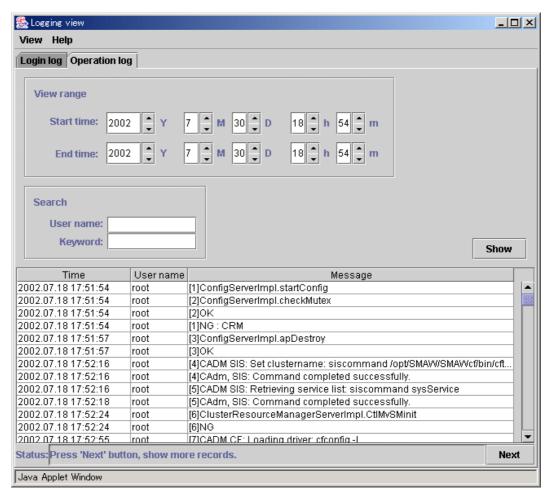
Keyword

Input details to further narrow down. The keyword is valid in the message contents.

Select the < Show > button after specifying the conditions to display the operation log.

The logs can be shown up to 200 lines at one time.

Referring to operation log Logging view screen (Operation log display screen)



Time

Shows the times and dates of user operations in [YYYY.MM.DD.hh.mm.ss] format.

User name

Shows the user name.

Message

Shows user operation contents and results.



Since the log display cannot be returned to a previous screen, narrow down the search conditions, or reselect the <Show> button.

Part 4 Web-Based Admin View operating setup

This part provides operating instructions (e.g. stop, restart) and setup modification procedures for Web-Based Admin View.

Chapter 6 Web-Based Admin View operating instruction

In order to display the GUI screen on the client, Web-Based Admin View needs to be active. However, it requires no extra handling for startup since it is automatically started on the management server or monitoring node during system reboot.

This part gives a description of the following operating instructions:

- Stop or restart of Web-Based Admin View
 When modifying the settings for the management server and the monitoring node, it might be necessary to stop and restart Web-Based Admin View.
- Setup conditions of installing scripts for Web-Based Admin View This is used to set whether or not Web-Based Admin View should be automatically activated during system startup.

6.1 Stop

The Web-Based Admin View is automatically started on the management server or monitoring node during system startup. No special operation is required to start or stop it.

If the Web-Based Admin View has to be stopped for some reason such as setup modification of management server or monitoring node, take the following steps with system administrator authority.

- 1. # /etc/init.d/fjsvwvcnf stop
- 2. # /etc/init.d/fjsvwvbs stop



- Be aware the Web-Based Admin View screen on the client is closed when stopping the operation. If the service stops while the Web-Based Admin View screen is active, the following message might be displayed: "0007 Management server session disconnected. Do you want to try to re-connect working Management Server?"
- With the 2-tier architecture model in which the monitoring node acts as a management server, Web-Based Admin View on the monitoring node is automatically shut down.
- If it is not shut down for some reasons, use the command in 6.2 "Restart" t to restart it. Then, terminate the operation again.

6.2 Restart

In order to display the GUI screen on the client, Web-Based Admin View needs to be active. However, it requires no extra handling for startup since it is automatically started on the management server or monitoring node during system startup.

If Web-Based Admin View has to be stopped for some reason such as setup modification of management server or monitoring node, execute two commands with system administrator authority as shown in the procedure below.

- 3. # /etc/opt/FJSVwvbs/etc/bin/wvCntl restart
- 4. # /etc/init.d/fjsvwvcnf restart



- Be aware that the Web-Based Admin View screen is closed on all clients when restarting. If you change the settings while the Web-Based Admin View screen is active, the following message might be displayed: "0007 Management server session disconnected. Do you want to try to re-connect working Management Server ?"
- With the 2-tier architecture model in which the monitoring node acts as a management server, Web-Based Admin View on the monitoring node is restarted.
- Be sure to restart Web-Admin View after the following operations.
 - Modification of the http port number or RMI port number
 - Modification of the management server
 - Modification of the Java environment
 - Modification of the network address used by a Web-Based Admin View
 - Modification of environment variable by executing a command
 - Modification of the secondary management server automatic migration
 - Modification of the connections to an active management server

6.3 Setup operating conditions

Execute the following command on the node to set up whether or not Web-Based Admin View should be automatically activated during system startup. Be sure to apply this setup as long as any operation management view (GUI) is not used.

[Setting to disable WWW server for Admin View and Web-Based Admin View]
/etc/opt/FJSVwvbs/etc/bin/wvrcscript uninstall
[Settings to automatically activate WWW Server for Admin View and Web-Based Admin View during system startup]

/etc/opt/FJSVwvbs/etc/bin/wvrcscript install

The following separate setup for WWW Server for Admin View or Web-Based Admin View is also available:

- To automatically start Web-Based Admin View during system startup
 # /etc/opt/FJSVwvbs/etc/bin/wvrcscript install FJSVwvcnf
- To not start Web-Based Admin View during system startup
 - # /etc/opt/FJSVwvbs/etc/bin/wvrcscript uninstall FJSVwvcnf
- To automatically start WWW Server for Admin View
 - # /etc/opt/FJSVwvbs/etc/bin/wvrcscript install FJSVwvcnf
- To prevent the use of the WWW server for Admin function during system startup
 - # /etc/opt/FJSVwvbs/etc/bin/wvrcscript uninstall FJSVwvcnf

Note that if this setup is applied, neither machine management nor the operation management view provided by PRIMECLUSTER will be available.

Chapter 7 Web-Based Admin View setup modification

This chapter explains the following procedures to modify the initial setup and configuration.

- Modifying the network address used by a Web-Based Admin View
- Modifying the port number of the network service
- Changing the management server
- $\bullet\,$ Modifying the operation of the secondary management server
- $\bullet\,$ Modify the network environment in the management server

7.1 Network address

The IP address used for Web-Based Admin View is set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n" at it's installation.

There are following two purposes:

- The IP address or host name for identifying own host (mip)
 This is used for communication among management servers and monitoring nodes.
- The IP address used for a client (httpip)
 WWW server's IP addresses or host name.

Normally, these IP addresses are identical. If you need to modify the network environment to multi-network between server and client by classified use, set up the IP address respectively. For the detail, refer to 7.5 "Multi-network between server and client by classified use." Take the following steps to modify these IP addresses:

- 5. Stop Web-Based Admin View.
 - Refer to 6.1 "Stop." Stop Web-Based Admin View running on the management server or monitoring node.
- 6. Edit a definition file.

Execute the following command:

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <IP address for identifying own host>
- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <IP address
 used for client>

For example, if you need to change the $<\!IP$ address for identifying own host> to "100.100.100.100", execute the following:

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip 100.100.100
 Similarly, if you need to change the <IP address used for client> to
 "100.100.100.100", execute the following:
- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip
 100.100.100.100
- 7. Change a management server.

If the modified monitoring node acts as a management server, modify the management server settings. Refer to $7.3\,$ "Management server,"

8. Restart Web-Based Admin View.

Refer to 6.2 "Restart". Restart the Web-Based Admin View on the management server or monitoring node on which the IP address is changed.



<IP address used for client> might not be required to modify when <IP
address for identifying own host> and <IP address used for client> is
different. httpip is described<IP address used for client>, mip is
described <IP address for identifying own host>.

7.2 Network service port number

Web-Based Admin View uses the following system resources and bundled software package supporting Solaris OE.

- · Port number for the http protocol
- Port number for Java RMI
- Java operation environment bundled with Solaris OE

If Web-Based Admin View does not operate normally, or when such system resources are competing with other products, change port numbers.

7.2.1 http port number

The initial value of the port number to access to a management server from the client Web browser is "8081."

