


# FUJITSU Software PRIMECLUSTER

A decorative horizontal band with a red-to-dark-red gradient, featuring abstract, glowing white and red lines that swirl and intersect, creating a sense of motion and technology.

## Web-Based Admin View Operation Guide 4.6

Linux

J2UL-2504-03ENZ0(01)  
June 2021

# Preface

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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 five 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 modifies the original settings.

### Part 5 Notes on Web-Based Admin View

Describes the notes on Web-Based Admin View.

### 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.

### Appendix C Release Information

Lists the main changes in this manual.

### Glossary

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

## Related documentation

Refer to the following manuals as necessary when setting up the cluster:

- PRIMECLUSTER Concepts Guide
- PRIMECLUSTER Installation and Administration Guide
- PRIMECLUSTER Installation and Administration Guide Cloud Services
- PRIMECLUSTER Cluster Foundation (CF) Configuration and Administration Guide
- PRIMECLUSTER Reliant Monitor Services (RMS) with Wizard Tools Configuration and Administration Guide
- PRIMECLUSTER Global Disk Services Configuration and Administration Guide
- PRIMECLUSTER Global File Services Configuration and Administration Guide
- PRIMECLUSTER Global Link Services Configuration and Administration Guide: Redundant Line Control Function
- PRIMECLUSTER Messages

- PRIMECLUSTER Easy Design and Configuration Guide
- FJQSS (Information Collection Tool) User's Guide

## Note

The PRIMECLUSTER documentation includes the following documentation in addition to those listed above:

- PRIMECLUSTER Software Release Guide and Installation Guide

This Software Release Guide and Installation Guide are provided with each PRIMECLUSTER product package.

The data is stored on "DVD" of each package. For details on the file names, see the documentation.

## Manual Printing

Use the PDF file supplied in a DVD for each product to print this manual.

Adobe Reader is required to read and print this PDF file. To get Adobe Reader, see Adobe Systems Incorporated's website.

## 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.
<i>Italic, &lt;Italic&gt;</i>	Variables that you must replace with an actual entered value.
<Constant Width>	Variables that you must replace with an actual displayed value.
<b>Bold</b>	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:

 **Point**

.....  
Describes the contents of an important point.  
.....

 **Note**

.....  
Describes the points the users should pay close attention to.  
.....

 **Example**

.....  
Gives some examples for users' clear understanding.  
.....

 **Information**

.....  
Provides useful information related to the topic.  
.....

 **See**

.....  
Provides manuals for users' reference.  
.....

Abbreviations

- Windows(R) 8.1 Pro and Windows(R) 8.1 Enterprise are abbreviated as Windows(R) 8.1.
- Windows(R) 10 Pro, Windows(R) 10 Home, and Windows(R) 10 Enterprise are abbreviated as Windows(R) 10.
- Microsoft(R) Windows Server(R) 2012 is abbreviated as Windows Server(R) 2012.
- Microsoft(R) Windows Server(R) 2012 R2 is abbreviated as Windows Server(R) 2012 R2.
- Microsoft(R) Windows Server(R) 2016 is abbreviated as Windows Server(R) 2016.
- Microsoft(R) Windows Server(R) 2019 is abbreviated as Windows Server(R) 2019.
- Windows(R) 8.1, Windows(R) 10, Windows Server(R) 2012, Windows Server(R) 2012 R2, Windows Server(R) 2016, and Windows Server(R) 2019 are abbreviated as Windows(R).
- Windows Server(R) 2012, Windows Server(R) 2012 R2, Windows Server(R) 2016, and Windows Server(R) 2019 are abbreviated as Windows Server(R).
- Oracle Solaris might be described as Solaris, Solaris Operating System, or Solaris OS.
- Red Hat Enterprise Linux is abbreviated as RHEL.
- RHEL is abbreviated as Linux(R).

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## Revision History

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Revision	Location	Edition
Added the corrective action No.12.	Symptom 1 of B.1 Corrective action	3.1

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# Part 1 Introduction

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Part 1 outlines Web-Based Admin View.

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<a href="#">Chapter 2 Web-Based Admin View installation.....</a>	<a href="#">9</a>

# 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 the nodes are monitored by the management server for Web-Based Admin View. This enables the administrator to operate all monitored nodes only by accessing 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

A personal computer that displays the operation management view of each operation management product provided on the Web-Based Admin View. The operation management view provided by each operation management product is operated from a client.

2. Management server

The management server receives operation and displaying requests from the management screen provided by each operation management view on the client, and forwards these requests to the monitored nodes at the same time.

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 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.

### Note

- For details about setting the management server, refer to "[7.3 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 "[2.4.1 Management server configuration](#)".

#### 1. 2-tier architecture model

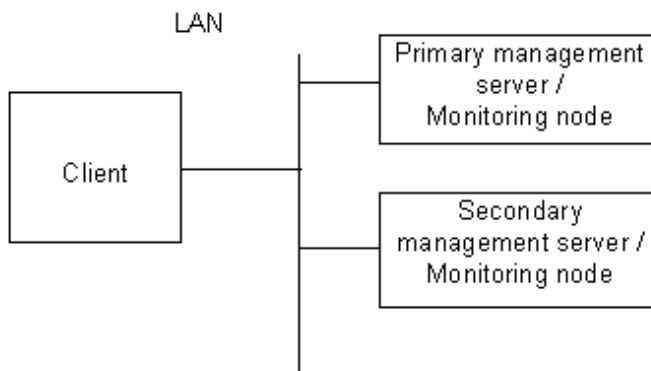
In this configuration, monitoring nodes and management servers share one tier, and a client is independent.

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

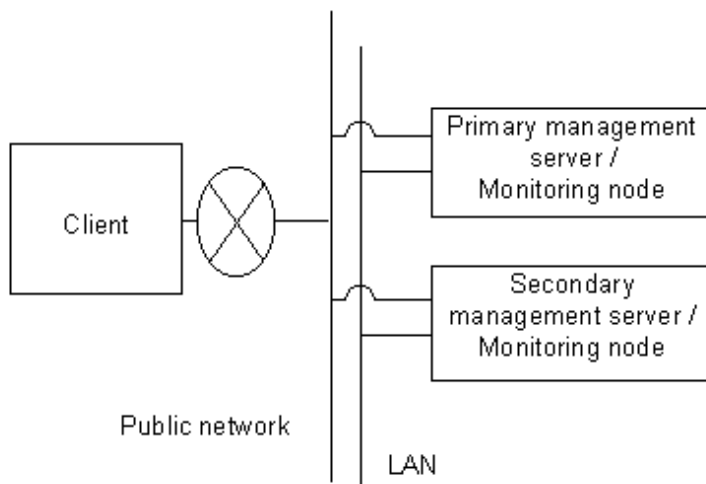
In this topology, only one LAN is used for the Web-Based Admin View operation. This topology should be adopted only if the range of network and users can be limited and defined.



- Topology where multi-network is 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-Based Admin View screen 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.



## 2. 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.

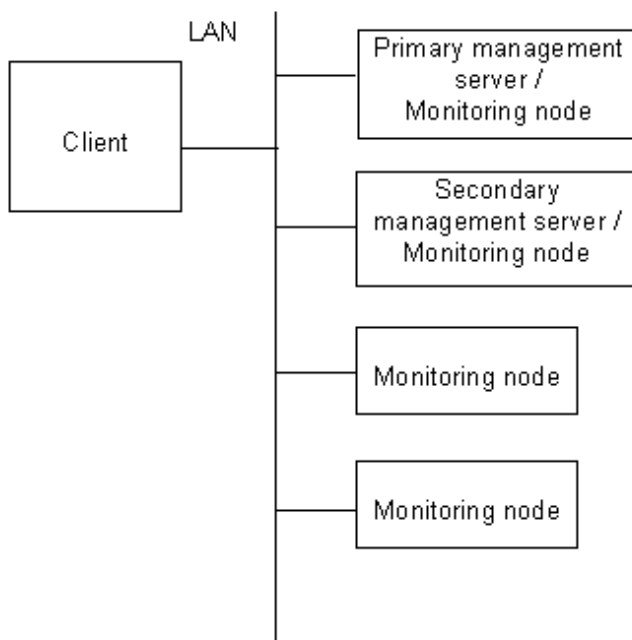
In case of the cluster system with three or more nodes, this model is used for N: 1 standby, mutual standby, or scalable operations.

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.

This model supports the following two types of topology:

- Generic topology

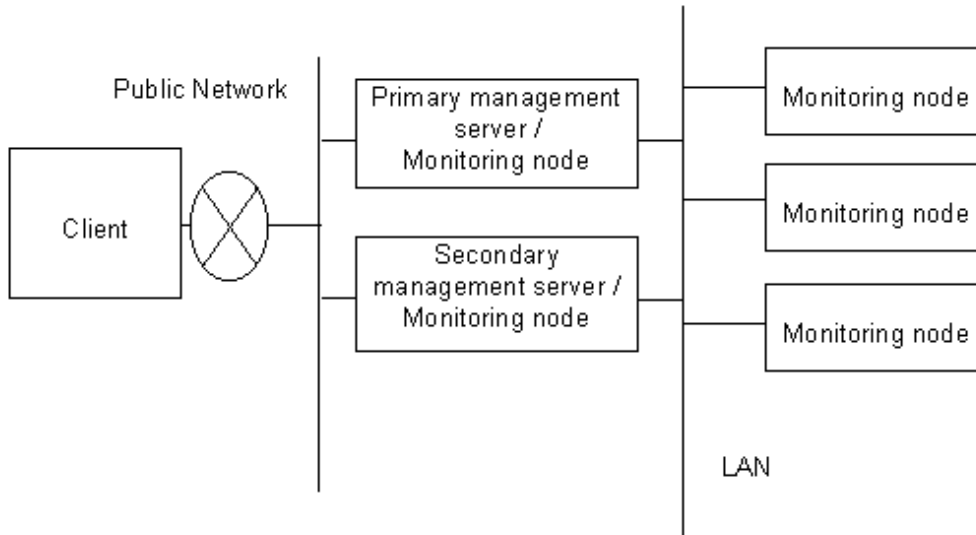
In this topology, only one LAN is used for the Web-Based Admin View operation. This topology should be adopted only if the range of network and users can be limited and defined.



- Topology where multi-network is 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-Based Admin View screen 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.



### Note

In three-tier configuration of Web-Based Admin View, server model and OS version of the cluster management server must be the same as those of cluster nodes.

### Point

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 system. 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 Method to start up the screen

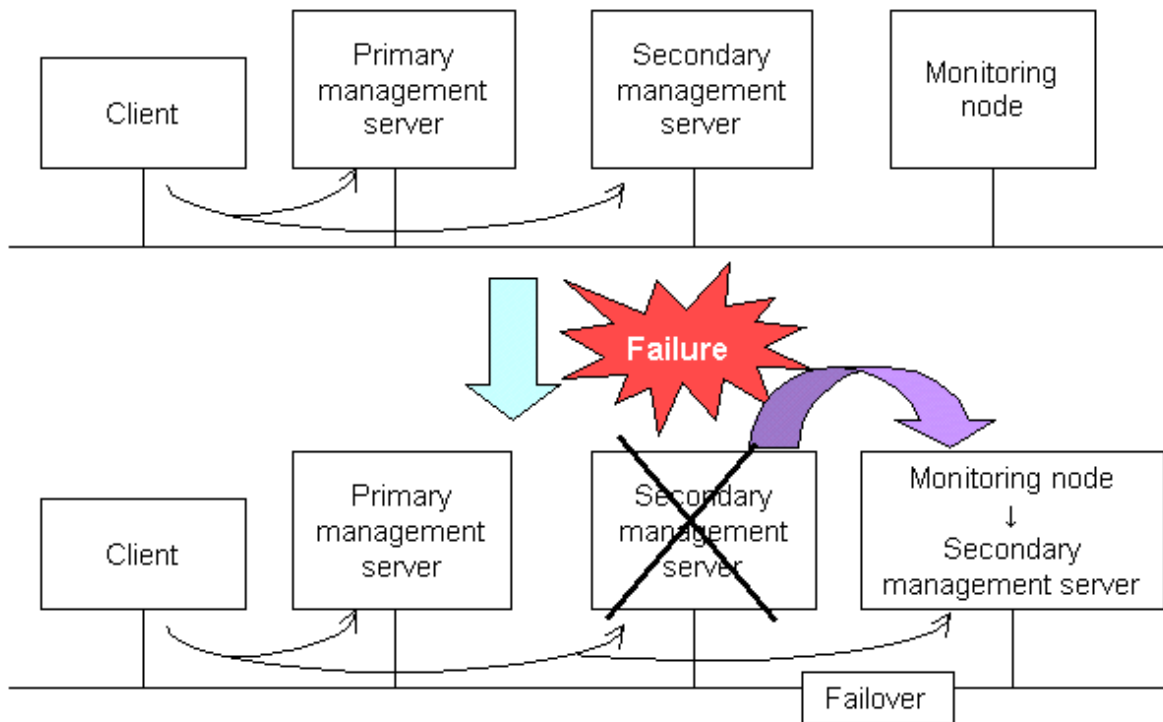
Web-Based Admin View supports the startup method by the Java application.

It is a method to install the Java application (PRIMECLUSTER Web-Based Admin View Startup) on a client, and to start the Web-Based Admin View screen from the Windows shortcut.

## 1.2.4 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

---

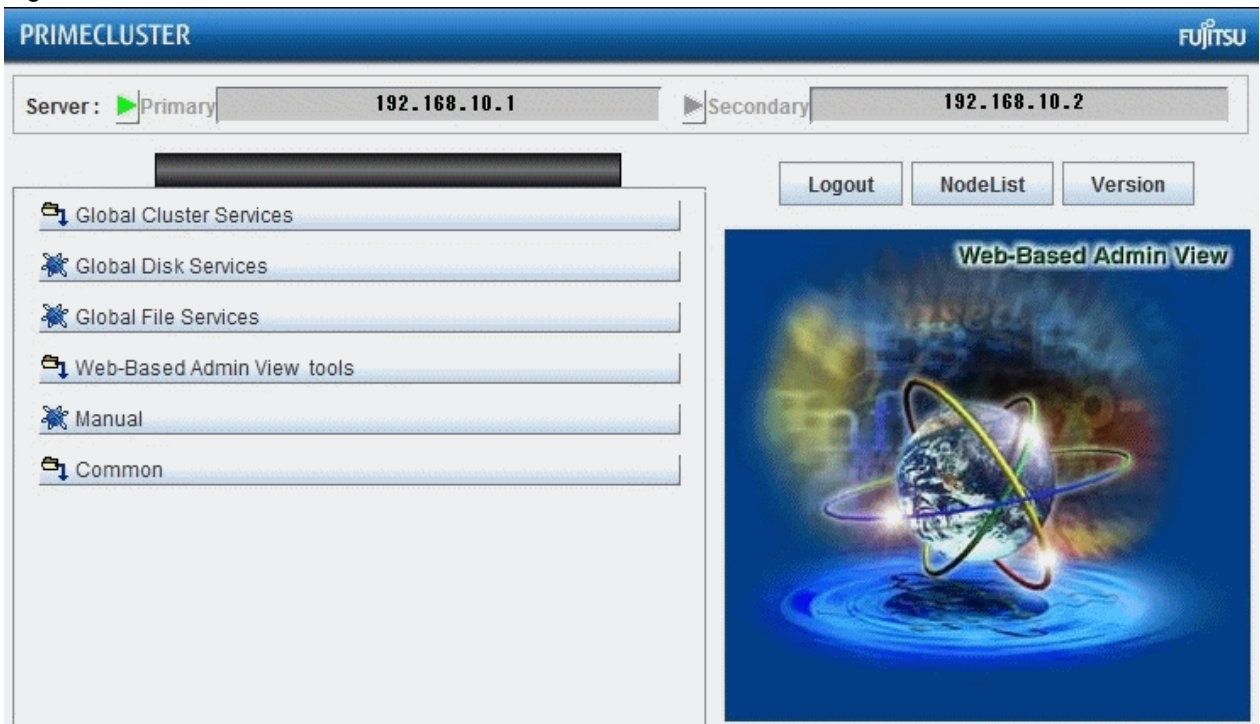
The version of Web-Based Admin View is automatically updated when each product is installed.

In order to display the version currently installed, take the following steps:

- Confirm with the Web-Based Admin View screen

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

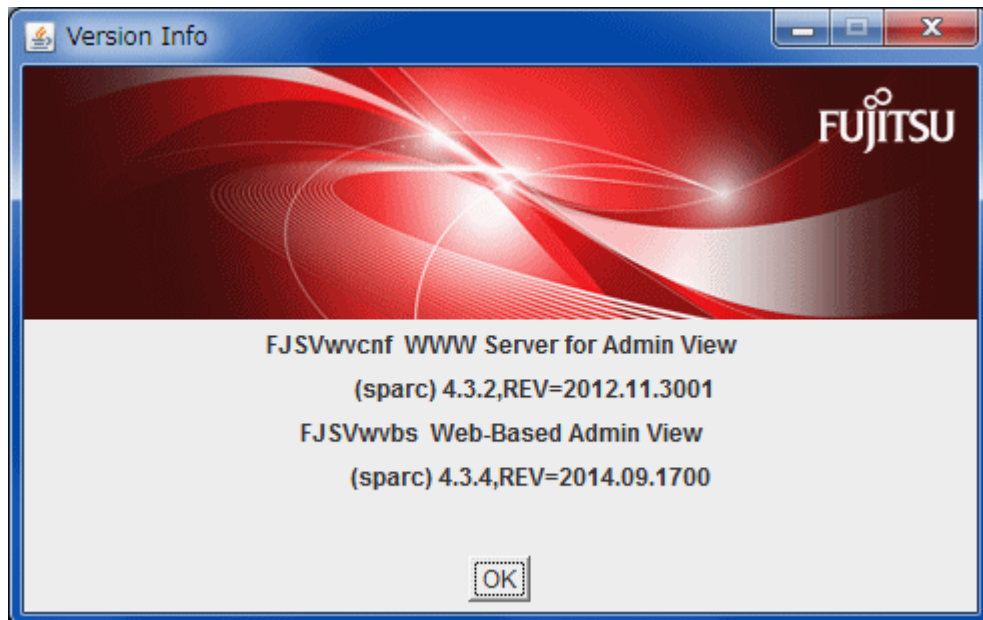
Figure 1.1 Web-Based Admin View screen



When selecting "Version," the following screen appears.

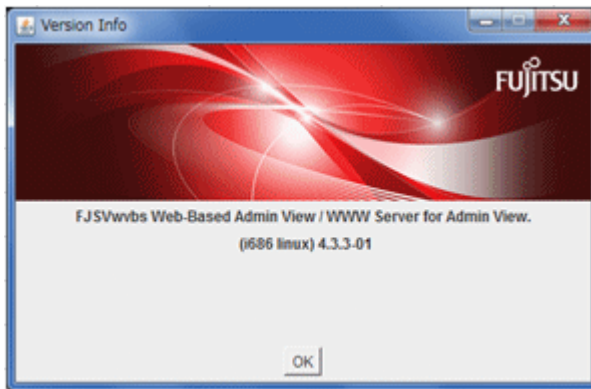
**Version display example**

- For Solaris OS



In case of the above figure, the package of the FJSVwvcnf version is 4.3.2, and that of the FJSVwvbs version is 4.3.4.

- For Linux(R)



In case of the above figure, the package of the FJSVwvbs version is 4.3.3-01.

### Note

.....  
The version is indicated next to the parenthesis.  
.....

- Confirm by command

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

```
# /etc/opt/FJSVwvbs/etc/bin/wvversion
```



# Chapter 2 Web-Based Admin View installation

This chapter outlines the operating 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 documentation related to the installation of each operation management product.

## 2.1 Operation Environment

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

- For Solaris OS

- Memory

At least 512 MB of memory is required.



For supported OS, see the manual of each management product.

- For Linux(R)

- Memory

At least 1024 MB of memory is required.

