



Hitachi Compute Plug-in for VMware vCenter

User's Guide

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Preface

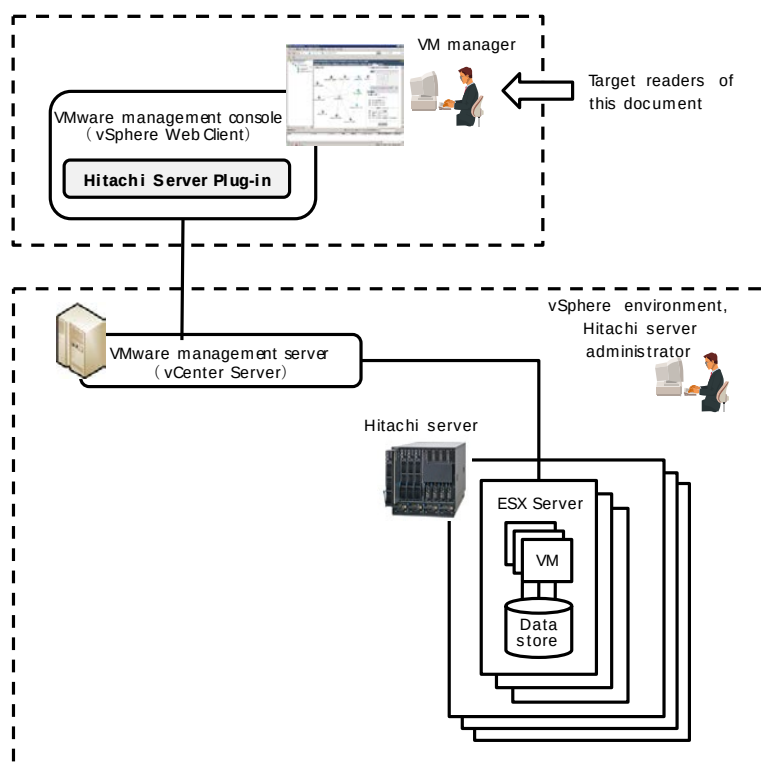
- ☐ [Intended Audience](#)
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This User's Guide describes the main functions, environmental requirements, configuration procedures, and troubleshooting of Hitachi Compute Plug-in for VMware vCenter (hereinafter referred to as "Hitachi Compute Plug-in").

Hitachi Compute Plug-in allows Hitachi server information to appear in the VMware vCenter Web Client.

Intended Audience

This document's intended for VMware administrators who also manage Hitachi servers running VMware vSphere. A person in this role's referred to in this document as a "VM manager."



This document provides only the information required by VM managers to install and use Hitachi Compute Plug-in. Information on configuring the VMware vSphere and Hitachi server environments required by Hitachi Compute Plug-in is not included.

This document also provides Hitachi Compute Plug-in troubleshooting information. VM managers can perform root cause analysis based on this document. If an issue seems to have been caused by Hitachi Compute Plug-in, the Hitachi Compute Plug-in support personnel should be contacted. Yet, if an issue seems to have been caused by the VMware vSphere environment or the Hitachi server, the relevant administrator should be contacted.

Prerequisite Knowledge

This document is intended for users who are familiar with:

- The basic operations of Microsoft Windows server and desktop operating systems
- The basic operation of the VMware vSphere Web Client

Related Documents

- Documents for VMware vSphere Hypervisor and VMware vCenter Server 5.1
- Documents for VMware vSphere Hypervisor and VMware vCenter Server 5.5
- Documents for VMware vSphere Hypervisor and VMware vCenter Server 6.0
- Hitachi Command Suite Compute Systems Manager Software User's Guide
- Hitachi Compute Blade 500 User's Guide
- Hitachi Compute Blade 2000 User's Guide
- Hitachi Compute Blade 2500 User's Guide

About Figures Listed in the Manual

This manual uses screenshots or partial screenshots from Windows computers in some illustrations. The colors in the screenshots may differ from the colors seen during actual use.

The screenshots featuring VMware vSphere Web Client are based on version 5.1.

Revision Level

Revision	Date	Description
First edition	February, 2014	
Second Edition	June, 2014	Changes for the version up.
Third Edition	November, 2014	Changes for the version up.
4th Edition	February, 2015	Changes for the version up.
5th Edition	July, 2015	Changes for the version up.

Acronyms and Abbreviations

#	Term and Abbreviation	Description
1.	Add function	Refers to Add Chassis.
2.	Datacenter	A managerial unit to consolidate the management of ESXi hosts and datastores on vCenter Server.
3.	ESXi	VMware vSphere Hypervisor and VMware ESXi are referred to as ESXi in this document. ESXi is the bare-metal hypervisor (virtualization OS) of VMware, Inc.
4.	HBA	Host Bus Adapter Hardware that connects a computer to other network machines and server systems.
5.	HCSM	Hitachi Compute Systems Manager This Hitachi Command Suite element consolidates the management of multiple server systems.
6.	Hitachi Command Suite	Hitachi Command Suite includes software components that allow massive and complex storage environments to be managed.
7.	Remove function	Refers to Remove Chassis.
8.	vCenter Server	VMware vCenter Server vCenter Server is management software from VMware Inc., and is used to centrally control multiple servers running VMware vSphere.
9.	VM	Virtual Machine
10.	vSphere Web Client	vSphere Web Client is a Web-based administration system for VMware vCenter. For vSphere 6.0 or later, the vSphere Web Client is installed with vCenter Server as a part of the services.
11.	WWN	World Wide Name

1. Overview

Hitachi Compute Plug-in is a vSphere Web Client plug-in that allows Hitachi server information to be integrated in to VMware vCenter. Once Hitachi Compute Plug-in is installed and configured, these features become available:

- Detailed Hitachi server hardware information is displayed in the vSphere Web Client
- Information on the ESXi instances and VMs running on Hitachi servers is displayed in the vSphere Web Client
- The ability to perform power, LID and remote console operations on servers is made available in the vSphere Web Client

2. System Requirements

- ☐ [System Configuration](#)
- ☐ [Hardware Prerequisites](#)
- ☐ [Software Requirements](#)
- ☐ [HCSM Setting](#)
- ☐ [Supported Models to be Managed](#)

2.1. System Configuration

The system configurations required for Hitachi Compute Plug-in are shown below.

- (1) HCSM must be configured, and all relevant Hitachi servers must be registered in HCSM.
- (2) All involved components must share TCP/IP network connectivity, including: VMware Management Client, vSphere Web Client, vCenter Server, ESXi, HCSM, and any Hitachi server equipment.
- (3) The TCP/IP network must use IPv4—IPv6 is not supported.

Figure 2.1-1 shows a system configuration example for Hitachi Compute Plug-in when using vSphere 5.1 or vSphere 5.5.

Figure 2.1-1 System Configuration Example(When using vSphere 5.1 or 5.5)

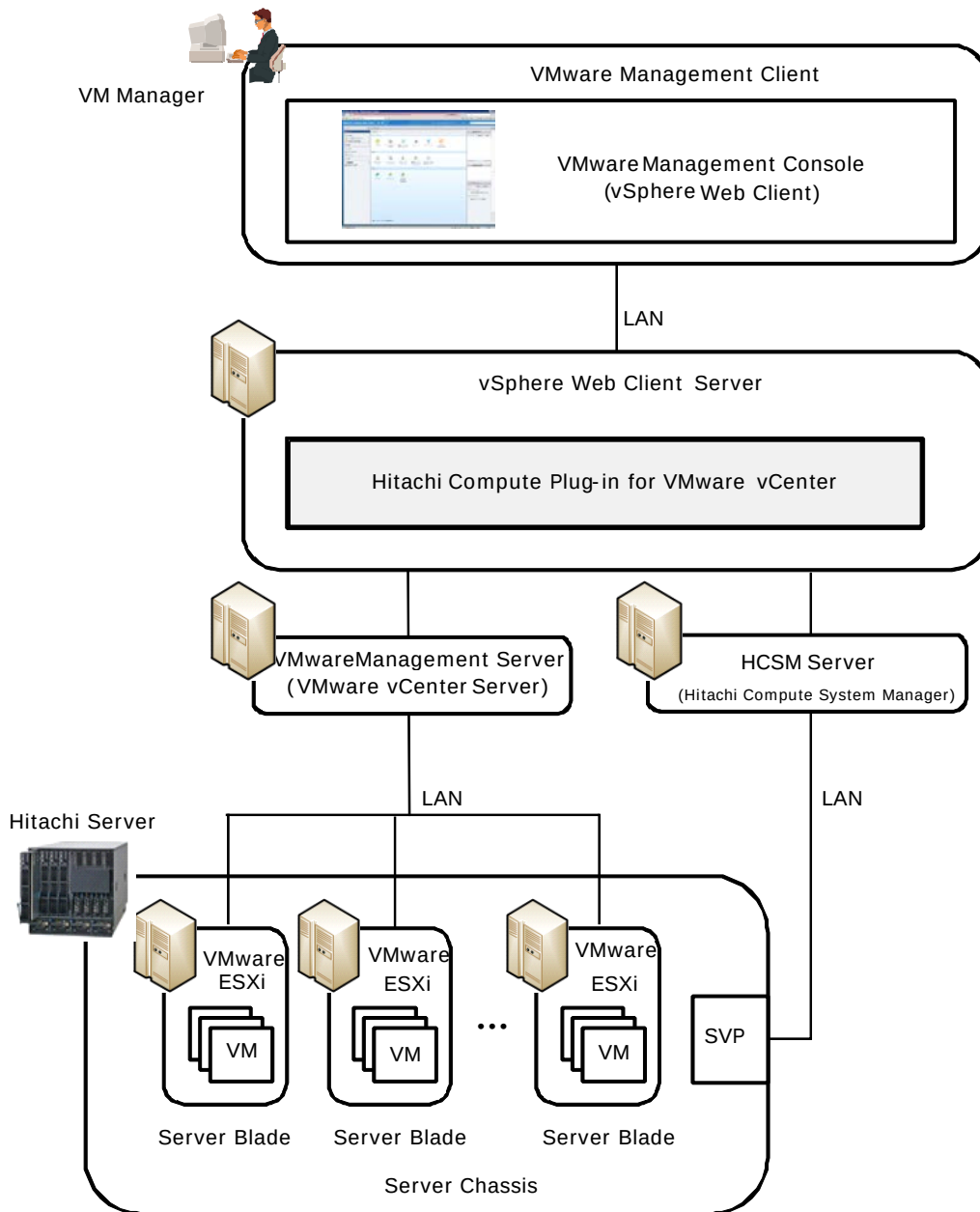
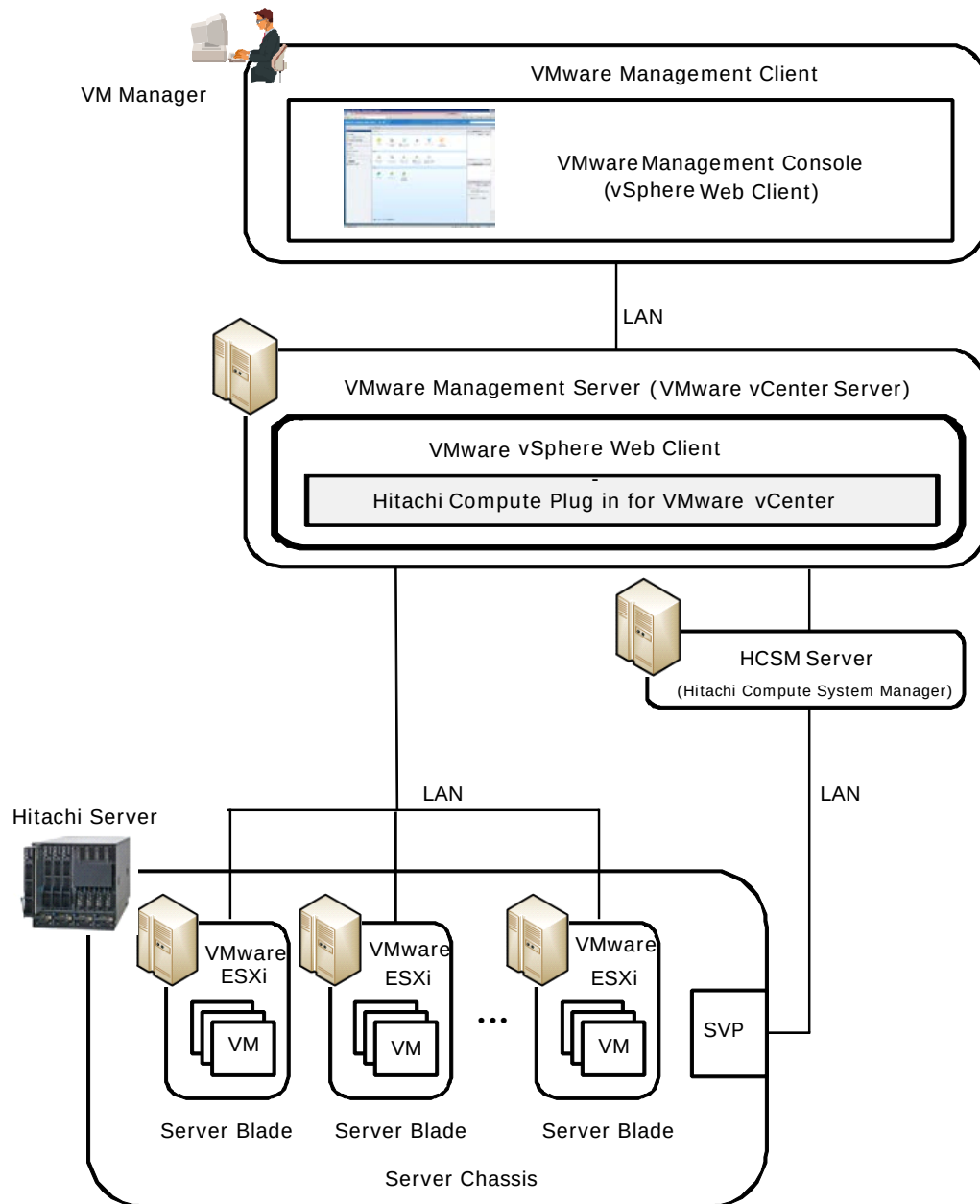


Figure 2.1-2 shows a system configuration example for Hitachi Compute Plug-in when using vSphere 6.0 or later.

Figure 2.1-2 System Configuration Example(When using vSphere 6.0)



2.2. Hardware Prerequisites

The following Table 2.2-1 lists the hardware requirements for the computer (see Figure 2.1-1 "vSphere Web Client Server" and Figure 2.1-2 "VMware Management Server") where Hitachi Compute Plug-in is installed.

Table 2.2-1 Server Requirements

#	Item	Condition	Remarks
1.	CPU	Conforms to the specifications of vSphere Web Client.	-
2.	Memory	Conforms to the specifications of vSphere Web Client.	-
3.	HDD free space	The capacity required for vSphere Web Client conforms to the specifications of vSphere Web Client. The capacity required for Hitachi Compute Plug-in varies depending on the needs of the maintenance set up file Note 1 ▪ 0.2 GB or more if the log file size is set to the default value (10 MB) and the number of retained log files is also set to the default value (five files) when installed ▪ 25 GB or more if the log file size is set to the maximum (100 MB) and the number of retained log files is also set to the maximum (255 files) Formula for calculating the required disk size: Required disk size [GB] = (specified log file size [MB]) × (number of log generations + 1)) + 100 [MB]) ÷ 1024	Space required for installation is 100 MB or more
4.	LAN	Conforms to the specifications of vSphere Web Client.	-

Note 1:

The log file size and number of retained log files can be set in the maintenance configuration file. For details, see Subsection 4.2.1.

2.3. Software Requirements

2.3.1. Operating Systems

A list of the operating systems supported by Hitachi Compute Plug-in is shown in Table 2.3.1-1 and Table 2.3.1-2.

Table 2.3.1-1 Operating Systems (vSphere Web Client)

#	Operating System
1.	Microsoft Windows Server 2008 R2 Standard/Enterprise/Datacenter Edition SP1
2.	Microsoft Windows Server 2012 Standard/Datacenter Edition
3.	Microsoft Windows Server 2012 R2 Standard/Datacenter Edition

Table 2.3.1-2 Operating Systems (VMware Management Client)

#	Operating System
1.	Microsoft Windows 7 Enterprise/Home Premium/Professional/ultimate SP1
2.	Microsoft Windows 8 Core/Pro/Enterprise
3.	Microsoft Windows 8.1 Core/Pro/Enterprise
4.	Microsoft Windows Server 2008 R2 Standard/Enterprise/Datacenter Edition SP1
5.	Microsoft Windows Server 2012 Standard/Datacenter Edition
6.	Microsoft Windows Server 2012 R2 Standard/Datacenter Edition
7.	Mac OS X v10.9

2.3.2. Software

Hitachi Compute Plug-in supports the operations on the software listed in Table 2.3.2-1.

Table 2.3.2-1 Software Requirements

#	Software *1	Remarks
1.	One of the following is required VMware vSphere Web Client 5.1 (Update 3) VMware vSphere Web Client 5.5 (Update 2e) VMware vSphere Web Client 6.0 *2	Required for vSphere Web Client server.
2.	One of the following is required VMware vCenter Server 5.1 (Update 3) VMware vCenter Server 5.5 (Update 2e) VMware vCenter Server 6.0 VMware vCenter Server Appliance 5.1 (Update 3) VMware vCenter Server Appliance 5.5 (Update 2e) VMware vCenter Server Appliance 6.0	Required for VMware Management Server.
3.	One of the following is required VMware ESXi Server 5.1 (Update 3) VMware ESXi 5.5 (Update 2) VMware ESXi 6.0	Required for VMware ESXi. It is used by installing in the server to be managed. See the manual of the Hitachi server for VMware ESXi version which a management target server supports.
4.	Hitachi Compute Systems Manager 7.6.1 or later (Part of Hitachi Command Suite)	Required for HCSM server.
5.	Microsoft Internet Explorer Mozilla Firefox Google Chrome	Installed in VMware Management client. Supported version complies with the vSphere Web Client supported version.
6.	Adobe Flash Player	Installed in VMware Management client. Supported version complies with the vSphere Web Client supported version.

***1:**

vSphere Web Client is a prerequisite for Hitachi Compute Plug-in, and they must both be installed on the same computer. Hitachi Compute Plug-in's installer will only allow installation on computers that already have vSphere Web Client installed.

***2:**

vSphere Web Client 6.0 is installed automatically when vCenter Server 6.0 is installed.

2.4. HCSM Setting

Table 2.4-1 lists the required HCSM settings.