To modify the setup, execute the following command for all management servers and monitoring nodes:

/etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv-h=<port number>
To confirm the current port number, execute the following command for all
management servers and monitoring nodes.

/etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv-h
8081



- Modifications should be made in a single user mode.
- Port numbers are controlled as the service name "fjwv-h" by /etc/inet/services file on all management servers and monitoring nodes.
- When using the products such as InfoProxy, InfoSearcher, InfoDispatcher, and Safeauthor, be sure to change the port numbers.
- If a URL is registered as a bookmark, change the URL port number. After changes are completed, restart Web-Based Admin View. Refer to 6.2 "Restart."

7.2.2 RMI port number

Web-Based Admin View uses four service port numbers, 9396, 9397, 9398, and 9399, in order to use the RMI programming model of the Java platform. Be aware that there's no client running Web-Based admin View first, and then execute the following command on all management servers and monitoring nodes.

To check the current port number, execute the following command;

/etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c fjwv_n fjwv_s
fjwv q

After modifications, restart Web-Based Admin View. Refer to 6.2 "Restart."



- Modifications should be made in a single user mode.
- Port numbers are controlled as the service name "fjwv_c", "fjwv_n", "fjwv_s" and "fjwv_s" by /etc/inet/services file on all management servers and monitoring nodes.
- Modification should be done for all management servers and monitoring nodes. The port number corresponding to each service name needs to be set to the same value among those nodes.
- If the setup is modified, and the daemon is restarted on the client running Web-Based Admin View, a message stating "0007 Management server session disconnected. Do you want to try to re-connect working Management Server ?" may appear on the Web browser screen.



For details on Remote Method Invocation (RMI), see the Sun Microsystems Documents.

7.2.3 JavaVM run time environment

Web-Based Admin View uses the JavaVM run time environment bundled in the supporting Solaris OE.

If unbundled package in Solaris OE is used, execute the following command on each management server and monitoring node. This operation is reset the Java environment library again. Be sure that the package includes the Java command when replacing the Java environment.

#/etc/opt/FJSVwvbs/etc/bin/wvSetparam java_home <JDK install
directory>

For example, if JDK1.2.2 is installed in the directory /opt/local/jdk1.2.2, execute the following since <JDK install directory> is /opt/local/jdk1.2.2:

#/etc/opt/FJSVwvbs/etc/bin/wvSetparam java_home
/opt/local/jdk1.2.2

After changes, be sure to restart Web-Based Admin View.



- For rebooting, refer to 6.2 "Restart."
- If this command is faild, refer to "Symptom 10" in Appendix B "Troubleshooting.".



JDK1.1.X is not supported from the current VL.

/usr/java1.1 does not work.

Check the version of operating JDK and set up.Refer to2.1 "Prerequisite server environment"

7.3 Management server

When the management server and the network address used on this management server have to be changed, be sure to set up the following:

There are two types of method; to set up by executing a command on each management server or monitoring node, or to set up from the environment setup screen.



These settings are made in a static operation mode where primary and secondary management servers are fixed. For the setup of dynamic operation of the secondary management server, refer to 7.4 "Secondary management server automatic migration."

· Setup by command

Procedure:

9. Stop Web-Based Admin View in all management servers and monitoring nodes.



Refer to 6.1 "Stop."

10. Set up the IP address of the management server.

Execute the following command for all the management servers and monitoring nodes:

#/etc/opt/FJSVwvbs/etc/bin/wvSetparam primary-server <IP
address of primary management server>

#/etc/opt/FJSVwvbs/etc/bin/wvSetparam secondary-server <IP
address of secondary management server>

Example:

When the IP addresses of primary management server and secondary server are set to "10.20.30.40" and "10.20.30.41":

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam primary-server
 10.20.30.40
- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam secondary-server
 10.20.30.41
- 11. Change **mip** (IP address for identifying own host) on the management servers,.

Change \min to the IP address set up in procedure2 on the primary and secondary management servers.

Refer to to 7.1 "Network address."

12. Change **httpip** (IP address used for a client) on the management servers,.

Change **httpip** to **mip** or the IP address that is connected from the client on the primary and secondary management servers.

Refer to 7.5 "Multi-network between server and client by classified use."

13. Restart Web-Based Admin View.

Restart Web-Based Admin View on all management servers and monitoring nodes.



Refer to 6.2 "Restart."

· Setting from the environment setup screen

• Procedure:

- 14. Start up the Web-Based Admin View screen.
 - Access to the primary management server from the Web browser.
- 15. Set up the IP address of the management server.

Select the [Web-Based Admin View tools]-[System environment] tab on [Environment settings] to set up for [IP address] of the [Primary server] property and [Secondary server] property.

Note that [IP address] of the [Secondary server] property is not available if [Secondary management server automatic migration] is set to "Yes."

16. On the management servers, change **mip** ("IP address for identifying own host").

Change $\min p$ on the primary and secondary management servers. Refer to 7.1 "Netowrk address."

17. On the management servers, set up **httpip** ("IP address used for a client").

Change **httpip** to **mip** or to IP address at user's discretion. Refer to 7.5 "Multi-network between server and client by classified use."



The **httpip** value cannot be set up from the environment setup screen. Use a wvSetparam command. Refer to 7.5 "Multi-network between server and client by classified use."

18. Login to the Web-Based Admin View screen, again.

When the environment setup is completed, the message "0051 In order to make the settings valid, restart Web-Based Admin View and reconnect it. Are you sure?" appears. If you need to validate the currently chosen value, select [Yes]. Log off, and then login the management server again. If [No] is selected, the setup remains invalid.

Refer to the message "0051" of A.4.1 "Information message."



The modifications may not get valid on the environment setup screen if the monitoring node is inactive. In such a case, refer to "Setup by command" above.

7.4 Secondary management server automatic migration

The following shows the setup method how a monitoring node can be automatically operated when the secondary management server is down.

- 19. Prepare the address used on the network To make this setup valid, a multicast address used on the network or a broadcast address is required. It must be pre-assigned from the network administrator.
- 20. Setup the secondary management server automatic migration Two types of settings are available:
 - executing a command Refer to 7.4.1 "Setup by command."
 - setting from the environment setup screen Refer to 7.4.2 "Setting from environment settings screen."
- 21. Access method from a client to the management server When this setup is valid, it might not be identifiable which monitoring node is used for the secondary management server when the client accesses to the management server. In such a case, access from a client to the management server following the instructions described in 7.4.3 "Access method."



- The monitoring node where this setup was done might be running as a secondary management server. In order to differentiate httpip ("IP address used for a client") from mip ("IP address for identifying own host"), set up httpip. Refer to 7.5 "Multi-network between server and client by classified use."
- Note that this function is not available when making the Web-Based Admin View's network interface multiplexed by GLS (Global Link Services).

7.4.1 Setup by command

• Procedure:

22. Stop Web-Based Admin View.

Execute the following command on the monitoring node:

/etc/opt/FJSVwvbs/etc/bin/wvCntl stop

Execute this command on ${\bf all}$ potential monitoring nodes of the secondary management server.

23. Determine a potential monitoring node of the secondary management server.

Execute the following command on the monitoring node:

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam server-election on
 Execute this command on all potential monitoring nodes of the secondary
 management server.
- 24. Start Web-Based Admin View.

Execute the following command on the monitoring node:

/etc/opt/FJSVwvbs/etc/bin/wvCntl start

Execute this command on **all** potential monitoring nodes of the secondary management server

25. Set up a group address.

Execute the following command on the primary management server to set up a group address:

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam group-addr <group
 address>
- 26. Set the secondary management server to the mode in which a dynamic decision is available.

Execute the following command on the primary management server:

- # /etc/opt/FJSVwvbs/etc/bin/wvSetparam server-ha on
- 27. Validate settings.