- OS

RHEL7

RHEL8



Refer to "3.1.2 Preparing 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
```

Set node\_name for the host, and 10.20.30.40 for the IP address in the "/etc/hosts" file. Then, change the network address and management server IP address referring to "[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 Global Link Services (hereinafter GLS) 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 of how to make the network interface to be duplex by using GLS.

The setting procedure is explained for each mode as follows:

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

The following IP addresses used for Web-Based Admin View can 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**)

For the method done by GLS, refer to "PRIMECLUSTER Global Link Services Configuration and Administration Guide: Redundant Line Control Function."

### 2.3.1 NIC switching mode

---

#### 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 **used 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

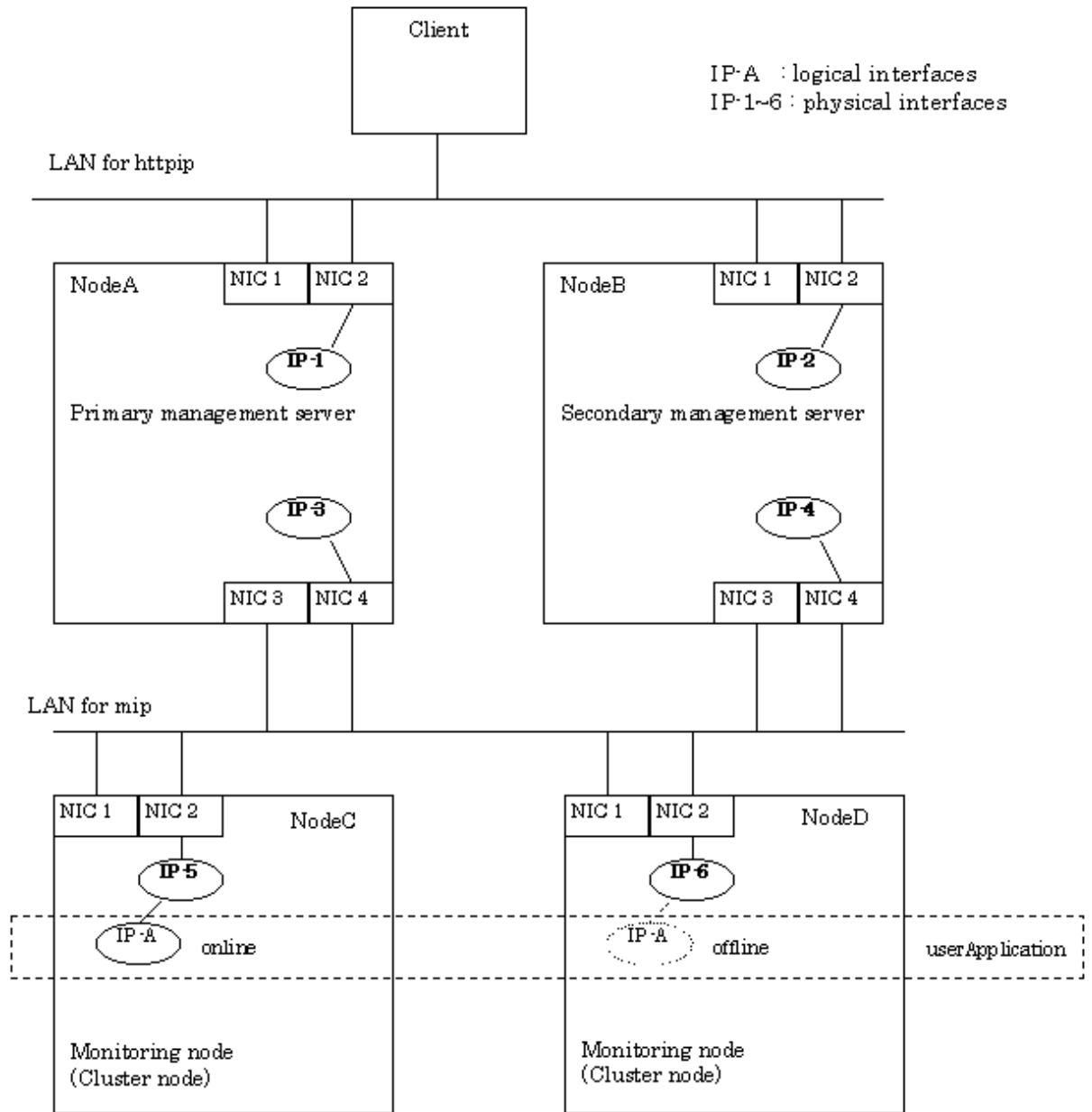
In this model, the IP address setup varies depending on the node roles.

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.

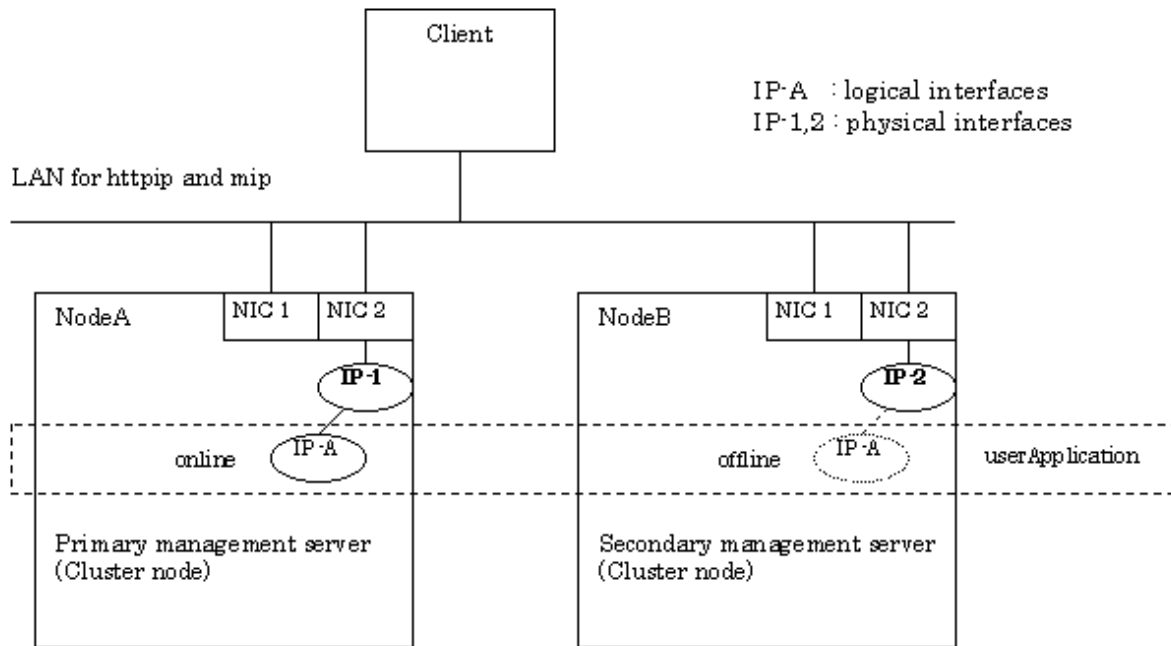
b. In case of monitoring node

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.

### Setup of IP address

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

1. Stop Web-Based Admin View on all the management servers and monitoring nodes.

Refer to "6.1 Stop."

2. Set up the IP address.

Execute the following commands on a node (a management server, a 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 **mip**. Set up the logical IP address or the physical IP address.

<httpip> indicates **httpip**. Set up the logical IP address or the physical IP address.

3. Change the management server settings.

Change the management server settings on all the management servers and monitoring nodes if the node changed in Step 2 is the cluster management server.

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

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

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

Refer to "[6.2 Restart](#)."

## Note

- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.
- The NIC switching takes 2 to 300 seconds, (default: 22-27 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 Web-Based Admin View screen, 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 is delayed in the event of node stop or panic disorder. Based on this fact, change the time interval to monitor the connection between the client and the management server (Client - management server connection time).

For Client - management server connection time, be aware of setting the value (2-300 sec.) exceeding the time from occurrence of a NIC failure to completion of switchover.

For the setup of Client - management server connection 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.

### Setup of Client - management server connection time

- Stop Web-Based Admin View.

Stop Web-Based Admin View on all the management servers.

```
# /etc/init.d/fjswvvcnf stop
# /etc/init.d/fjswvvs stop
```

- Set up Client - management server connection time.

Refer the example below to execute the following command on all the management servers.

Example: When changing Client - management server connection time to 100 seconds

```
# /etc/opt/FJSVvbs/etc/bin/wvSetparam keep-time 100
```

- Start Web-Based Admin View.

Start Web-Based Admin View on all the management servers.

```
# /etc/init.d/fjswvvs start
# /etc/init.d/fjswvvcnf start
```

## 2.3.2 Virtual NIC mode

After setting Virtual NIC mode of GLS, take following steps to set Web-Based Admin View.

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

Refer to "[6.1 Stop](#)."

- Set up the IP address.

Execute the following commands on a node (a management server, a monitoring node) where the GLS virtual IP address needs to be set.

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <mip>
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <httpip>
```

<mip> indicates **mip**. Set up the virtual IP address.

<httpip> indicates **httpip**. Set up the virtual IP address.

3. Change the management server settings.

Change the management server settings on all the management servers and monitoring nodes if the node changed in Step 2 is the cluster management server.

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

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

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

Refer to "6.2 Restart."



## Note

- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.
- The virtual NIC mode takes 1 to 300 seconds, (default: 1-17 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 Web-Based Admin View screen, 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 is delayed in the event of node stop or panic disorder. Based on this fact, change the time interval to monitor the connection between the client and the management server (Client - management server connection time).

For Client - management server connection time, be aware of setting the value (1-300 sec.) exceeding the time from occurrence of a NIC failure to completion of switchover.

For the setup of Client - management server connection 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.

## Setup of Client - management server connection time

1. Stop Web-Based Admin View.

Stop Web-Based Admin View on all the management servers.

```
# /etc/init.d/fjsvwvcnf stop
# /etc/init.d/fjsvwvbs stop
```

2. Set up Client - management server connection time.

Refer the example below to execute the following command on all the management servers.

Example: When changing Client - management server connection time to 100 seconds

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam keep-time 100
```

3. Start Web-Based Admin View.

Start Web-Based Admin View on all the management servers.

```
# /etc/init.d/fjsvwvbs start
# /etc/init.d/fjsvwvcnf start
```

## Dynamic operation of secondary management server

The secondary management server can be dynamically operated in the environment where the network interface used with Web-Based Admin View is configured to be redundant by using Virtual NIC mode of GLS.

For the setting to operate the secondary management server dynamically, refer "[7.4 Secondary management server automatic migration](#)."

## 2.4 Initial Setup of Web-Based Admin View

### 2.4.1 Management server configuration

This section explains **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.

Take the following procedure to check if the management server is configured for the 3-tier model.

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

Execute the following command on the management server and all monitored 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 recognized by each node is identical with the active secondary management server.

Execute the following command on the management server and all monitored 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 case 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 Step 1 with that (**httpip**) by Step 2.

**If both values are the same**, the topology of multi-network is not configured. 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.

### Point

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 2.

#### 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. To validate the setup, restart Web-Based Admin View on all management servers and monitoring nodes.

Refer to "[6.2 Restart](#)".

### Note

In the file (hosts) on all the 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)). The hosts file is "/etc/inet/hosts" on Solaris OS, but it is "/etc/hosts" on Linux(R).

## 2.4.2 Setting the Web-Based Admin View Language

The language environment in which Web-Based Admin View operates is set to English as default. Even though the client has a Japanese environment, the text of the messages that are sent from the monitoring node is displayed in English.

If you want to display the messages in Japanese, take the following steps to set up an environment variable of Web-Based Admin View. For the environment variable, see the following table.

This operation must be executed with the system administrator authority for all the cluster nodes and the cluster management server that make up the cluster system.

Table 2.1 Environment variable for the operation language of Web-Based Admin View

Attribute	Variable	Possible values	Meaning
sys	lang	C, ja	Language environment in which Web-Based Admin View operates. C: Operates in English. ja: Operates in Japanese. If this variable is not set, Web-Based Admin View operates in the English environment.

Operation Procedure:

1. Stop Web-Based Admin View on all the management servers and nodes.

```
# /etc/init.d/fjswvvcnf stop
# /etc/init.d/fjswvvs stop
```

2. Add the environment variable to the definition file (/etc/opt/FJSVwvbs/etc/webview.cnf) of Web-Based Admin View, and set the language.

Execute the following command on all the management servers and nodes, referring to the example.

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam -add <attribute> <environment-variable> <setting_value>
```

Example: Add the environment variable and set the operation language to Japanese.

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam -add sys lang ja
```

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

```
# /etc/init.d/fjswvvs restart
# /etc/init.d/fjswvvcnf restart
```

 Note

- It is necessary to set the locale to Japanese on personal computers that are used as clients. If the above setting is changed on the clients with an English environment, messages might be garbled.
- To change the environment variable again after it is added by the above procedure, execute the following command:

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam lang <setting_value>
```

For details on the command, see "[4.5.3 Environment variable modification](#)".

# Part 2 Web-Based Admin View GUI screen

---

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

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# 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:

- Determining user group
- Preparing client environment
- Preparing Java application

### 3.1.1 Determining user group

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 user group enable to use functions 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.

When creating the wvroot user group automatically at installation of PRIMECLUSTER, GID (ID number of the group) is not specified. Even if GID is not changed, it does not affect the behavior of the operation management products; however, if you want to specify the same GID between the primary management server and the secondary management server, execute the groupadd(8) command or the groupmod(8) command:

- When specifying GID before installing PRIMECLUSTER and then creating the wvroot user group

```
# groupadd -g <GID> wvroot
```

- When changing GID of the wvroot user group after installing PRIMECLUSTER

```
# groupmod -g <GID> wvroot
```

#### 3.1.1.2 Register to a user group

Use commands to register user names into the user groups.

## Point

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."

## Note

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 an example for inputting user name "wvroot" into the group name as Supplementary Group, the registration way is described as follows.

- 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 Preparing client environment

The Web-Based Admin View works on the following client environments:

- **Windows(R)**

- OS / Web browser

- Windows(R) 8.1, Windows(R) 10, Windows Server(R) 2012, Windows Server(R) 2012 R2, Windows Server(R) 2016, Windows Server(R) 2019 / Internet Explorer 11

- Windows(R) 10 / Microsoft Edge

When using Windows Server(R), follow the procedure below to register the IP addresses of the primary management server and the secondary management server to the trusted site.

1. Select [Internet Options] - [Security] tab - [Trusted sites] zone and click <Sites> button.
2. Add the connection URL of the primary management server and the secondary management server to the Web site.

Example of a setting value of the Web site:

When specifying the address of the management server 192.168.10.1 (port designation is not necessary)

http://192.168.10.1

## Note

- To display Japanese, the following requirements need to be satisfied:

- The Japanese version of Windows(R) is installed.
- Japanese is selected for the language environment used in Windows(R).

- Do not uninstall (delete IPv4) IPv4 as stated below:

```
netsh interface ipv4 uninstall
```

If IPv4 was accidentally uninstalled, install it again.

```
netsh interface ipv4 install
```

- If Windows(R) is used for a client that is supported with Web-Based Admin View, the following color pallet problem may occur:

When the GUI screen of Web-Based Admin View is displayed with Windows(R), the 16-bit or 32-bit color mode must be used. The 24-bit color mode does not properly support an alpha component (transparency) that is required for RMS graphs. If 24-bit color is used, RMS graphs may not be displayed properly.

Whether problems will occur in 24-bit color mode depends on the graphics card and video driver being used.



See

For the operating environment of the management server or the monitoring node, refer to "2.1 Operation Environment."

### 3.1.3 Preparing Java application

---

This section explains how to install and set up the Java application to use the Web-Based Admin View.

Take the following steps to prepare the Java application:

- Installing Java application
- Setting up Java application

#### 3.1.3.1 Installing Java application

To use the Web-Based Admin View screen, install the client Java application.

On the client to start the screen, access the following web page from the Web browser and download the installer of the client Java application (PRIMECLUSTER Web-Based Admin View Startup). The file name is "WVStartupInst.zip". Unzip the file and execute "WVStartupInst.exe".

`http://[IP address of the management server]:[http port number of the management server]/download.html`

When running the installer, enter the IP address (IPv4 or IPv6) and the http port number of primary and secondary management servers. Enter only the IP address of the primary management server if the management server is not duplicated.

These entered values are set as the connection information of two shortcuts (the shortcut and the desktop shortcut) created by the installer.

After the installer is completed, the following program group, the shortcut, and the desktop shortcut are created.

Program group:

`\PRIMECLUSTER\PRIMECLUSTER Web-Based Admin View Startup\`

Shortcut and desktop shortcut:

- Shortcut name for a connection to the primary management server  
PRIMECLUSTER Web-Based Admin View Startup - Primary
- Shortcut name for a connection to the secondary management server (only when inputting the IP address of the secondary management server)  
PRIMECLUSTER Web-Based Admin View Startup - Secondary

This Java application is installed in the home folder of a Windows login user ("C:\Users\[User name]" is used for later examples). This installation folder cannot be changed later. Install the Java application in each user who executes it. About 200MB disk resources are consumed for each installation user.

Example of installation folder:

`C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\`

Before using the Java application on Windows Server(R), install the Java application and then take the following steps to add the Java application execution program (javaw.exe) to the allowed communication applications through Windows Firewall.

1. Obtain the command path of the Java application execution program.

Copy the command path of "javaw.exe" from [Target] in the properties of the shortcut.

Example of "javaw.exe" command path:

C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\bin\javaw.exe

2. Set to allow the Java application execution program (command path copied in Step 1) to the Windows firewall.



### Note

- Installing the Java Runtime Environment (JRE) is not necessary as it is included in the Java application.
- When installing a new version of Java application, install it without uninstalling the existing version that is already installed. The existing configuration information can be retained.

### 3.1.3.2 Setting up Java application

The shortcut and the desktop shortcut of the Java application retain the connection target information (IP address and http port number of the management server) specified by the "PRIMECLUSTER Web-Based Admin View Startup" installer.

Edit the [Target] parameter from properties of the shortcut and the desktop shortcut to confirm and modify the connection target information.

See the example below when setting "10.20.30.40" for the IP address of the management server and "8081" for the http port number of the management server.

Example of [Target] parameter of the shortcut (IPv4) (set as follows without line break):

```
"C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\bin\javaw.exe"
-jar "WVStartup.jar" "10.20.30.40" "8081"
```

See the example below when setting "1080:2090:30a0:40b0:50c0:60d0:70e0:80f0" for the IP address of the management server.

Example of [Target] parameter of the shortcut (IPv6) (set as follows without line break):

```
"C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\bin\javaw.exe"
-jar "WVStartup.jar" "1080:2090:30a0:40b0:50c0:60d0:70e0:80f0" "8081"
```

When starting the Web-Based Admin View screens of multiple cluster systems, copy the shortcut and the desktop shortcut of the existing cluster system and change them to the IP addresses (httpip) and the http port number information of the connection target management server in other cluster systems.

Parameters other than the connection target information are retained in the configuration file. Since the configuration file is created for each Windows user who installed the Java application, the Web-Based Admin View screens of multiple cluster systems cannot be started with different setting values. Separate Windows users for each cluster system.

The following parameters can be set in the configuration file (WVStartup.properties).

Parameter key	Function	Default value	Settable value
redirect	Automatic connection to the management servers	yes	yes or no
initialwait	Maximum waiting time (second)	60	Integers from 10 to 2147483647
language	Display language settings on a client	auto	ja, en, or auto



### Note

- initialwait is the maximum waiting time. It is not a parameter that guarantees the specified waiting time for connection. The waiting time for connection may end earlier than initialwait depending on a client OS and a network environment.

- When using the language of Windows(R) OS that is not Japanese or English, set "en" to "language" of the environment setting parameter.

When changing the settings if necessary, move to the "File location:" below and edit the configuration file (WVStartup.properties).

The configuration parameter "redirect" sets up yes/no of the automatic connection to the management server.

When automatically selecting and connecting with the running management server (primary or secondary), set "yes".

This setting enables the automatic connection of the primary/secondary management server, and the automatic migration function of the secondary management server.

When connecting with the specified management server without using automatic connection or automatic migration function, set "no".

For details of the automatic migration function of the secondary management server, refer to "[7.4 Secondary management server automatic migration](#)."

File location:

C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\

File name:

WVStartup.properties

Parameter:

redirect

Function:

Automatic connection to the management servers

Settable values:

yes/no (default value: yes)

Setting example (in the WVStartup.properties file):

redirect = yes

To directly connect with the secondary management server, set the redirect parameter to "no" and then start the Web-Based Admin View screen from the shortcut (or desktop shortcut) where the secondary management server is set as the IP address of the connection management server.

For the parameters other than redirect parameter, see the following sections.

- initialwait  
"[Symptom 4](#)" of "Troubleshooting"
- language  
"[3.5.1 Tentative modification of screen display settings \(Language, Look & Feel\)](#)"

## 3.2 Screen startup

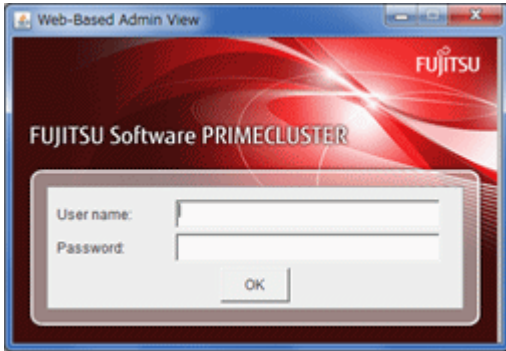
---

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

### Procedures:

1. Start the Web-Based Admin View screen from the shortcut or the desktop shortcut.
2. 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].





### Note

This screen cannot be closed by clicking <X> in the upper right corner of the screen.

3. When the authentication completes, the Web-Based Admin View screen is available.

### Note

- 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 the specific monitoring node to a parameter specified in [Target] of the shortcut. For details, refer to "[7.4 Secondary management server automatic migration](#)."
- If the authentication is failed for multiple times at Step 2, the message "0016 login incorrect." is displayed, and the login process is disabled. Refer to Corrective action 3 of "[Symptom 15](#)" in "[Appendix B Troubleshooting](#)."
- When operating with Web-Based Admin View, a popped up screen might be displayed at the back side of other screens.  
In this case, use a keyboard or a mouse to display the screen at the front.
- Starting the Web-Based Admin View screen by Java Plug-in or Java Web Start is not supported.

## 3.3 Web-Based Admin View screen

---

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

The supported functions of Web-Base Admin View are indicated as a menu in the left panel of the screen.

### 3.3.1 Menu functions

---

The Web-Based Admin View screen supports the following facilities.

Refer to "The menu outline."

Figure 3.1 Web-Based Admin View screen



#### The menu outline

The menu is categorized into the following two types:

- a. The operation management screen and some documentation of operation management products provided by PRIMECLUSTER.
- b. The operation management screen and some documentation of operation management products provided by Non-PRIMECLUSTER.

The following operations are possible for the menu of a:

- **Operation management product name (PRIMECLUSTER)**

Handles the management screen for the following PRIMECLUSTER products.

- Global Cluster Services (CF, CRM, RMS, SIS)
- Global Disk Services (hereinafter GDS)
- Global File Services (hereinafter 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](#)".

- Manual

Displays the documentation of PRIMECLUSTER as online manual.

The following operations are possible for the menu of b:

- Operation management product name (non-PRIMECLUSTER)

Handles the management screen of the following non-PRIMECLUSTER operation management product.

For details, see the document for each operation management product.

- **Common**

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

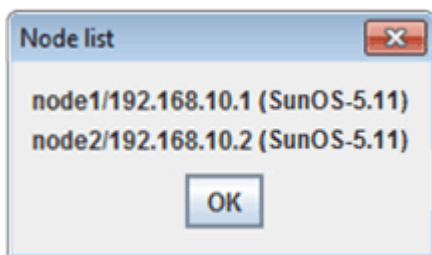
## Note

- The Web-Based Admin View menu varies depending on the products installed.
- 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.

## Point

### 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)

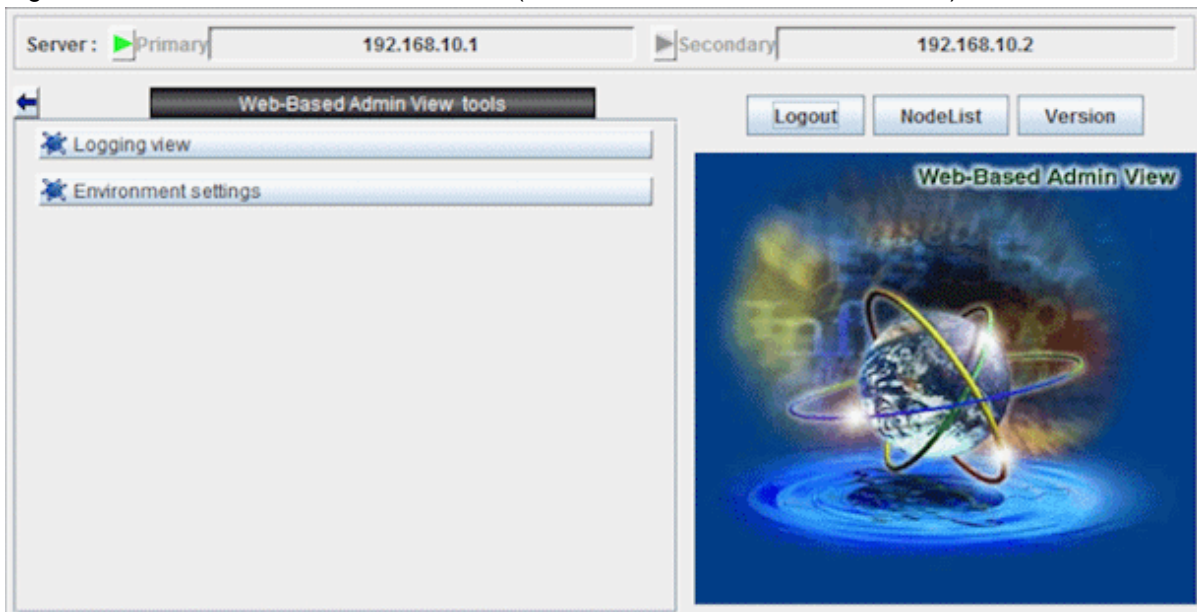
In this case, it should be "Node name: node1, IP address: 192.168.10.1, OS type: Solaris 11 OS."