Table 2.4-1 List of Required HCSM Settings

#	Necessity of setting <Legend> X: Configuration is mandatory X*: Configuration is required depending on operation	Item	Description
1.	X	HCSM account	The HCSM account used to add Hitachi server to the vSphere Web Client must have either Admin or Modify privileges.
2.	X	Hitachi server equipment managed by HCSM	All Hitachi server equipment intended for use with Hitachi Compute Plug-in must be registered in HCSM in advance.
3.	X*	SSL communication setting of HCSM	When using the HTTPS protocol for communication with HCSM, refer to the HCSM installation and configuration guide to set HCSM to be able to perform SSL communication on HCSM server and VMware management client. GUI and CLI are available for the SSL communication setting of VMware Management client (GUI SSL communication setting must be performed, however).

2.5. Supported Models to be Managed

Table 2.5-1 lists the supported models to be managed.

Table 2.5-1 Supported Models

#	Supported Model	Remarks
1.	▪ CB500 - CB520H server blade A1/B1 model - CB520H server blade A2/B2 model - CB520H server blade B3 model *1 - CB520A server blade A1 model - CB540A server blade A1/B1 model - CB520X server blade B1 model *1 *2 - CB520X server blade B2 model *2 *3	▪ For SVP firmware revision, see HCSM manual and release note. ▪ *1: When these models are managed, HCSM 8.1.0 or later is required. ▪ *2: With this model, it is non-support at the time of SMP configuration with four blades. ▪ *3: When these models are managed, HCSM 8.1.4 or later is required.
2.	▪ CB2000 - Standard server blade R3/S3 model - Standard server blade R4/S4 model - High performance server blade A2 model	▪ For SVP firmware revision, see HCSM manual and release note.
3.	▪ CB2500 - CB520H server blade B3 model *1 - CB520X server blade B1 model *1 *2 - CB520X server blade B2 model *2 *3	▪ For SVP firmware revision, see HCSM manual and release note. ▪ *1: HCSM 8.1.1 or later is required. ▪ *2: With this model, it is non-support at the time of SMP configuration with four blades. ▪ *3: HCSM 8.1.2 or later is required.

3. Restrictions and Considerations

- ☐ [Restrictions and Considerations for the Environmental Configuration](#)
- ☐ [Operational Restrictions and Consideration](#)

3.1. Restrictions and Considerations for the Environmental Configuration

Restrictions and considerations for the environmental configuration are listed in Table 3.1-1.

Table 3.1-1 Restrictions and Considerations for the Environmental Configuration

#	Item	Description
1.	Antivirus software	Any antivirus software running on the computer may cause the installation Hitachi Compute Plug-in to fail. Before installing Hitachi Compute Plug-in, please temporarily disable antivirus software.
2.	User at the time of installation	Installation must be performed by a user that has administrative privileges.
3.	Installation folder	Hitachi Compute Plug-in is installed inside of the folder hierarchy used by vSphere Web Client, like this: - vSphere Web Client 5.1/5.5 <Installation folder of vSphere Web Client>\plugin-packages\HitachiComputePlugin - vSphere Web Client 6.0 <Installation folder of vCenter Server>\vCenter Server\WebClient\plugin-packages\HitachiComputePlugin\ Before installing Hitachi Compute Plug-in, confirm that the filesystem upon which this folder resides has sufficient free space (see Section 2.2).
4.	Communication port for the HCSM server	- When using the HTTPS protocol for communication with HCSM, Hitachi Compute Plug-in uses port 22016/tcp by default. Also, when using the HTTP protocol for communication with HCSM, the port 22015/tcp is used by default. Confirm that neither port 22016/tcp nor port 22015/tcp is used by other software. If other software uses either of these port numbers, change the port number in the HCSM setting, and then change the port number of the HCSM server by using the Add function. - After installing Hitachi Compute Plug-in, enable the port number to be used to communicate with the HCSM server.
5.	Installation of Hitachi Compute Plug-in	After installing Hitachi Compute Plug-in, the VMware vSphere Web Client service must be manually restarted.
6.	Repair installation and uninstallation of Hitachi Compute Plug-in	The VMware vSphere Web Client service should be manually stopped before repairing or uninstalling Hitachi Compute Plug-in.
7.	Upgrade to vSphere Web Client 6.0 or later	If vSphere Web Client 5.1 or 5.5 is upgraded to vSphere Web Client 6.0 or later in the state that Hitachi Storage Plug-in is installed, remove Hitachi Compute Plug-in first, and then newly install Hitachi Compute Plug-in. Since the Hitachi servers that were registered by Hitachi Compute Plug-in of vSphere Web Client 5.1 or 5.5 cannot be taken over, register the Hitachi servers again using the Add function.

3.2. Operational Restrictions and Consideration

Restrictions and considerations related to operation are listed in Table 3.2-1. Also, Hitachi checks the restrictions of vSphere Web Client. Restrictions and considerations attributable to vSphere Web Client are listed in Table 3.2-2.

Table 3.2-1 Operational Restrictions and Considerations

#	Item	Description
1.	HCSM account changes	If the HCSM account name or password used to initially add a Hitachi server to the vSphere Web Client changes, updates to the Hitachi server information will no longer be reflected in the vSphere Web Client. To restore this functionality, simply use the functionality provided by Hitachi Compute Plug-in to remove and re-add the Hitachi server to the vSphere Web Client.
2.	Logging configuration	If a smaller value is set for the log file size and number of log generations in the maintenance configuration file, a backed up log file is wrapped around, which might result in loss of information required for troubleshooting. Do not lower any values in the maintenance configuration file, except in unavoidable circumstances.
3.	Changing the configuration file	If the maintenance configuration file (hilogger.config) is changed while vSphere Web Client service is running, restart the vSphere Web Client service.
4.	Failure during the task processing operation	If a failure occurs in the vSphere environment or a service is suspended while the task processing is running, any ongoing task will remain. Cancel the task if it is not to be operated over the next 10 minutes. Then, check the status of the resource to be operated and reexecute the task if necessary.
5.	Finding resources	Though the Chassis List, Server Blade List, and VM List screens lack a "Find" highlight function, resources can be found by filtering the displayed information.
6.	Display of task names and event information	When operation functions (see Section 6.3) are executed for the first time after installing Hitachi Compute Plug-in, task names and event information are not displayed correctly. *1 They can be displayed correctly by logging into vSphere Web Client again. *1: displayed as "hiserverplugin.xxx" ("xxx" is varied).
7.	Event information display except in the case where the browser language setting is English	vSphere Web Client 5.1 does not display event information except in the case where the browser language setting is English. Change the browser language setting to English or update the version to vSphere Web Client 5.5 or later.
8.		vSphere Web Client 5.5 or later does not display the type information correctly in the event console except in the case where the browser language setting is English. Change the browser language setting to English or check the type information in a task console related event.

Table 3.2-1 Operational Restrictions and Considerations

#	Item	Description
9.	Displaying the "Latest task" window	In the case of logging into vSphere Web Client by "vSphere Web Client user whose identity source type is other than local OS" *1, Hitachi Compute Plug-in tasks are not displayed if the display target in the "Recent Tasks" window is "My Tasks". In this case, tasks can be displayed by changing the display target to "All Users' Tasks" *2. *1: This indicates that the identity source type is Open LDAP, Active Directory, or no type. (In the case of vSphere Web Client 5.1, it indicates a System-Domain domain user. For vSphere Web Client 5.5 or later, it indicates a vsphere.local domain user.) *2: In vSphere Web Client 6.0 or later "All Users' Tasks" is disabled by default. To display the task, either click "Another Task" or change the settings of vSphere Web Client to make the display target "All Users' Tasks" For the method of changing the settings, see the document of vCenter Server 6.0.
10.	Displaying the number of objects	In vSphere Web Client 5.5, the number of objects shown in the lower right of the Chassis List window, Server Blade List window and VM List window might differ from the actual number. This occurs when the number of chassis, servers/hosts or virtual machines is changed. The number of objects is displayed correctly by logging into vSphere Web Client again after completing registration, creation or removal of a chassis, server/host or virtual machine.
11.	Take action if there is not a response for a long time.	A problem may have occurred in the Hitachi server environment, HCSM server environment and vSphere environment if there is not response for a long time. Refer to Section 7.5 and confirm whether an error has occurred.
12.	Log into just after the vSphere Web Client service start.	In the case of logging into just after vSphere Web Client service start, the icon of Hitachi Compute Plug-in is not displayed. Log in again after a while.

Table 3.2-2 Restrictions and Considerations attributable to vSphere Web Client

#	Item	Description
1.	Characters used for chassis ID	If a chassis ID contains the character "[" or "]", display of event information might be garbled. Do not use this character for chassis ID.

4. Installation and Configuration

- ☐ [Procedure for Environmental Configuration](#)
- ☐ [Installation](#)
- ☐ [Uninstallation](#)
- ☐ [Repair Installation](#)
- ☐ [Update Installation \(Version up\)](#)
- ☐ [Enabling and Disabling Hitachi Compute Plug-in](#)

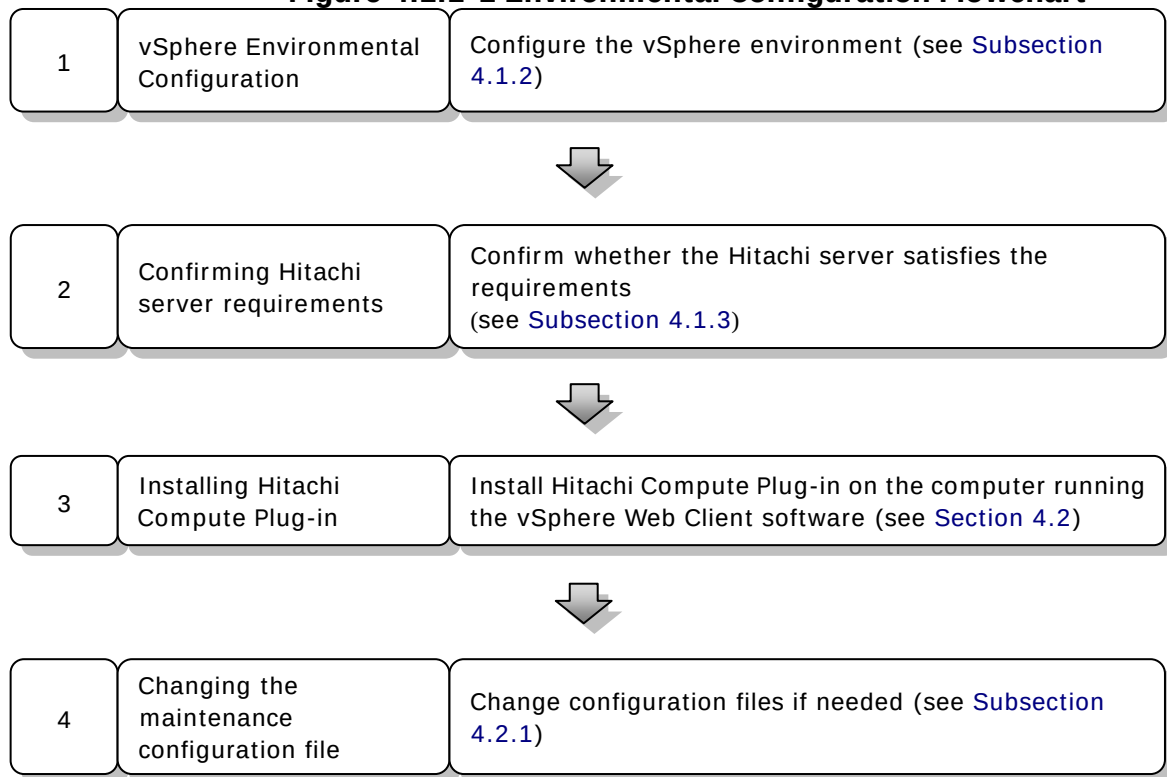
4.1. Procedure for Environmental Configuration

This chapter provides the required environmental configuration procedures for using Hitachi Compute Plug-in.

4.1.1. Environmental Configuration Flowchart

A flowchart for using Hitachi Compute Plug-in is shown in Figure 4.1.1-1.

Figure 4.1.1-1 Environmental Configuration Flowchart



Directory Configuration of CD is shown in Figure 4.1.1-2 and CD Files are described in Table 4.1.1-1.

Figure 4.1.1-2 CD Directory Configuration

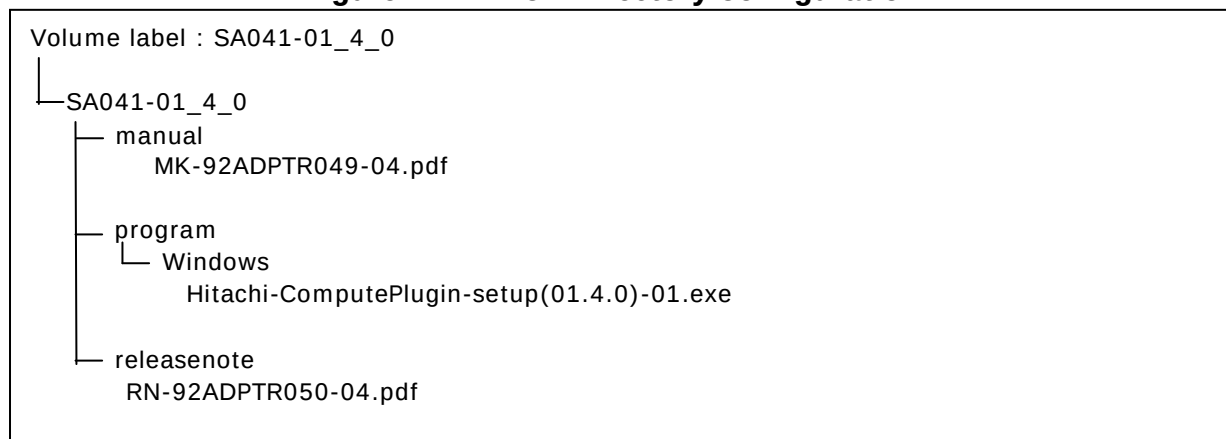


Table 4.1.1-1 CD Files Description

#	File	Description
1.	MK-92ADPTR049-04.pdf	This is the User's Guide.
2.	Hitachi-ComputePlugin-setup(01.4.0)-01.exe	This is the Hitachi Compute Plug-in installer.
3.	RN-92ADPTR050-04.pdf	This is the release notes document, which provides information that may have become available following the publication of the User's Guide.

4.1.2. vSphere Environmental Configuration

The vSphere environment must be configured before using Hitachi Compute Plug-in.

Please visit the VMware, Inc. Web site for documentation on how to configure the vSphere environment. The following URL may be a good place to start:

<http://www.vmware.com/support/pubs/vsphere-esxi-vcenter-server-pubs.html>

4.1.3. Confirming the Hitachi Server to be Managed

Confirm that all Hitachi server managed by Hitachi Compute Plug-in meet the requirements shown in Section 2.5. If requirements are not met, take appropriate action.

4.2. Installation

The installation procedure for Hitachi Compute Plug-in is shown in Table 4.2-1.

Table 4.2-1 Installation Procedure for Hitachi Compute Plug-in

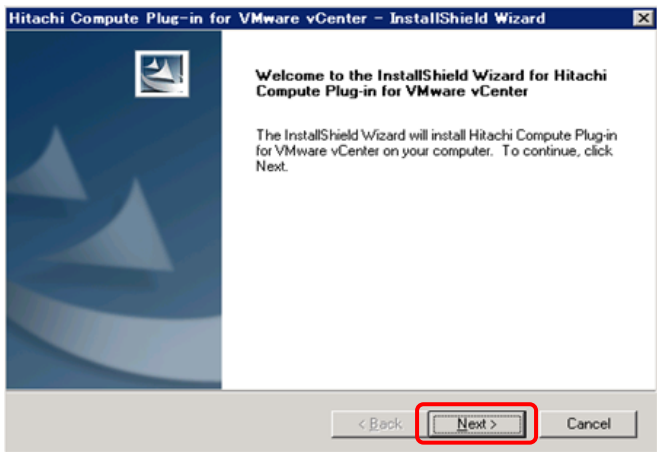
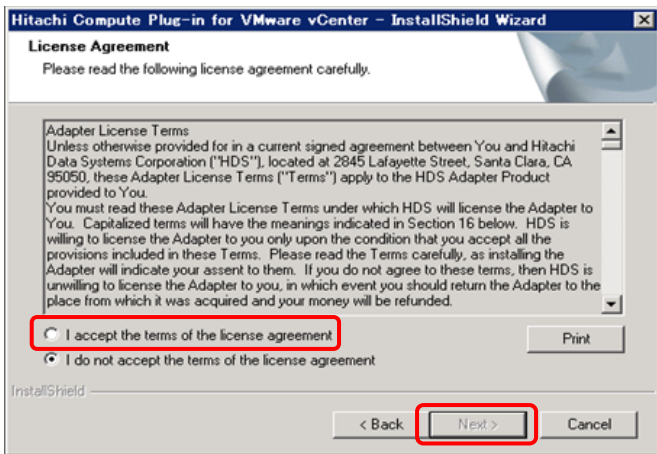
#	Installation Procedure	Display
1.	Execute the installer file.	 Hitachi-ComputePlugin-setup(01.4.0)-01.exe
2.	Click Next in the displayed setup wizard.	
3.	After confirming the license, select I accept the terms of the license agreement , click Next .	