Restart Web-Based Admin View on the primary management server.



Refer to 6.2 "Restart."



When a multicast address is set to a group address, for example, the IP address of the primary management server is 10.20.30.40, override 231.20.30.40 by changing "10" to "231."

For details of the group address information, refer to "RFC1700."

7.4.2 Setting from environment settings screen

There are methods of "Doing setup" and "Undoing setup" to set from environment settings screen.

Doing setup

Take the following steps to access to the primary management server via the Web browser.

• Procedure:

- 28. Determine a potential monitoring node of the secondary management server.
 - a) Select the [Node environment] tab on the environment setup screen, and select a potential monitoring node of the secondary management server from [Node].
 - b) Select [Server environment].
 - c) Set [Object of secondary management server automatic migration] to "Yes."

This setting must be selected from [Node] for all potential monitoring nodes of the secondary management server.

- 29. Set the secondary management server to the mode in which a dynamic decision is available.
 - d) Select the [System environment] tab.
 - e) Select "Yes" from [Secondary management server automatic migration] of the [Secondary server] property.

- 30. Set up a group address.
 - a) Select the [System environment] tab.
 - b) Set "Multicast address" or "Broadcast address" to [Management server group address] of the [Secondary server] property.
- 31. Validate settings.

When settings are completed, terminate the environment setup. The message, "0051 In order to make the settings valid, restart Web-Based Admin View and reconnect it. Are you sure?" appears. If you need to validate the currently chosen value, select [Yes]. Log off, and then login the management server again. If [No] is selected, the setup remains invalid.

Undoing setup

To return settings, access to the primary management server from the Web browser as follows:

Procedure:

- 32. Set the secondary management server to the mode in which a dynamic decision is not available.
 - a) Select the [System environment] tab from the environment setup screen.
 - b) Select "No" from [Secondary management server automatic migration] of the [Secondary server] property.
- 33. Validate settings.

When settings are completed, terminate the environment setup. Then, the message, "0051 Do you wish to restart Web-based Admin View and login again to validate the value?" appears. If you need to validate the value, select [Yes]. If [No] is selected, the setup remains invalid.



The modifications done on the environment setup screen might not be effective if the monitoring node was inactive. In such a case, refer to 7.4.1 "Setup by command".

7.4.3 Access method

connected:

If you setup the secondary management server automatic migration, it might not be identifiable which monitoring node is used for the secondary management server when the client accesses to the management server. In such a case, describe URL to access from the client as shown below. Then, the running primary or secondary management server is automatically

When the Java Plug-in is used

http://<host name>:<port number>/Plugin.cgi



- When the Java Plug-in is not used
 - http://<host name>:<port number>/WebView.html
- · Specify an optional management server or monitoring node for the host

name.

• When accessing from a client by using this function, the actually connected management server is not always a monitoring node or management server designated in URL. In order to connect by designating the primary or secondary management server, click the [Management server switching] button in the upper right of the Web-Based Admin View screen while the login screen is displayed after accessing to an optional management server or monitoring node. For details of Management server switching button, refer to 3.5.2 "Switchover of management server."

7.5 Multi-network between server and client by classified use

Web-Based Admin View enables to set up a different **httpip** ("IP address used for a client") than **mip** ("IP address for identifying own host").

Normally, these IP addresses are identical. If you need to modify the network environment, take following steps to set up a separate IP address.



These values (mip and httpip) are not omissible. Even in the case of not setting a different IP address that the management server opens to clients, be sure to set up the same IP address as mip according to each setup method.

Setup by command

Take the following steps on the primary and secondary management server.

• Procedure:

34. Set up the network address

Login to the primary or secondary management server to execute the following commands:

The $<\!IP$ address for identifying own host> value designates the IP address used for Web-Based Admin View on the primary or secondary management server.



When modifying the **mip** value, it's necessary to set the primary and secondary management servers again on all monitoring nodes and all management servers. For the setup each of management server, refer to 7.3 "Management server."

/etc/opt/ FJSVwvbs/etc/bin/wvSetparam mip <IP address for identifying own host>

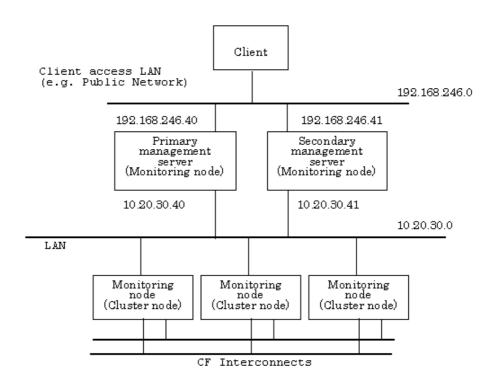
/etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <IP address
used for client>

Examples:

In the following configuration, set up the "mip" and "httpip" as follows.

/etc/opt/FJSVwvbs/etc/bin/wvSetparam mip 10.20.30.40

/etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip 192.168.246.40



35. After modifications, restart Web-Based Admin View. Refer to 6.2 "Restart."



- If the clients are deployed on the LAN (10.20.30.0 in above fig.) used for mip of the management server in this topology, the management server needs to have routing information to transfer the communication requests for httpip to mip.
- If you need to set again the operation not to separate network on the management server by classified use, Web-Based Admin View must be restarted after executing the following command on all management servers. Refer to 6.2 "Restart."
 - # /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <IP address
 same as mip>

• Setup from environment setup screen

Access the primary management server via the Web browser to set up the following. Note that only **mip** can be set up on the environment setup screen. When changing the IP address for the clients, refer to "Setup by command" as described above.

Procedure:

36. Designate a management server.

Select [Node environment], and then select a management server from [Node] to separate network.

37. Set the IP address or the host name.

Select [IP address/Host name] and set the network address used for Web-Based Admin View (IP address or host name) in [IP address/Host name for identifying own host].

The setup value is mip.

38. Validate settings.

After settings are completed, exit the environment setup. When the environment setup is terminated after modifications, the message, "0051 In order to make the settings valid, restart Web-Based Admin View and reconnect it. Are you sure?" appears. If you need to validate the currently chosen value, select [Yes]. Log off, and then login the management server.



This method might not be validated if the monitoring node was not active when the setup was done. In such a case, use a command.

Part 5 Download package

Setup of a download package and operating instructions are described below.

Chapter 8 Setup of a download package and operating

Web-Based Admin View provides a screen required to download software. This screen is provided in the Solaris OE package format.

- Package installation
 How the download screen package is installed on the system.
- Download screen operation

 How Java(TM) 2 Runtime Environment Standard Edition v1.3.1 is downloaded using the download page.

8.1 Installation

The download screen is provided under the package name of FJSVwvdl, and included in PRIMECLUSTER CD-ROM1.

Installation.

- 1. Log in with system administrator access privileges # gn
- 2. Check if volm is operating. If not, start it.
 # /usr/bin/ps -ef | grep /usr/sbin/volm | grep -v grep || sh
 /etc/init.d/volmgt start
- 3. Move the current directory to the directory with the package.
 # cd <CDROM1-mountpoint>/Solaris8/products/BASE_GUIs/sparc
 Normally, <CDROM1-mountpoint> should be /cdrom/cdrom0.
- 4. Execute the pkgadd command.

pkgadd -d . FJSVwvd1

5. Go through the following interactive dialog.

The copyright notice above dose not evidence any actual or intended publication of such source code.

Auto Installation ? [y,n,?,q]: y
Using </opt> as the package base directory.
##Package information is in progress.
System information is in progress.

•

Install the download package after the FJSVwvbs and FJSVwvcnf packages are installed.