## 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.

Figure 3.2 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 settings**

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](#)"

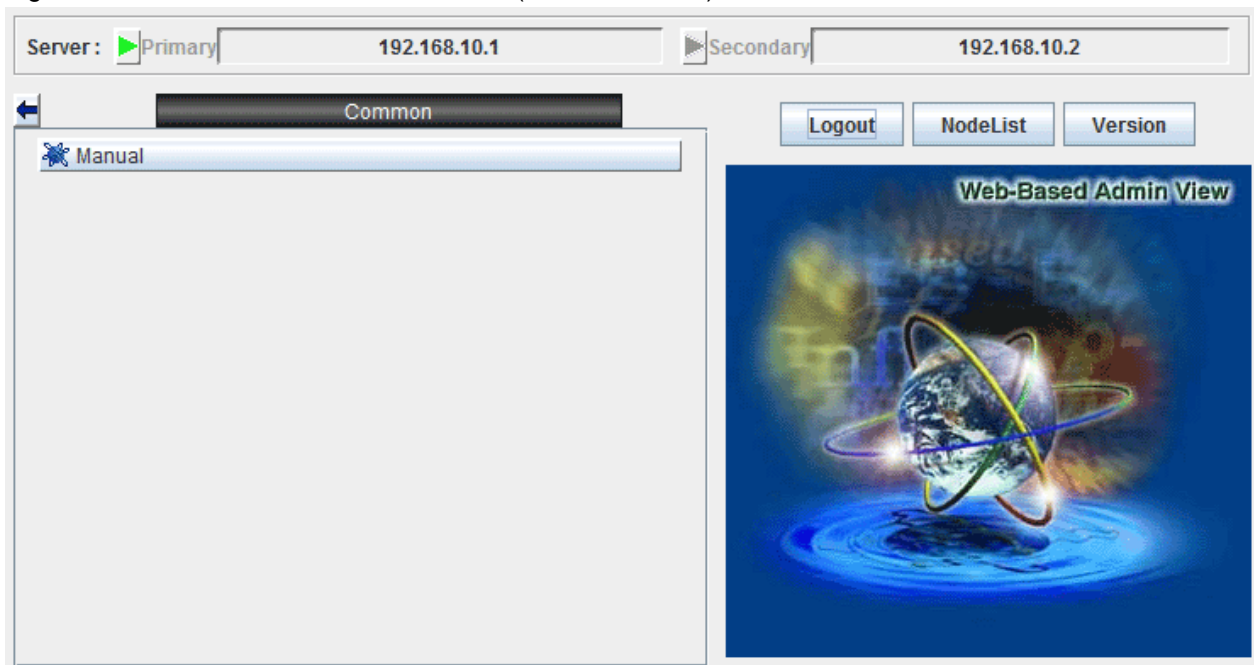
### 3.3.3 Common menu functions

---

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.

Figure 3.3 Web-Based Admin View screen (Common menu)



#### Common menu outline

- **Manual**

Displays the documentation as online manual.

### 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 exit the Web-Based Admin View screen, click <X> in the upper right corner of the Web-Based Admin View menu screen while the login screen is displayed.



The login screen cannot be closed by clicking <X> in the upper right corner of the screen.

## 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

To set a display language on a client, edit the configuration file of the Java application (PRIMECLUSTER Web-Based Admin View Startup).

Edit the property file described in "[3.1.3.2 Setting up Java application](#)" to set the parameter "language".

When setting the value "auto" for "language", a display language is set based on a system language of the client OS. Set "ja" to display in Japanese and set "en" to display in English.

File location:

C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\

File name:

WVStartup.properties

Parameter:

language

Function:

Display language settings on a client

Settable values:

ja/en/auto (default value: auto)

Setting example (in the WVStartup.properties):

language = en

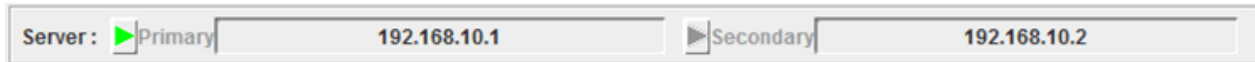
## 3.5.2 Switchover of management server

---

The connected 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 the 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.



#### Note

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:

#### Note

The modified screen size is tentative. It is not saved if a screen is terminated.

## 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 on the desired item. Then, click left mouse button to select the target of operation. If single selections are 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.

## 3.6 Deleting Java application

---

Exit all the Java applications (PRIMECLUSTER Web-Based Admin View Startup). For the exit of the Java application, refer to "[3.4 Screen exiting](#)."

And then, to delete the Java application, go to [Control Panel] - [Uninstall a program] on Windows and select [PRIMECLUSTER Web-Based Admin View Startup].

#### Note

When deleting the Java application that is running, the following message will appear. It means the resources of the Java application are not completely deleted.

Message content:

```
PRIMECLUSTER Web-Based Admin View Startup uninstall complete.  
Some elements could not be removed. These can be removed manually.
```

In this case, exit all the Java applications that are running and then delete the installation folder of the Java application.

Example of installation folder:

```
C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup
```

---

# Part 3 Web-Based Admin View tools menu

---

This part explains the functions provided by Web-Based Admin View tools menu.

<a href="#">Chapter 4 Environment settings</a> .....	33
<a href="#">Chapter 5 Web-Based Admin View log reference</a> .....	56



# Chapter 4 Environment settings

## Target users

All users using the Web-Based Admin View

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

### Point

For reference or setup of operation environment, there are two methods; one is to 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 node which is not monitored by the primary management server, refer to "4.5 Reference and modification by command" and set up as required on each node.

There are the 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
<b>Use</b>	Set tentative operating conditions	Determine the operating conditions of the entire system	Specific setting for each monitoring node
<b>Target user</b>	All users	The root user or the user that belongs to the Web-Based Admin View administrator group (wvroot) (*1)	
<b>Setup timing</b>	As long as the Web-Based Admin View is active.		
<b>Setup validation timing (*2)</b>	[End] -> 0052_message : select [Yes] -> The value is validated right.	[End] -> 0051 message : select [Yes] -> 0015 message : select [OK] -> Log off (*3) -> { Web-Based Admin View running on the management server restarts automatically } ->_0003 message : the value is validated.	[End] -> 0059 message : select [Yes] -> 0015 message : select [OK] -> Log off (*3) -> { Web-Based Admin View running on the management server restarts automatically } -> 0003 message : the value is validated.

(\*1) The user who logs in by authority of other 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) Below explains 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 until 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 certain amount of time (10 minutes) passes. So the logged-in clients must be logged off, and then 0007 message is displayed.

## Note

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

## 4.1 Environment settings start

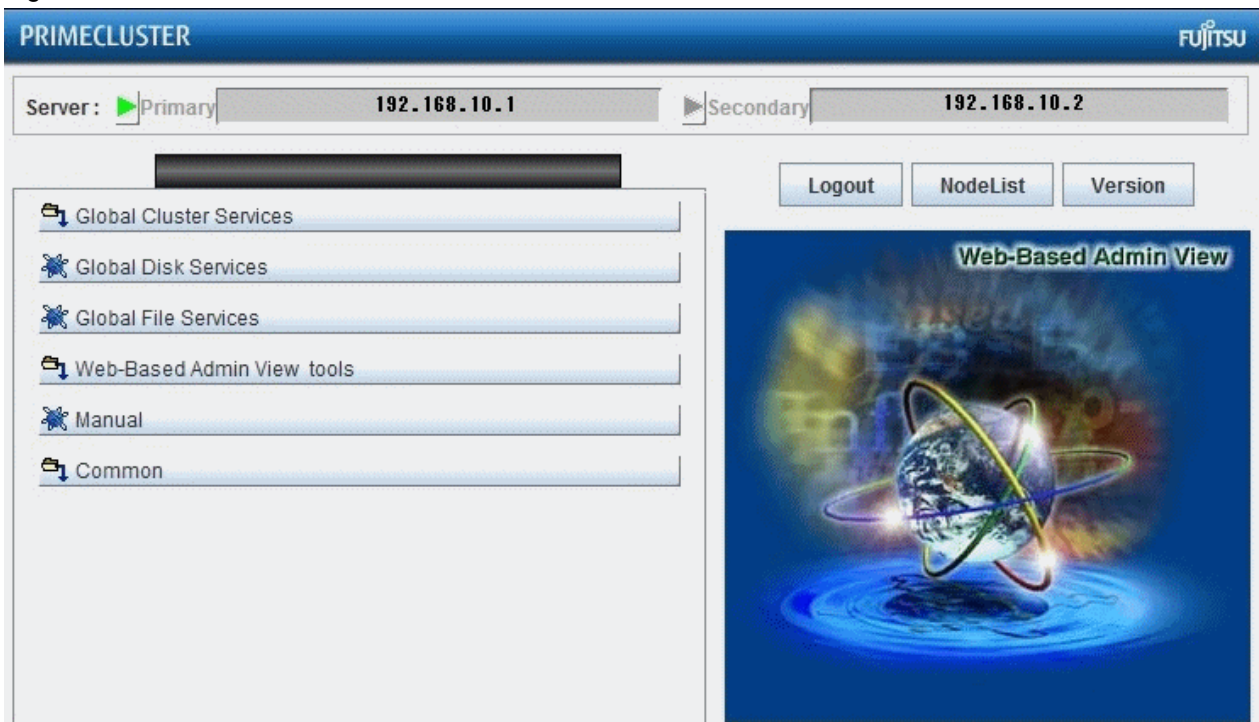
Start the environment settings as described below.

### Target users

All users using the Web-Based Admin View

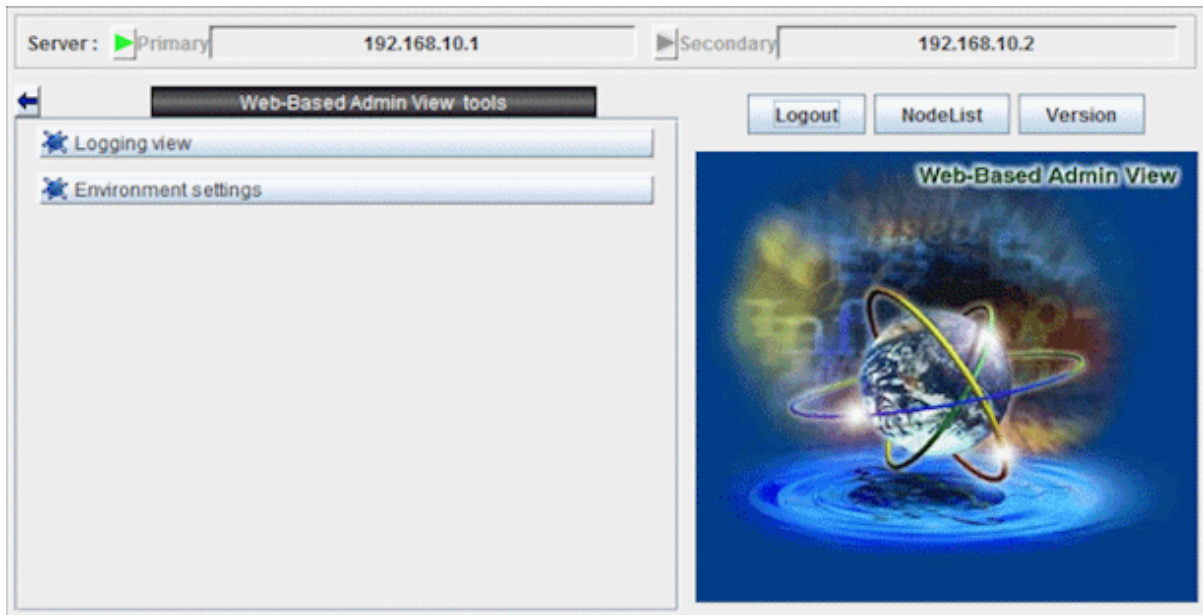
- Select the [Web-Based Admin View tools] button on the menu of Web-Based Admin View screen.

Figure 4.1 Web-Based Admin View screen



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

Figure 4.2 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 using the Web-Based Admin View

Table 4.1 User environment settings item list

Item	Usage	Default value
Client detailed trace log	Select this item when specific client information is necessary for maintenance or troubleshooting.	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.	No
Inactivity timeout interval	The inactivity timeout interval is standby time until Web-Based Admin View is locked.	10 minutes

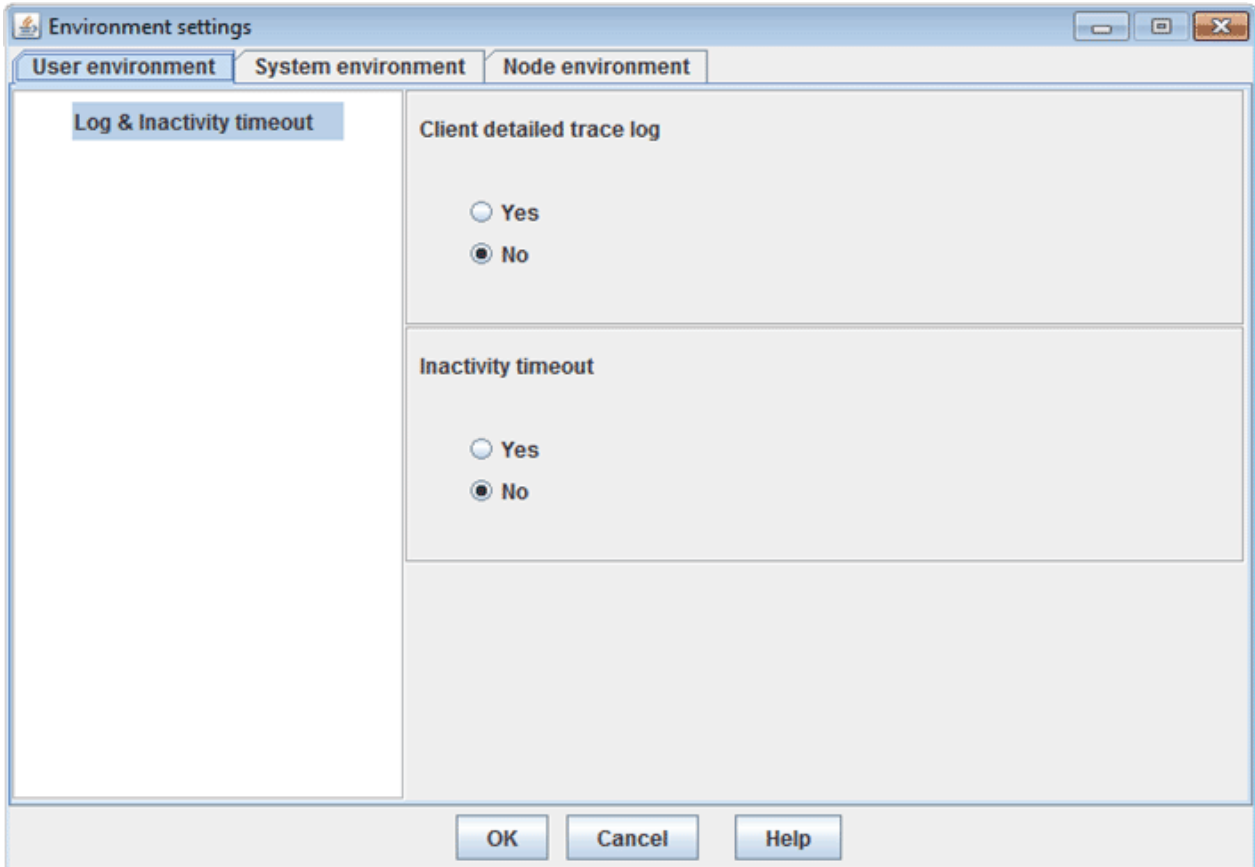
### Note

Note that the user environment settings only remain valid until logged out. 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.

Figure 4.3 User environment (Log & Inactivity timeout) screen



#### Client detailed trace log

Select [Yes] or [No] for collecting a detailed trace. When collecting the log, select [Yes]. When not collecting the log, select [No].

#### Inactivity timeout

Select [Yes] or [No] for the inactivity timeout. When enabling the timeout, select [Yes]. When disabling the timeout, select [No].

#### 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.

### Information

#### 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.

### Note

The support status varies according to the operation management product. For details, refer to the documentation provided with each management product.

## 4.3 System environment

### Target users

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

### Note

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

### Notices on system environment settings

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

Table 4.2 System environment settings item list

Item		Default value	Usage
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 locking Web-Based Admin View.  This function's validation varies depending on each operation management product.
	Inactivity timeout interval	10 minutes	
Primary management server		Default set at installation	To change the IP address of the primary management server.
Secondary management server		Default set at installation	To change the IP address of the secondary management server
Secondary management server automatic migration		No	Execute " <a href="#">7.4 Secondary management server automatic migration</a> " 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.
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.

Item	Default value	Usage
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.

Item	Default 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 log	File size	200
	Number of files	5
	Detailed trace log	Yes
Monitoring node trace log	File size	200KB
	Number of files	5
	Detailed trace log	Yes



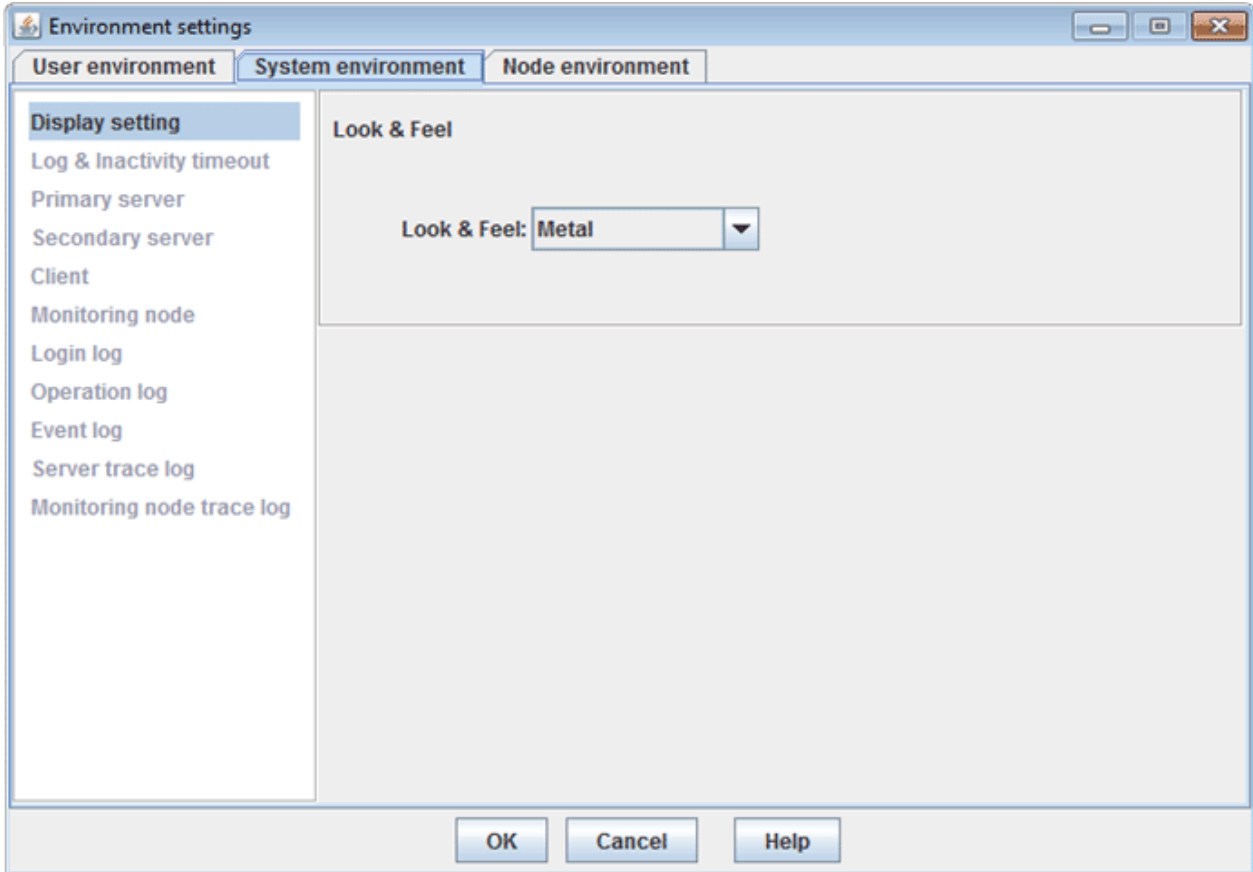
#### Note

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

## 4.3.1 Display setup

Set the display language and Look & Feel.

Figure 4.4 System environment (Display setting) screen



**Look & Feel**

The default of Look & Feel is Metal. "Look & Feel" can select either the following according to the environment of client OS.

Look & Feel	Client OS	Java Application
Metal	All	All
Nimbus	All	All
CDE/Motif	All	All
Windows	All	All
Windows Classic	All	All
Any	All	All

**Point**

**Display language**

- Client

The displayed language can be set or modified in the client locale.

Refer to "[Changing the Language](#)".