Table 4.2-1 Installation Procedure for Hitachi Compute Plug-in

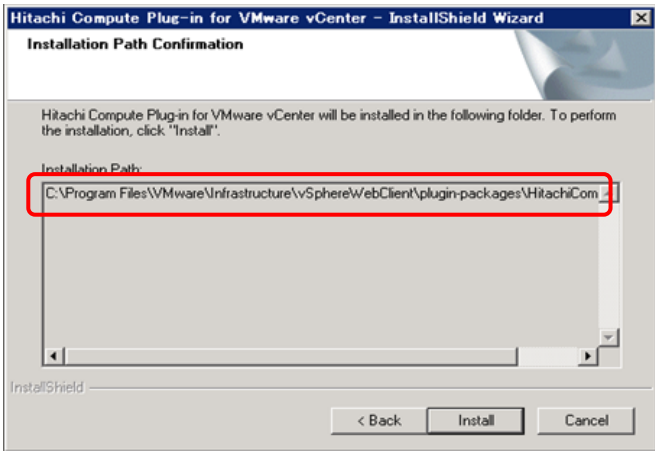
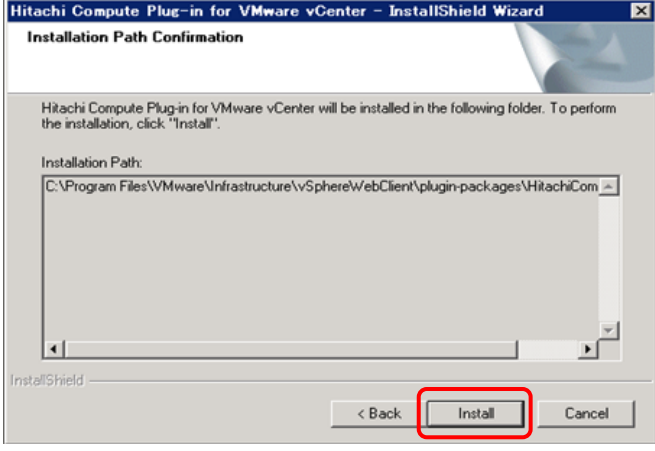
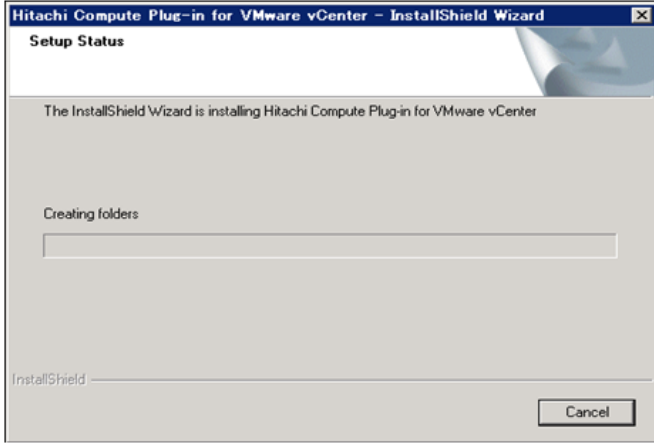
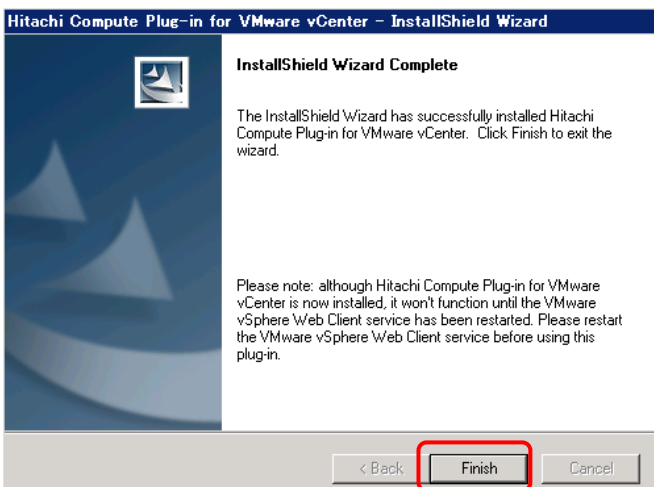
#	Installation Procedure	Display
4.	Displayed Install Location is different depending on the version of vSphere Web Client. - vSphere Web Client 5.1/5.5 <Installation folder of vSphere Web Client> \plugin-packages\HitachiComputePlugin\ - vSphere Web Client 6.0 <Installation folder of vCenter Server> \vCenter Server\WebClient\plugin-packages\HitachiComputePlugin\ This installation folder is fixed and cannot be changed. The display widow shown on the right side is the case of vSphere Web Client 5.1 and 5.5.	
5.	Click Install to start the installation.	

Table 4.2-1 Installation Procedure for Hitachi Compute Plug-in

#	Installation Procedure	Display
6.	Installation is started.	
7.	The installation complete message indicates that Hitachi Compute Plug-in is installed. Click Finish to complete. The installation is complete.	
8.	Restart the VMware vSphere Web Client service after completing the installation of Hitachi Compute Plug-in.	
9.	To avoid the phenomena shown in #6 of Table 3.2-1, do as follows: 1. Register at least one Hitachi server to be managed by the Add function (see subsection 6.2.1). 2. Execute the Refresh function (see subsection 6.3.3) for the registered Hitachi server. 3. Log out from vSphere Web Client.	

4.2.1. Changing the Maintenance Configuration file

When Hitachi Compute Plug-in is installed, a maintenance configuration file (hilogger.config) is created in Hitachi Compute Plug-in's installation folder. This file can set the log output behavior generated by Hitachi Compute Plug-in. Descriptions of the maintenance configuration file are listed in Table 4.2.1-1. Edit the file with a text editor using single-byte alphanumeric characters (SJIS code set). End each line with a line feed.

Table 4.2.1-1 Descriptions of Maintenance Configuration Files

#	Item	Description	Entry Format	Remarks
1.	Log file size	Specify the log file size.	[MaxFileSize= <size>]	- You can specify the size of an output log file in megabytes depending on the <size> value. Specify between 1 and 100. - Specify <size> in single-byte decimal numbers. - Put MaxFileSize= <size> in one-byte brackets. - Insert a line feed after [MaxFileSize= <size>]. - If this value is omitted or non-allowed values (outside the maximum and minimum values or other than one-byte values) are used, the default value of 10 MB is used.
2.	Number of log generations	When a log file exceeds the size specified in the log file size, rotate and specify the number of generations of the backup file to be created.	[MaxBackupIndex= <number-of- generations>]	- You can specify the number of backup file generations with the value in <number-of- generations>. Specify between 1 and 255. - Specify <number-of- generations> in single-byte decimal numbers. - Put [MaxBackupIndex= <number-of- generations>] in one-byte brackets. - Insert a line feed after [MaxBackupIndex= <number-of- generations>]. - If this value is omitted or non-allowed values (outside the maximum and minimum values or other than one-byte values) are used, the default value of 5 generations is used.

Notation examples for a maintenance configuration file are shown below.

Figure 4.2.1-1 Notation Examples for a Maintenance Configuration File

You can enter comments on a line starting with #.

```
#####  
# [MaxFileSize=1~100] - default is 10(MB)  
# [MaxBackupIndex=1~255] - default is 5  
#####  
  
[MaxFileSize=10]  
[MaxBackupIndex=5]
```

Always insert a line feed after the last line.

4.3. Uninstallation

This chapter covers the uninstallation procedures of Hitachi Compute Plug-in. The following two uninstallation procedures are available.

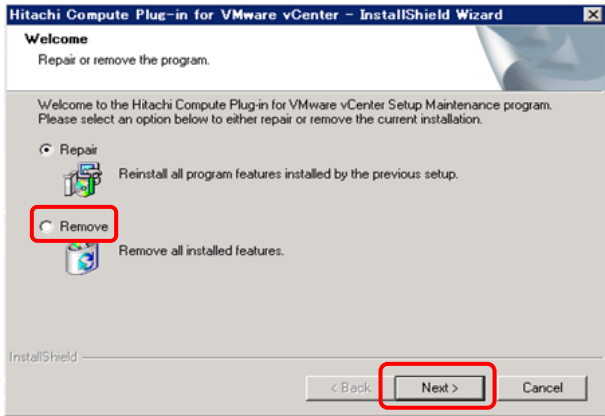
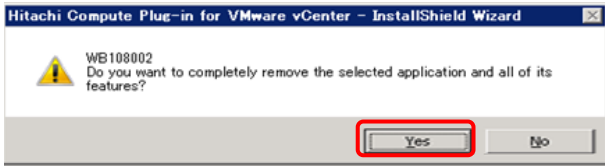
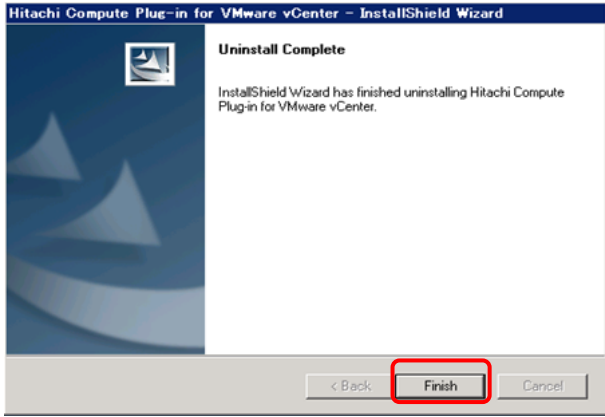
- Uninstallation using the Hitachi Compute Plug-in Installer.
- Uninstallation from the Windows control panel.

Examples of the uninstallation procedures are shown below.

4.3.1. Uninstallation using the Installer

An uninstallation procedure using Hitachi Compute Plug-in's installer is shown in Table 4.3.1-1.

Table 4.3.1-1 Uninstallation Procedure for Hitachi Compute Plug-in

#	Uninstallation Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Execute the installer file.	 Hitachi-ComputePlugin-setup(01.4.0)-01.exe
3.	After selecting Remove in the displayed setup wizard, click Next .	
4.	The confirmation popup window for an uninstallation is displayed. Click Yes and go to #5.	
5.	The uninstallation complete message informs you when Hitachi Compute Plug-in is uninstalled. Click Finish to complete. From the Program and Function window, confirm that Hitachi Compute Plug-in for VMware vCenter has been removed. Even if the uninstallation has been completed, some files automatically created during installation and files user created in the installation folder are not removed. Manually remove the folder and files as needed. The uninstallation procedure is complete.	
6.	Start the VMware vSphere Web Client service after completing the uninstallation of Hitachi Compute Plug-in.	

4.3.2. Uninstallation from the Control Panel

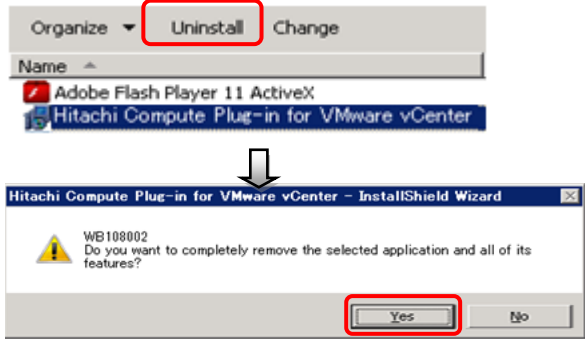
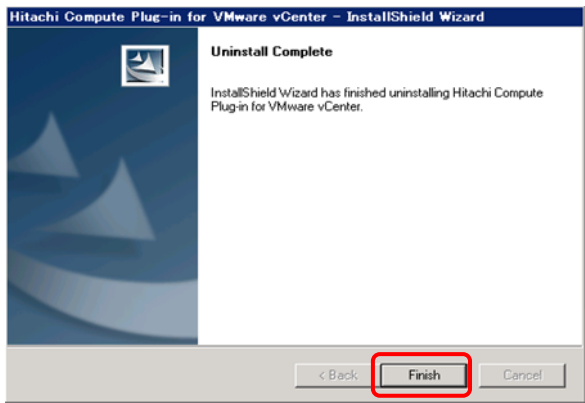
The following uninstall procedures from the control panel are available.

- **Add or Remove programs** - click **Remove** of **Hitachi Compute Plug-in for VMware vCenter** to uninstall the program.
- **Add or Remove programs** - click **Change** of **Hitachi Compute Plug-in for VMware vCenter** to uninstall the program.

The two uninstallation procedures are shown below.

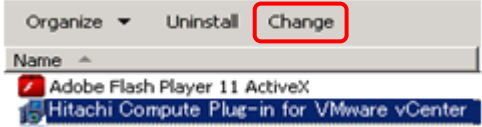
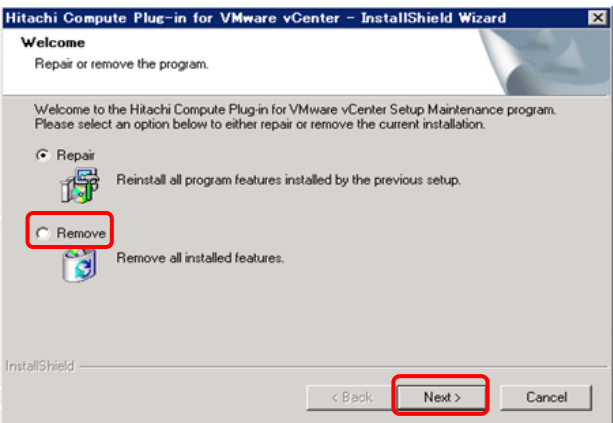
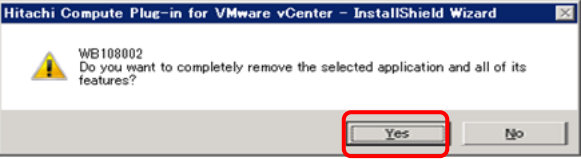
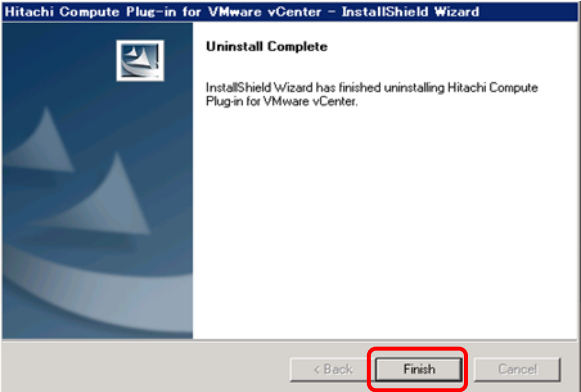
For the uninstallation procedure clicking **Remove**, see Table 4.3.2-1.

Table 4.3.2-1 Uninstallation Procedure for Hitachi Compute Plug-in

#	Uninstallation Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Select Hitachi Compute Plug-in for VMware vCenter from Program and Function in Control Panel and click Uninstall. The confirmation popup window for an uninstallation is displayed. Click Yes and go to #3.	
3.	The uninstallation complete message informs you when Hitachi Compute Plug-in is uninstalled. Click Finish to complete. From the Program and Function window, confirm that Hitachi Compute Plug-in for VMware vCenter has been removed. Even if the uninstallation has been completed, some files automatically created during installation and files user created in the installation folder are not removed. Manually remove the folder and files as needed. The uninstallation procedure is complete.	
4.	Start the VMware vSphere Web Client service after completing the uninstallation of Hitachi Compute Plug-in.	

For the uninstallation procedure clicking **Change**, see Table 4.3.2-2.

Table 4.3.2-2 Uninstallation Procedure for Hitachi Compute Plug-in

#	Uninstallation Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Select Hitachi Compute Plug-in for VMware vCenter from Program and Function in Control Panel and click Change .	
3.	After selecting Remove in the displayed setup wizard, click Next .	
4.	The confirmation popup window for an uninstallation is displayed. Click Yes and go to #5.	
5.	The uninstallation complete message informs you when Hitachi Compute Plug-in is uninstalled. Click Finish to complete. From the Program and Function window, confirm that Hitachi Compute Plug-in for VMware vCenter has been removed. Even if the uninstallation has been completed, some files automatically created during installation and files user created in the installation folder are not removed. Manually remove the folder and files as needed. The uninstallation procedure is complete.	
6.	Start the VMware vSphere Web Client service after completing the uninstallation of Hitachi Compute Plug-in.	

4.4. Repair Installation

If you accidentally delete one or more files installed by Hitachi Compute Plug-in, you can restore them by performing a repair-mode installation.

The following two repair-mode installations are available:

- Repair Installation using the Hitachi Compute Plug-in Installer
- Repair Installation from the Windows control panel

The repair installation procedures are as follows.

Note:

Depending on which files are replaced by a repair-mode installation, it's possible for information regarding formerly registered Hitachi servers to become absent. Should this happen, use the Add function to register the Hitachi servers again (see Subsection 6.2.1).

4.4.1. Repair Installation using the Installer

The repair-mode installation procedure using Hitachi Compute Plug-in's installer is shown in Table 4.4.1-1.

Table 4.4.1-1 Repair Installation Procedure for Hitachi Compute Plug-in

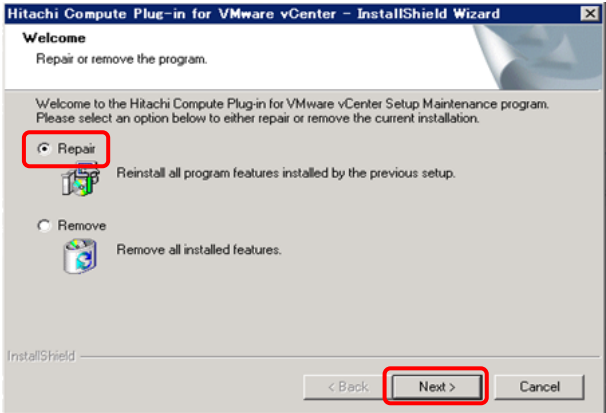
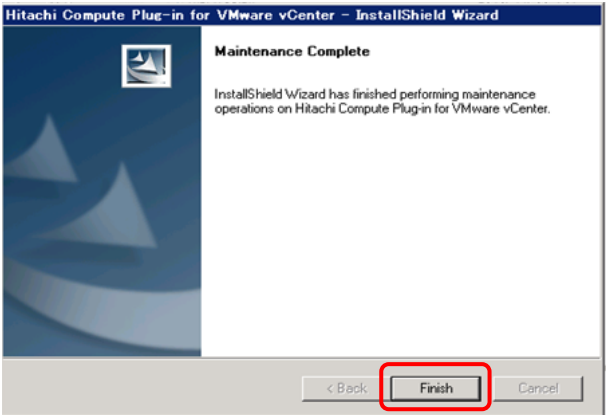
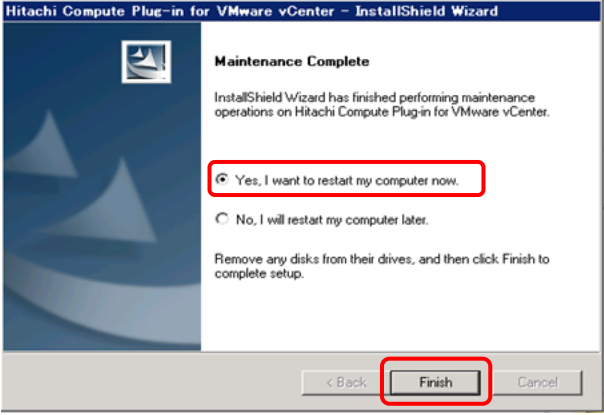
#	Repair Installation Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Execute the installer file.	 Hitachi-ComputePlugin-setup(01.4.0)-01.exe
3.	After selecting Repair in the displayed setup wizard, click Next .	
4.	The repair installation complete message indicates that Hitachi Compute Plug-in has been repaired. Click Finish to complete. The repair installation procedure is complete.	