8.2 Operation

The required software can be downloaded on a client by taking the following steps:

- 1. Start the browser on the client.
- 2. Specify the following URL.

http://<host name>:<port number>/download/index.htm
<host name>

httpip (host name or IP address used for the client) of the primary
or secondary management server.

The default value of ${f httpip}$ is set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n."

<port number>

Enter "8081." If the port number was changed according to 7.2.1 "http port number", designate the number.

• Procedure

1. Display the following download screen.



- 2. Select the OS type in the software items.
- 3. Click the download button.
- 4. The following page appears.

When selecting Windows, the following page appears.

Web-Based Admin View

Software Download

It downloads. Is it all right? j2re-1_3_1_02-win-i.exe/9047136byte

Yes No

If yes, the file download page is displayed and stored in a disk. If no, the screen returns to $3. \,$



The file download page varies depending on the browser.

- 5. Now, Java(TM) 2 Runtime Environment Standard Edition v1.3.1 is downloaded.
- 6. Install the downloaded Java(TM) 2 Runtime Environment Standard Edition v1.3.1.

Appendix A Message

This appendix provides information on message associated with Web-Based Admin View, and wherever possible, a recovery procedure is provided to locate and correct the problem.

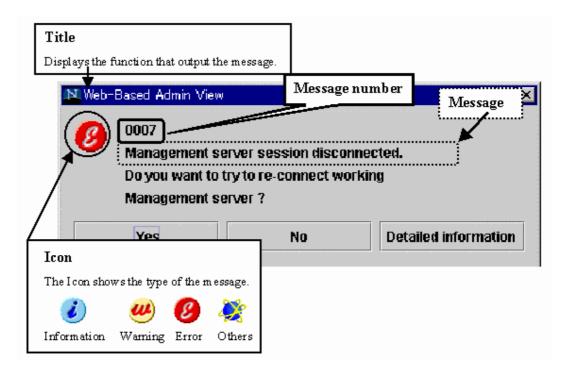
A.1 Message reference

This section explains how to refer to a message.

Message display style

Web-Based Admin View displays a following message dialog:

Message dialog





For details on the function (title) displayed by Web-Based Admin View, see the TABLE A-1 "Message dialog messages".

Refer to message

Message dialog contains the description of function(title), type(icon), and a unique number.

If you do not quite understand the meaning of a message or action, take a note of the message text, the message number, and look up the message in the following table:

TABLE A-1 Message dialog messages

Function (title)	Message number	Type (Icon)
A.2 Web-Based Admin View	A.2.1 0001-0044	③
message	A.2.2 0001-0044	(S)
A.3 Log reference message	A.3.1 0045-0049	③
A.3 Log reference message	A.3.2 0045-0049	8
	A.4.1 0051-0059	®
A.4 Environment setup message	A.4.2 0051-0059	w
	A.4.3 0051-0059	8



If the title of the message is other than those above, the manual for each product described in the title, and then take appropriate actions.

A.2 Web-Based Admin View message

A.2.1 Information message

0020 This application cannot launch with a secondary Management Server specified. Please specify a primary Management Server.

Corrective action

Connect to the primary management server and start this application.

0021 This application must be started up with following URL on anotherbrowser window.

Corrective action

Select [OK] to exit all running applications, and then re-access the recommended URL.

0022 Re-connect to following URL. Do you want to connect?"

Corrective action

Select Yes or No.

- Click [Yes]. Active management server is retrieved and connection is attempted.
- Click [No] to end the connection.

0023 This application must be started up with following URL on another browser window.

Corrective action

Click [Yes] to access by the specified URL.

When the activated Web browser is Internet Explorer, access the designated URL again via Netscape Communicator.

Reference problem

"Symptom 13" in "Troubleshooting"

A.2.2 Error message

0001 Cannot call Management server.

Corrective action 1

In most cases, the management server might not be able to respond to the request from the client, or the response from the server might be extremely slow. Click <OK> and call a management server again.

Corrective action 2

If the corrective action 1 does not work, the Web browser might not be operating normally. Exit the Web browser, and then, restart the Web-Based Admin View screen, or reboot the client first.

Reference problem

"Symptom 1", "Symptom 8" in "Troubleshooting"

0003 Management server session disconnected. Do you want to re-connect? Corrective action

When the system environment was modified in the environment setup, it is displayed in the client in which the setup was done. Take a proper action in the followings:

- Click [Yes] to reconnect.
- Click [No] to end the connection.
- · Click [Detailed information] to display error detailed information.

0004 Connection refused from Management Server. Do you want to re-connect?

Corrective action

The network failure might have occurred, the client terminal's CPU might have been overloaded, or the system time setting of the management server might have been changed. Take a proper action in the followings:

- Click [Yes] to reconnect to another management server..
- Click [No] to end the current connection.

Reference problem

"Symptom 1" in "Troubleshooting"

0005 Cannot connect to Management. Server. Do you want to re-connect? Corrective action

The management server may not have been started. Take a proper action in the followings:

- Click [Yes] to reconnect.
- Click [No] to end the connection.
- Click [Detailed information] to display error detailed information.

Reference problem

"Symptom 1", "Symptom 4" in "Troubleshooting"

0006 An error was detected in the Management Server environment setting.

Corrective action 1

The Web browser might not be operating properly. Exit the Web browser, and then, restart the Web-Based Admin View screen, or reboot the client first.

Corrective action 2

Refer to Take appropriate action while referring to the explanation of "Symptom 16" in troubleshooting to take an Corrective action. Still, the problem is not improved, report the contents of the Java console to local Customer Support.

Reference problem

0007 Management server session disconnected. Do you want to try to re-connect working Management Server?

Corrective action

Select one of [Yes], [No], or [Detailed information]:

- · Click [Yes] to retrieve an active management server for connection.
- Click [No] to end the connection.
- · Click [Detailed information] to display error detailed information.



This message appears if no response is received from the management server. Confirm the state of the management server or the network. If connection is available by selecting [Yes], a temporary network load is assumed to be the cause of the disconnection. In this case, raise the "Connection monitoring time between Client and Server" of the system environment.

Reference problem

"Symptom 7", "Symptom 15" in "Troubleshooting"

0015 Management Server will terminate. Please logout immediately.

Corrective action

The management server is terminated. Sign off Web-Based Admin View.

0016 login incorrect.

Corrective action

Enter a correct user name and password.

Reference problem

"Symptom 17" in "Troubleshooting"

0017 password incorrect.

Corrective action

Enter a correct password.

0030 Internal Error

Corrective action

An error was detected in the management server environment setting. Contact local Customer Supports



This error message appears on the page within the Web browser.

0031 Network Error

Corrective action

A network error has occurred. Restart the cluster management server and the monitored node, and then reconnect the network following the procedures described in 6.2 "Restart." Still, the problem is not improved, contact local Customer Supports.



This error message appears on the page within the Web browser.

0032 Login Error

Corrective action

Login was failed. Sign on by a correct user ID and password.



This error message appears on the page within the Web browser.

0033 Management server is not running.

Corrective action

Select [Reload] of the browser.



This error message appears on the page within the Web browser.

0040 Invalid browser

Corrective action

Web-Based Admin View cannot be started by accessing the specified URL with this Web browser. To start from this URL, use Netscape Communicator.



This error message appears on the page within the Web browser.

0041 Old Swing is installed

Corrective action

The version of the Swing class file set in the Web browser is not correct. Set a Swing class file in the correct version.



This error message appears on the page within the Web browser.

0042 Swing is not installed

Corrective action

No Swing class file is set up on the Web browser, or the version is incorrect. Set up the Swing class file again as described in 3.1.3.2 "Required for the Web Browser Environment."



This error message appears on the page within the Web browser.

A.3 Log reference message

A.3.1 Information message

0045 Invalid value found at 'Start(End)' field.

Corrective action

Set the correct start and finish time.