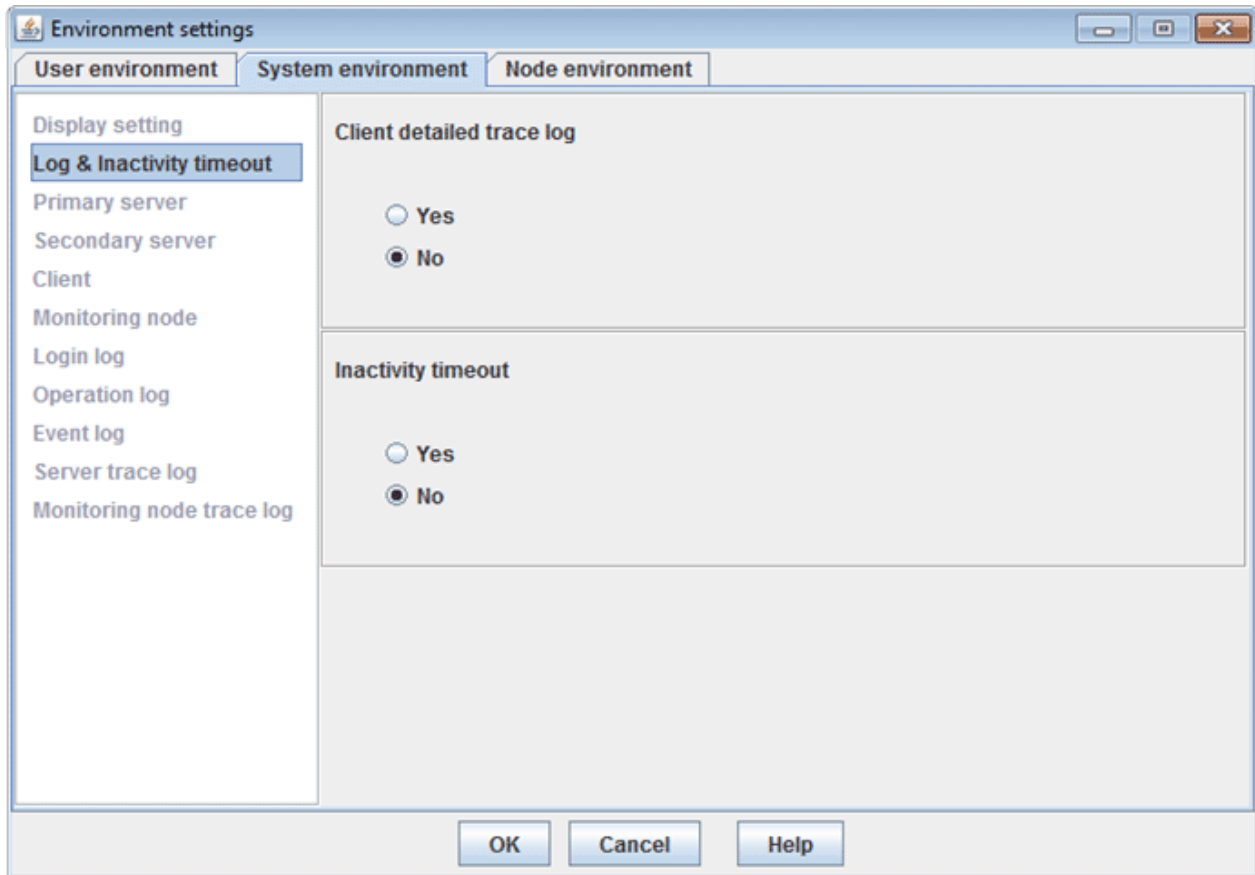
**Note**

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.

Figure 4.5 System environment (Log & Inactivity timeout) screen



### Client detailed trace log

Select [Yes] or [No] for collecting a detailed trace. When collecting the log, select [Yes]. When not collecting the log, select [No].

### Inactivity timeout

Select [Yes] or [No] for the inactivity timeout. When enabling the timeout, select [Yes]. When disabling the timeout, select [No].

### 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.

### Information

#### 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.

### Note

The support status varies according to the operation management product. For details, refer to the manual of each product.

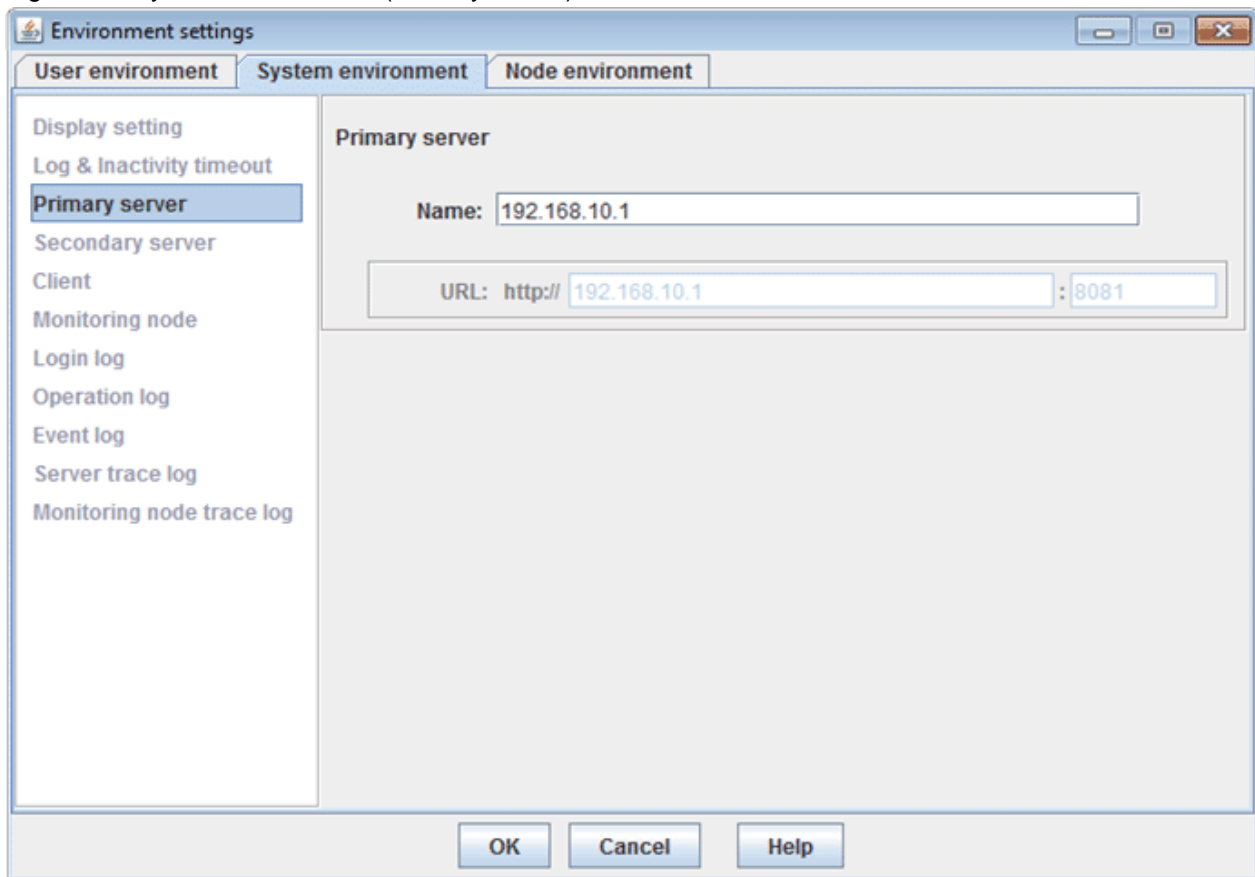


### 4.3.3 Primary management server

---

Set the IP address of the primary management server.

Figure 4.6 System environment (Primary server) screen



#### Primary server

Enter the IP address of the primary management server.

Enter the IP address which is to be designated to **mip** ("IP address/Host name for identifying own host") of a node that will be the primary management server on the primary management server. For **mip**, refer to "4.4.1 IP address/Host name."

For the URL to access the primary management server, the URL of the primary management server that is currently set is displayed.

#### Note

Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

### 4.3.4 Secondary management server

---

Set the IP address of the secondary management server.

Figure 4.7 System environment screen (when the secondary management server automatic migration is selected)

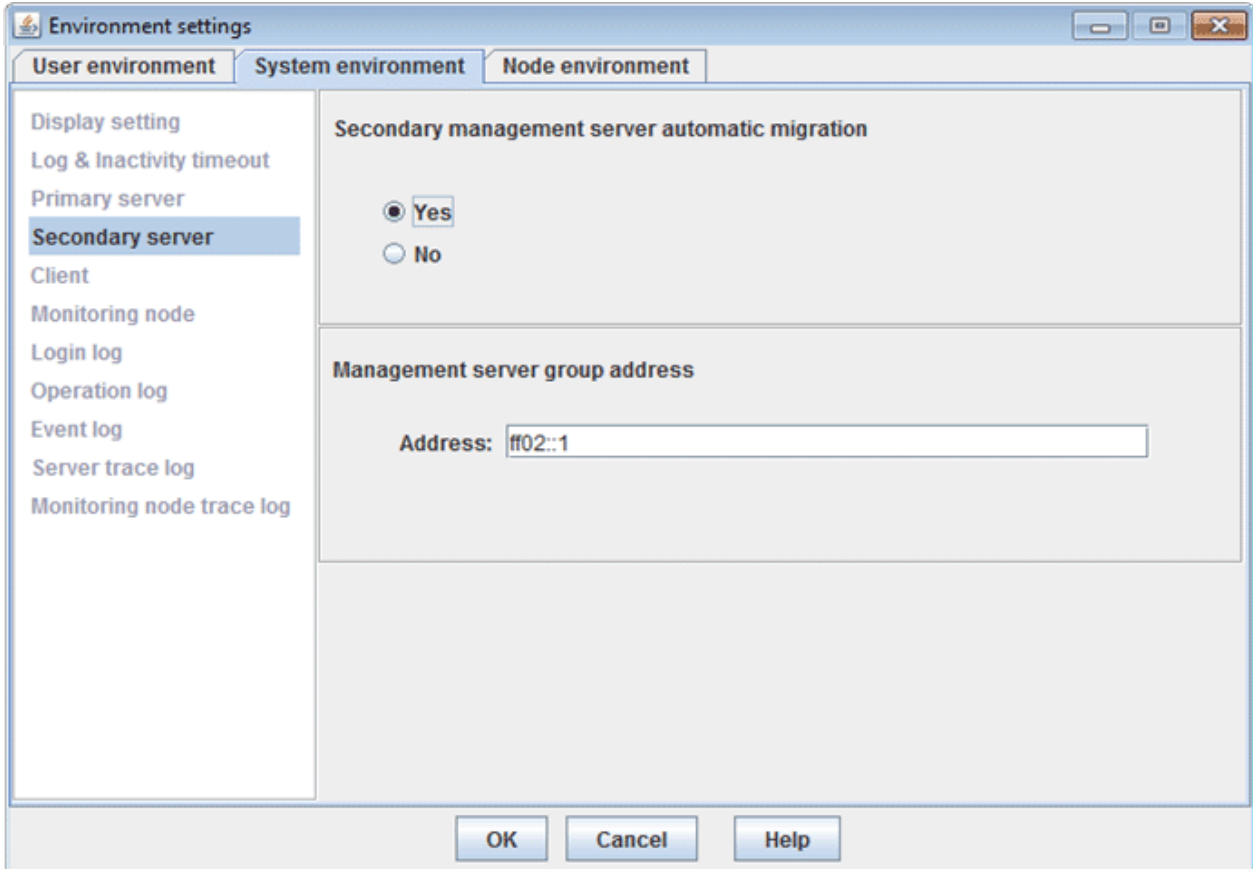
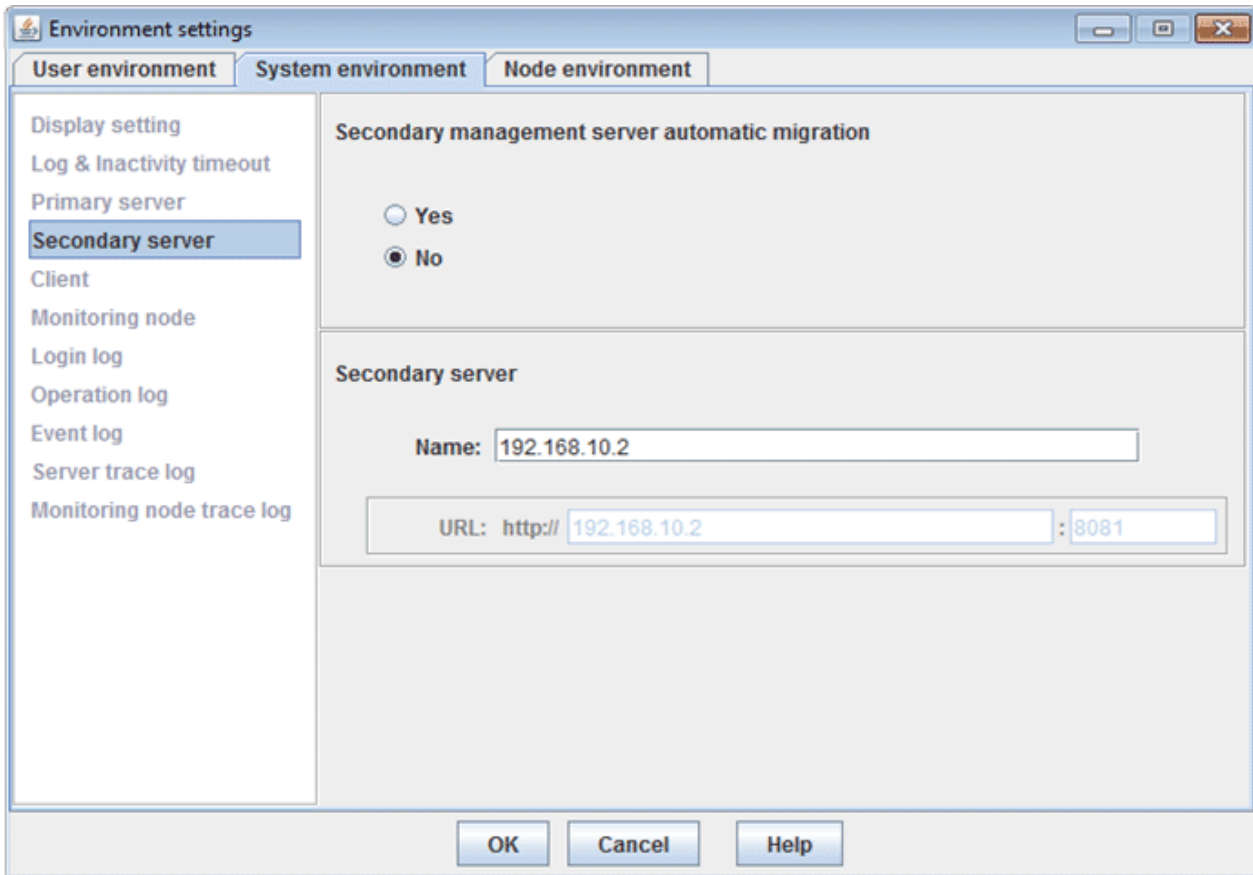


Figure 4.8 System environment screen (when the secondary management server automatic migration is not selected)



#### 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.

The secondary management server automatic migration is only available when the management server IP address is IPv4 address.

When the management server IP address is IPv6 address, select [No].

#### 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.

#### Note

Whenever possible, set the following multicast address for the management server group address.

Example : 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."

#### Secondary server

Enter the IP address of the secondary management server.

Enter the IP address which is to be designated to **mip** ("IP address/Host name for identifying own host") of a node that will be the secondary management server on the secondary management server. For **mip**, refer to "4.4.1 IP address/Host name."

For the URL to access the secondary management server, the URL of the secondary management server that is currently set is displayed.

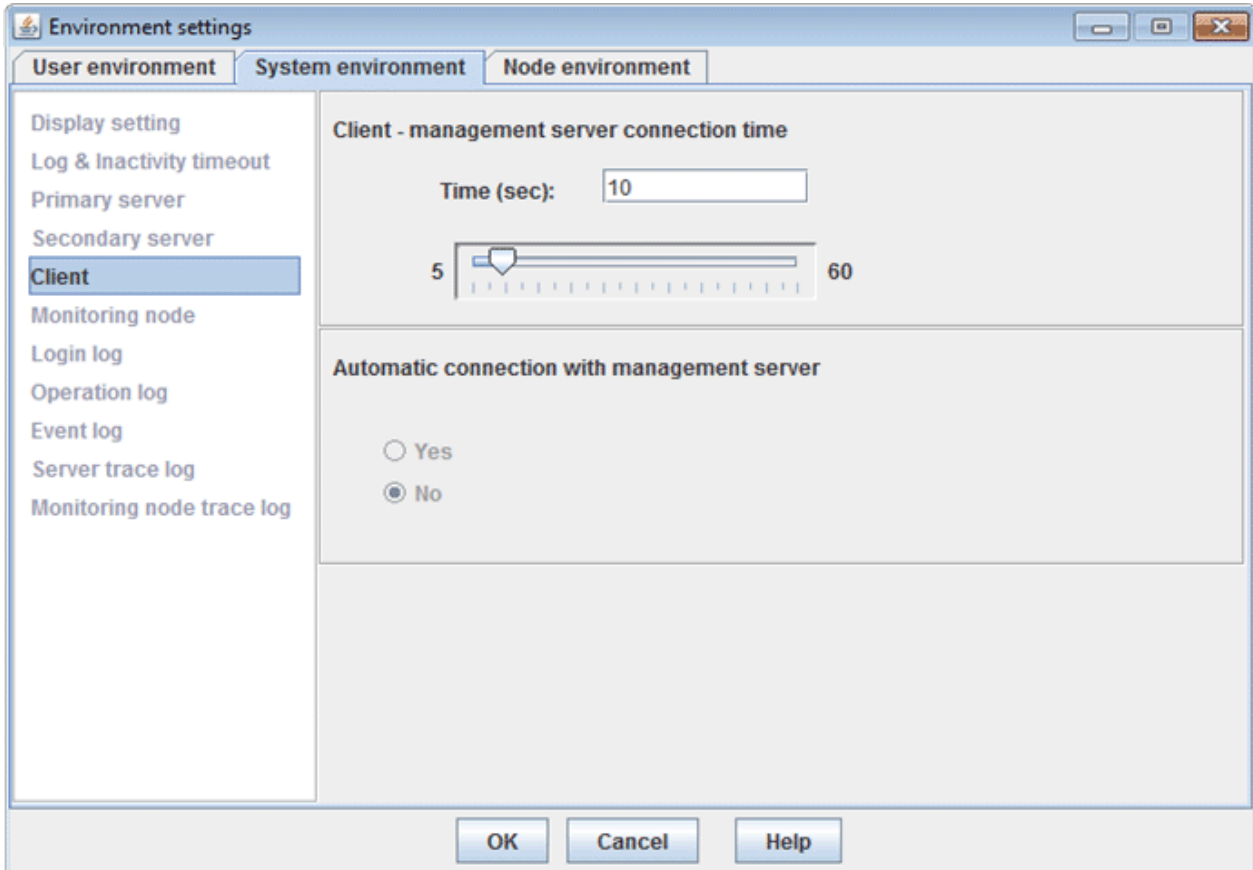
## Note

Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

### 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.

Figure 4.9 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.

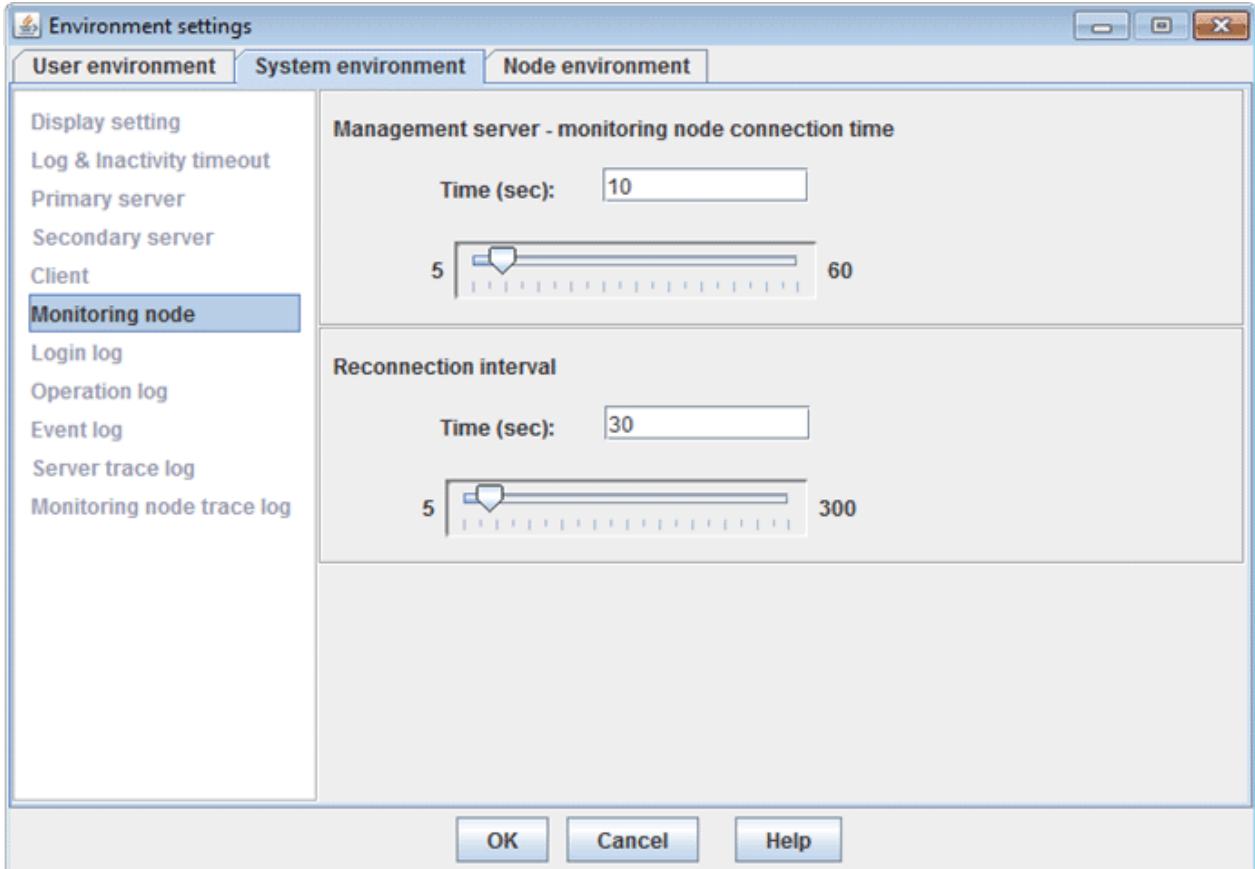
#### Automatic connection with management server

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.