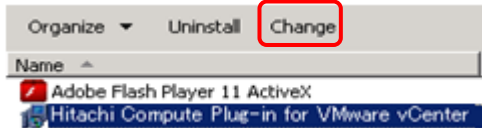
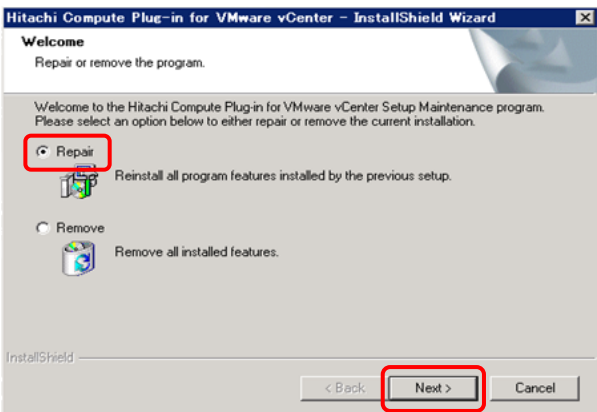
Table 4.4.1-1 Repair Installation Procedure for Hitachi Compute Plug-in

#	Repair Installation Procedure	Display
5.	If a repair-mode installation was performed without having stopped the VMware vSphere Web Client service first, the installer will automatically prompt to reboot the computer. To complete the repair-mode installation, select Yes, I want to restart my computer now and click Finish to reboot. The repair installation procedure is complete.	
6.	Start the VMware vSphere Web Client service after completing the repair-mode installation of Hitachi Compute Plug-in.	

4.4.2. Repair Installation from the Control Panel

For the repair installation procedure clicking **Remove**, see Table 4.4.2-1.

Table 4.4.2-1 Repair installation Procedure for Hitachi Compute Plug-in

#	Repair installation Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Select Hitachi Compute Plug-in for VMware vCenter from Program and Function in Control Panel and click Change .	
3.	After selecting Repair in the displayed setup wizard, click Next. The subsequent procedures match those listed in Table 4.4.1-1.	

4.5. Update Installation (Version up)

This chapter describes the update installation (version up) of Hitachi Compute Plug-in.

Table 4.5-1 Update Installation Procedure of Hitachi Compute Plug-in

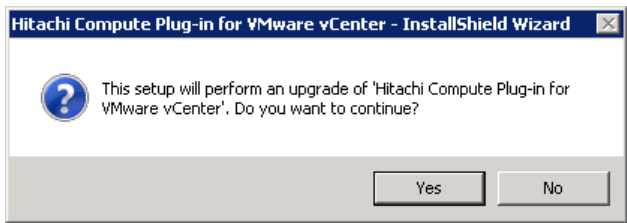
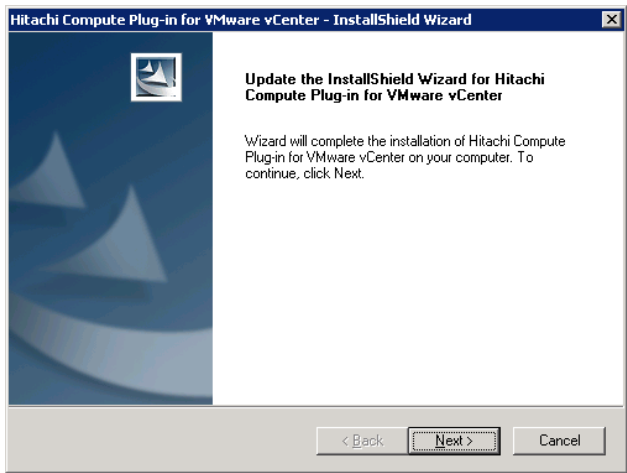
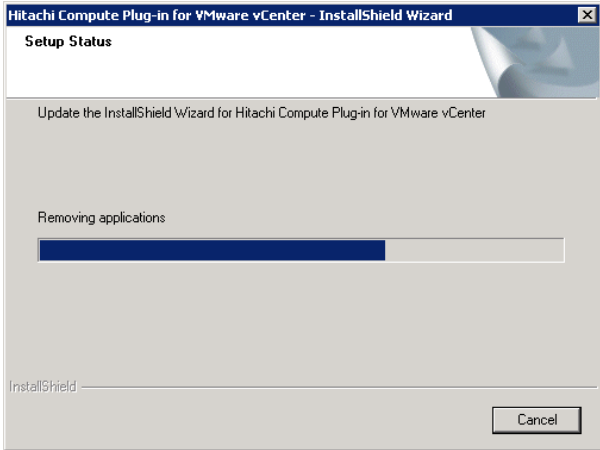
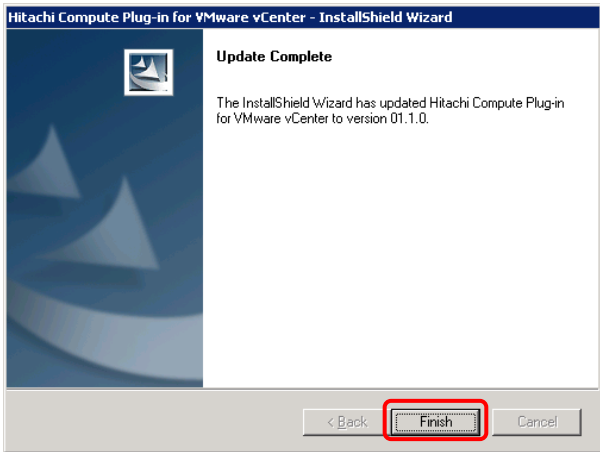
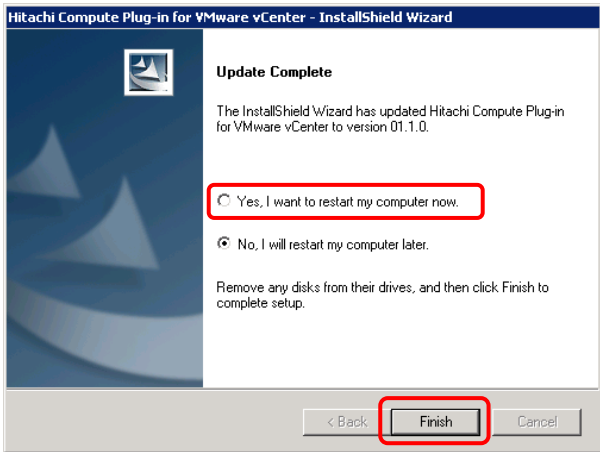
#	Update Procedure	Display
1.	Log out from VMware vSphere Web Client and stop VMware vSphere Web Client service.	
2.	Run the new version of the installer.	 Hitachi-ComputePlugin-setup(01.4.0)-01.exe
3.	The confirmation popup window for an upgrade is displayed. Click Yes . Note If the installed version of Hitachi Compute Plug-in is newer than the executed installer, a message is displayed after clicking Yes and installation is suspended.	
4.	Click Yes in the wizard.	

Table 4.5-1 Update Installation Procedure of Hitachi Compute Plug-in

#	Update Procedure	Display
5.	Update installation is executed.	
6.	The update installation complete message informs you of when Hitachi Compute Plug-in is updated. Click Finish to complete. The update installation procedure is complete.	
7.	In #5, when the update installation is executed while vSphere Web Client is running, the request message of restart is displayed instead of #6. Select Yes, I want to restart my computer now and click Finish to restart OS. The update installation procedure is complete.	
8.	Start the VMware vSphere Web Client service after completing the update installation of Hitachi Compute Plug-in.	

4.6. Enabling and Disabling Hitachi Compute Plug-in

Hitachi Compute Plug-in is enabled by the default setting. vSphere Web Client standard function can enable or disable Hitachi Compute Plug-in. To enable or disable Hitachi Compute Plug-in, do the following:

- (1) Log into vSphere Web Client as an administrator.
- (2) In the navigation tree, click “Management”.
- (3) Under “Solution”, click “Plug-in Management” (“Client Plug-in” in vSphere Web Client 5.5 or later).
- (4) Select “Hitachi Compute Plug-in” from the list of plug-ins, then execute enable or disable from the right-click menu.

5. Accessing Hitachi Compute Plug-in

When Hitachi Compute Plug-in is installed, a **Hitachi Compute Plug-in** icon is added to the vSphere Web Client window.

The procedures to use the functions provided by Hitachi Compute Plug-in are described below.

Table 5-1 Hitachi Compute Plug-in Window Display Procedure

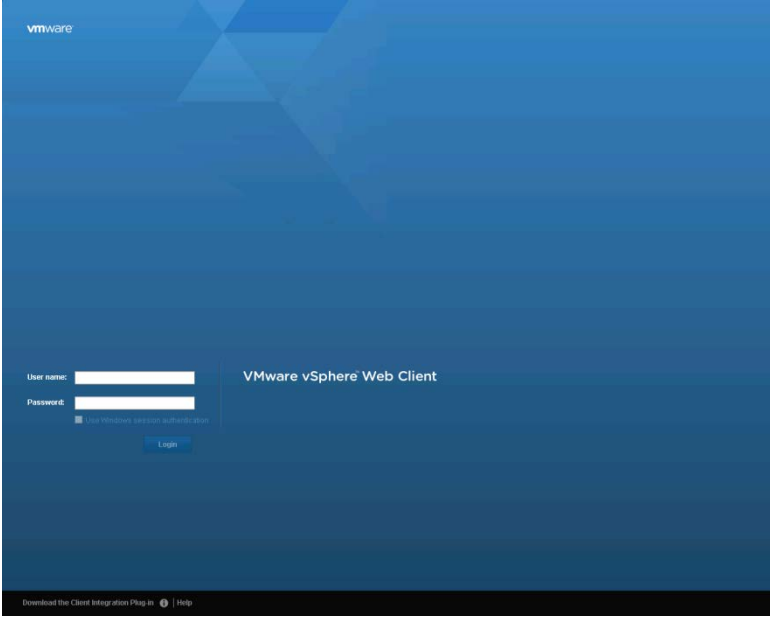
#	Description
1.	Use a Web browser to log in to the vSphere Web Client. 

Table 5-1 Hitachi Compute Plug-in Window Display Procedure

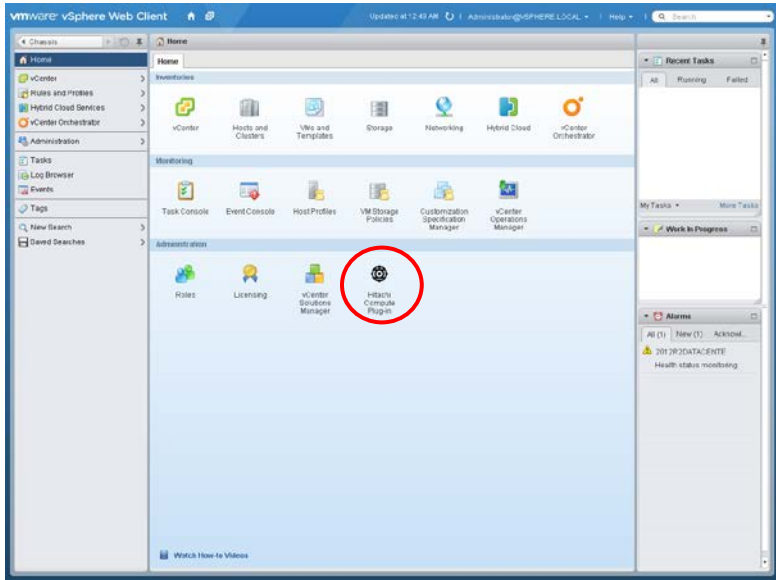
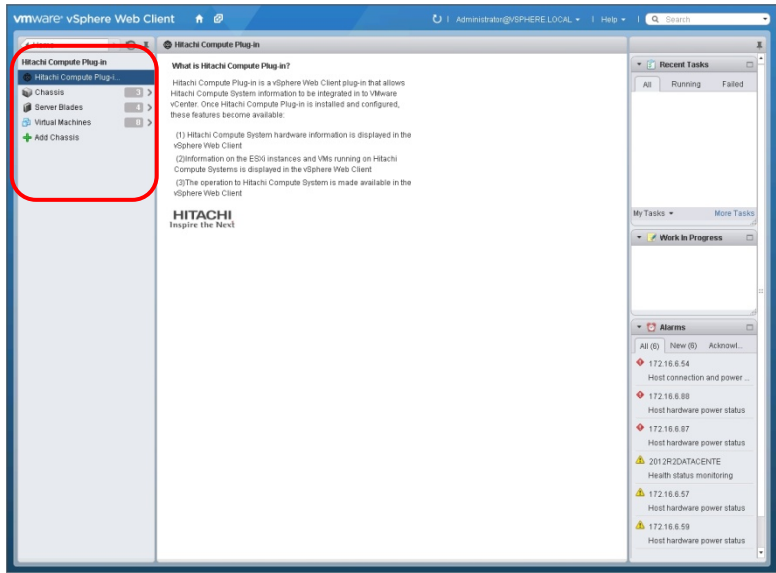
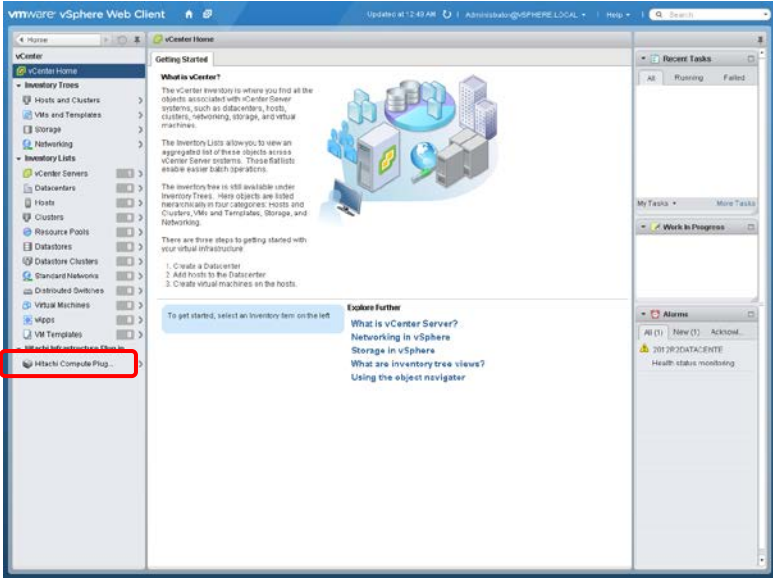
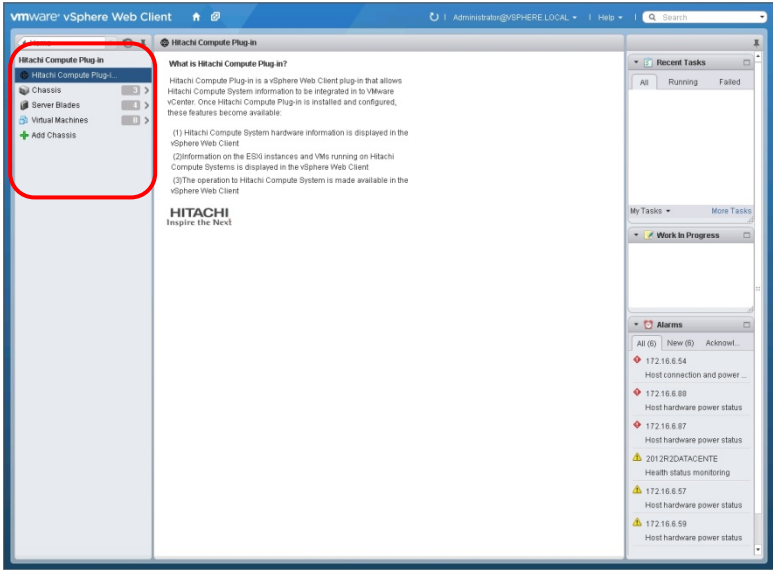
#	Description
2.	When you select Home, the following window is displayed. Hitachi Compute Plug-in's installation adds the Hitachi Compute Plug-in icon to the vSphere Web Client.  Note: In the case of logging into just after vSphere Web Client service start, the icon of Hitachi Compute Plug-in is not displayed. Log in again after a while.
3.	The following Hitachi Compute Plug-in navigator is displayed when the Hitachi Compute Plug-in icon is clicked. The following four functions can be used. (1) Chassis List (2) Server Blade List (3) VM List (4) Add Chassis  For the details of each function, see Chapter 6.

Table 5-1 Hitachi Compute Plug-in Window Display Procedure

#	Description
4.	Also, when vCenter is selected in the navigator appeared after logging into vSphere Web Client, the following window is displayed. 
5.	The following Hitachi Compute Plug-in navigator is displayed when the Hitachi Compute Plug-in is clicked. 

6. Function Details

- ☐ [Function List](#)
- ☐ [Action](#)
- ☐ [Operation Function](#)
- ☐ [Information Display](#)

Information display and operation of the Hitachi server from vSphere Web Client are enabled by installing Hitachi Compute Plug-in in vSphere Web Client.

6.1. Function List

Functions provided by Hitachi Compute Plug-in are shown in Table 6.1-1.

Table 6.1-1 Hitachi Compute Plug-in Function List

#	Function	Description
1.	Action	
2.	Add Chassis	Registers a chassis managed by Hitachi Compute Plug-in.
3.	Remove Chassis	Removes a chassis managed by Hitachi Compute Plug-in.
4.	Operation Function	
5.	Power On	Starts the server.
6.	Force Power Off	Stops the server by compulsion.
7.	Power Reset	Resets the server.
8.	LID On/Off	Switches LID on and off of the server.
9.	Refresh Chassis	Updates information of the Hitachi server and vCenter Server.
10.	Refresh Servers	Updates information of the Hitachi server and vCenter Server.
11.	Information Display	
12.	Chassis List window	Displays a list of the chassis.
13.	Chassis Details window	Displays the configuration information and status information of each chassis in Summary. Displays information of server blades and virtual machines stored in each chassis using Related Objects.
14.	Server Blade List window	Displays a list of the server blades.
15.	Server Blade detailed window	Displays the configuration information and status information of each server blade in Summary. Displays information of virtual machine on each server blade using Related Objects.
16.	VM List window	Displays a list of VM and the information.

When Hitachi Compute Plug-in is installed, the “Hitachi Compute Plug-in” icon are added to vSphere Web Client.

The procedures to use the functions provided by Hitachi Compute Plug-in are described below.

6.2. Action

6.2.1. Add Chassis

Register a chassis to enable a Hitachi server in Hitachi Compute Plug-in using the Add Chassis.