0046 Please put the start time earlier than the end time.

Corrective action

Set the correct start and finish time.

0047 There are no records. There are no appropriate logs.

Corrective action

Reset the conditions and display information

A.3.2 Error message

0048 Read error occurred. Log information couldn't be gotten.

Corrective action

Re-select <Show> and display information.

0049 Initialize error.

Corrective action

Contact local Customer Support.

A.4 Environment setup message

A.4.1 Information message

0051 In order to make the settings valid, restart Web-Based Admin View and reconnect it. Are you sure?

Corrective action

Select [Yes] to login again. Then, Web-Based Admin View starts automatically and outputs the message if you wish to login again after restarting. Select [Yes].

Otherwise, select [No]. The value is not enabled.

0052 Do you want to terminate Environment setup to make the settings valid?

Corrective action

Select [Yes] to quit environment setup and enable the setup. Otherwise, select [No].

0053 Do you want to cancel processing?

Corrective action

Click [Yes] to cancel processing. Click [No] to stop cancellation.

0054 Do you want to terminate Environment setup?

Corrective action

Click [Yes] to exit. Otherwise, click [No].

0059 In order to make the settings valid, restart Web-Based Admin View on the changed monitoring node and reconnect it. Are you sure?

Corrective action

Select [Yes] to login again. Then, Web-Based Admin View starts automatically and outputs the message if you wish to login again after restarting. Select [Yes].

Otherwise, select [No]. The value is not enabled

A.4.2 Warning message

0055 There is an error in the designation of XXXX.

Corrective action

Enter the correct value.

0058 The Web-Based Admin View may not work correctly because of the designation of XXXX. Do you want to continue?

Corrective action

A.4.3 Error message

0056 There is an connection error. Environment setup is canceled. Corrective action

A communication error occurred.

Check if the management server and monitoring node are working properly. If not, restart Web-Based Admin View as explained in 6.2 "Restart."

0057 There is an internal error. Environment setup is canceled. Corrective action

Report the contents of the Java Console to local Customer Support.

Appendix B Troubleshooting

The Appendix B is directed to all kinds of users, and explains what actions to be taken in the event of Web-Based Admin View failure for them.

I In this chapter, the left names are abbreviated as the right:

B.1 Corrective action

This section explains the actions to be taken in the event of a Web-Based Admin View failure.

Be sure to check "Symptom 1" before working on each problem.

Symptom 1: The Web-Based Admin View screen cannot be started. Even though it was started, the screen is not displayed properly, or a message from 0001-0005 appears.

Corrective action 1

Check the followings;

- If the designated URL is correct.
- If the host name is correctly specified.
- If the environment supports Java Plug-in.
 (Refer to 3.1.3 "Web environment")
- If the browser type and version are the recommended ones.

Corrective action 2

Refer to 7.2.1 "http port number" and confirm the http port number that is currently set up.

Corrective action 3

Refer to $Corrective\ action\ 3$ for the "Symptom 4" and check if each process is active.

Corrective action 4

The browser might be hung up depending on the client OS or the browser version

In such a case, restart the browser and retry accessing the management server.

Corrective action 5

Refer to the installation guide for the product and make sure all the required packages are correctly installed.

Corrective action 6

Check the proxy setting of the browser not using a proxy server. For the proxy setting, refer to "Proxy setting" in 3.1.3.1 "Preparing the Web browser."

Both the host name and corresponding IP address must be set not using a proxy server.

Symptom 2: The screen is not switched when clicking the confirmation button for 0003 or 0007-dialog message. The browser is hung up when attempting to reconnect to the management server that was previously connected.

Corrective action

Enter the URL of the connected management server in the URL field of the browser and switch the screen manually, or restart the browser, and then retry accessing the server.

Symptom 3: The following message may be output to the Java console screen of the management server or monitoring node.

FJSVwvbs: OutOfMemoryError

Corrective action

Restart Web-Based Admin View on the management server or monitoring node on which the message appeared. Shut down/restart the client Web browser and then reaccess.



For restarting Web-Based Admin View, refer to 6.2 "Restart."

Symptom 4: When the browser accesses the management server, dialog message 0005 is displayed, and the Web-Based Admin View screen and dialog message are not displayed.

If the problem is not solved when restarting the browser, take the following steps:

Corrective action 1

If a name is specified as the host name of the management server in the URL field of the browser, designate the IP address used for the client of the management server. If the authentication dialog box is displayed then, the client DNS settings may be incorrect. In that case, follow the procedure shown below:

The default value of httpip set to the IP address, which is assigned to the displayed node name as a result of executing "uname -n."

If it does not appear, go to Corrective Action 2.

- If the client is running Windows(R) 98

 Select [Start]-[Settings]-[Control Panel]-[Network]. Select the

 [TCP/IP properties] from [Configuration], and then select [DNS configuration]. If "Do not use DNS" is selected, go to Corrective Action 3.
 - If "Use DNS" is selected, [Host] and [Domain] should be configured in the DNS and mapped to an IP address by the DNS server. So, you need to set up the mapping in DNS for [Host] and [Domain] to the IP address.
- If Windows NT(R) is installed in the client
 Select [Start]-[Settings]-[Control Panel]-[Network]. Select the
 [TCP/IP protocol] property from [Protocols], and then select [DNS].
 If values are not set for both [Host name] and [Domain], go to
 Corrective Action 3. If values are specified for [Host name] and
 [Domain], both should be configured in the DNS and mapped to an IP
 address by the DNS server. So, you need to set up the mapping in DNS
 for [Host] and [Domain] to the IP address.
- If Windows(R) 2000 is installed in the client

 Select [Start]-[Settings]-[Control Panel]-[Network and dialup connection]- [Local area connection]- [Properties].

 From the list on the [General] tag, select [Internet protocol (TCP/IP)] and then display [Properties]. If either [Automatically acquire DNS server address] or [Use the next DNS server address] is selected, check if the name is configured in the DNS and mapped to an IP address by the designated DNS server. If neither is selected, go to Corrective Action 3.
- If Solaris OE or Linux(R) is installed in the client

Check if the mapping in DNS is set up for host name.

Execute the following command. If 'dns' appears as following, the system might adopt DNS.

[Example]

egrep '^hosts:' /etc/nsswitch.conf

hosts: files dns

In that case, execute the following command, and check if the host name designated in the URL is configured in the DNS.

[Example]

nslookup www.fujitsu.co.jp

Server: foo.fujitsu.co.jp Adress: XXX.XXX.XXX

Name: www.fujitsu.co.jp
Address: XXX.XXX.XXX

If an error is displayed, the DNS setting is incorrect. Report the problem to the network administrator.

Corrective action 2

Confirm whether a combination of the host name (local host name) displayed as a result of executing "uname -n" and the IP address is registered either in the "/etc/inet/hosts" file or DNS. If not, you need to register either in the /etc/inet/hosts file or in DNS for host name to be mapped to the IP address.

Corrective action 3

Check whether Web-Based Admin View is started on the management server. Execute the ps(1) command to check whether the following process is started correctly.

[When the monitoring node acts as the management server]

/usr/java1.2/bin/../jre/bin/../bin/sparc/native_threads/java

-Dwebview.htdocs=/etc/opt/FJSVwvcnf/htdocs/FJSVwvbs -mx128m

-Djava.security.policy=/opt/FJSVwvbs/etc/.policyAp

com.fujitsu.webview.base.server.ServerMain /opt/FJSVwvbs

wvAgent /opt/FJSVwvbs

wvAgent /opt/FJSVwvbs

/opt/FJSVwvcnf/bin/wvcnfd -b XXX.XXX.XXX.XXX -p XXXX

[When the monitoring node does not act as the management server]

wvAgent /opt/FJSVwvbs

wvAgent /opt/FJSVwvbs

/opt/FJSVwvcnf/bin/wvcnfd -b XXX.XXX.XXX -p XXXX

If even one process is not running, take actions as described in Corrective action 4 or "Symptom 10".