Figure 4.10 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

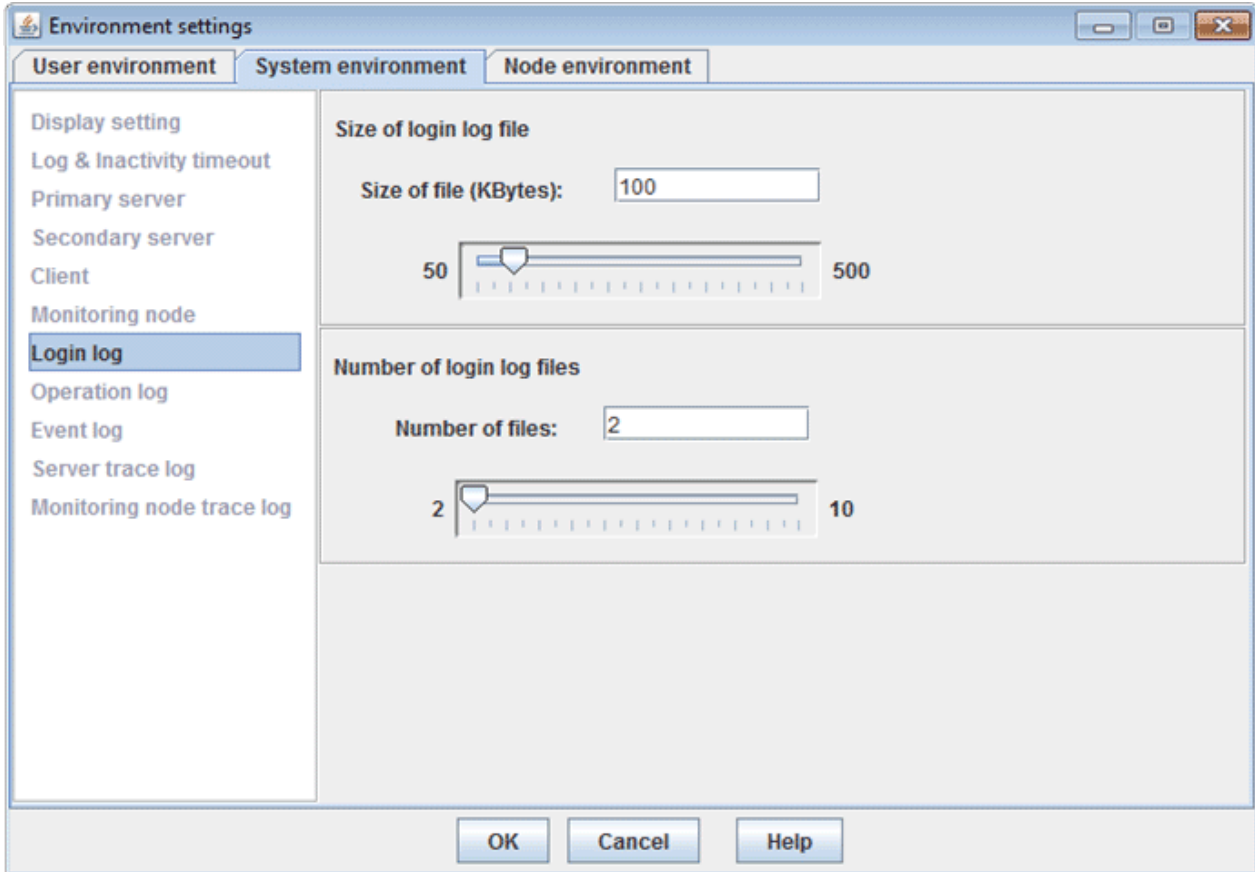
Enter the interval (from 5 to 300 seconds) in the text field and press [Enter], or set the interval by moving the bar (slider) to the left or right.

### 4.3.7 Login log

---

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

Figure 4.11 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

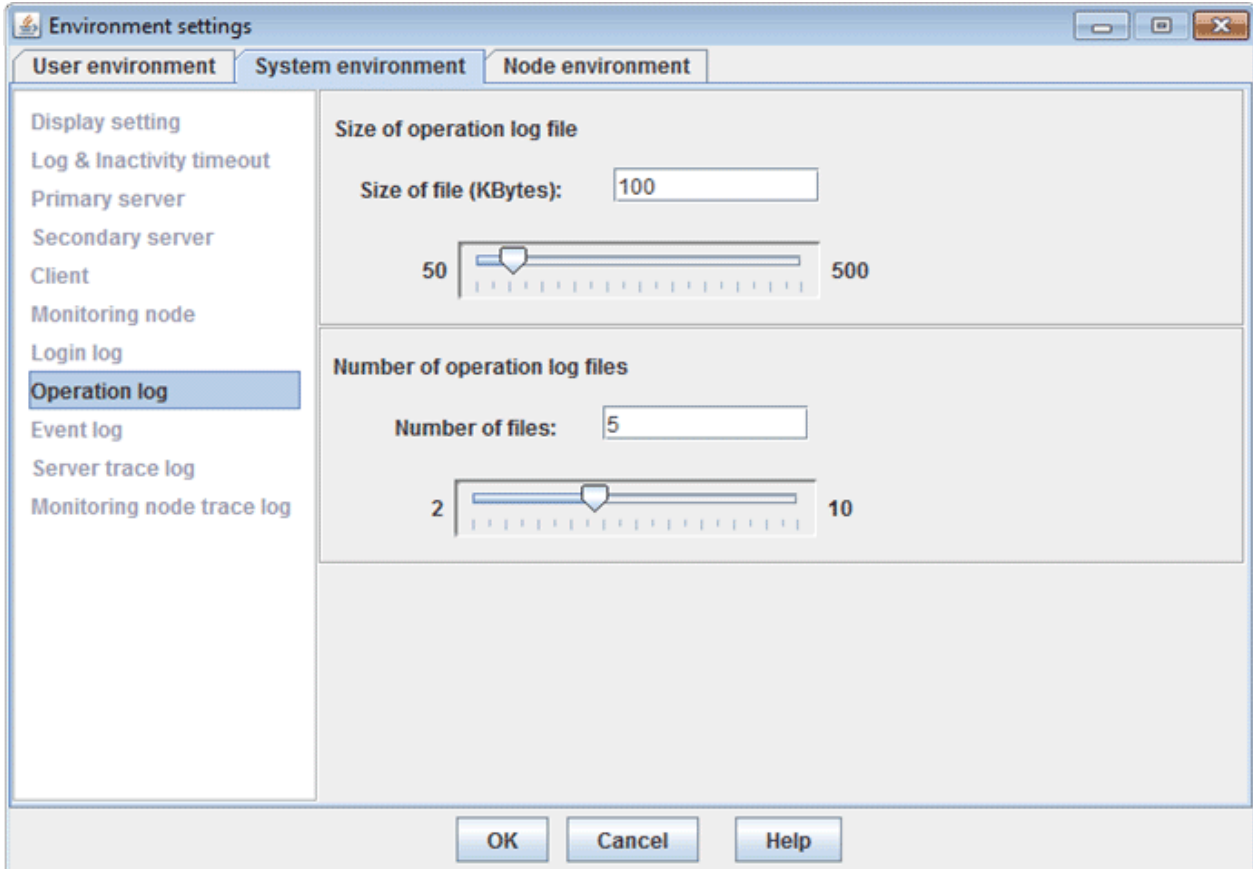
Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

### 4.3.8 Operation log

---

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

Figure 4.12 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

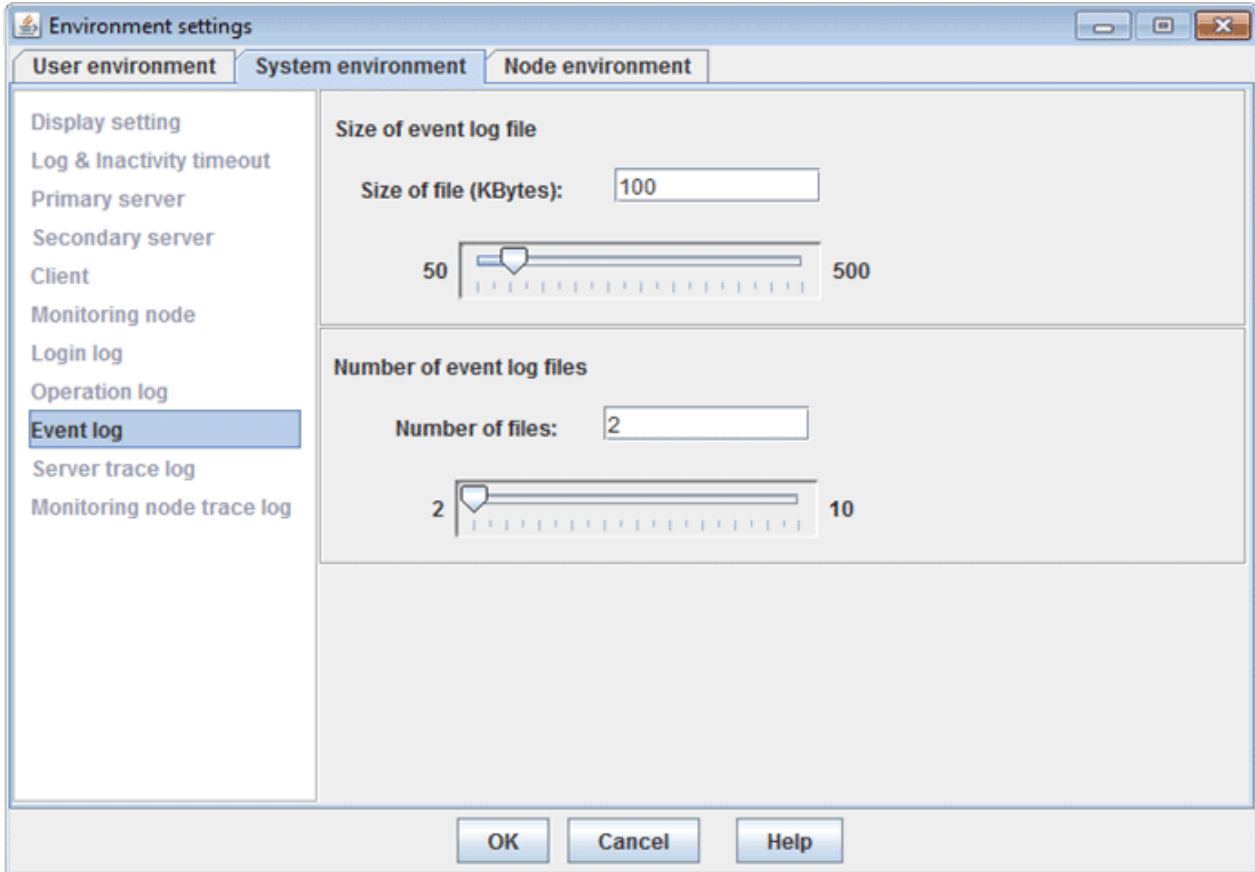
Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

### 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.

Figure 4.13 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

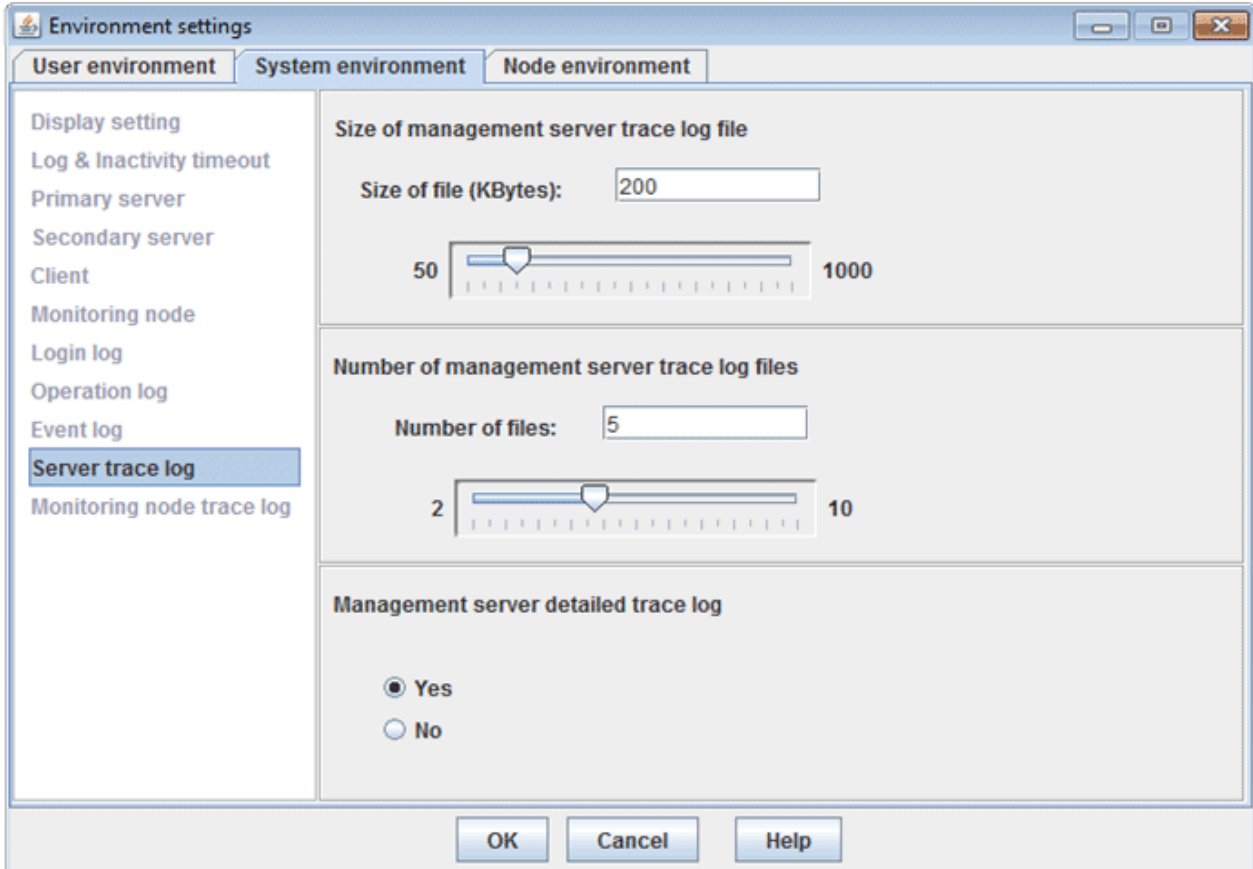
Enter the number of files (from 2 to 10) in the text field and press [Enter], or set the number by moving the bar (slider) to the left or right.

### 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.



Figure 4.14 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.

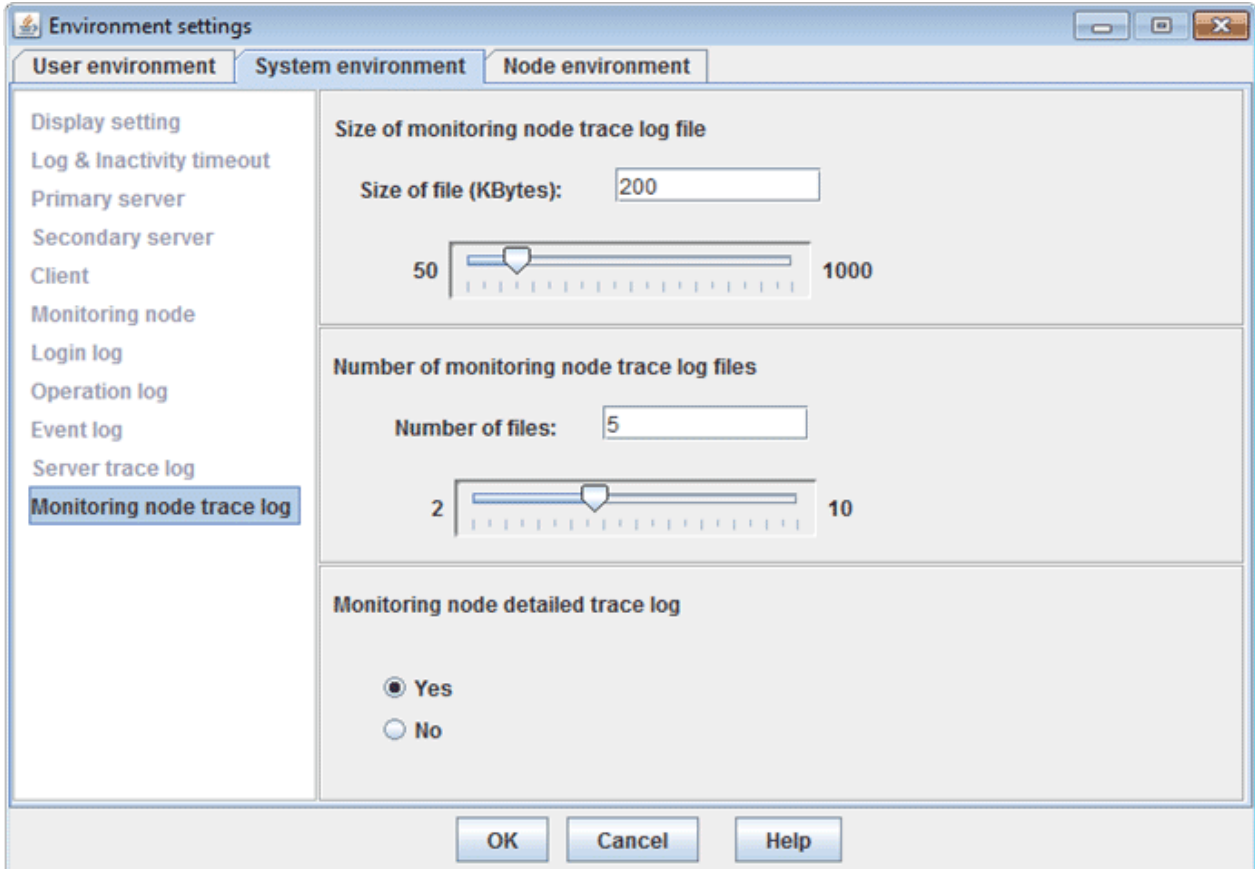
#### Management server detailed trace log

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.

Figure 4.15 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

Table 4.3 List of node environment settings items

Item	Usage	Default value
IP address/Host name for identifying own host	Set up when modifying <b>mip</b> (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.	The IP address, which is assigned to the displayed node name as a result of executing "uname -n"
IP address/Host name of the WWW server	If the monitoring node for environment settings is a management server, <b>httpip</b> (the IP address or the host name that is set for the clients) is displayed.	The IP address, which is assigned to the displayed node name as a result of executing "uname -n"

Item	Usage	Default value
	The displayed IP address/host name cannot be modified on the GUI screen. For modification, refer to " <a href="#">7.5 Multi-network between server and client by classified use</a> ".	
Object of secondary management server automatic migration	Specify whether the monitoring node is automatically selected as the secondary management server when " <a href="#">7.4 Secondary management server automatic migration</a> " is set.	Yes

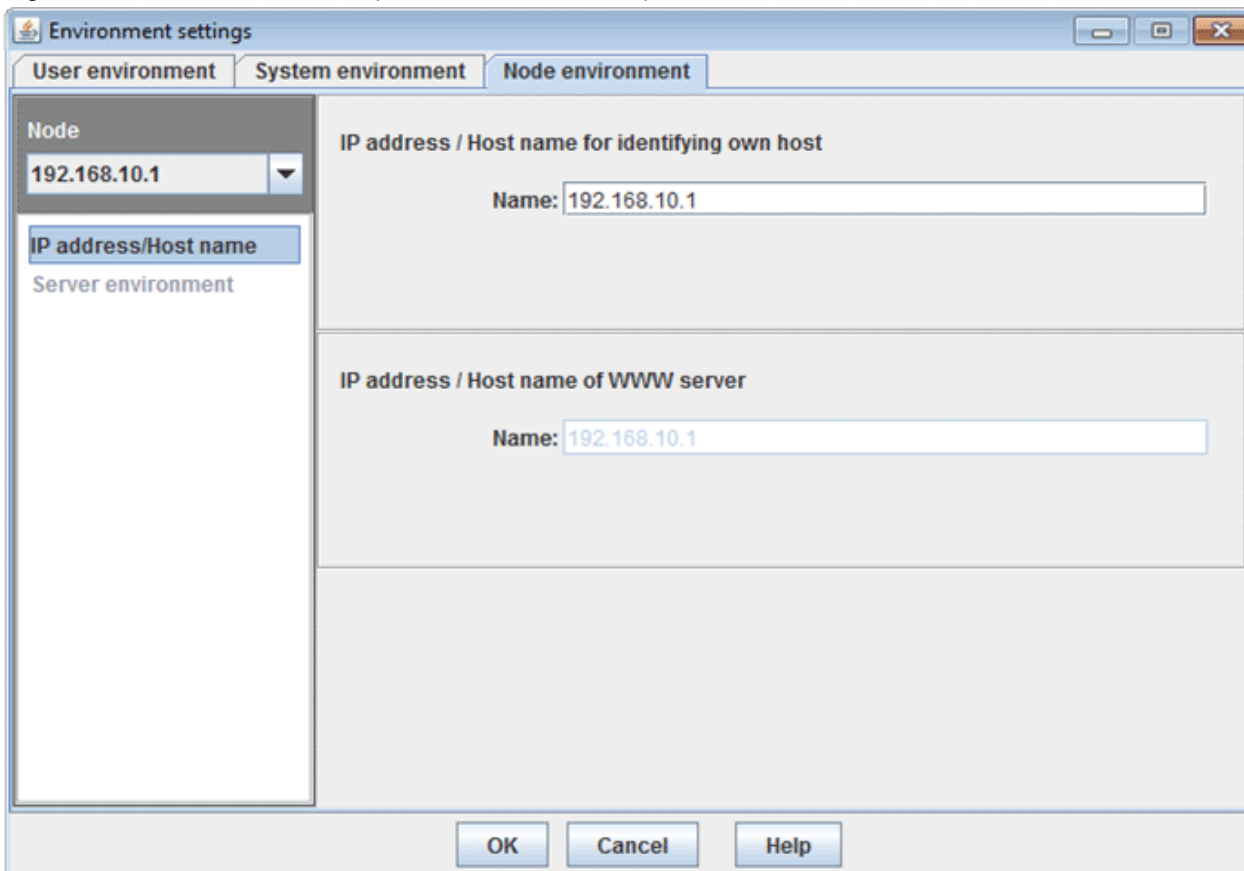
### Note

- 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).

Figure 4.16 Node environment (IP address/Host name) screen



The screenshot shows a window titled "Environment settings" with three tabs: "User environment", "System environment", and "Node environment". The "Node environment" tab is active. On the left, there is a sidebar with a "Node" dropdown menu showing "192.168.10.1" and a "Server environment" section with "IP address/Host name" selected. The main area contains two input fields: "IP address / Host name for identifying own host" and "IP address / Host name of WWW server", both with "Name:" labels and text boxes containing "192.168.10.1". At the bottom are "OK", "Cancel", and "Help" buttons.