6.2.1.1. Registering Chassis

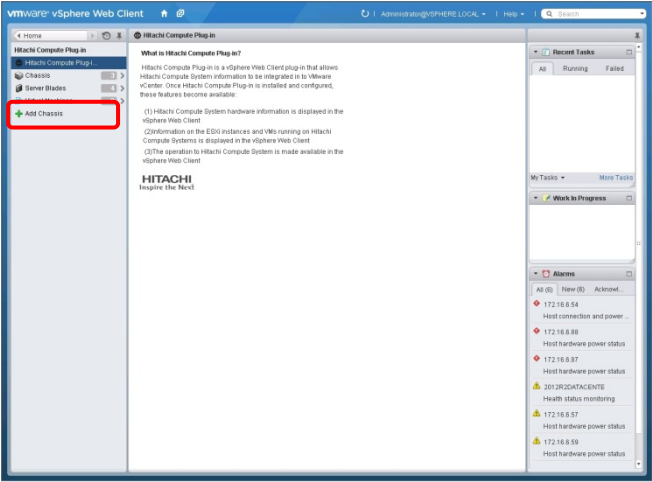
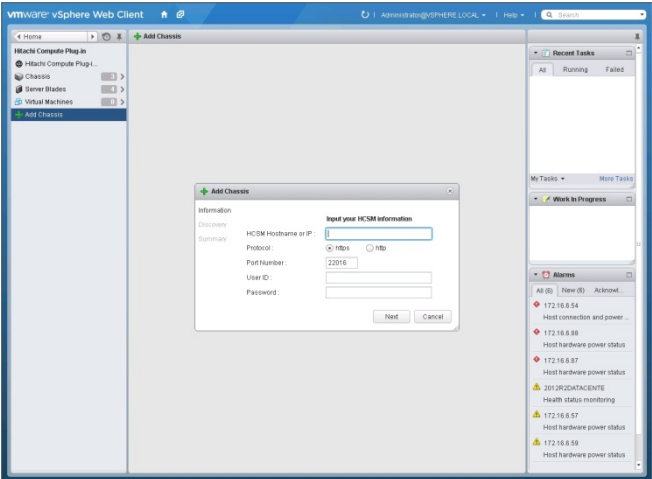
(1) Operation Procedure

Operation procedure to register a chassis using the Add Chassis is as follows.

(a) Start the Add Chassis

Start the Add Chassis by following the procedure shown below.

Table 6.2.1.1-1 Add Chassis - Start Procedure

#	Procedure	Display
1.	Click Add Chassis in the Hitachi Compute Plug-in navigator.	
2.	Add Chassis is displayed.	

(b) Information (Enter the information of the chassis to be registered.)

Enter the chassis information by following the procedure shown below.

Table 6.2.1.1-2 Add Chassis - Information Procedure

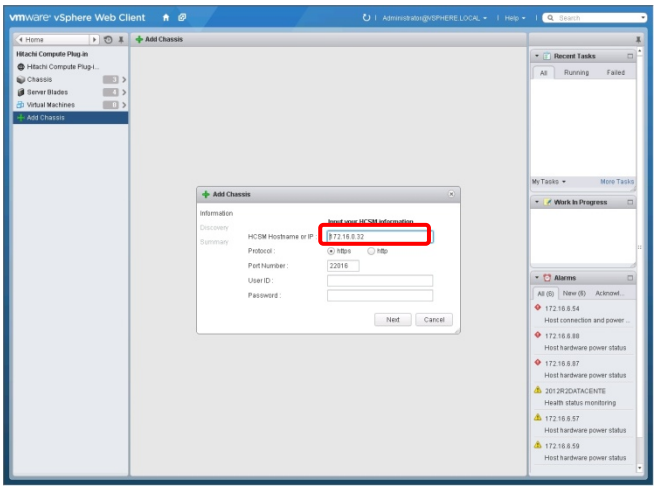
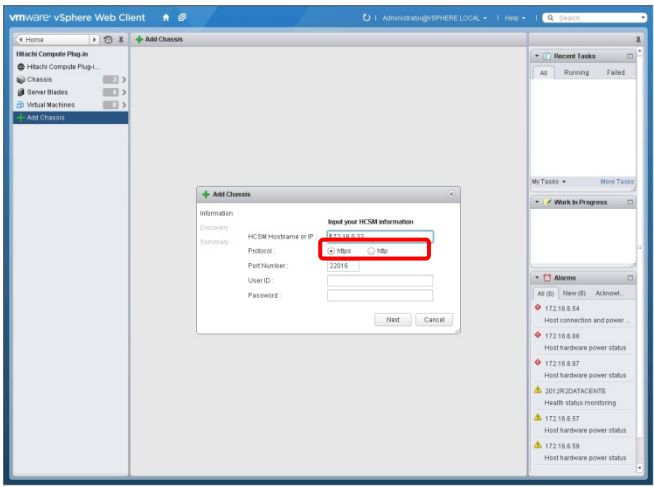
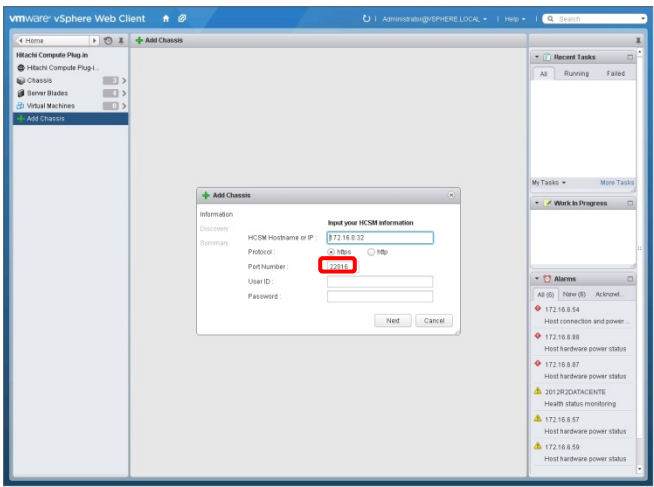
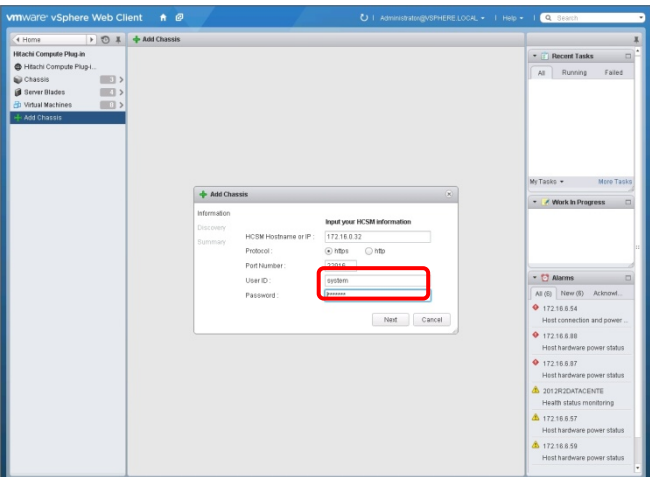
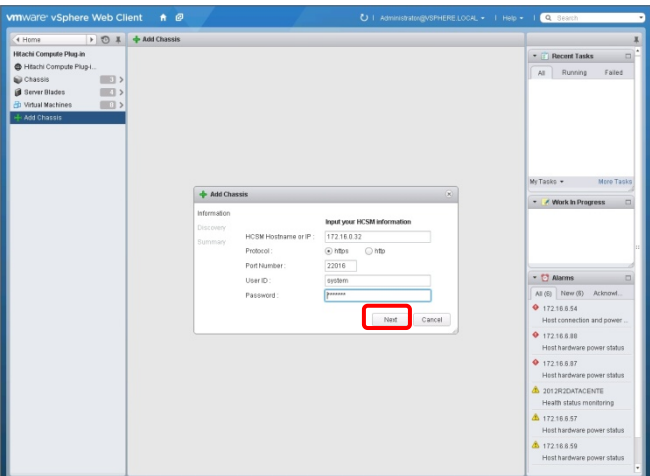
#	Procedure	Display
1.	Type the IP address (IPv4 format) or host name of the HCSM server on which the target chassis has been registered. Note To type the host name, DNS on which the host information was registered, or hosts file, needs to be available on vSphere Web Client server.	
2.	Select a communication protocol for the HCSM server.	
3.	Type the TCP port number used by the HCSM server on which the target chassis has been registered. If the port number of the HCSM server is not the default setting 22016 or 22015, type the TCP port number which was set for HCSM. Note that the numbers must be between 0 and 65535. Note Entry of a port number corresponding to the communication protocol (HTTP/HTTPS) is required.	

Table 6.2.1.1-2 Add Chassis - Information Procedure

#	Procedure	Display
4.	Enter user ID and password of HCSM. For the HCSM user ID and password, contact the HCSM administrator.	
5.	After completing the above steps, click Next to move to the next step.	

(c) Discovery (Detection of the chassis)

Configure a chassis.

Table 6.2.1.1-3 Add Chassis -Discovery Procedure

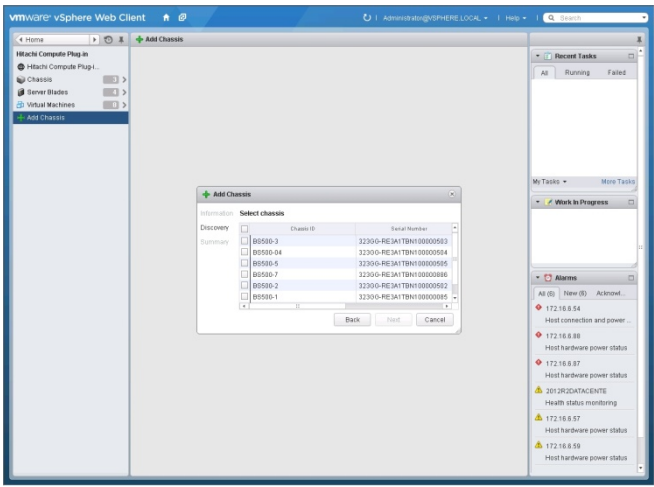
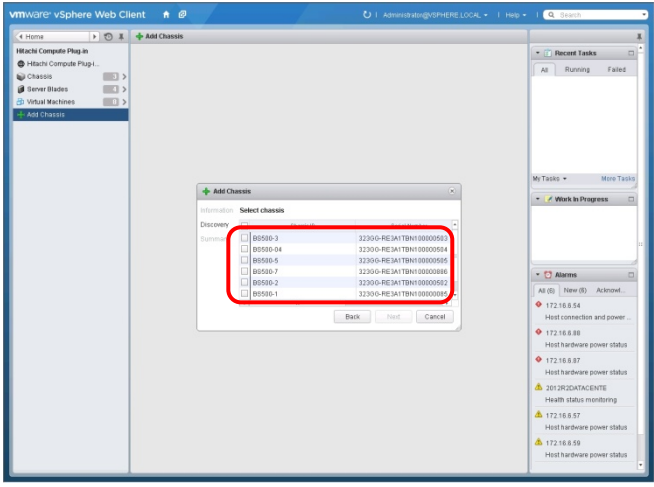
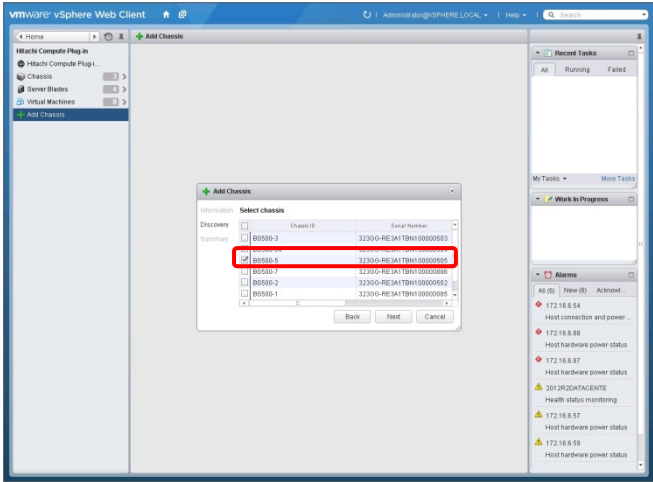
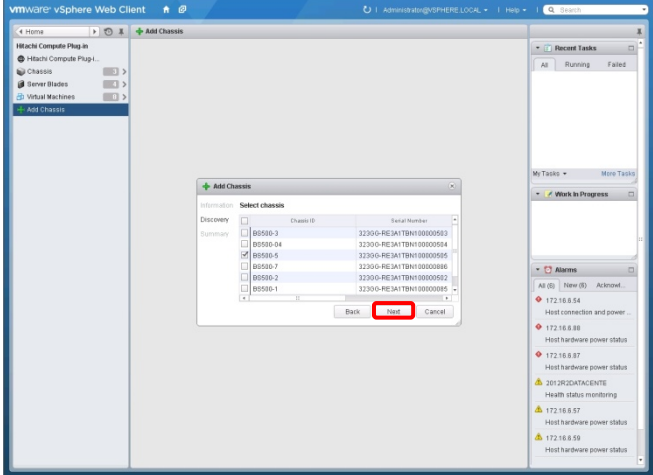
#	Procedure	Display
1.	Detect IP address entered in Information from the network and login to the HCSM using the specified user ID and password.	
2.	If the successful login to HCSM is found, chassis which were registered in HCSM are displayed in the list. If the login to HCSM has failed (Example: communication error, or incorrect user ID or password), take an appropriate action based on the troubleshooting process.	

Table 6.2.1.1-3 Add Chassis -Discovery Procedure

#	Procedure	Display																											
3.	Select the chassis to be registered from the list. Checking the top checkbox in Select chassis selects all checkboxes. When the top checkbox is unselected, no checkboxes are selected.	 <table border="1"> <thead> <tr> <th>Discovery</th> <th>Chassis ID</th> <th>Serial Number</th> </tr> </thead> <tbody> <tr> <td>☒</td> <td>B8580-3</td> <td>3230G-REJATBN100000903</td> </tr> <tr> <td>☒</td> <td>B8580-4</td> <td>3230G-REJATBN100000904</td> </tr> <tr> <td>☒</td> <td>B8580-5</td> <td>3230G-REJATBN100000905</td> </tr> <tr> <td>☒</td> <td>B8580-6</td> <td>3230G-REJATBN100000906</td> </tr> <tr> <td>☒</td> <td>B8580-7</td> <td>3230G-REJATBN100000907</td> </tr> <tr> <td>☒</td> <td>B8580-8</td> <td>3230G-REJATBN100000908</td> </tr> <tr> <td>☒</td> <td>B8580-9</td> <td>3230G-REJATBN100000909</td> </tr> <tr> <td>☒</td> <td>B8580-10</td> <td>3230G-REJATBN100000910</td> </tr> </tbody> </table>	Discovery	Chassis ID	Serial Number	☒	B8580-3	3230G-REJATBN100000903	☒	B8580-4	3230G-REJATBN100000904	☒	B8580-5	3230G-REJATBN100000905	☒	B8580-6	3230G-REJATBN100000906	☒	B8580-7	3230G-REJATBN100000907	☒	B8580-8	3230G-REJATBN100000908	☒	B8580-9	3230G-REJATBN100000909	☒	B8580-10	3230G-REJATBN100000910
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4.	Click Next to move to the next step.	 <table border="1"> <thead> <tr> <th>Discovery</th> <th>Chassis ID</th> <th>Serial Number</th> </tr> </thead> <tbody> <tr> <td>☐</td> <td>B8580-3</td> <td>3230G-REJATBN100000903</td> </tr> <tr> <td>☐</td> <td>B8580-4</td> <td>3230G-REJATBN100000904</td> </tr> <tr> <td>☐</td> <td>B8580-5</td> <td>3230G-REJATBN100000905</td> </tr> <tr> <td>☐</td> <td>B8580-6</td> <td>3230G-REJATBN100000906</td> </tr> <tr> <td>☐</td> <td>B8580-7</td> <td>3230G-REJATBN100000907</td> </tr> <tr> <td>☐</td> <td>B8580-8</td> <td>3230G-REJATBN100000908</td> </tr> <tr> <td>☐</td> <td>B8580-9</td> <td>3230G-REJATBN100000909</td> </tr> <tr> <td>☐</td> <td>B8580-10</td> <td>3230G-REJATBN100000910</td> </tr> </tbody> </table>	Discovery	Chassis ID	Serial Number	☐	B8580-3	3230G-REJATBN100000903	☐	B8580-4	3230G-REJATBN100000904	☐	B8580-5	3230G-REJATBN100000905	☐	B8580-6	3230G-REJATBN100000906	☐	B8580-7	3230G-REJATBN100000907	☐	B8580-8	3230G-REJATBN100000908	☐	B8580-9	3230G-REJATBN100000909	☐	B8580-10	3230G-REJATBN100000910
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(d) Summary (Recognition of the chassis)

Confirm the registered chassis by following the procedures shown below.

Table 6.2.1.1-4 Add Chassis - Summary Procedure

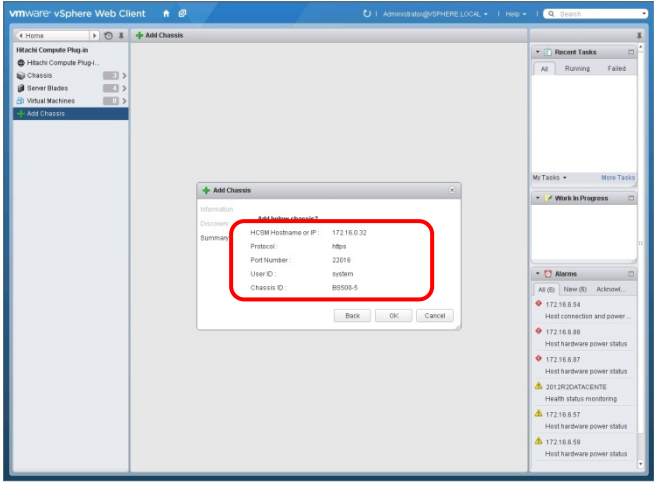
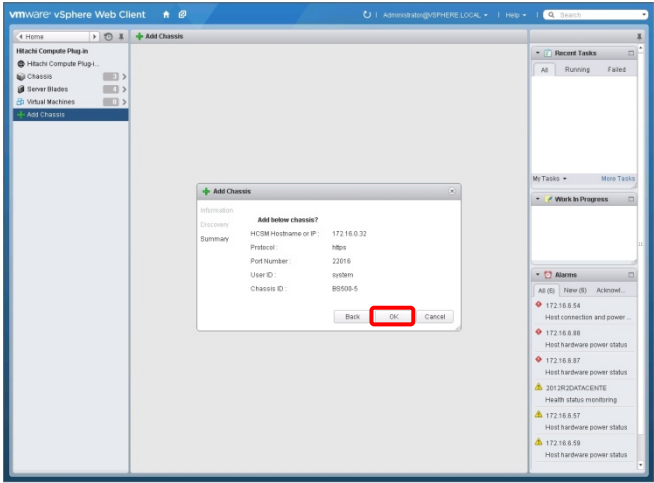
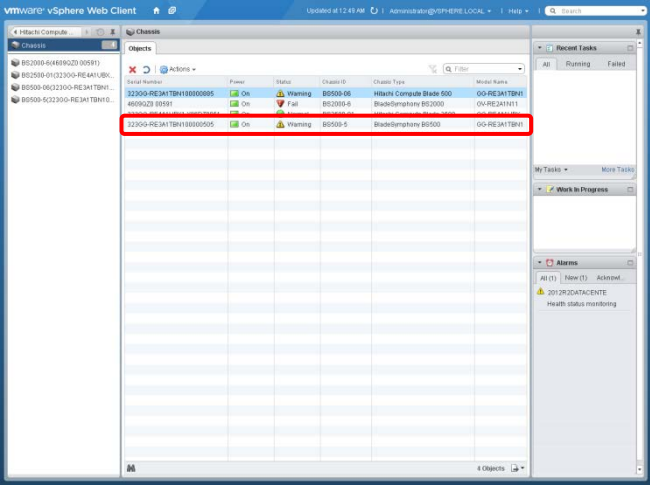
#	Procedure	Display
1.	Confirm the settings in Information and Discovery. Note: If you want to change the settings, click Back to change the corresponding items.	
2.	Click OK and register the chassis.	