Corrective action 4

Check mip, httpip, and that for the management server in all nodes.

- # /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip
 - local:mip xxx.xxx.xxx <IP address for identifying own host>
- # /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip
 - local:httpip xxx.xxx.xxx <IP address used for the client>
- # /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server
 - sys:primary-server xxx.xxx.xxx <IP address of the primary

/etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server

sys:secondary-server xxx.xxx.xxx.xxx<IP address of the secondary
management server>

If these parameters are not set up correctly, set correct addresses. Refer to 7.1 "Network address", or 7.3 "Management server", and 7.5 "Multi-network between server and client by classified use."

Corrective action 5

- 1. Edit and access the following file on the management server:
 File: /etc/opt/FJSVwvbs/etc/WebView.html
 Record: < PARAM NAME=Port VALUE="????" >
- 2. Execute the following command:

/etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c

If the VALUE in 2 is ????, the same as that in 1, go to **Corrective action** 6.

If the VALUE in 2 is nor the same as that in 1, change the RMI port number of fjwv_c, according to 7.2.2 "RMI port number."

/etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c=<RMI port
number>

The initial value is 9399.

After changing the port number, be sure to restart Web-Based Admin View . Refer to 6.2 "Restart".

Corrective action 6

Edit the following file in the management server and retry accessing the management server:

File: /etc/opt/FJSVwvbs/etc/WebView.html

File: /etc/opt/FJSVwvbs/etc/Plugin.html

Record: < PARAM NAME=Initial_wait VALUE="??">

Specify 60 or more in "??".

After editing a file, be sure to restart Web-Based Admin View. Refer to 6.2 "Restart".

Symptom 5: When the IP address of the LAN was changed, the operation of Web-Based Admin View was disabled.

Corrective action

Change the network address used for Web-Based Admin View in accordance with 7.1 "Network address." Then, reset the IP address available to management server setup and the clients, Refer to 7.3 "Management server" and 7.5 "Multi-network between server and client by classified use".

Symptom 6: With the operation management view, the monitoring node cannot be displayed in the node list for each product.

Corrective action

Follow the Corrective Action of Symptom 5, and then, restart Web-Based View in accordance with 6.2 "Restart".

Symptom 7: The screen is not switched when clicking the confirmation button of dialog message.

Corrective action

When the picture on the right of the Web-Based Admin View screen is red, the hidden message dialog behind other windows might appear by clicking it.

In order to recognize such a hidden dialog, show the picture on the display at all time.

Symptom 8: It takes a few minutes to show the Web-Based Admin View screen. Even the menu is displayed, the client gets hung up, or the message "0001 Cannot call management server" appears.

Corrective action 1

Set up longer time than the existing [Connection monitoring time between client and server] in the system environment.

Corrective action 2

Follow the Corrective Action of Symptom 4.

Symptom 9: When a Java Plug-in is used for the client browser, garbage data are jumbled up or the screen display is distorted after accessing the Web-Based Admin View screen or operation management view of each product.

Corrective action

The graphics hardware of the client might be failed. Modify the operation method (see below) or update the graphics driver. If the problem is not solved, contact your local Customer Support.

[For Windows(R) 98 and For Windows(R) Me]

- 1. Right-click [My Computer], and then select [Properties]-[System Properties] -[Performance]-[Graphics].

[For Windows(R) 2000]

- 1. Select [Start]-[Settings]-[Control Panel]-[Display]-[Screen Properties]-[Settings]-[Details] -[Troubleshooting].
- 2. Change the settings of the hardware accelerator.
- 3. Select [Plus!] of [Display], and then check the box of [Show windows contents while dragging]

[For Windows NT(R)]

Modification is not available.

[For Windows(R) XP]

- 1. Select [Start]-[Control Panel]-[Display]-[Screen Properties]-[Settings]-[System Properties] -[Troubleshooting].
- 2. Change the settings of the hardware accelerator.



- If the problem is not solved even after the performance is lowered to a next level, check the display as turning down the level one by one.
- The modification of operation method might affect the overall client's graphic dislays. When Web-Based Admin View is not used, undo any setup modifications.

Symptom 10: The message "FJSVwvbs: webview.cnf abnormal" or "Node process abnormal end" is output when starting up or restarting Web-Based Admin view, or starting up a node.

Corrective action 1

Take the following steps to check if Web-Based Admin View supports the Java environment:

1. Defined Java environment

/etc/opt/FJSVwvbs/etc/bin/wvGetparam java_home

```
local:java_home <path>
```

2. Version

Use the following version display command to check if the Java environment in the <path> obtained by the command above is available on Web-Based Admin View:

<path>/bin/java -version

```
java version "X.X.X"
```

If the version is "1.2.X," it is available.

If other than version 1.2.X is set up, reset an appropriate Java environment. Refer to 7.2.3 "JavaVM run time environment".

Corrective action 2

Follow the Corrective Action 3 of "Symptom 4".

Corrective action 3

Check if the specified port number has not already been used. Refer to 7.2 "Network service port number."

Corrective action 4

Check whether the definition file (/etc/opt/FJSVwvbs/etc/webview.cnf or /etc/opt/FJSVwvbs/etc/wvlocal.cnf) of Web-Based Admin View is set up correctly on all the management servers or monitoring nodes.

The following is an example of the webview.cnf file:

[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]

```
usr:out-time:0
usr:c-tlog-debug:off
usr:locale:japanese
usr:look-and-feel:Metal
sys: serialID:XXX.XXX.XXX.XXX@XXXX.XX XX:XX:XX.XXX
sys:http-home:
sys:s-tlog-debug:on
sys:classpath:/opt/FJSVwvbs/etc/jars/swingall.jar
sys:health-time:10
sys:keep-time:10
sys:tophtml-suffix:html
sys:httpdif:hme0
sys:n-tlog-debug:on
sys:s-llog-vol:100
sys:n-tlog-vol:200
sys:s-tlog-vol:200
sys:acsif:hme0
sys:s-olog-vol:100
sys:s-elog-vol:100
sys:rmi-cmdread-timer:900
sys:n-pending-events:100
sys:retry-time:30
sys:cluster-lib-path:/etc/opt/FJSVcluster/lib
sys:cluster-path:/etc/opt/FJSVcluster/bin:/etc/opt/FJSVcluster/sys
sys:s-llog-num:2
sys:n-tlog-num:5
sys:s-tlog-num:5
sys:group-addr:XXX.XXX.XXX
sys:s-olog-num:5
sys:s-elog-num:2
sys:rmi-cmdwait-timer:900
```

```
sys:server-ha:off
sys:secondary-server:XXX.XXX.XXX.XXX
sys:primary-server:XXX.XXX.XXX.XXX
sys:n-java-option:-mx128m
sys:s-java-option:-mx128m
```

The following is an example of the wvlocal.cnf file:

[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]

```
local:classpath:
local:cluster-path:
local:cluster-lib-path:
local:mip:XXX.XXX.XXX.XXX
local:httpip:XXX.XXX.XXX.XXX
local:server-election:on
local:java_home:/usr/javal.2
local:s-log-path:/var/opt/FJSVwvbs/logs/server
local:n-log-path:/var/opt/FJSVwvbs/logs/node
```

If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).

If the "webview.cnf or wvlocal.cnf" file is created as shown above, take the following steps to reset

the node specific parameter on all the management servers and monitoring nodes.