#### 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."

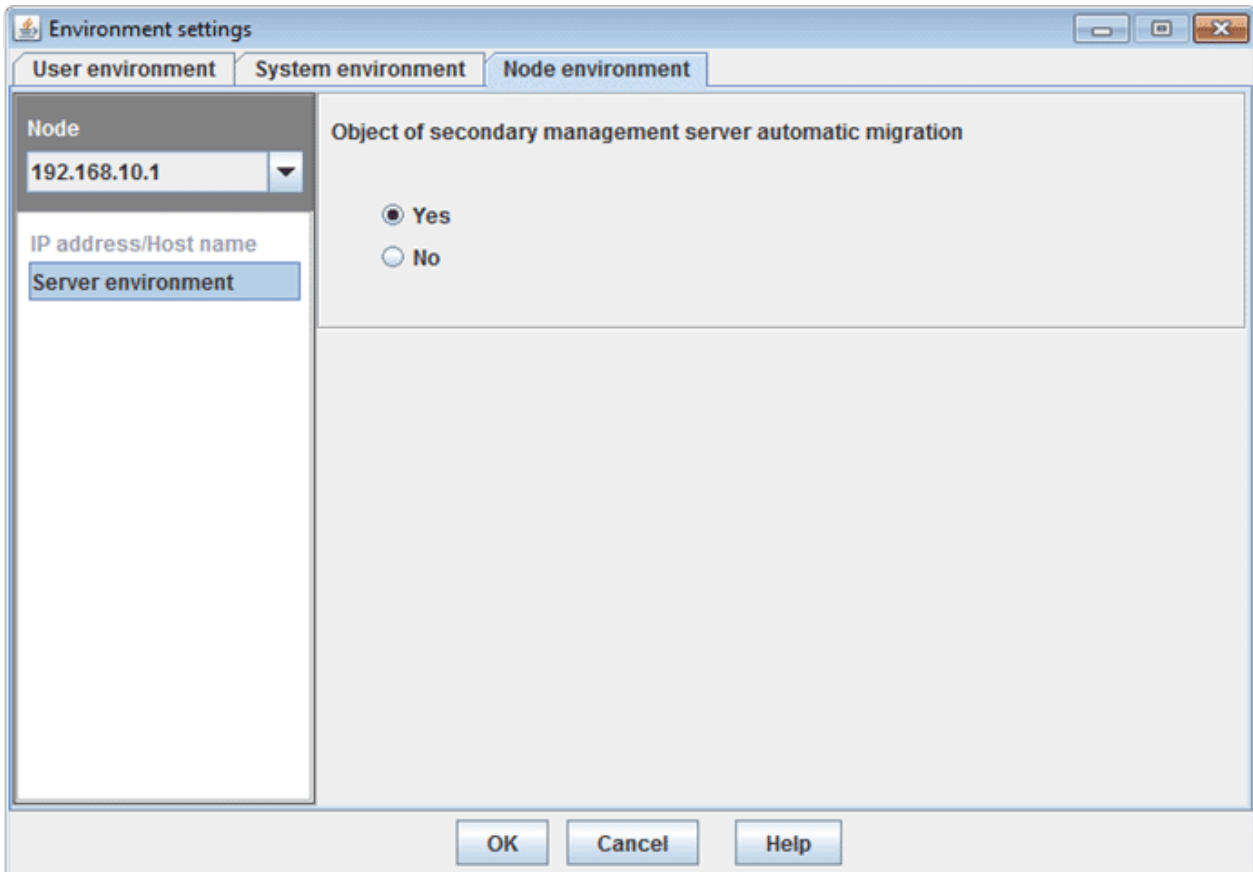
#### Note

- If the IP address or host name for identifying own host is not set, the environment settings screen cannot be closed.
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

## 4.4.2 Server environment

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

Figure 4.17 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.

Table 4.4 Operation environment variable list

Attribute	Environment variable	Setting value		Description
usr	look-and-feel	Metal,CDE/Motif,Windows,Any		Look & Feel
usr	c-tlog-debug	on, off		Client detailed trace log
usr	out-time	When monitoring inactive timeout interval: <i>nnnn</i> (min: 10, max:60) When not monitoring inactive timeout interval: 0	minute	Inactivity timeout interval
sys	primary-server	<i>IP address</i>		IP address of Primary server
sys	secondary-server	<i>IP address</i>		IP address of Secondary server
sys	keep-time	<i>nnnn</i> (min: 5, max: 60)	second	Client - management server connection time
sys	health-time	<i>nnnn</i> (min: 5, max: 60)	second	Management server - monitoring node connection time
sys	retry-time	<i>nnnn</i> (min: 5, max: 300)	second	Reconnection interval
sys	s-llog-vol	<i>nnnn</i> (min: 50, max: 500)	Kbyte	Size of login log file
sys	s-llog-num	<i>nnnn</i> (min: 2, max: 10)		Number of login log files
sys	s-olog-vol	<i>nnnn</i> (min: 50, max: 500)	Kbyte	Size of operation log file
sys	s-olog-num	<i>nnnn</i> (min: 2, max: 10)		Number of operation log files
sys	s-eolog-vol	<i>nnnn</i> (min: 50, max: 500)	Kbyte	Size of event log file
sys	s-eolog-num	<i>nnnn</i> (min: 2, max: 10)		Number of event log files
sys	s-tlog-vol	<i>nnnn</i> (min: 50, max: 1000)	Kbyte	Size of management server trace log file
sys	s-tlog-num	<i>nnnn</i> (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	<i>nnnn</i> (min: 50, max: 1000)	Kbyte	Size of monitoring node trace log file
sys	n-tlog-num	<i>nnnn</i> (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	<i>IP address</i>		Management server group address
sys	server-ha	on, off		Secondary management server automatic migration

Attribute	Environment variable	Setting value		Description
sys	lang	C, ja		Language environment in which Web-Based Admin View operates. C: Operates in English. ja: Operates in Japanese.
local	mip	<i>IP address or Host name</i>		IP address/Host name for identifying own host  (Information to communicate between the management servers and the monitoring nodes)
local	httpip	<i>IP address</i>		IP address of WWW server
local	server-election	on, off		Object of secondary management server automatic migration

*nnnn*: positive number,

*IP address*: IPv4 address or IPv6 address

*Host name*: Host name

### Note

- 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.nnn*
- When using the host name for mip, you need to create the environment where name resolution of the specified host name is available on the client and server.
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

## 4.5.2 Environment variable reference

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

```
/etc/opt/FJSVwvbs/etc/bin/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. Accessing the primary management server

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

2. Specifying an inappropriate variable

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 on all the management servers and monitored nodes.  
Refer to "[6.1 Stop](#)".
2. Modify settings.

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam primary-server 10.20.30.41  
sys:primary-server 10.20.30.41
```

3. Restart Web-Based Admin View.  
Refer to "[6.2 Restart](#)".

If there's no operation environment variables identifying with the specified *<environment-variable>*, the following error message appears:

```
"No such key <specified environment variable>"
```

#### Note

- 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](#)".
- To change the operating environment variables that include "sys" for attributes, set the same value on all the management servers and monitored nodes after stopping Web-Based Admin View on all the management servers and monitored nodes
- After modifications are made, restart Web-Based Admin View. Refer to "[6.2 Restart](#)".
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

# 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.

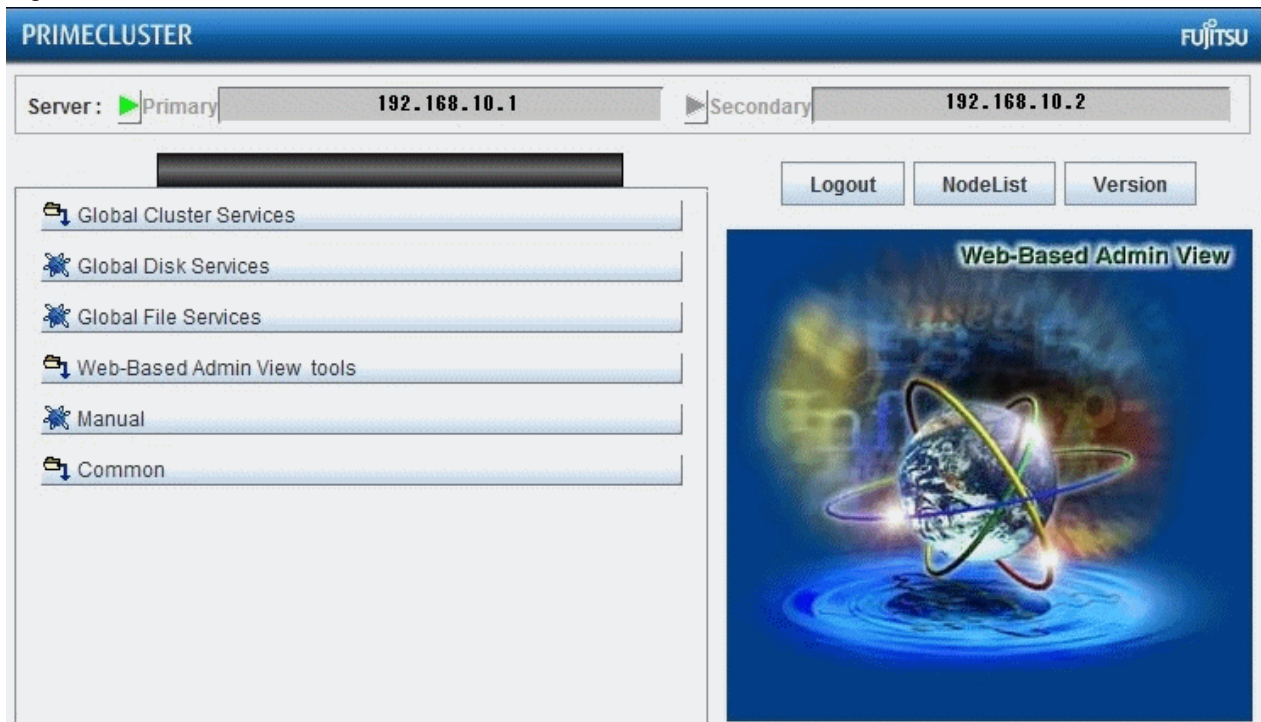
### 5.2.1 Logging view startup

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.

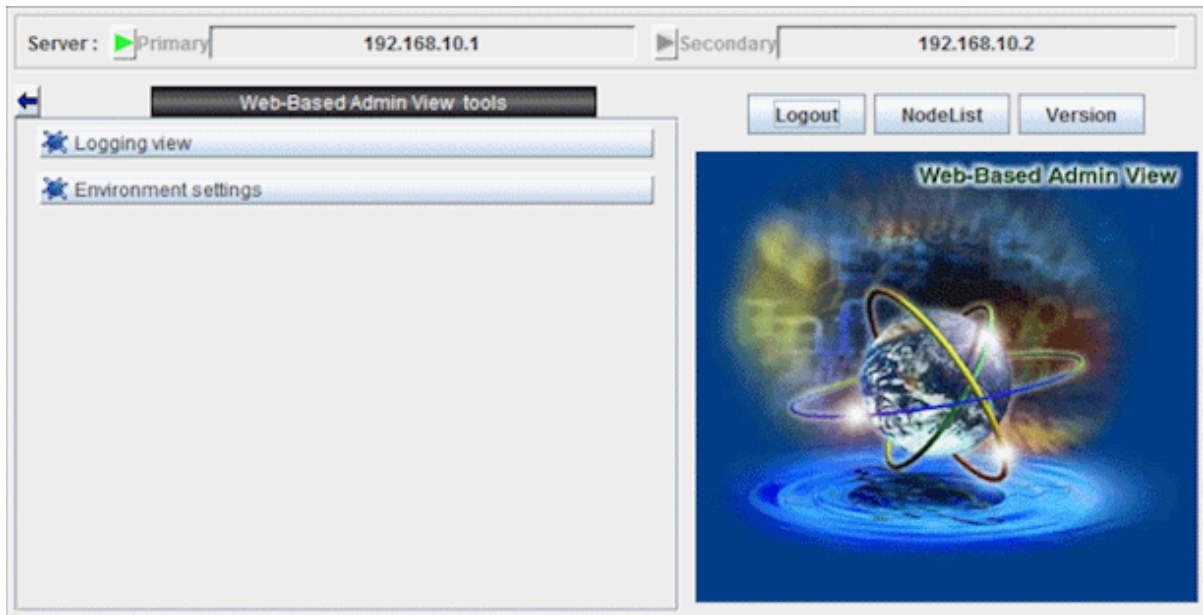
Figure 5.1 Web-Based Admin View screen





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

Figure 5.2 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

Figure 5.3 Logging view screen (Setup screen for login log display)

The screenshot shows a Java Applet Window titled "Logging view". It has a menu bar with "View" and "Help". Below the menu bar are two tabs: "Login log" (selected) and "Operation log". The main area contains a "View range" section with "Start time" and "End time" filters. Each filter has dropdowns for Year (2002), Month (7), Day (30), Hour (18), and Minute (54). Below this is a "Search" section with "User name:" and "Keyword:" text boxes. A "Show" button is to the right of the search boxes. At the bottom, there is a "Status:" label and a "Next" button. The main display area is a table with columns "Time", "User name", and "Message", which is currently empty.

Time	User name	Message
------	-----------	---------

### Start time

Input time when the log was started (Specify with "yyyy Y mm M dd D hh H mm M" format).

### End time

Input time when the log was completed (Specify with "yyyy Y mm M dd D hh H mm M" format).

### User name

Input one user name. If not specified, all users are the object.

### 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.

When there are more than 200 lines to be shown at one time, select <Next> to see the further logs.

## Referring to login log

Figure 5.4 Logging view screen (Login log display screen)

The screenshot shows a Java Applet window titled "Logging view". It has a menu bar with "View" and "Help". Below the menu bar are two tabs: "Login log" (selected) and "Operation log".

Under the "Login log" tab, there is a "View range" section with two rows of date and time pickers. Both "Start time" and "End time" are set to 2002 Y, 7 M, 30 D, 18 h, 54 m.

Below the "View range" section is a "Search" section with two input fields: "User name:" and "Keyword:". A "Show" button is located to the right of these fields.

The main area of the screen is a table with three columns: "Time", "User name", and "Message". The table contains 14 rows of log entries. The status bar at the bottom of the table area shows "Status: Done." and a "Next" button.

Time	User name	Message
2002.07.18 17:51:45	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.18 18:25:54	root	login :Success :Sid = 2 From 192.168.246.62
2002.07.18 18:41:28	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.18 19:52:03	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.18 20:10:34	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.18 20:26:26	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.18 22:52:00	root	logout.Aborted :Sid = 1, link down while 104 sec.
2002.07.19 10:51:12	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.19 11:09:17	root	login :Success :Sid = 1 From 192.168.246.62
2002.07.19 13:49:10	root	logout.Aborted :Sid = 1, link down while 108 sec.
2002.07.19 13:49:59	root	login :Success :Sid = 2 From 192.168.246.90
2002.07.19 13:56:32	root	logout.Aborted :Sid = 2, link down while 105 sec.
2002.07.19 14:19:02	root	login :Success :Sid = 1 From 192.168.246.62

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

Shows if you are logged in or logged out.

## Note

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

When there are more than 200 lines to be shown at one time, select <Next> to see the further logs.

## 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

Figure 5.5 Logging view screen (Setup screen of operation log)

The screenshot shows a Java Applet Window titled "Logging view". It features a menu bar with "View" and "Help". Below the menu bar are two tabs: "Login log" and "Operation log". The "Operation log" tab is selected. The main area is divided into three sections: "View range", "Search", and a table. The "View range" section has two rows: "Start time" and "End time". Each row has six spinners for year, month, day, hour, and minute. The "Search" section has two input fields: "User name" and "Keyword". A "Show" button is to the right of the "Keyword" field. Below the search fields is a table with three columns: "Time", "User name", and "Message". The table is currently empty. At the bottom of the window, there is a "Status:" label and a "Next" button. The window is titled "Java Applet Window".

Specify which operation log should be displayed.

#### Start time

Input time when the log was started (Specify with "yyyy Y mm M dd D hh H mm M" format).

#### End time

Input time when the log was completed (Specify with "yyyy Y mm M dd D hh H mm M" format).

#### User name

Input one user name. If not specified, all users are the object.

#### 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.

When there are more than 200 lines to be shown at one time, select <Next> to see the further logs.

### Referring to operation log

Figure 5.6 Logging view screen (Operation log display screen)

The screenshot shows a Java Applet Window titled "Logging view". It has a menu bar with "View" and "Help". Below the menu bar are two tabs: "Login log" and "Operation log", with "Operation log" selected. The main area is divided into three sections: "View range", "Search", and a log table. The "View range" section has two rows of spinners for "Start time" and "End time", both set to 2002, 7, 30, 18, 54. The "Search" section has two input fields for "User name" and "Keyword". A "Show" button is located to the right of the search fields. Below these is a table with three columns: "Time", "User name", and "Message". The table contains 13 rows of log entries. At the bottom of the window, there is a "Status" bar with the text "Press 'Next' button, show more records." and a "Next" button. The window title bar at the very bottom says "Java Applet Window".

Time	User name	Message
2002.07.18 17:51:54	root	[1]ConfigServerImpl.startConfig
2002.07.18 17:51:54	root	[2]ConfigServerImpl.checkMutex
2002.07.18 17:51:54	root	[2]OK
2002.07.18 17:51:54	root	[1]NG : CRM
2002.07.18 17:51:57	root	[3]ConfigServerImpl.apDestroy
2002.07.18 17:51:57	root	[3]OK
2002.07.18 17:52:16	root	[4]CADM SIS: Set clustername: siscommand /opt/SMAVW/SMAVwcf/bin/cft...
2002.07.18 17:52:16	root	[4]CADm, SIS: Command completed successfully.
2002.07.18 17:52:16	root	[5]CADM SIS: Retrieving service list: siscommand sysService
2002.07.18 17:52:18	root	[5]CADm, SIS: Command completed successfully.
2002.07.18 17:52:24	root	[6]ClusterResourceManagerServerImpl.CtIMvSMinut
2002.07.18 17:52:24	root	[6]NG
2002.07.18 17:52:55	root	[7]CADM.CE: Loading driver: cfcconfig-l

#### 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.



#### Note

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.

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# 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.

## 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 on the Web-Based Admin View screen: "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 Web-Based Admin View is not shut down for some reasons, use the command in "6.2 Restart" 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.

### Procedure

1. `# /etc/init.d/fjsvwvbs restart`
2. `# /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 on the Web-Based Admin View screen: "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 network address used by a Web-Based Admin View
  - Modification of the environment variable by executing a command
  - Modification of the secondary management server automatic migration
  - Modification of the connections to an active management server





# 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
- Modifying the operation of the secondary management server
- Modifying the network environment in the management server

## 7.1 Network address

The IP address used for Web-Based Admin View is set. It corresponds to the displayed node name after of executing "uname -n". 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:

1. Stop Web-Based Admin View on the management server or the monitoring node where the IP address is changed.  
Refer to "[6.1 Stop](#)".

2. Set up the IP address.

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 <IP address or Host name 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 or Host name for identifying own host>* to "100.100.100.100", execute the following:

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip 100.100.100.100
```

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
```

3. Change the management server settings.

If the node changed in Step 2 is the management server, change the management server settings. Refer to "[7.3 Management server](#)".

4. Restart Web-Based Admin View on the management server or the monitoring node where the IP address was changed.

Refer to "[6.2 Restart](#)".

5. Change the connection target information of the Java application.

If the node changed in Step 2 is the management server, refer to "[3.1.3.2 Setting up Java application](#)" and change the IP addresses (httpip) of the connection target management server retained in the shortcut and the desktop shortcut of the Java application.

## Note

- Changing <IP address for identifying own host> might not be required when <IP address for identifying own host> and <IP address used for client> are different. **httpip** means <IP address used for client>, and **mip** means <IP address for identifying own host>.
- When the value specified for the environment variable mip of Web-Based Admin View is a host name, specify a host name available for name resolution.
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

## 7.2 Network service port number

Web-Based Admin View uses the following system resources:

- Port number for the http protocol
- Port number for Java RMI

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 default port number to access the management server from the client Java application (Web-Based Admin View screen) 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
```

## Note

- Modifications should be made in a single user mode.
- For Solaris OS, port numbers are controlled by the service name "fjwv-h" in the "/etc/inet/services" file on all management servers and monitoring nodes.
- For Linux(R), port numbers are controlled by the service name "fjwv-h" in the "/etc/services" file.
- When using the products such as InfoProxy, InfoSearcher, InfoDispatcher, and Safeauthor, be sure to change the port numbers.
- Also change the URL port numbers that are set for the shortcut of the Java application and the desktop shortcut. For how to change them, refer to "[3.1.3.2 Setting up Java application.](#)"

### 7.2.2 RMI port number

As Web-Based Admin View uses four service port numbers, 9396, 9397, 9398, and 9399 are used in Solaris in order to use the RMI programming model of the Java platform.

In Linux, four service port numbers of 9796, 9797, 9798, and 9799.

If the port numbers are the same as the numbers used for another product, change the numbers.

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.

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetport { fjwv_c=<port number> | fjwv_n=<port number> | fjwv_s=<port number> | fjwv_g=<port number> }
```

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

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c fjwv_n fjwv_s fjwv_g
```

## Note

- Modifications should be made in a single user mode.
- For Solaris OS, port numbers are controlled by the service name "fjwv\_c", "fjwv\_n", "fjwv\_s" and "fjwv\_s" in the "/etc/inet/services" file on all the nodes.
- For Linux(R), port numbers are controlled by the service name "fjwv\_c", "fjwv\_n", "fjwv\_s" and "fjwv\_s" in the "/etc/services" file on all the 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.

## Information

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

## 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.

## Information

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:

1. Stop Web-Based Admin View on all the management servers and monitored nodes.

Refer to "[6.1 Stop](#)".

2. 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
```

If the primary management server is only used for a management server, set the IP address of the secondary management server for that of the primary one.

3. Change **mip** (IP address for identifying own host) on the management servers.

To change the network address for the management server, change **mip** to the IP address set up in procedure 2 on the primary and secondary management servers.

Refer to "[7.1 Network address](#)".

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

To change the network address for the management server, 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](#)".

5. Restart Web-Based Admin View on all the management servers and monitored nodes.

Refer to "[6.2 Restart](#)".

6. Change the connection target information of the Java application.

Refer to "[3.1.3.2 Setting up Java application](#)" and change the IP addresses (httpip) of the connection target management server retained in the shortcut and the desktop shortcut of the Java application.

## Setting from the environment setup screen

### Procedure:

1. Start up the Web-Based Admin View screen.

Access the primary management server from the Java application (Web-Based Admin View screen).

2. 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 [Name] of the [Primary server] property and [Secondary server] property.

If the primary management server is only used for a management server, set the IP address of the secondary management server for that of the primary one.

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

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

Change **mip** on the primary and secondary management servers. Refer to "[7.1 Network address](#)".

4. 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](#)".



### Note

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](#)".

5. Change the connection target information of the Java application.

Refer to "[3.1.3.2 Setting up Java application](#)" and change the IP addresses (httpip) of the connection target management server retained in the shortcut and the desktop shortcut of the Java application.

6. 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](#)".

## Note

- 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.
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

## 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.

This setup is only available when the management server IP address is IPv4 address.

1. 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.

2. 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](#)".

3. 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 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](#)".

## Note

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](#)".

### 7.4.1 Setup by command

---

Procedure:

1. Stop Web-Based Admin View on all the monitored nodes that might become the secondary management server.

Refer to "[6.1 Stop](#)".