Table 6.2.1.1-4 Add Chassis - Summary Procedure

#	Procedure	Display
3.	Various types of information on the registered chassis are displayed in the Chassis List window. For the details, see Table 6.4.1.2-1. Note: If another chassis was registered by mistake, remove the mistakenly registered chassis from the Hitachi Compute Plug-in.	

6.2.2. Remove Chassis

The Remove Chassis removes the chassis which has previously been registered using the **Add Chassis** from Hitachi Compute Plug-in.

The details of operation of the Remove Chassis by following the procedures shown below (see Table 6.2.2-1).

Table 6.2.2-1 Remove Chassis

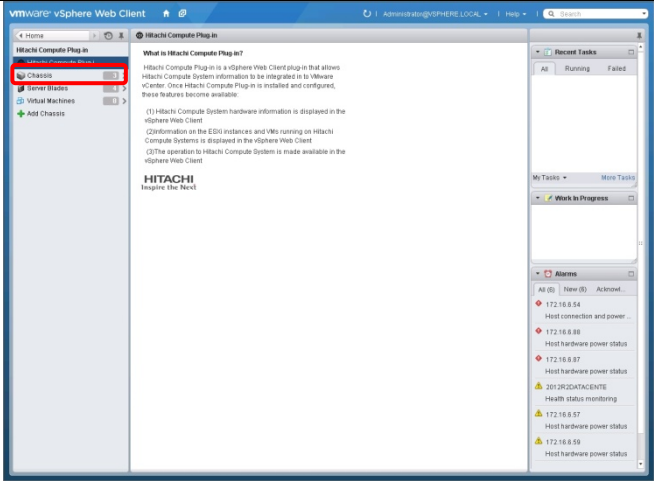
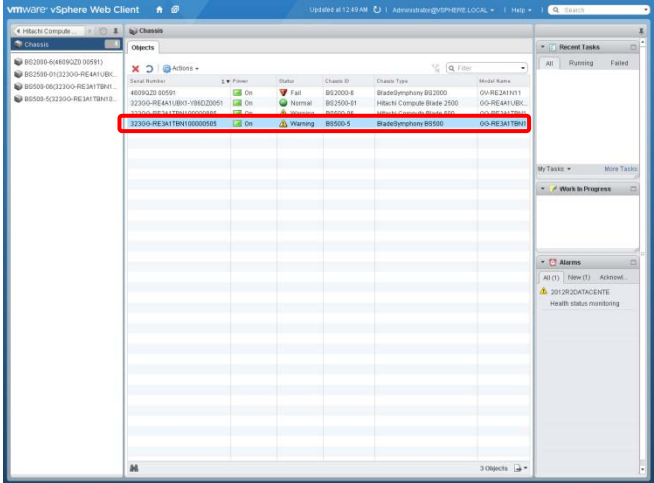
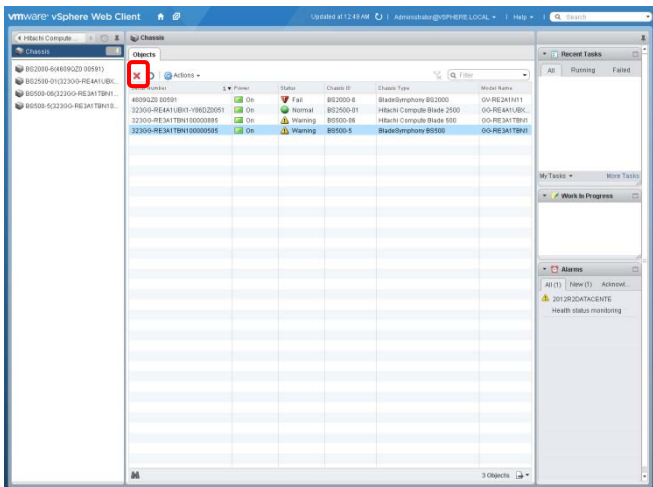
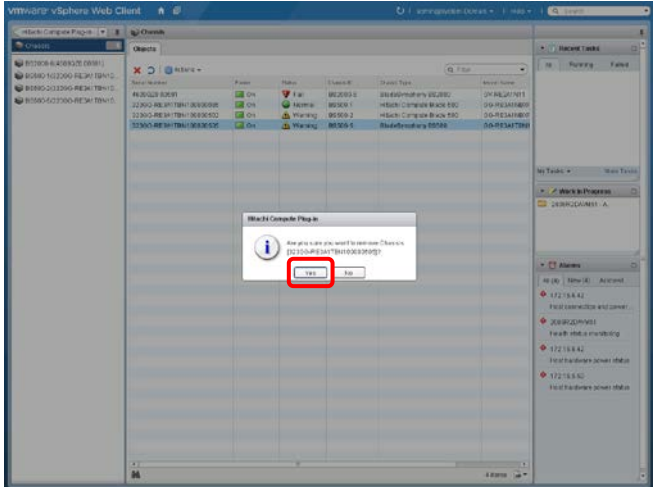
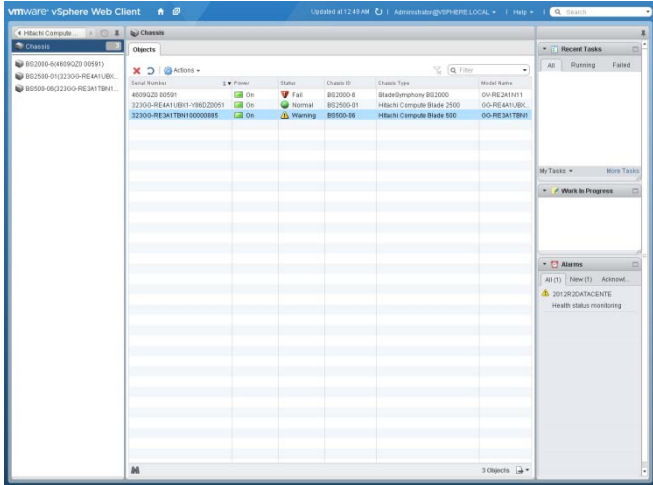
#	Procedure	Display
1.	Click Chassis in the Hitachi Compute Plug-in navigator.	
2.	Select the chassis to be removed from the Chassis List window.	

Table 6.2.2-1 Remove Chassis

#	Procedure	Display																														
3.	Click the Remove Chassis icon. Note: If multiple chassis were selected, select Remove Chassis from Actions.	 <table><thead><tr><th>Serial Number</th><th>Power</th><th>Status</th><th>Chassis ID</th><th>Chassis Type</th><th>Model Name</th></tr></thead><tbody><tr><td>460902D 00591</td><td>On</td><td>Fail</td><td>802000-8</td><td>BladeServerph 802000</td><td>GV-RE241N1</td></tr><tr><td>32300-RE41UB1-Y80Z0051</td><td>On</td><td>Normal</td><td>802000-41</td><td>Hitachi Compute Blade 2500</td><td>GV-RE41UB1</td></tr><tr><td>32300-RE3AT1BN1-00000055</td><td>On</td><td>Warning</td><td>80500-58</td><td>Hitachi Compute Blade 500</td><td>GV-RE3AT1BN1</td></tr><tr><td>32300-RE3AT1BN1-00000055</td><td>On</td><td>Warning</td><td>80500-5</td><td>BladeServerph 80500</td><td>GV-RE3AT1BN1</td></tr></tbody></table>	Serial Number	Power	Status	Chassis ID	Chassis Type	Model Name	460902D 00591	On	Fail	802000-8	BladeServerph 802000	GV-RE241N1	32300-RE41UB1-Y80Z0051	On	Normal	802000-41	Hitachi Compute Blade 2500	GV-RE41UB1	32300-RE3AT1BN1-00000055	On	Warning	80500-58	Hitachi Compute Blade 500	GV-RE3AT1BN1	32300-RE3AT1BN1-00000055	On	Warning	80500-5	BladeServerph 80500	GV-RE3AT1BN1
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4.	A confirmation dialog box for the removal is displayed. Click Yes to execute the removal.																															
5.	After the chassis has been removed, the Chassis List window is displayed again with the selected chassis removed from the Chassis List window. Note: If another chassis was removed by mistake, or removed chassis is required again, register the required chassis in Hitachi Compute Plug-in again using the Add Chassis.	 <table><thead><tr><th>Serial Number</th><th>Power</th><th>Status</th><th>Chassis ID</th><th>Chassis Type</th><th>Model Name</th></tr></thead><tbody><tr><td>460902D 00591</td><td>On</td><td>Fail</td><td>802000-8</td><td>BladeServerph 802000</td><td>GV-RE241N1</td></tr><tr><td>32300-RE41UB1-Y80Z0051</td><td>On</td><td>Normal</td><td>802000-41</td><td>Hitachi Compute Blade 2500</td><td>GV-RE41UB1</td></tr><tr><td>32300-RE3AT1BN1-00000055</td><td>On</td><td>Warning</td><td>80500-58</td><td>Hitachi Compute Blade 500</td><td>GV-RE3AT1BN1</td></tr></tbody></table>	Serial Number	Power	Status	Chassis ID	Chassis Type	Model Name	460902D 00591	On	Fail	802000-8	BladeServerph 802000	GV-RE241N1	32300-RE41UB1-Y80Z0051	On	Normal	802000-41	Hitachi Compute Blade 2500	GV-RE41UB1	32300-RE3AT1BN1-00000055	On	Warning	80500-58	Hitachi Compute Blade 500	GV-RE3AT1BN1						
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6.3. Operation Function

Note:

A task will be generated in the vCenter Server if an operation function is operated.

Although the generated task is cancellable, even if it cancels, processing of Hitachi Compute Plug-in is continued.

When it changes into the state where a task does not progress according to the obstacle of vCenter Server or vSphere Web Client, and a network failure, a task can be terminated by canceling a task.

6.3.1. Power Operation

The operation function operates the power of server. The following 3 operations can be executed.

(1) Power On

Starts a server.

(2) Force Power Off

Stops a server forcibly.

This is used when shutdown (vSphere Web Client standard function) of a server host fails.

(3) Power Reset

Resets a server.

This is used when reboot (vSphere Web Client standard function) of a server host fails.

The power operation procedure is shown blow.

Table 6.3.1-1 Power Operation Procedure

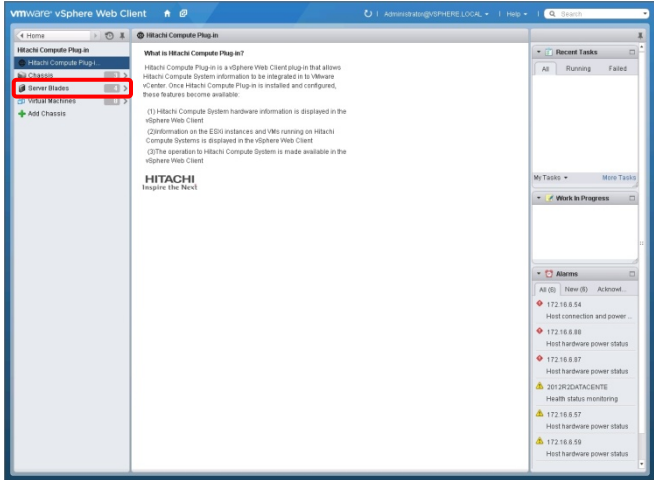
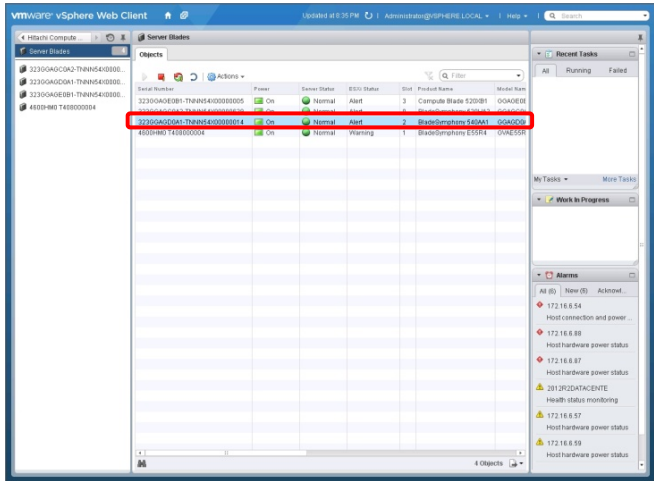
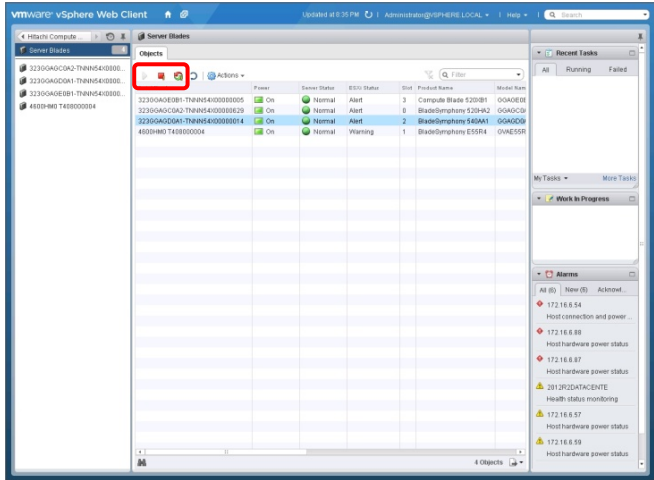
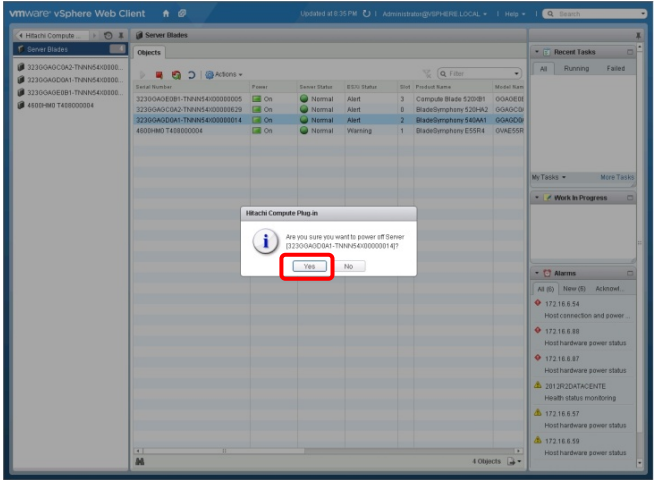
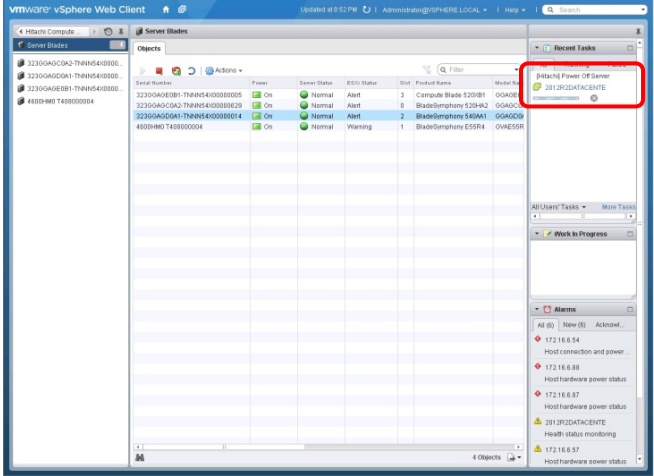
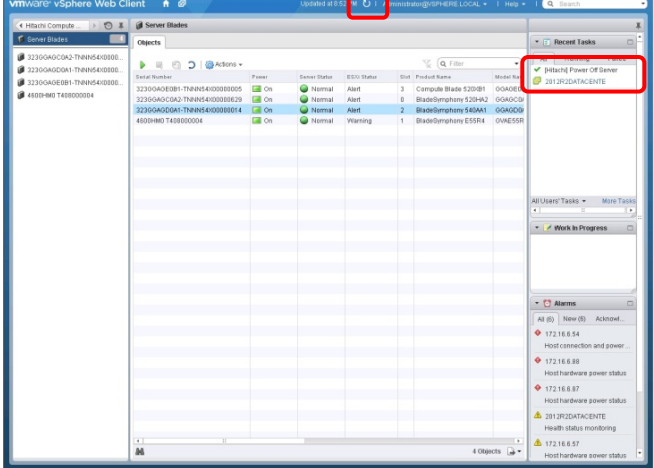
#	Procedure	Display
1.	Click Server Blades in the Hitachi Compute Plug-in navigator.	
2.	Select the server blade which you want to execute the power operation in the Server Blade List window. Note: Only one server blade can be selected at a time and the power operation of multiple server blades at one time cannot be performed. Also, the power operation to be selected will vary depending on the power status of the server blade.	
3.	Click Power On icon, Force Power Off icon or Power Reset icon.	

Table 6.3.1-1 Power Operation Procedure

#	Procedure	Display
4.	In the case of Force Power Off or Power Reset , a confirmation dialog box is displayed. Click Yes to execute.	
5.	Window shown on the right side is displayed during the execution.	
6.	After completing the power operation, the task status will be Completed . To display the latest status of the server blade after completing the task, execute refreshing the window (vSphere Web Client standard function).	

6.3.2.LID Operation

LID operation operates LID of a server. The following 2 operations can be performed.

- (1) LID On
Turns on the LID of a server.
- (2) LID Off
Turns off the LID of a server.

The details of the LID operation procedure is shown blow.