- 1. Set up the Network address that is used for Web-Based Admin View on the node. Refer to 7.1 "Network address."
- 2. Set up the IP addresses of the primary management server and the secondary server. Refer to 7.3 "Management server."
- 3. Set up the IP address of the open network for clients when the node acts as a management server. Refer to 7.5 "Multi-network between server and client by classified use."
- 4. Set up the group address. Refer to the method used for command-based setup in 7.4 "Secondary management server automatic migration."
- 5. Restart Web-Based Admin View.
 Restart Web-Based Admin View. Refer to 6.2 "Restart."

Symptom 11: The message "WARNING: unrelated 'httpip' property." is output when the Web-Based Admin View is started or restarted.

Corrective action 1

Confirm if the IP address of the open network is correctly set up in the management server. Refer to 7.5 "Multi-network between server and client by classified use."

Symptom 12: The manual title is not displayed by manual reference operation after the manual package is installed, or the manual title remains after the package is deleted.

Corrective action

The installation or deletion of the manual contents while Web-Based Admin View is active will not take effect. You need to restart to make it valid. Refer to 6.2 "Restart". Restart the Web-Based Admin View, and then retry accessing from the client.

Symptom 13: The message "0023: This application must be started with the following URL." is displayed when starting the operation management

product from the Web-Based Admin View screen.

Corrective action

Since the access method may vary depending on the operation management product, recheck by referring to the manual of operation management products.

In case of the concurrent use of operation management products with different access methods, refer to 3.3.4 "Concurrent use of operation management products with different access methods".

Symptom 14: The start button of the operation management product gets out of the Web-Based Admin View screen.

Corrective action

If the incorrect access method is applied to start an optional operation management product, the system might show the "0022" message, and then automatically re-access by a correct access method. In such a case, the Web-Based Admin View screen that was displayed by the first incorrect method is exited.

If you need to display this first Web-Based Admin View screen again, start the Web browser and access on the screen.

For details refer to 3.3.4 "Concurrent use of operation management products with different access methods".

Symptom 15: The "0003" or "0007" message may not appear when the management server is disconnected.

Corrective action

Restart the browser and retry accessing the management server.

Symptom 16: The "0006" dialog message is displayed, and the Web-Based Admin View screen is not displayed when accessing to the management server from the browser.

Corrective action

Follow the Corrective Action 2 for "Symptom 10".

Symptom 17: The server is unable to login with the user ID and password, and the "0016" message is output.

Corrective action 1

Check if the user ID and password provided is correctly registered.

Corrective action 2

If no password is assigned for the user ID, set the password.

Corrective action 3

The password might have been entered wrong several times in a row. Check the environment setup variable for authentication (login-retry). For details, refer to $4.6\,$ "Authentication environment setup."

If you continue to login, follow the corrective action 4 below.

Corrective action 4

If the problem is not improved, reconnect from a client after restarting the management server of Web-Based Admin View. Refer to 6.2 "Restart."

Symptom 18: "PRIMECLUSTER Global File Services Configuration and Administration Guide" is not displayed in the manual menu.

Corrective action

The English and Japanese versions of "PRIMECLUSTER Global Disk Services Configuration and Administration Guide" cannot be displayed at the same time.

Reinstall the manual package of GFS. Refer to 3.3.3 "Common menu functions".

Symptom 19: When starting Netscape Navigator or Netscape Communicator, the proper screen is not displayed. (When the user exited the Web browser last, either the upper right [X] button or [Close] on the Window menu.)

Corrective action

Note that different actions have to be taken depending on the type of client \cos .

[In case of Windows NT(R) 4.0, Windows(R) 2000, Windows(R) Me, or Windows(R) XP1

- 1. Press the <Ctrl> + <Alt> + <Delete> keys at the same time to launch the "task manager."
- 2. Select the "Process" tab, and then select netscape.exe.
- 3. Right-click, and then select the "end process" menu. Enter "Yes" in the dialog.
- 4. Exit from every instance of netscape.exe.
- 5. Start the Web browser.

[In case of Windows(R) 98]

- 1. Press the <Ctrl> + <Alt> + <Delete> keys at the same time to open the "Close Program" screen.
- 2. Select Netscape from the list box , and then click the "End" button.
- 3. Exit from every instance of Netscape.
- 4. Start the Web browser.

[In case of Solaris OE]

1. Check the process ID of java_vm_native.

ps -ef | grep java_vm_native

- 2. Stop the process of java_vm_native by force.
 - # kill -9 < java_vm_native process ID>

java_vm_native-process-ID: <java_vm_native process ID>

3. Check the process ID of the netscape process.

ps -ef | grep netscape

- 4. Stop the process of Netscape by force.
 - # kill -9 <Netscape process ID>

netscape-process-ID: <Netscape process ID>

5. Start the Web browser.

[In case of Linux(R)]

1. Check the process ID of jre process.

ps -ef | grep IBMJava2-131

2. Terminate the jre process forcibly

kill -9 < jre_process_id>

<jre_process_id>: Process ID acquired at No.1

3. Check the Process ID of Netscape process

ps -ef | grep netscape

4. Terminate the Netscape process forcibly

kill -9 <Netscape_process_ id>

- < Netscape_process_ id >: Process ID acquired at No.3
- 5. Restart the Web browser.

Symptom 20: The cluster node is not displayed, or an access error occurs

when the operation management screen is activated for the first time after Web-Based Admin View installation.

Corrective action

Take the following steps to check if the setup for primary and secondary management server is properly done. For your reference, you can see 4.3.3 "Primary management server", 4.3.4 "Secondary management server".

- 1. Check the provided [Secondary] information in the upper right of the Web-Based Admin View screen.
- 2. Take proper actions according to the information.
 - In case of non-display
 Check if there's any failure or damage in the secondary management
 server
 - If any, locate the cause of the node failure and take corrective actions.
 - If not, set up the primary and secondary management server.
 Refer to 7.3 "Management server".
 - In case of displaying "Down" Check if there's any failure or damage in the nodes and if the package is correctly installed for each product. If any, take corrective actions.

Symptom 21: When reading the URL of Java Plug-in by using Netscape Communicator or Netscape Navigator, the message "Click here to get the plugin" is displayed in the Web browser.

Corrective action

Verify the followings;

- If the Java Plug-in is installed.
- If the supported version is updated.

If there is any problem, install Java Plug-in according to "Setting up Java Plug-in" in 3.1.3.2 "Required for the Web-Based Admin View."

Note that the dialogue box appears when clicking the icon on "Click here to get the plugin", so select [Cancel].

Symptom 22: When reading the URL of Java Plug-in by using Internet Explorer, the message "Welcome to Web-Based Admin View" is not displayed or the dialog of "Security Warning" (If the Java Plug-in should be installed and executed) is displayed in the Web browser.

Corrective action

Verify the followings;

- If the Java Plug-in is installed.
- If the supported version is updated.

If there is any problem, install Java Plug-in according to "Setting up Java Plug-in" in 3.1.3.2 " Required for the Web Browser Environment"

Note that when the dialogue box of "Security Warning" appears, select [Cancel].

Symptom 23: The japanese character turn into garbage or is not displayed on a screen.

Corrective action

The client might be used where Japanese environment is not set up. Check the environment, and then use the client with proper environment. For details about the recommended display language on your environment, refer to 4.3.1 "Display setup."

Symptom 24: The URL modification and input is not allowed when using Netscape 6.X.

Corrective action

In such a case, resize Netscape by using [Minimize], and then [Restore]. Otherwise, restart the Web browser.

Since this problem is due to Netscape, it's under verification.

B.2 Troubleshooting information collection

In the event of a failure, collect the following material for investigation, and contact local Customer Support.