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

Execute the following command on all the monitored nodes that might become the secondary management server:

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam server-election on
```

3. Restart Web-Based Admin View on all the monitored nodes that might become the secondary management server.

Refer to "[6.2 Restart](#)".

4. 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>
```

5. 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
```

6. To validate the setup, restart Web-Based Admin View on all the management servers and monitored nodes.

Refer to "[6.2 Restart](#)".



### Information

When a multicast address for IPv4 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 the primary management server via the Java application (Web-Based Admin View screen).

Procedure:

1. 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.

2. Set the secondary management server to the mode in which a dynamic decision is available.
  - a. Select the [System environment] tab.
  - b. Select [Yes] from [Secondary management server automatic migration] of the [Secondary server] property.
3. 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.
4. 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 undo settings, access the primary management server from the Java application (Web-Based Admin View screen) as follows:

Procedure:

1. 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.
2. 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

If you set up the secondary management server automatic migration, the secondary management server can be automatically selected. In such case, access from the client to the management server after setting "yes" for "redirect" parameter as described in "3.1.3.2 Setting up Java application." The primary management server or the secondary management server running at the time is automatically connected.



When getting access from a client by using this function, the actually connected management server is not always a monitoring node or management server designated in the [Target] parameter from properties of the shortcut. 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 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:

1. Set up the network address

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

The *<IP address or Host name for identifying own host>* value designates the network address (IP address or Host name) used for Web-Based Admin View on the primary or secondary management server.

## Note

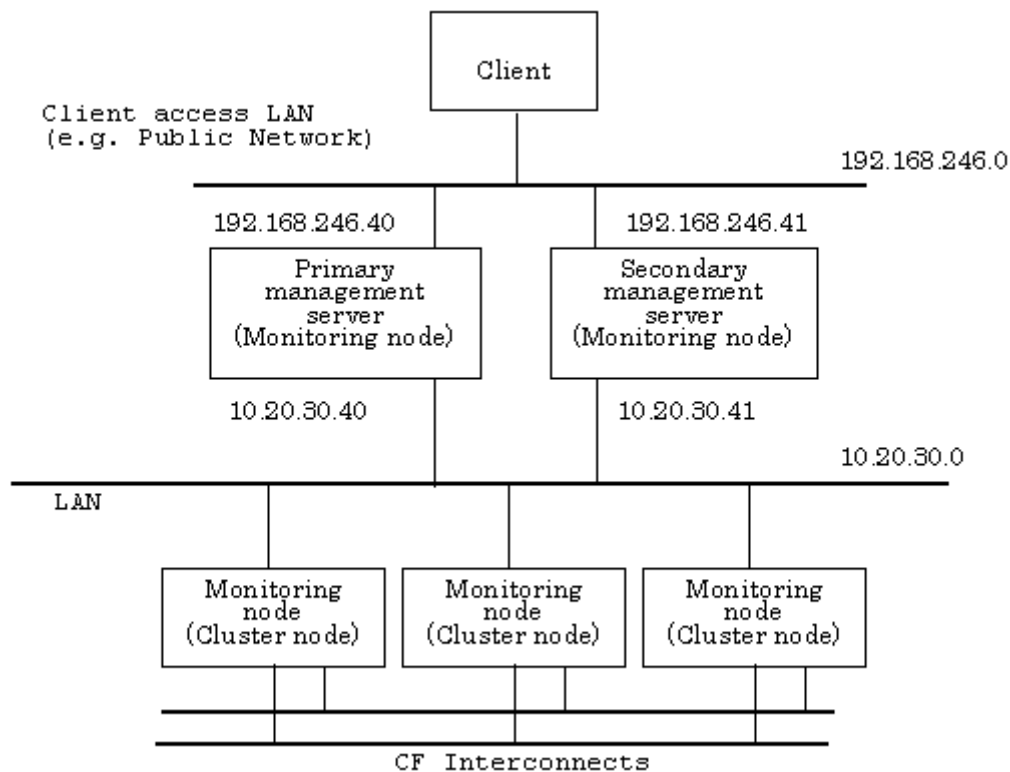
When modifying the **mip** value, it's necessary to set the primary and secondary management servers again on all monitoring nodes and all management servers. For the setup each of management server, refer to "[7.3 Management server](#)".

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip <IP address or Host name for identifying own host>
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip <IP address used for client>
```

Examples:

Set up the "mip" and "httpip" on the primary management server as follows in the configuration below:

```
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam mip 10.20.30.40
# /etc/opt/FJSVwvbs/etc/bin/wvSetparam httpip 192.168.246.40
```