Table 6.3.2-1 LID Operation Procedure

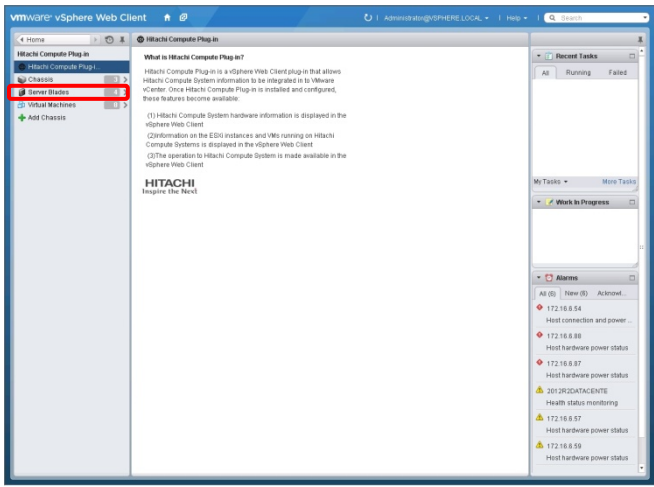
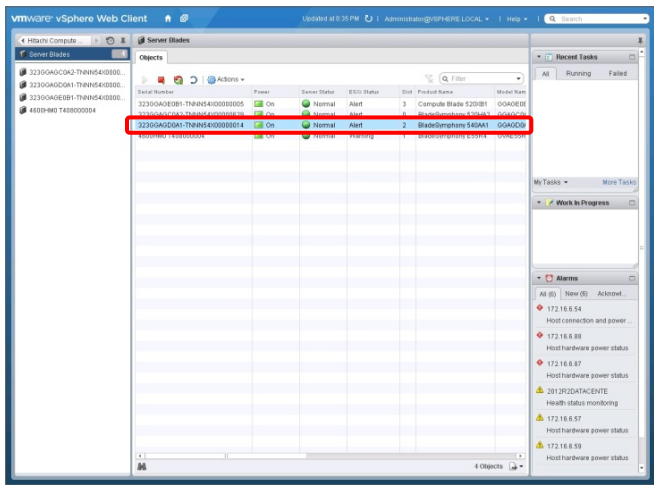
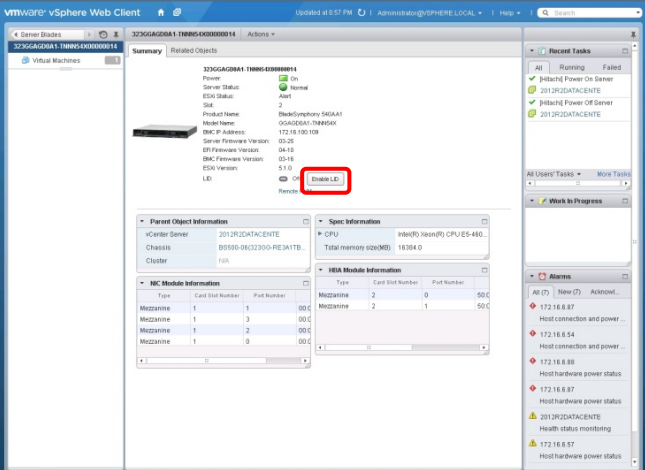
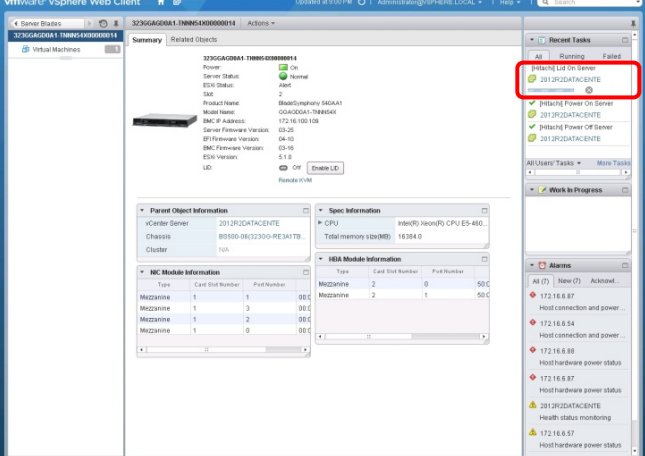
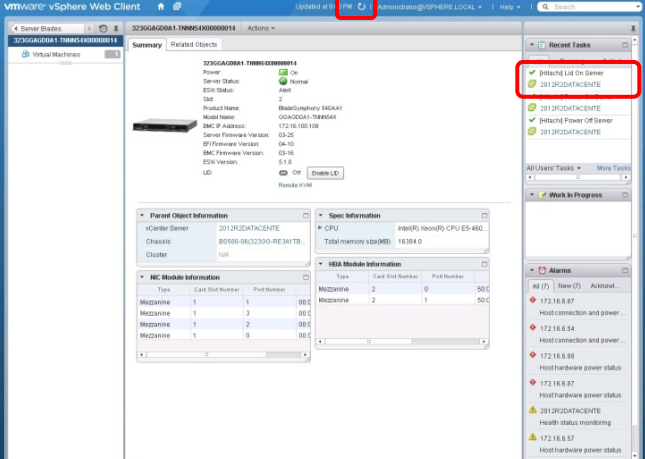
#	Procedure	Display
1.	Click Server Blades in the Hitachi Compute Plug-in navigator.	
2.	Double click the server blade you want to operate LID in the Server Blade List window and display the Summary window. Note: Only one server blade can be performed the LID operation at a time and multiple server blades cannot be performed the LID operation at one time. Note that LID operation to be selected will vary depending on the LID status of the server blade.	

Table 6.3.2-1 LID Operation Procedure

#	Procedure	Display
3.	Click Enable LID button or Disable LID button.	 The screenshot shows the vSphere Web Client interface for a server blade. The 'Enable LID' button is highlighted with a red box. The interface includes a summary of the server blade, related objects, and various tabs for configuration and monitoring.
4.	Window shown on the right side is displayed during the execution.	 The screenshot shows the vSphere Web Client interface with the 'Enable LID' task in progress. The task is listed in the 'Recent Tasks' pane on the right, with a red box highlighting the task name 'Enable LID on Server 2012R2-DATACENTER'. The task status is 'In Progress'.
5.	After completing the LID operation, the task status will be Completed. To display the latest status of the server blade after completing the task, execute refreshing the window (vSphere Web Client standard function).	 The screenshot shows the vSphere Web Client interface with the 'Enable LID' task completed. The task is listed in the 'Recent Tasks' pane on the right, with a red box highlighting the task name 'Enable LID on Server 2012R2-DATACENTER'. The task status is 'Completed'. The 'Refresh' button in the top right corner is also highlighted with a red box.

6.3.3.Refresh

The Refresh updates the information on chassis, server and virtual machine.

Refresh Chassis and Refresh Servers update the information by chassis.

Refresh can be executed in **Chassis List** window and **Server Blade List** window.

The following shows operation procedures as an example of the Refresh from **Chassis List** window.

The operation procedures of Refresh from **Server Blade List** window are also the same.

Table 6.3.3-1 Refresh Operation Procedure

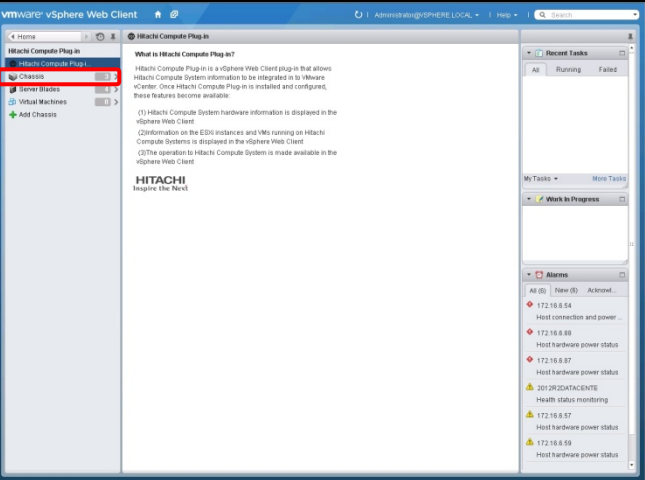
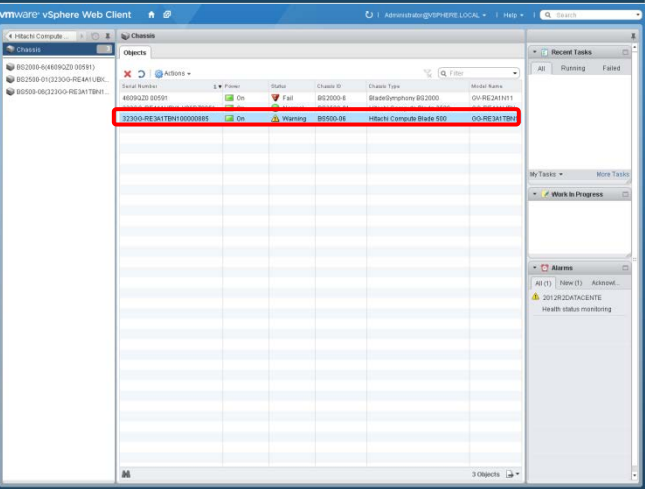
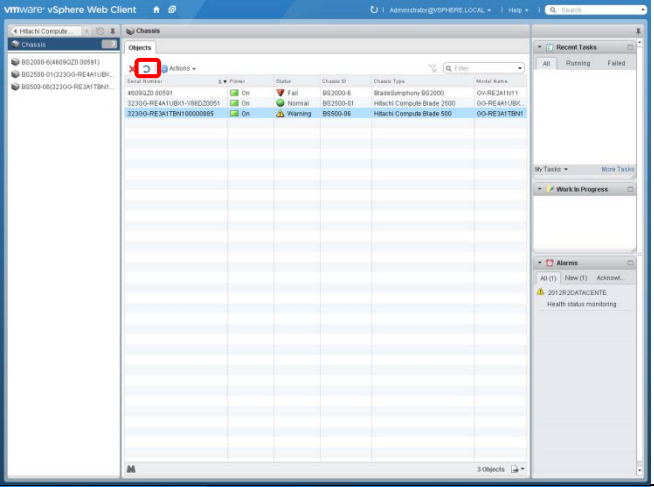
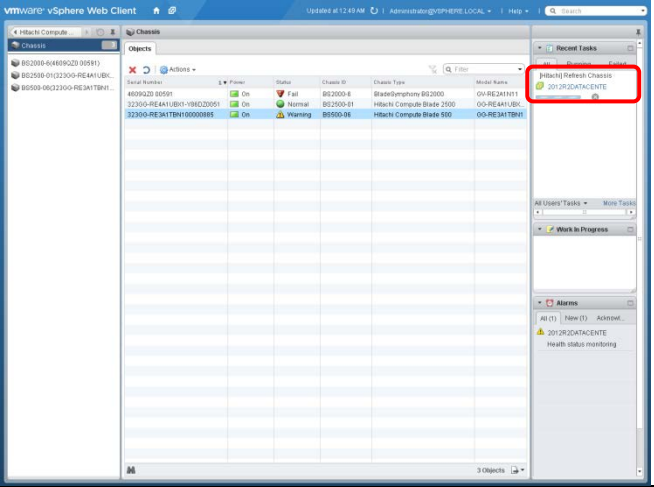
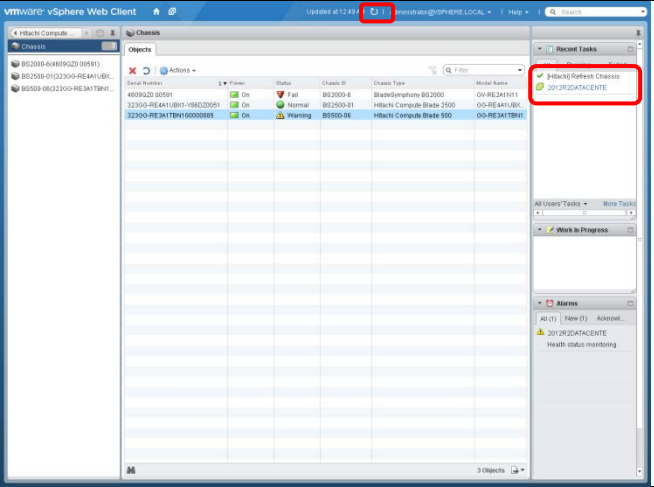
#	Procedure	Display
1.	Click Chassis in the Hitachi Compute Plug-in navigator.	
2.	Select the chassis to be refreshed in the Chassis List window.	

Table 6.3.3-1 Refresh Operation Procedure

#	Procedure	Display
3.	Click the Refresh Chassis icon. Note: If multiple chassis are selected, select Refresh Chassis from Actions.	
4.	Window shown on the right side is displayed during refresh.	
5.	After completing the Refresh operation, the task status will be Completed. To display the latest status of the chassis after completing the task, execute refreshing the window (vSphere Web Client standard function).	

6.4. Information Display

Note:

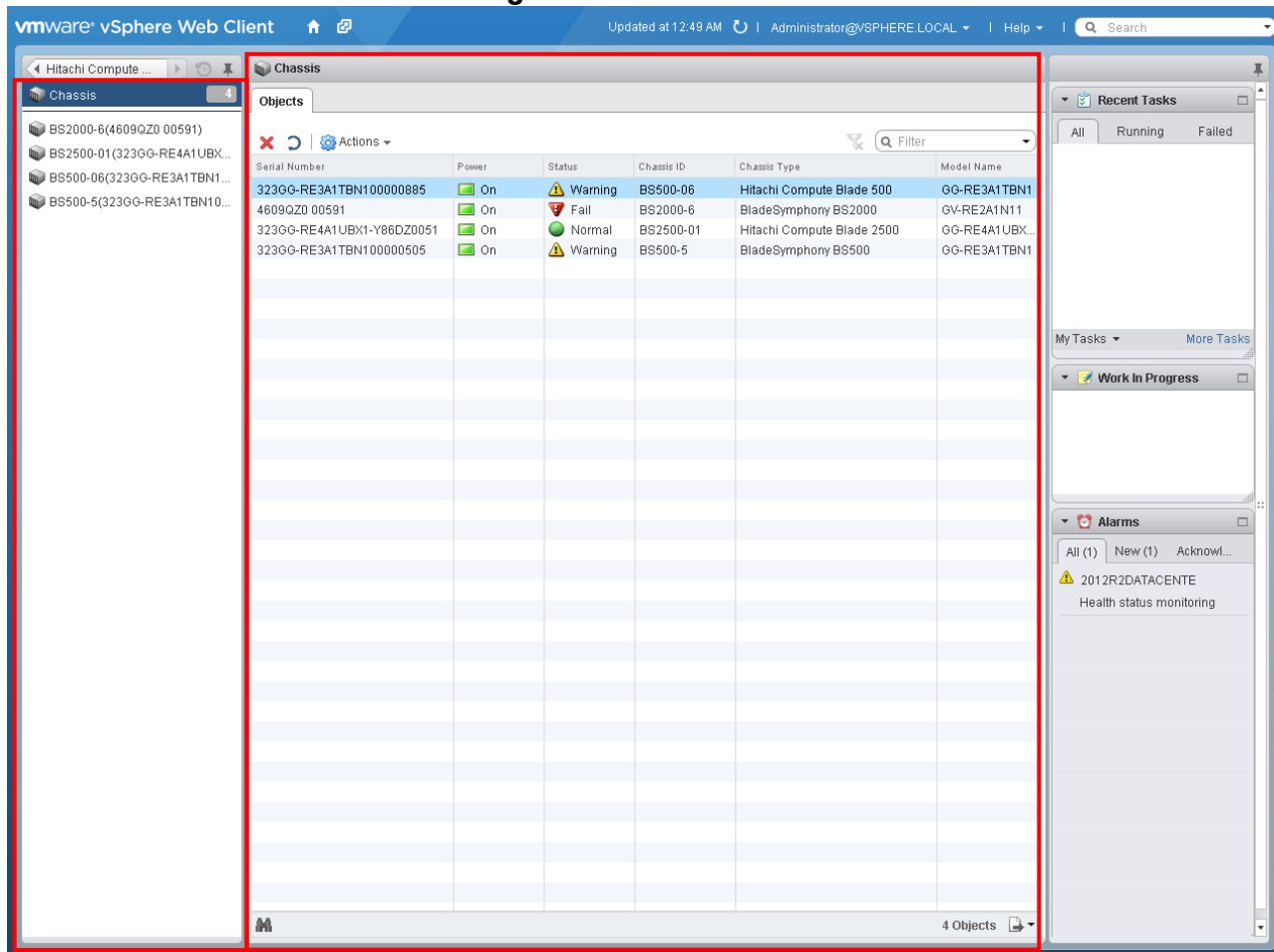
If there is no value for a display item, “N/A” is displayed. Also, if retrieval of information fails due to an error or failure, all information is displayed as “N/A”, or resources and product image will not be displayed. Confirm that an error message is not displayed in the window or log file.

6.4.1. Chassis List window

Chassis List window displays a list of chassis registered in the Hitachi Compute Plug-in.

To display the Chassis List window, click **Chassis** in the Hitachi Compute Plug-in navigator.

Figure 6.4.1-1 Chassis List window



6.4.1.1. Chassis List

Chassis registered in the Hitachi Compute Plug-in are listed in the form of **Chassis ID (serial number)**.

6.4.1.2. Chassis Information List

Chassis registered in the Hitachi Compute Plug-in are listed in the tabular form as shown below.

Table 6.4.1.2-1 Property List of Chassis Information List

#	Property Name	Description
1.	Serial Number	Displays the chassis serial number.
2.	Power	Displays the chassis power status. On : On Unknown : Not connected
3.	Status	Displays the status of chassis. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Chassis status is not available
4.	Chassis ID	Displays chassis ID.
5.	Chassis Type	Displays chassis type.
6.	Model Name	Displays chassis model name.

6.4.2. Chassis Details window

Chassis details window shows the detail information of chassis registered in the Hitachi Compute Plug-in. Also, if you click **Related Objects** tab, you can see the list of server blades and the list of virtual machines as the object related chassis.

To display the Chassis details window, either click the **chassis** in the Chassis List on the Chassis List window or double click the **chassis** in the Chassis Information List (see Figure 6.4.1-1).

6.4.2.1. Summary

Summary displays the detail information of the chassis.

To display chassis, click **Summary** in the Chassis details window.