Investigation information for Web-Based Admin View

- 1. Execute wvCntl to collect investigation information on all management servers and monitoring nodes.
- 2. Collect the Java Console on the clients.
- 3. Collect screen hard copies on the clients.



• If the PRIMECLUSTER is installed, collect the investigation information. Refer to "PRIMECLUSTER Cluster Foundation Configuration and Administration Guide".

B.2.1 wvCntl

Execute these operations on the all the management server and monitoring node. In the event of a failure, the investigation information can be collected by executing the wvCntl command. For details on the management server and monitoring node, refer to the 1.2.2 "System topology". Execute the wvCntl command as follows:

· Procedure:

- 1. Log-in with system administrator authority.
- 2. Execute the wvCntl command.

Then, the file "wvLogs.tar.Z" is generated on the node.

/etc/opt/FJSVwvbs/etc/bin/wvCntl glogs -all <the material
storage directory name>

<the material storage directory name> :

Designate the material storage directory by full path name. Otherwise, information is automatically stored in the default directory /var/tmp.

B.2.2 Java console

Take the following steps to collect the Java consol on the client. Note that collecting method varies depending on the client or connected URL types.

Java console display

Collect the Java console of Java Plug-in. Display it by taking the following steps.

< In case of PC client with Java(TM) 2 Runtime Environment Standard Edition

v1.3.1>

3. The following icons in the taskbar are double-clicked.



< In case of Solaris OE >

- 1. Exit the browser.
- 2. Display the Java Plug-in control panel by executing the following command:

<Netscape dir>/j2pi/ControlPanel

<Netscape dir>: Specify the Netscape installation directory.
For Solaris 2.6 OE or Solaris 7 OE, the directory is default

"/opt/NSCPcom," and for Solaris 8 OE, the directory is default "/usr/dt/appconfig/netscape."

- 3. Click the [Java Plug-in control panel]-[Base] tab, and then select [Java console display].
- 4. Click <Apply> and then close [Java Plug-in control panel].
- 5. Start the browser.

< In case of Solaris OE with Java(TM) 2 Runtime Environment Standard Edition v1.3.1>

1. The following icon on the desktop environment are double-clicked.



Double-click the following icon in the desktop environment.

Select and copy output information on the Java console, and paste it on a text editor such as wordpad.

< In case of Linux(R) >

1. Click the Java Console button on the task bar in the bottom.

· In case of non-displaying Java Console

After collecting this information, take the following steps to restore the setting as the Java console is not displayed:

< In case of PC client with Java(TM) 2 Runtime Environment Standard Edition v1.3.1 >

None.

< In case of Solaris OE>

- 1. Exit the browser.
- 2. Display the Java Plug-in control panel by executing the following command:

<Netscape dir>/j2pi/ControlPanel

<Netscape dir> : Specify the Netscape installation directory.
For Solaris 2.6 OE or Solaris 7 OE, the directory is default

"/opt/NSCPcom," and for Solaris 8 OE, the directory is default

- "/usr/dt/appconfig/netscape."
- 1. Deselect [Java consol display] on the [Java Plug-in control panel]-[Base] tab.
- 2. Click <Apply>, and then close [Java Plug-in control panel].
- 3. Start the browser.

< In case of Solaris OE with Java(TM) 2 Runtime Environment Standard Edition v1.3.1 \Rightarrow

None.

< In case of Linux(R) >

None.

B.2.3 Screen hard copy

Collect screen hard copies on the client as following:

- 1. Click [Print Screen], and then paste the necessary data by an image-editing tool.
- 2. Store in a bit map file or other format.
- 3. If the [Detail] button is available on the error dialog, click.
- 4. Collect the error details as well



In case of Solrais Workstation, the screen hard copies cannot be collected. Note down the displayed contents.

Glossary

Cookie

A piece of information, sent by a Web server to a Web browser and saved on the client hard disk drive. When a server receives a request from a Browser that includes a Cookie, the server is able to use the information stored in the Cookie to identify each client.

DNS

Abbreviation for Dmain Network Service. This system provides the naming policy and mechanisms for mapping domain and machine names to addresses on the Internet.

GDS

See "Global Disk Services".

GFS

See "Global File Services".

Global Disk Services

The volume management software designed to improve availability and manageability of the information stored on the disk unit of the Storage Area Network (SAN).

Global File Services

The software that provides direct and concurrent access to the file system on the shared storage unit from two or more nodes within a cluster.

Global Link Services

PRIMECLUSTER optional module that provides network high availability solutions by multiplying a network route.

GLS

See "Global Link Services".

Group address

The specialized address that is able to recognize multiple hosts and communicate to those destination addresses on the IP network.

GUI

See "Operation management view"

Host name

The name that stands for the network machine (all kinds of nodes with IP addresses) especially in the TCP/IP network.

httpip

The IP address and host name used for a client (WWW server's IP address and host name).

This is used for communication among monitoring clients and management servers.

Http port

Refers to the network port that the management Web server (Webcnf) uses to accept a connection from the client.

Internet Explorer

The name of Web browser developed and manufactured by Microsoft.

Java console

The console screen for the Java program provided by a Web browser or Java Plug-in. The behavior of the Java program within a client's Web browser is displayed.

Java Development Kit

Java basic development kit offered by Sun Microsystems. Java Plug-in software is attached.

Java Plug-in

JavaVM for the Web browser manufactured by Sun Microsystems.

Java Runtime Environment

Software set required in order to perform software developed in the Java offered by Sun Microsystems. Java Plug-in software is attached to Java Runtime Environment.

LAN

Abbreviation for Local Area Network.

In this manual, generic name of network (LAN) used by Web-Based Admin View. For example, public LAN, administrative LAN, private LAN, and so on.

mip

The IP address or the host name used for identifying the own host. This is used for communication among management servers and monitoring nodes. The management server uses mip as the value to identify each monitoring node.

Network address used for Web-Based Admin View

The IP address of LAN used for communication among clients and management servers, and among management servers and monitoring nodes.

- The IP address, which is used for communication among client and management servers, is set up as httpip.
- The IP address, which is used for communication among management servers and monitoring nodes, is set up as mip.

The initial value of httpip and/or mip is assigned to the displayed node name as a result of executing "uname -n." The IP address is automatically set up when Web-Based Admin View is installed.

Operation management view

The software that enables to install and manage operations of the cluster system on the GUI screen.



Global Cluster Services screen

Global Disk Services screen

Global File Services screen

Management Web server

Product to provide the WWW server (http server) function for using the Web-Based Admin View.

Multicast address

IP address for implementing multicast.

Netscape

The Web browser provided by Netscape Communications Corporation.

Node

A single computer (on which a single operating system operates)

PRIMECLUSTER

Software provided by Fujitsu for cluster configuration.

RMI function

Abbreviation for Remote Method Invocation. Remote method invocation function.

RMI port

The network port that enables Web-Based Admin View to perform communications with clients and monitor target nodes.

RMS

Abbreviation for Reliant(R) Monitor Software. Software that maintains high availability of user-specified resources by providing monitoring and switchover capabilities.

Session ID

The ID is required to consider allowing a user to access the Web-Based Admin View. When the user signs on with a valid user ID and password, a unique session ID is created.

Swing Class File

A Java component provided by Sun Microsystems. Performs control related to graphics.

The IP address for identifying own host

See "mip."

The IP address used for a client

See "httpip."

User group

Used to limit the operation and monitoring of each operation management product provided by Web-Based Admin View. This user group (eg. wvroot) is resgistered as a group to be supported by the operating system. In order to use Web-Based Admin View, the registration of the user ID into this group is indispensable.

Web-Based Admin View

A common base to utilize GUI (operation management view) with PRIMECLUSTER

WWW Server for Admin View

WWW server for Web-Based Admin View (Web server).

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