2. After modifications, restart Web-Based Admin View. Refer to "[6.2 Restart](#)".

## Note

- 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>
```

3. Change the connection target information of the Java application.

Refer to "[3.1.3.2 Setting up Java application](#)" and change the IP addresses (httpip) of the connection target management server retained in the shortcut and the desktop shortcut of the Java application.



## Setup from environment setup screen

Access the primary management server via the Java application (Web-Based Admin View screen) 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:

1. Designate a management server.

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

2. 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**.

3. 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.

Note that selecting No does not enable the management server until it is rebooted.



### Note

- 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 referring to "[Setup by command](#)".
- Only IP (IPv4 or IPv6) addresses can be set to the primary management server, the secondary management server, and httpip. Note that IPv6 link local addresses cannot be set to these servers.

# Part 5 Notes on Web-Based Admin View

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This part describes the notes when using Web-Based Admin View.

<a href="#">Chapter 8 Notes on Web-Based Admin View.....</a>	75
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## Chapter 8 Notes on Web-Based Admin View

The host name cannot be specified as setting values of the primary management server, secondary management server, and httpip for Web-Based Admin View.

The setting value of the primary management server or secondary management server is as follows:

- The value of "primary-server" or "secondary-server" for environment variables of Web-Based Admin View set with the wvSetparam command.
- The value of "IP/host name" of the primary management server or secondary management server of the [System environment] tab in the Environment setup page.

The setting value of httpip is as follows:

- IP address used for connecting to the management server from the client

# Appendix A Message

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

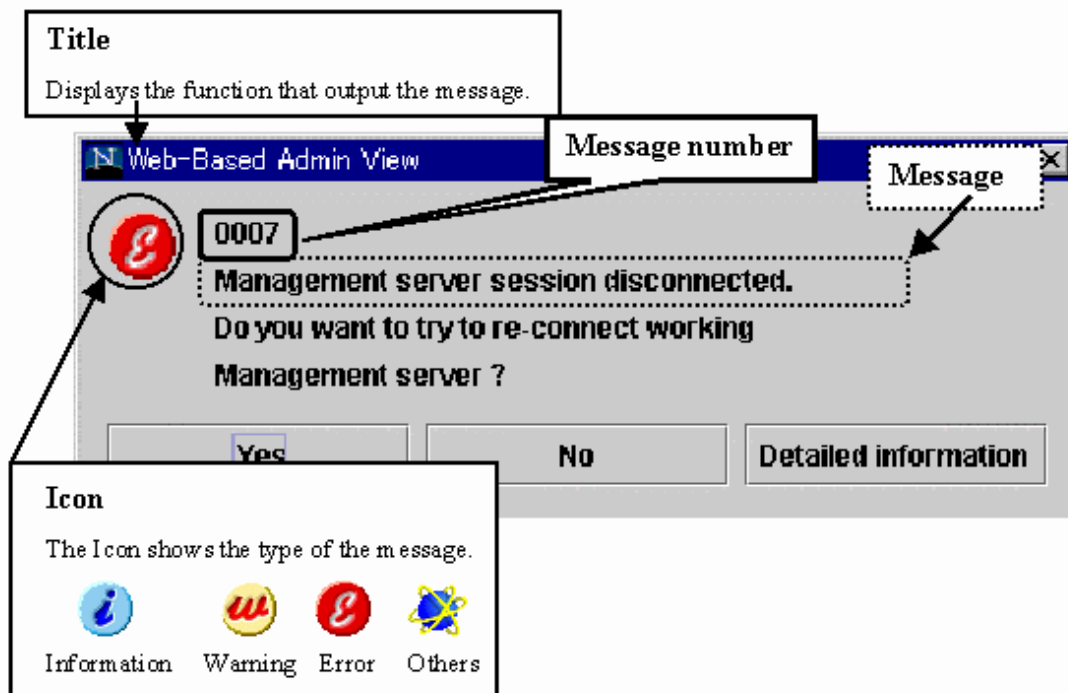
## A.1 Message reference

This section explains how to refer to a message.

### Message display style

Web-Based Admin View displays a following message dialog:

Figure A.1 Message dialog



### Information

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






### Refer to message

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

If you do not quite understand the meaning of a message or action, take a note of the message text or 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 href="#">A.2 Web-Based Admin View message</a>	0001-0044, 0071-0080	
<a href="#">A.3 Log reference message</a>	0045-0049	

Function (title)	Message number	Type (Icon)
	0045-0049	
A.4 Environment setup message	0051-0059	
	0051-0059	
	0051-0059	
A.5 Security message	0061-0069	



See

.....  
 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 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 Java application (Web-Based Admin View screen) might not be operating normally. Exit the Java application, 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 following:

- 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 following:

- 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 following:

- 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-Based Admin View screen might not be operating properly. Exit the screen, 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 14" in troubleshooting to take a **Corrective action**. Still, the problem is not improved, report the contents of the Java console or the Java execution log to local Customer Support.

#### Reference problem

"Symptom 14" in "Troubleshooting"

---

### 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 2", "Symptom 13" 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 15" in "Troubleshooting"

**0017 password incorrect.**

Corrective action

Enter a correct password.

**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.

**0043 Java Plug-in is not supported.**

**Download application installer from the URL as follow, and install it.  
(URL)**

Corrective action

Screen startup using the Java Plug-in is not supported.

Access the URL to download and install the application.



.....  
This error message is displayed only in an environment where the Java Plug-in is not supported.  
.....

**0044 Java Web Start is not supported.**

**Download application installer from the URL as follow, and install it.  
(URL)**

Corrective action

Screen startup using the Java Web Start is not supported.

Access the URL to download and install the application.



.....  
This error message is displayed only in an environment where the Java Web Start is not supported.  
.....

**0071 The number of parameters specified in [Target] of the shortcut is not correct.  
Specify two parameters that are the IP address and the port number of the management server.**

Corrective action

The number of parameters specified in [Target] of the shortcut is not correct.

Check the parameters in [Target] and set two parameters that are the IP address and the port number of the management server. For the details of settings, refer to "3.1.3.2 Setting up Java application."

---

**0072 The set IP address <current value> is not in IPv4 or IPv6 format.  
Correct the IP address in an IP address format.**

Corrective action

Correct the IP address set in the parameter of [Target] of the shortcut to an IP address format. For the details of settings, refer to "[3.1.3.2 Setting up Java application.](#)"

---

**0073 The port number of the set management server <current value> is not correct.  
Correct the port number to the port number of the management server.**

Corrective action

Correct the port number (integers from 1 to 65535) set in the parameter of [Target] of the shortcut to the http port number of the management server. For the details of settings, refer to "[3.1.3.2 Setting up Java application.](#)"

---

**0074 The configuration file (WVStartup.properties) does not exist.  
Create the configuration file or install the Java application (PRIMECLUSTER Web-Based Admin View Startup) again.**

Corrective action

Create the configuration file directly in an application folder (example: "C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\"), or after uninstalling the Java application (PRIMECLUSTER Web-Based Admin View Startup), install the Java application again.

When creating the configuration file, it must be empty file or set a settable parameter.

For how to uninstall the Java application, refer to "[3.6 Deleting Java application](#)" and for how to install the Java application, refer to "[3.1.3.1 Installing Java application.](#)"

For the settable parameters, refer to "0075" of "Web-Based Admin View message."

---

**0075 The setting value in <setting parameter name> in the configuration file (WVStartup.properties) is not correct. Correct the setting value in <setting parameter name> to <settable value>.**

Corrective action

Correct the setting value in the setting parameter according to the message.

For how to set up the setting parameters, refer to the following sections:

- redirect  
    "[3.1.3.2 Setting up Java application](#)"
- language  
    "[3.5.1 Tentative modification of screen display settings \(Language, Look & Feel\)](#)"
- initialwait  
    "[Symptom 4](#)" in "Troubleshooting"

---

**0076 Cannot connect to the IP address <IP address> and the port number <port number> of the management server. Check the network status between a client and the management server, or check if the Web-Based Admin View is started on the management server.**

Corrective action

Refer to "[Symptom 1](#)" in "Troubleshooting."

---

## 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 *item*.**

Corrective action

Enter the correct value.

---

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

Corrective action

Click [Yes] to continue. If you do not wish to continue, click [No].

---

## A.4.3 Error message

---

**0056 There is a 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 or the Java execution log to local Customer Support.

---

## A.5 Security message

---

---

### A.5.1 Error message

---

**0061 Access to illegal class was requested. (class name: *classname*)  
The application will terminate.  
Check whether the illegal access is done on client, server or network.  
Re-connect to Web-Based Admin View after removing the threat.**

Corrective action

Access to the illegal class was detected. Terminate the application to avoid the risk of loading the illegal class, also the risk of continuing the process in the attacked environment.

***classname*** shows the name of the access requested illegal class. Check whether the illegal access is done on client, server or network. Re-connect to Web-Based Admin View after removing the threat.

## 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.

### 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 No	Content of Symptom
Symptom 1	The Web-Based Admin View screen cannot be started. Even though it was started, the screen is not displayed properly, or dialog messages from 0001-0005 and 0076 appear.
Symptom 2	The screen is not switched when clicking the confirmation button for 0003 or 0007 dialog message. The screen is hung up when attempting to reconnect to the management server that was previously connected.
Symptom 3	A message such as "FJSVwvbs: OutOfMemoryError" may be output to the Java console screen of the management server, monitoring node or the Java execution log.
Symptom 4	When accessing the management server by starting the Java application (Web-Based Admin View screen), the dialog message 0005 is displayed, and the Web-Based Admin View screen and the dialog messages are not displayed.
Symptom 5	When the IP address of the LAN was changed, the operation of Web-Based Admin View was disabled.
Symptom 6	With the operation management view, the monitoring node cannot be displayed in the node list for each product.
Symptom 7	The screen is not switched when clicking the confirmation button of dialog message.
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 dialog message 0001 appears.
Symptom 9	The Japanese character turns into garbage or is not displayed on a screen.
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, and Web-Based Admin View is not started.
Symptom 11	The message "WARNING: unrelated 'httpip' property." is output when the Web-Based Admin View is started or restarted.
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.
Symptom 13	The 0003 or 0007 dialog message may not appear when the management server is disconnected.
Symptom 14	The 0006 dialog message is displayed, and the Web-Based Admin View screen is not displayed when accessing the management server by starting the Java application (Web-Based Admin View screen).
Symptom 15	The server is unable to login with the user ID and password, and the 0016 dialog message is output.
Symptom 16	"PRIMECLUSTER Global File Services Configuration and Administration Guide" is not displayed in the manual menu.
Symptom 17	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.

Symptom No	Content of Symptom
Symptom 18	Web-Based Admin View or each operation management view (such as GDS operation management view and GFS operation management view) on Web-Based Admin View becomes unusable in process of the operation, or the connection to the management server is cut in process of the operation.
Symptom 19	During the displaying of each operation management view (such as GDS operation management view and GFS operation management view), if the hardware of the client machine is reset or the network of the client machine is cut, you will become to not able to login Web-Based Admin View after it is recovered.
Symptom 20	Monitored nodes might not be displayed on a list of nodes for each product after the network disconnection between the management servers and monitored nodes is recovered.
Symptom 21	The message "NoClassDefFoundErr" is displayed and the Web-Based Admin View screen is unable to launch.

GFS: Global File Services

GDS: Global Disk Services

**Symptom 1: The Web-Based Admin View screen cannot be started. Even though it was started, the screen is not displayed properly, or dialog messages from 0001-0005 and 0076 appear.**

No	Corrective action
1	Check the following: If the connection information set for the shortcut is correct. If the IP address is correctly specified.
2	Refer to "7.2.1 http port number" and confirm the http port number that is currently set up.
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] wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b <IP address or Host name> -p <Port number> <java_home>/bin/java -Dwebview.htdocs=/etc/opt/FJSVwvcnf/htdocs/FJSVwvbs -Xmx128m -Djava.security.policy=/opt/FJSVwvbs/etc/.policyAp com.fujitsu.webview.base.server.ServerMain /opt/FJSVwvbs <java_home>:Environment variable of Web-based Admin View. [When the monitoring node does not act as the management server] wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b <IP address or Host name> -p <Port number> If even one process is not running, take actions as described in the following action 9 to 11.
4	The OS might be hung up depending on the client OS version. In such a case, restart the OS and retry accessing the management server.
5	Refer to the installation guide for the product and make sure all the required packages are correctly installed.
6	Change NTP settings so that time will be synchronized slowly by the slew mode.
7	Make sure that accessing is established not via a proxy server.

No	Corrective action
	Also make sure that both the host name and the corresponding IP address of the accessing management server are set not via a proxy.
8	<p>Check <b>mip</b>, <b>httpip</b>, and the IP address or the host name for the management server in all the nodes.</p> <ul style="list-style-type: none"> <li>- IP address or host name for identifying own host  <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip local:mip &lt;IP address or Host name&gt;</pre> </li> <li>- IP address or host name used for the client  <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip local:httpip &lt;IP address or Host name&gt;</pre> </li> <li>- IP address or host name of the primary management server  <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server sys:primary-server &lt;IP address or Host name&gt;</pre> </li> <li>- IP address or host name of the secondary management server  <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server sys:secondary-server &lt;IP address or Host name&gt;</pre> </li> </ul> <p>If these parameters are not set up correctly, set correct addresses. Refer to "<a href="#">7.1 Network address</a>", or "<a href="#">7.3 Management server</a>", and "<a href="#">7.5 Multi-network between server and client by classified use</a>".</p>
9	Check if the specified port number has not already been used. Refer to " <a href="#">7.2 Network service port number</a> ".
10	<p>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.</p> <p>The following is an example of the webview.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]</p> <pre>usr:out-time:0 usr:c-tlog-debug:off usr:look-and-feel:Metal usr:_serialID:&lt;IP address&gt;@XXXX.XX.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</pre>




No	Corrective action
	<pre> sys:s-elog-vol:100 sys:rmi-cmdread-timer:900 sys:n-pending-events:100 sys:retry-time:30 sys:cluster-lib-path: sys:cluster-path: sys:s-llog-num:2 sys:n-tlog-num:5 sys:s-tlog-num:5 sys:group-addr:&lt;IP address&gt; sys:s-olog-num:5 sys:s-elog-num:2 sys:rmi-cmdwait-timer:900 sys:server-ha:off sys:secondary-server:&lt;IP address&gt; sys:primary-server:&lt;IP address&gt; sys:s-java-option:-Xmx128m </pre> <p>The following is an example of the wvlocal.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]</p> <pre> local:classpath: local:cluster-path: local:cluster-lib-path: local:mip:&lt;IP address or Host name&gt; local:httpip:&lt;IP address &gt; local:server-election:on local:java_home:/opt/FJSVwvbs/jre local:s-log-path:/var/opt/FJSVwvbs/logs/server local:n-log-path:/var/opt/FJSVwvbs/logs/node </pre> <p>If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).</p> <p>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.</p> <p>Set up the Network address that is used for Web-Based Admin View on the node. Refer to <a href="#">"7.1 Network address"</a>.</p> <ol style="list-style-type: none"> <li>1. Set up the IP addresses of the primary management server and the secondary server. Refer to <a href="#">"7.3 Management server"</a>.</li> <li>2. Set up the IP address of the open network for clients when the node acts as a management server. Refer to <a href="#">"7.5 Multi-network between server and client by classified use"</a>.</li> <li>3. Set up the group address. Refer to the method used for command-based setup in <a href="#">"7.4 Secondary management server automatic migration"</a>.</li> <li>4. Restart Web-Based Admin View. Refer to <a href="#">"6.2 Restart"</a>.</li> </ol>
11	The communication between the client and the management server may be blocked by firewall.

No	Corrective action
	When using firewalld, iptables, ip6tables, or nftables as a firewall on the management server, allow the communication on port numbers used by Web-Based Admin View.  For details on the port numbers used by Web-Based Admin View, see " <a href="#">7.2 Network service port number</a> ."
12	If PRIMECLUSTER is configured in a cloud environment, review the security group settings of each cloud.  Refer to "PRIMECLUSTER Installation and Administration Guide Cloud Services" for the security group settings of each cloud.

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

No	Corrective action
1	Refer to " <a href="#">3.1.3.2 Setting up Java application</a> " and set the automatic connection to the management server to "no", and then restart the Web-Based Admin View screen to retry accessing the server.

**Symptom 3: A message such as "FJSVwvbs: OutOfMemoryError" may be output to the Java console screen of the management server, monitoring node or the Java execution log.**

No	Corrective action
1	Restart Web-Based Admin View on the management server or monitoring node on which the message appeared. Also restart the Web-Based Admin View screen on a client and then reaccess.   <b>See</b> ..... For restarting Web-Based Admin View, refer to " <a href="#">6.2 Restart</a> ". .....
2	1. Stop Web-Based Admin View.   <b>See</b> ..... Refer to " <a href="#">6.1 Stop</a> ". ..... 2. Change a heap size.  <code># /etc/opt/FJSVwvbs/etc/bin/wvSetparam s-java-option -Xmx&lt;heap-size&gt;m</code>  <heap-size>: Heap size. The initial value is 128Mbyte. For example, When changing a heap size to 256Mbyte. <code># /etc/opt/FJSVwvbs/etc/bin/wvSetparam s-java-option -Xmx256m</code>  3. Restart Web-Based Admin View.   <b>See</b> ..... Refer to " <a href="#">6.2 Restart</a> ". .....

**Symptom 4: When accessing the management server by starting the Java application (Web-Based Admin View screen), the dialog message 0005 is displayed, and the Web-Based Admin View screen and the dialog messages are not displayed.**

No	Corrective action
1	<p>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/hosts" file or DNS. If not, you need to register either in the "/etc/hosts" file or in DNS for host name to be mapped to the IP address.</p>
2	<p>Check whether Web-Based Admin View is started on the management server.</p> <p>Execute the ps(1) command to check whether the following process is started correctly.</p> <p>[When the monitoring node acts as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt;  &lt;java_home&gt;/bin/java -Dwebview.htdocs=/etc/opt/FJSVwvcnf/htdocs/FJSVwvbs -Xmx128m - Djava.security.policy=/opt/FJSVwvbs/etc/.policyAp com.fujitsu.webview.base.server.ServerMain /opt/FJSVwvbs  &lt;java_home&gt;:Environment variable of Web-based Admin View.</pre> <p>[When the monitoring node does not act as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt;</pre> <p>If even one process is not running, take actions as described in the following action 6 and 7.</p>
3	<p>Check <b>mip</b>, <b>httpip</b>, and the IP address or the host name for the management server in all the nodes.</p> <ul style="list-style-type: none"> <li>- IP address or host name for identifying own host <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip local:mip &lt;IP address or Host name&gt;</pre> </li> <li>- IP address used for the client <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip local:httpip &lt;IP address&gt;</pre> </li> <li>- IP address of the primary management server <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server sys:primary-server &lt;IP address&gt;</pre> </li> <li>- IP address of the secondary management server <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server sys:secondary-server &lt;IP address&gt;</pre> </li> </ul> <p>If these parameters are not set up correctly, set correct addresses. Refer to "<a href="#">7.1 Network address</a>", or "<a href="#">7.3 Management server</a>", and "<a href="#">7.5 Multi-network between server and client by classified use</a>".</p>
4	<ol style="list-style-type: none"> <li>1. Edit and access the following file on the management server: <pre>File: /etc/opt/FJSVwvbs/etc/WebView.html Record: &lt; PARAM NAME=Port VALUE="????" &gt;</pre> </li> <li>2. Execute the following command: <pre># /etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c</pre> <p>If the VALUE in 2 is ????, the same as that in 1, go to <b>Corrective action 6</b>.  If the VALUE in 2 is not the same as that in 1, change the RMI port number of fjwv_c, according to "<a href="#">7.2.2 RMI port number</a>".</p> <pre># /etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv_c=&lt;RMI port number&gt;</pre> <p>The initial value is 9799.</p> </li> </ol> <p>After changing the port number, be sure to restart Web-Based Admin View. Refer to "<a href="#">6.2 Restart</a>".</p>



No	Corrective action
5	<p>Edit the configuration file described in "<a href="#">3.1.3.2 Setting up Java application</a>" (WVStartup.properties) to set the current value (default value is 60) or more for the parameter "initialwait".</p> <p>By setting this parameter, the maximum waiting time to connect from a client to the server can be changed.</p> <p>File location:</p> <p style="padding-left: 20px;">The installation folder in the home folder of a Windows login user</p> <p>(Example: C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup)</p> <p>File name:</p> <p style="padding-left: 20px;">WVStartup.properties</p> <p>Parameter:</p> <p style="padding-left: 20px;">initialwait</p> <p>Function:</p> <p style="padding-left: 20px;">Maximum waiting time (second)</p> <p>Settable values:</p> <p style="padding-left: 20px;">Values (default value: 60)</p> <p>Setting example (in the WVStartup.properties):</p> <p style="padding-left: 20px;">initialwait = 120</p>
6	<p>Check if the specified port number has not already been used. Refer to "<a href="#">7.2 Network service port number</a>".</p>
7	<p>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.</p> <p>The following is an example of the webview.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]</p> <pre>usr:out-time:0 usr:c-tlog-debug:off usr:look-and-feel:Metal sys:_serialID:&lt;IP address&gt;@XXXX.XX.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</pre>

No	Corrective action
	<pre> 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: sys:cluster-path: sys:s-llog-num:2 sys:n-tlog-num:5 sys:s-tlog-num:5 sys:group-addr:&lt;IP address&gt; sys:s-olog-num:5 sys:s-elog-num:2 sys:rmi-cmdwait-timer:900 sys:server-ha:off sys:secondary-server:&lt;IP address&gt; sys:primary-server:&lt;IP address&gt; sys:s-java-option:-Xmx128m </pre> <p>The following is an example of the wvlocal.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]</p> <pre> local:classpath: local:cluster-path: local:cluster-lib-path: local:mip:&lt;IP address or Host name&gt; local:httpip:&lt;IP address&gt; local:server-election:on local:java_home:/opt/FJSVwvbs/jre local:s-log-path:/var/opt/FJSVwvbs/logs/server local:n-log-path:/var/opt/FJSVwvbs/logs/node </pre> <p>If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).</p> <p>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.</p> <ol style="list-style-type: none"> <li>1. Set up the Network address that is used for Web-Based Admin View on the node. Refer to "<a href="#">7.1 Network address</a>".</li> <li>2. Set up the IP addresses of the primary management server and the secondary server. Refer to "<a href="#">7.3 Management server</a>".</li> <li>3. Set up the IP address of the open network for clients when the node acts as a management server. Refer to "<a href="#">7.5 Multi-network between server and client by classified use</a>".</li> <li>4. Set up the group address. Refer to the method used for command-based setup in "<a href="#">7.4 Secondary management server automatic migration</a>".</li> </ol>

No	Corrective action
	5. 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.**

No	Corrective action
1	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.**

No	Corrective action
1	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.**

No	Corrective action
1	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 dialog message 0001 appears.**

No	Corrective action
1	Set up longer time than the existing [Connection monitoring time between client and server] in the system environment.
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/hosts" file or DNS. If not, you need to register either in the "/etc/hosts" file or in DNS for host name to be mapped to the IP address.
3	<p>Check whether Web-Based Admin View is started on the management server.</p> <p>Execute the ps(1) command to check whether the following process is started correctly.</p> <p>[When the monitoring node acts as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt; &lt;java_home&gt;/bin/java -Dwebview.htdocs=/etc/opt/FJSVwvcnf/htdocs/FJSVwvbs -Xmx128m -Djava.security.policy=/opt/FJSVwvbs/etc/.policyAp com.fujitsu.webview.base.server.ServerMain /opt/FJSVwvbs &lt;java_home&gt;:Environment variable of Web-based Admin View.</pre> <p>[When the monitoring node does not act as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt;</pre> <p>If even one process is not running, take actions as described in the following action 6 and 7.</p>
4	Check <b>mip</b> , <b>httpip</b> , and the IP address or the host name for the management server in all the nodes.

No	Corrective action
	<ul style="list-style-type: none"> <li>- IP address or host name for identifying own host # /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip local:mip &lt;IP address or Host name&gt;</li> <li>- IP address used for the client # /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip local:httpip &lt;IP address&gt;</li> <li>- IP address of the primary management server # /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server sys:primary-server &lt;IP address&gt;</li> <li>- IP address of the secondary management server # /etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server sys:secondary-server &lt;IP address&gt;</li> </ul> <p>If these parameters are not set up correctly, set correct addresses. Refer to "<a href="#">7.1 Network address</a>", or "<a href="#">7.3 Management server</a>", and "<a href="#">7.5 Multi-network between server and client by classified use</a>".</p>
5	<p>Edit the configuration file described in "<a href="#">3.1.3.2 Setting up Java application</a>" (WVStartup.properties) to set a value 60 or more for the parameter "initialwait".</p> <p>By setting this parameter, the maximum waiting time to connect from a client to the server can be changed.</p> <p>File location:</p> <p style="padding-left: 20px;">The installation folder in the home folder of a Windows login user</p> <p>(Example: C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup)</p> <p>File name:</p> <p style="padding-left: 20px;">WVStartup.properties</p> <p>Parameter:</p> <p style="padding-left: 20px;">initialwait</p> <p>Function:</p> <p style="padding-left: 20px;">Maximum waiting time (second)</p> <p>Settable values:</p> <p style="padding-left: 20px;">Values (default value: 60)</p> <p>Setting example (in the WVStartup.properties):</p> <p style="padding-left: 20px;">initialwait = 120</p>
6	<p>Check if the specified port number has not already been used. Refer to "<a href="#">7.2 Network service port number</a>".</p>
7	<p>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.</p> <p>The following is an example of the webview.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]</p> <pre style="padding-left: 20px;">usr:out-time:0 usr:c-tlog-debug:off</pre>

No	Corrective action
	<pre> usr:look-and-feel:Metal sys:_serialID:&lt;IP address&gt;@XXXX.XX.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: sys:cluster-path: sys:s-llog-num:2 sys:n-tlog-num:5 sys:s-tlog-num:5 sys:group-addr:&lt;IP address&gt; sys:s-olog-num:5 sys:s-elog-num:2 sys:rmi-cmdwait-timer:900 sys:server-ha:off sys:secondary-server:&lt;IP address&gt; sys:primary-server:&lt;IP address&gt; sys:s-java-option:-Xmx128m </pre> <p>The following is an example of the wvlocal.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]</p> <pre> local:classpath: local:cluster-path: local:cluster-lib-path: local:mip:&lt;IP address or Host name&gt; local:httpip:&lt;IP address&gt; local:server-election:on local:java_home:/opt/FJSVwvbs/jre </pre>

No	Corrective action
	<p>local:s-log-path:/var/opt/FJSVwvbs/logs/server local:n-log-path:/var/opt/FJSVwvbs/logs/node</p> <p>If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).</p> <p>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.</p> <ol style="list-style-type: none"> <li>1. Set up the Network address that is used for Web-Based Admin View on the node. Refer to "<a href="#">7.1 Network address</a>".</li> <li>2. Set up the IP addresses of the primary management server and the secondary server. Refer to "<a href="#">7.3 Management server</a>".</li> <li>3. Set up the IP address of the open network for clients when the node acts as a management server. Refer to "<a href="#">7.5 Multi-network between server and client by classified use</a>".</li> <li>4. Set up the group address. Refer to the method used for command-based setup in "<a href="#">7.4 Secondary management server automatic migration</a>".</li> <li>5. Restart Web-Based Admin View. Refer to "<a href="#">6.2 Restart</a>".</li> </ol>

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**Symptom 9: The japanese character turns into garbage or is not displayed on a screen.**

No	Corrective action
1	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 " <a href="#">4.3.1 Display setup</a> ".

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**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, and Web-Based Admin View is not started.**

No	Corrective action
1	<p>Check mip, httpip, and the IP address or the host name for the management server in all nodes.</p> <ul style="list-style-type: none"> <li>- IP address or host name for identifying own host # /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip local:mip &lt;IP address or Host name&gt;</li> <li>- IP address used for the client # /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip local:httpip &lt;IP address &gt;</li> <li>- IP address of the primary management server # /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server sys:primary-server &lt;IP address&gt;</li> <li>- IP address of the secondary management server # /etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-serve sys:secondary-server &lt;IP address&gt;</li> </ul> <p>If these parameters are not set up correctly, set correct addresses. Refer to "<a href="#">7.1 Network address</a>," or "<a href="#">7.3 Management server</a>" and "<a href="#">7.5 Multi-network between server and client by classified use</a>."</p>
2	Check if the specified port number has not already been used. Refer to " <a href="#">7.2 Network service port number</a> ."

No	Corrective action
3	<p>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.</p> <p>The following is an example of the webview.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]</p> <pre> usr:out-time:0 usr:c-tlog-debug:off usr:look-and-feel:Metal sys:_serialID:&lt;IP address&gt;@XXXX.XX.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:htpdif: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: sys:cluster-path: sys:s-llog-num:2 sys:n-tlog-num:5 sys:s-tlog-num:5 sys:group-addr:&lt;IP address&gt; sys:s-olog-num:5 sys:s-elog-num:2 sys:rmi-cmdwait-timer:900 sys:server-ha:off sys:secondary-server:&lt;IP address&gt; sys:primary-server:&lt;IP address&gt; sys:s-java-option:-Xmx128m </pre>

No	Corrective action
	<p>The following is an example of the wvlocal.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]</p> <pre> local:classpath: local:cluster-path: local:cluster-lib-path: local:mip:&lt;IP address or Host name&gt; local:httpip:&lt;IP address&gt; local:server-election:on local:java_home:/opt/FJSVwvbs/jre local:s-log-path:/var/opt/FJSVwvbs/logs/server local:n-log-path:/var/opt/FJSVwvbs/logs/node </pre> <p>If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).</p> <p>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.</p> <ol style="list-style-type: none"> <li>1. Set up the Network address that is used for Web-Based Admin View on the node. Refer to "<a href="#">7.1 Network address.</a>"</li> <li>2. Set up the IP addresses of the primary management server and the secondary server. Refer to "<a href="#">7.3 Management server.</a>"</li> <li>3. Set up the IP address of the open network for clients when the node acts as a management server. Refer to "<a href="#">7.5 Multi-network between server and client by classified use.</a>"</li> <li>4. Set up the group address. Refer to the method used for command-based setup in "<a href="#">7.4 Secondary management server automatic migration.</a>"</li> <li>5. Restart Web-Based Admin View. Refer to "<a href="#">6.2 Restart.</a>"</li> </ol>

---

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

No	Corrective action
1	Confirm if the IP address of the open network is correctly set up in the management server. Refer to " <a href="#">7.5 Multi-network between server and client by classified use</a> ".

---

**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.**

No	Corrective action
1	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 " <a href="#">6.2 Restart</a> ". Restart the Web-Based Admin View, and then retry accessing from the client.

---

**Symptom 13: The 0003 or 0007 dialog message may not appear when the management server is disconnected.**

No	Corrective action
1	Restart the Web-Based Admin View screen and retry accessing the management server.



**Symptom 14: The 0006 dialog message is displayed, and the Web-Based Admin View screen is not displayed when accessing the management server by starting the Java application (Web-Based Admin View screen).**

No	Corrective action
1	<p>Check whether Web-Based Admin View is started on the management server.</p> <p>Execute the ps(1) command to check whether the following process is started correctly.</p> <p>[When the monitoring node acts as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt; &lt;java_home&gt;/bin/java -Dwebview.htdocs=/etc/opt/FJSVwvcnf/htdocs/FJSVwvbs -Xmx128m -Djava.security.policy=/opt/FJSVwvbs/etc/.policyAp com.fujitsu.webview.base.server.ServerMain /opt/FJSVwvbs &lt;java_home&gt;:Environment variable of Web-based Admin View.</pre> <p>[When the monitoring node does not act as the management server]</p> <pre>wvAgent /opt/FJSVwvbs wvAgent /opt/FJSVwvbs /opt/FJSVwvcnf/bin/wvcnfd -b &lt;IP address or Host name&gt; -p &lt;Port number&gt;</pre> <p>If even one process is not running, take actions as described in the following action 3 to 5.</p>
2	<p>Check <b>mip</b>, <b>httpip</b>, and the IP address or the host name for the management server in all the nodes.</p> <ul style="list-style-type: none"> <li>- IP address or host name for identifying own host <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam mip local:mip &lt;IP address or Host name&gt;</pre> </li> <li>- IP address used for the client <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam httpip local:httpip &lt;IP address&gt;</pre> </li> <li>- IP address of the primary management server <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam primary-server sys:primary-server &lt;IP address&gt;</pre> </li> <li>- IP address of the secondary management server <pre># /etc/opt/FJSVwvbs/etc/bin/wvGetparam secondary-server sys:secondary-server &lt;IP address&gt;</pre> </li> </ul> <p>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".</p>
3	<p>Check if the specified port number has not already been used. Refer to "7.2 Network service port number".</p>
4	<p>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.</p> <p>The following is an example of the webview.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/webview.cnf]</p> <pre>usr:out-time:0 usr:c-tlog-debug:off usr:look-and-feel:Metal sys:_serialID:&lt;IP address&gt;@XXXX.XX.XX XX:XX.XX.XXX</pre>

No	Corrective action
	<pre> 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: sys:cluster-path: sys:s-llog-num:2 sys:n-tlog-num:5 sys:s-tlog-num:5 sys:group-addr:&lt;IP address&gt; sys:s-olog-num:5 sys:s-elog-num:2 sys:rmi-cmdwait-timer:900 sys:server-ha:off sys:secondary-server:&lt;IP address&gt; sys:primary-server:&lt;IP address&gt; sys:s-java-option:-Xmx128m </pre> <p>The following is an example of the wvlocal.cnf file:</p> <p>[Example of /etc/opt/FJSVwvbs/etc/wvlocal.cnf]</p> <pre> local:classpath: local:cluster-path: local:cluster-lib-path: local:mip:&lt;IP address or Host name&gt; local:httpip:&lt;IP address &gt; local:server-election:on local:java_home:/opt/FJSVwvbs/jre local:s-log-path:/var/opt/FJSVwvbs/logs/server local:n-log-path:/var/opt/FJSVwvbs/logs/node </pre>

No	Corrective action
	<p>If the webview.cnf or wvlocal.cnf file is not in this format, recreate the above file by using an editor (eg. vi).</p> <p>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.</p> <ol style="list-style-type: none"> <li>1. Set up the Network address that is used for Web-Based Admin View on the node. Refer to "<a href="#">7.1 Network address</a>".</li> <li>2. Set up the IP addresses of the primary management server and the secondary server. Refer to "<a href="#">7.3 Management server</a>".</li> <li>3. Set up the IP address of the open network for clients when the node acts as a management server. Refer to "<a href="#">7.5 Multi-network between server and client by classified use</a>".</li> <li>4. Set up the group address. Refer to the method used for command-based setup in "<a href="#">7.4 Secondary management server automatic migration</a>".</li> <li>5. Restart Web-Based Admin View. Refer to "<a href="#">6.2 Restart</a>".</li> </ol>
5	<p>Through Firewall and NAT, a client may accesses each node on which PRIMECLUSTER is installed.</p> <p>From a client, do not access each node on which PRIMECLUSTER is installed through Firewall and NAT.</p>

**Symptom 15: The server is unable to login with the user ID and password, and the 0016 dialog message is output.**

No	Corrective action
1	Check if the user ID and password provided are correctly registered.
2	If no password is assigned for the user ID, set the password.
3	If the problem is not improved, reconnect from a client after restarting the management server of Web-Based Admin View. Refer to " <a href="#">6.2 Restart</a> ".

**Symptom 16: "PRIMECLUSTER Global File Services Configuration and Administration Guide" is not displayed in the manual menu.**

No	Corrective action
1	<p>The English and Japanese versions of "PRIMECLUSTER Global File Services Configuration and Administration Guide" cannot be displayed at the same time.</p> <p>Reinstall the manual package of GFS. Refer to "<a href="#">3.3.3 Common menu functions</a>".</p>

GFS: Global File Services

**Symptom 17: 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.**

No	Corrective action
1	<p>Take the following steps to check if the setup for primary and secondary management server is properly done. For your reference, you can see "<a href="#">4.3.3 Primary management server</a>", "<a href="#">4.3.4 Secondary management server</a>".</p> <ol style="list-style-type: none"> <li>1. Check the provided [Secondary] information in the upper right of the Web-Based Admin View screen.</li> <li>2. Take proper actions according to the information. <ul style="list-style-type: none"> <li>- In case of non-display</li> </ul> <p>Check if there's any failure or damage in the secondary management server.</p> </li> </ol>

No	Corrective action
	<ul style="list-style-type: none"> <li>- If any, locate the cause of the node failure and take corrective actions.</li> <li>- If not, set up the primary and secondary management server. Refer to "<a href="#">7.3 Management server</a>".</li> <li>- In case of displaying "Down"</li> </ul> <p>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.</p>

**Symptom 18: Web-Based Admin View or each operation management view (such as GDS operation management view and GFS operation management view) on Web-Based Admin View becomes unusable in process of the operation, or the connection to the management server is cut in process of the operation.**

No	Corrective action
1	<p>Check whether the port number which uses in Web-Based Admin View overlaps with one in other products.</p> <p>Check the port numbers which use in Web-Based Admin View.</p> <p><b>[Example of checking the port number setting]</b></p> <pre># /etc/opt/FJSVwvbs/etc/bin/wvSetport fjwv-h=8081 fjwv-s=9798 fjwv-n=9797 fjwv-c=9799 fjwv-g=9796</pre> <p>If the above port numbers are repeatedly used by other products, refer to "<a href="#">7.2 Network service port number</a>" to change them.</p>

**Symptom 19: During the displaying of each operation management view (such as GDS operation management view or GFS operation management view), if the hardware of the client machine is reset or the network of the client machine is cut, you will become to not able to login Web-Based Admin View after it is recovered.**

No	Corrective action
1	Restart Web-Based Admin View. Refer to " <a href="#">6.2 Restart</a> ."

**Symptom 20: Monitored nodes might not be displayed on a list of nodes for each product after the network disconnection between the management servers and monitored nodes is recovered.**

No	Corrective action
1	Restart Web-Based Admin View. Refer to " <a href="#">6.2 Restart</a> ."

**Symptom 21: The message "NoClassDefFoundErr" is displayed and the Web-Based Admin View screen is unable to launch.**

No	Corrective action
1	<p>The operation to uninstall IPv4 as stated below may be implemented on the client.</p> <ul style="list-style-type: none"> <li>- netsh interface ipv4 uninstall</li> </ul> <p>If IPv4 was accidentally uninstalled, install it again.</p> <ul style="list-style-type: none"> <li>- netsh interface ipv4 install</li> </ul>

## 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 execution log on the clients.
3. Collect screen hard copies on the clients.



.....

If the PRIMECLUSTER is installed, collect the investigation information. Refer to "C.1 Collecting Troubleshooting Information" in "PRIMECLUSTER Installation and Administration Guide."

.....

### B.2.1 wvCntl

---

Execute these operations on 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 "[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 execution log

---

Take the following steps to collect the Java execution log on the client which displays Web-Based Admin View.

#### Getting a file in the log folder

The log folder is created in the target installation folder of the Java application.

Log folder location:

[Home folder of a Windows login user]\[Target folder]\log\

Log folder example:

C:\Users\[User name]\AppData\Local\Programs\PRIMECLUSTER Web-Based Admin View Startup\log\

Collect the file in the folder above as the Java execution log.

### 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

## B.3 Settings to output core files

---

Set up the following when outputting the core files of the Web-Based Admin View.

### Setup procedure

1. Create directories to store settings files.

```
# mkdir /etc/systemd/system/fjsvwvbs.service.d
# chmod 755 /etc/systemd/system/fjsvwvbs.service.d
# mkdir /etc/systemd/system/fjsvwvcnf.service.d
# chmod 755 /etc/systemd/system/fjsvwvcnf.service.d
```

2. Create each settings file (core.conf) in the created directories.

```
# touch /etc/systemd/system/fjsvwvbs.service.d/core.conf
# chmod 644 /etc/systemd/system/fjsvwvbs.service.d/core.conf
# touch /etc/systemd/system/fjsvwvcnf.service.d/core.conf
# chmod 644 /etc/systemd/system/fjsvwvcnf.service.d/core.conf
```

3. Add the following in each settings file (core.conf) created in Step 2.

```
[Service]
Environment="DAEMON_COREFILE_LIMIT=unlimited"
```

4. Reflect the settings of environment variables of Web-Based Admin View services.

```
# systemctl daemon-reload
```

5. Check the settings of environment variables of Web-Based Admin View services.

Make sure that DAEMON\_COREFILE\_LIMIT is included.

```
# systemctl show fjsvwvbs.service |grep "Environment="
# systemctl show fjsvwvcnf.service |grep "Environment="
```

If DAEMON\_COREFILE\_LIMIT is not included, check if Step 1 to Step 4 are performed correctly.

6. Restart the Web-Based Admin View services.

```
# /etc/init.d/fjsvwvbs restart
# /etc/init.d/fjsvwvcnf restart
```

## Appendix C Release Information

This appendix lists the main changes in this manual.

No.	Edition	Location	Description
1	Second edition	1.2.1 Logical three-tier architecture	Changed the description of the client.
2	Second edition	2.3.1 NIC switching mode 2.3.2 Virtual NIC mode 7.1 Network address	Changed the description when setting up the IP address.
3	Second edition	4.3.3 Primary management server 4.3.4 Secondary management server	Changed the description of the primary management server and the secondary management server.
4	Third edition	4.5.1 Environment variable	Deleted the environment variable "locale".

# 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 Domain Network Service. This system provides the naming policy and mechanisms for mapping domain and machine names to addresses on the Internet.

es".

---

## 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.

---

## 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 application

An application that includes the dedicated Java Runtime Environment to run the Java programs in that environment. In this manual, the PRIMECLUSTER Web-Based Admin View Startup is a Java application.

---

## 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 Oracle. Java Plug-in software is attached.

---

## Java execution log

A log file that records the outputs equivalent to the Java console created by the Java application (PRIMECLUSTER Web-Based Admin View Startup).

---

## Java Plug-in

An Oracle software product that extends the functions of Web browsers and allows the Java programs to run in the Java Runtime Environment.

---

## Java Runtime Environment

Software set required in order to perform software developed in the Java offered by Oracle. Java Plug-in software is attached to Java Runtime Environment.

---

## Java Web Start

An Oracle software product that enables to automatically download the Java programs from Web browsers and others to run them.

---

## 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.



### Example

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.

---

## 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 Monitor Services. 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 Oracle. 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 registered 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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