Figure 6.4.2.1-1 Chassis Details window (Summary)

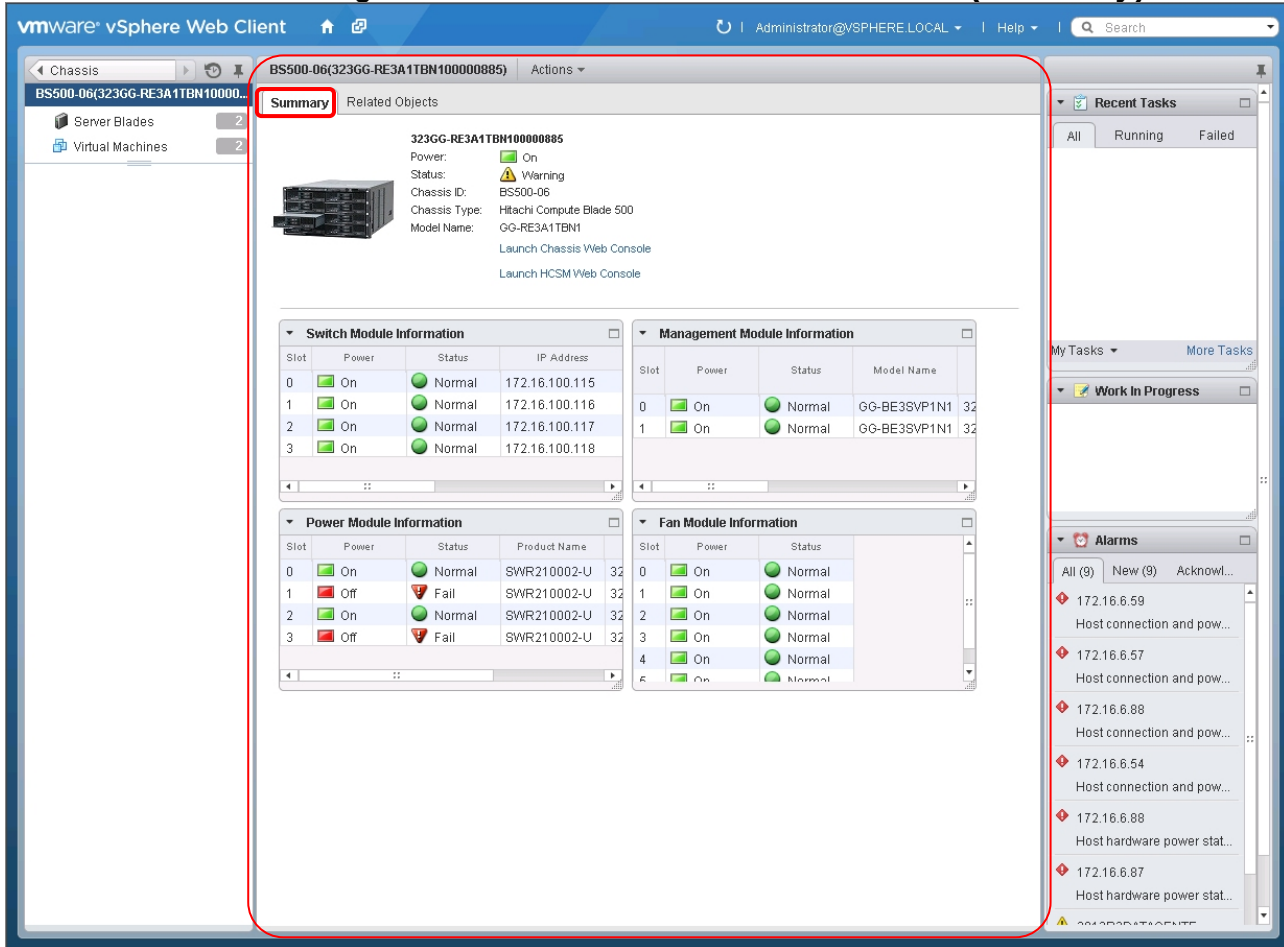


Table 6.4.2.1-1 Property List of Summary

#	Property Name	Description
1.	Serial Number	Displays the same information as in the Chassis Information List (See Table 6.4.1.2-1).
2.	Power	
3.	Status	
4.	Chassis ID	
5.	Chassis Type	
6.	Model Name	
7.	Launch Chassis Web Console	Displays the login window of the chassis web console in the different window when you click the link. For the chassis web console, see the manual of the Hitachi server.
8.	Launch HCSM Web Console	Displays the login window of the HCSM web console in the different window when you click the link. For the HCSM web console, see the manual of HCSM.

Table 6.4.2.1-2 Property List of Switch Module Information

#	Property Name	Description
1.	Slot	Displays the slot number.
2.	Power	Displays the power status of the switch module. On : On Off : Off Unknown : Power status of the switch module is not available
3.	Status	Displays the status of the switch module. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Status of the switch module is not available.
4.	IP Address	Displays the IP address of the switch module.
5.	Type	Displays the type of the switch module.
6.	Model Name	Displays the model name of the switch module.
7.	Serial Number	Displays the serial number of the switch module.
8.	Firmware Version	Displays the firmware version of the switch module.

Table 6.4.2.1-3 Property List of Management Module Information

#	Property Name		Description
1.	Slot		Displays the slot number.
2.	Power		Displays the power status of the management module. On : On Off : Off Unknown : Power status of the management module is not available.
3.	Status		Displays the status of the management module. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Status of the management module is not available.
4.	Model Name		Displays the model name of the management module.
5.	Serial Number		Displays the serial number of the management module. Displayed when a version of HCSM is 8.1.0 and later.
6.	Firmware Version		Displays the firmware version of the management module.
7.	Hot Standby Status		Displays the status of Active, Not Active or Unknown.
8.	IP	Management	Displays the IP address of the management LAN port.
9.	Address	Maintenance	Displays the IP address of the maintenance LAN port.

Table 6.4.2.1-4 Property List of Power Module Information

#	Property Name	Description
1.	Slot	Displays the slot number.
2.	Power	Displays the power status of the power module. On : On Off : Off Unknown : Power module status is not available.
3.	Status	Displays the status of the power module. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Status of the power module is not available.
4.	Product Name	Displays the product name of the power supply.
5.	Model Name	Displays the model name of the power module.
6.	Serial Number	Displays the serial number of the power module.

Table 6.4.2.1-5 Property List of Fan Module Information

#	Property Name	Description
1.	Slot	Displays the slot number.
2.	Power	Displays the power status of the Fan module. On : On Off : Off Unknown : Power status of the Fan module is not available.
3.	Status	Displays the status of the Fan module. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Status of the Fan module is not available.

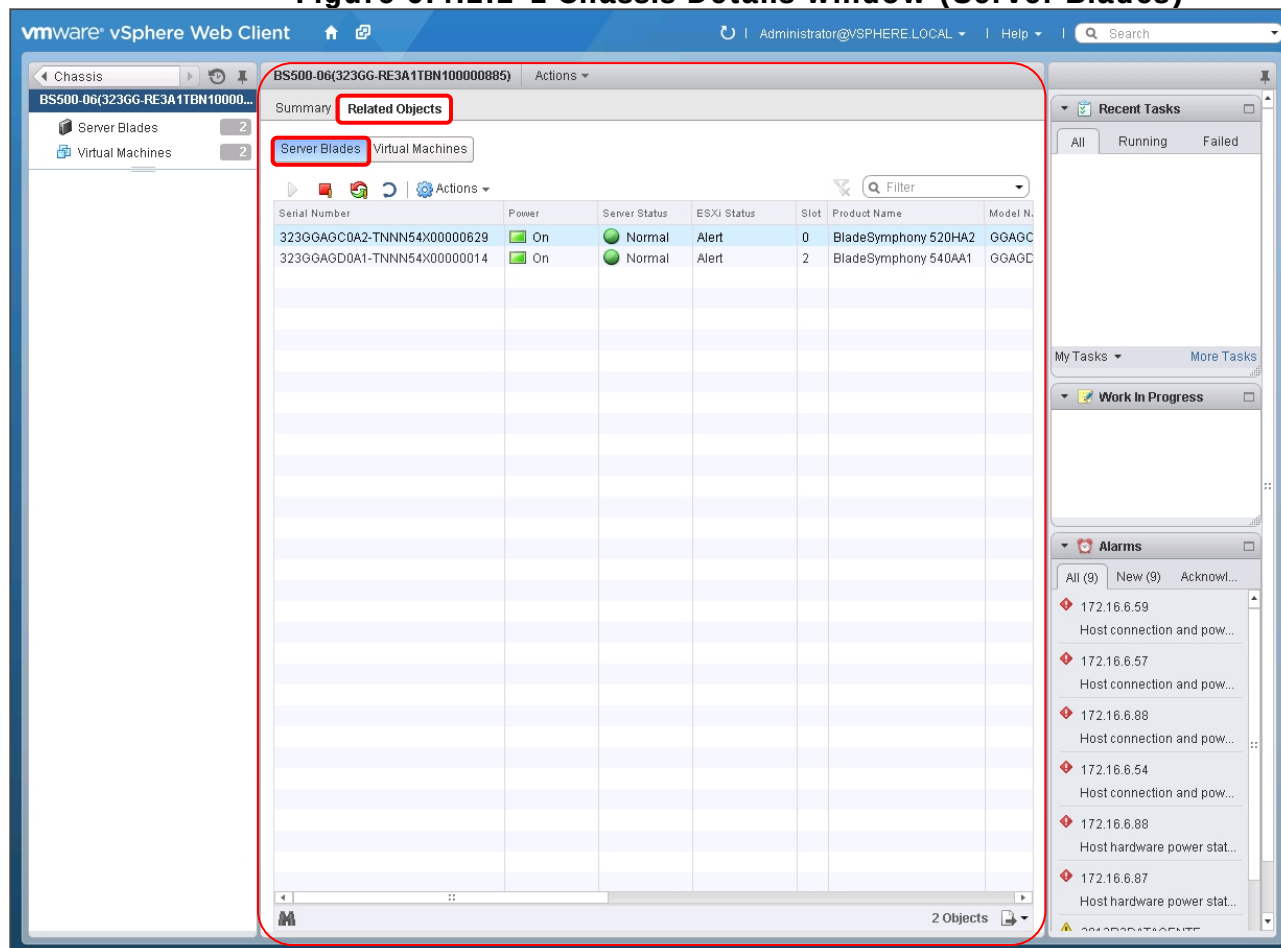
6.4.2.2. Relevant Objects Related to the Chassis

(1) List of server blade related chassis

Displays the server blade list related to the chassis.

Click **Related Objects** tab in the Chassis details window and click **Server Blades**.

Figure 6.4.2.2-1 Chassis Details window (Server Blades)



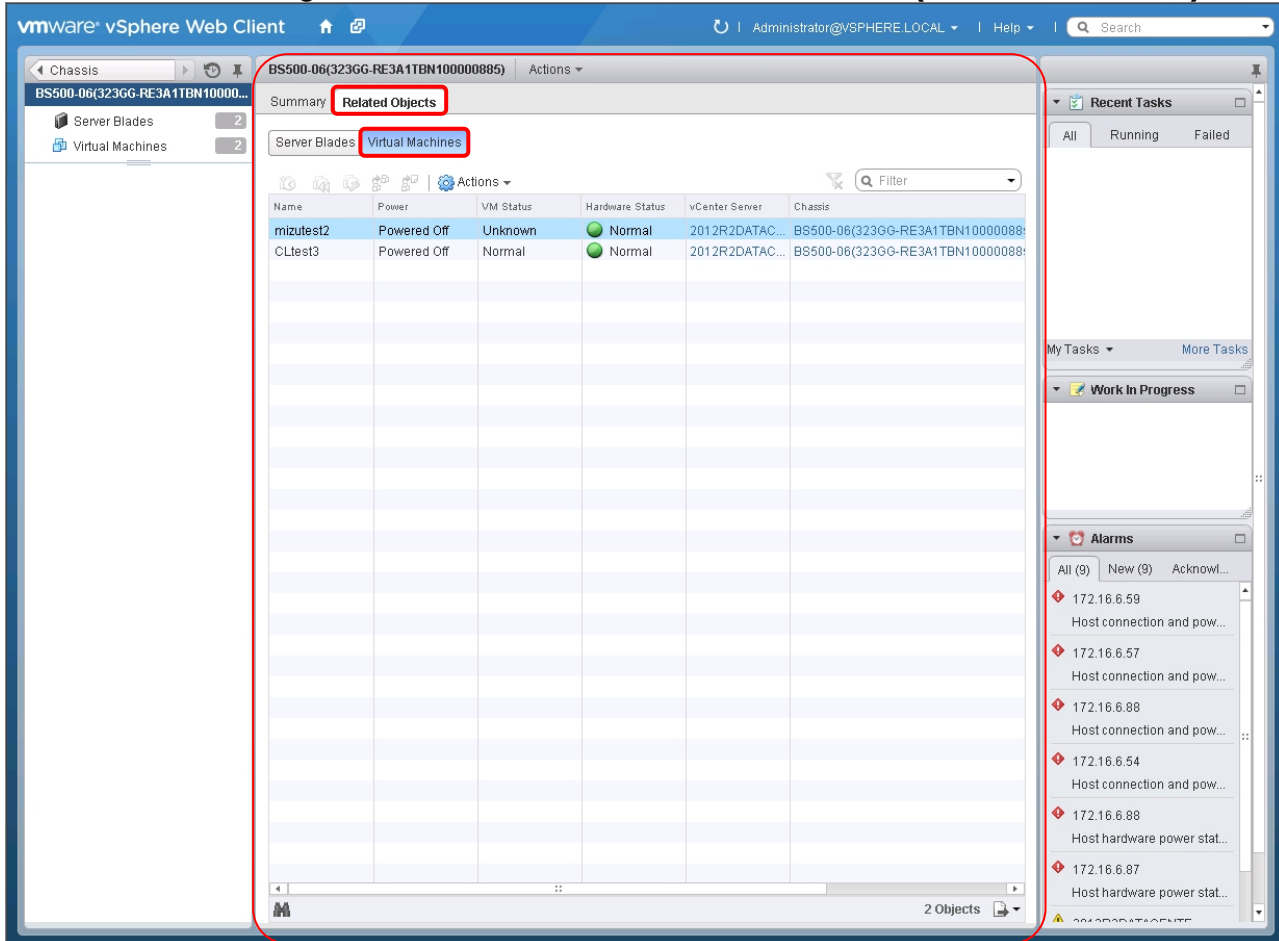
For the property displayed in the server blade list, see Table 6.4.3.2-1.

(2) List of the virtual machines related to the chassis

It displays a list of the virtual machines related to the chassis.

Click the **Related Objects** tab and click **Virtual Machines** on the Chassis Details window.

Figure 6.4.2.2-2 Chassis Details window (Virtual Machines)



For the property displayed in the virtual machines list, see Table 6.4.5.2-1.

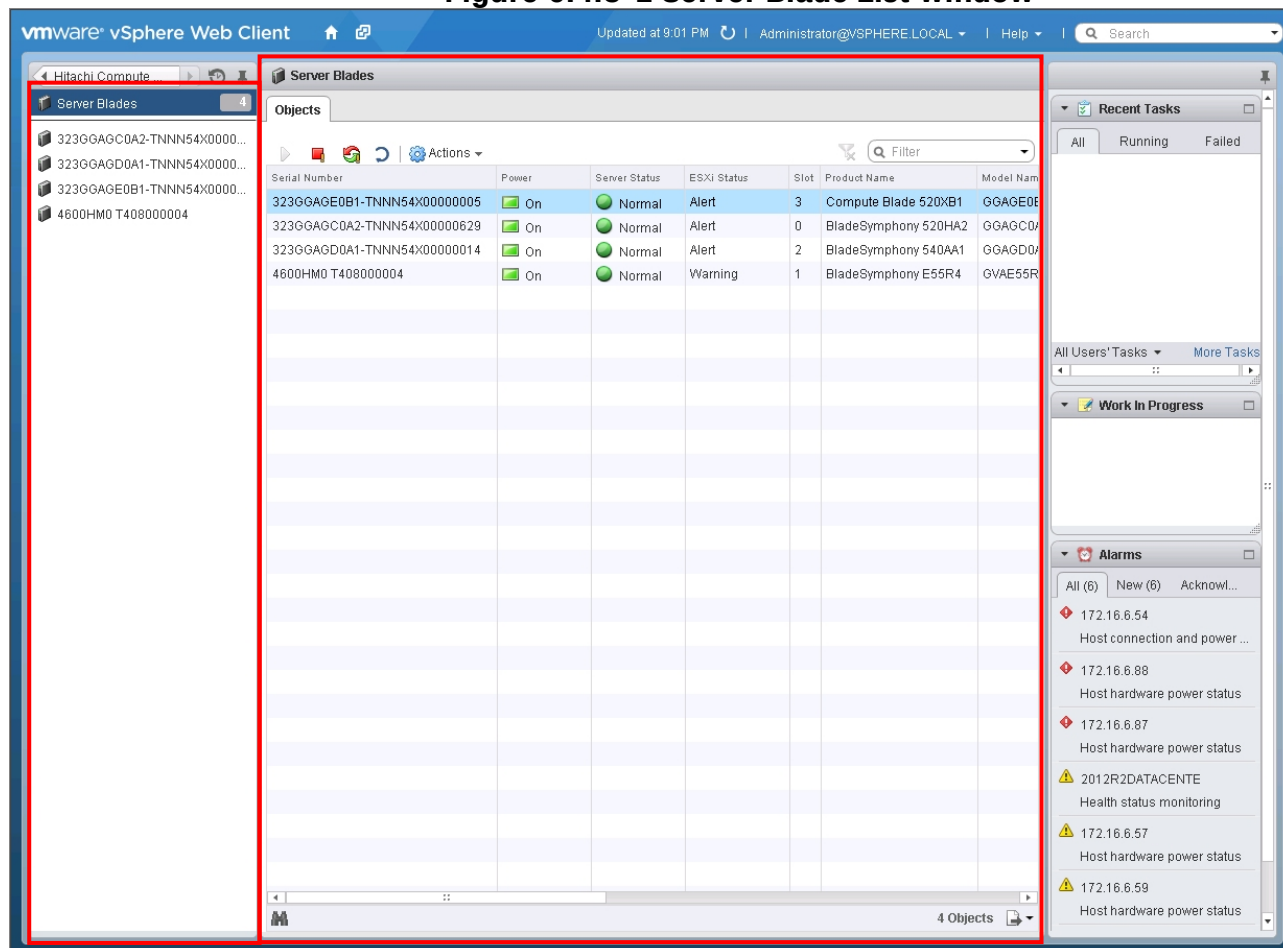
6.4.3. Server Blade List window

Server Blade List window displays the list of the server blades stored in the chassis which has been registered in the Hitachi Compute Plug-in.

Note that the server blade which has been registered in the vCenter Server as the host will only be displayed among the server blades stored in the chassis.

To display the Server Blade List window, click **Server Blades** in the Hitachi Compute Plug-in navigator.

Figure 6.4.3-1 Server Blade List window



6.4.3.1. Server Blade List

Server Blade List displays the serial number of the server blade stored in the chassis.

6.4.3.2. Server Blade Information List

Server Blade Information List displays the server blades stored in the chassis in the tabular form.

Table 6.4.3.2-1 Property List of Server Blade Information List

#	Property Name	Description
1.	Serial Number	Displays the serial number of the server blade.
2.	Power	Displays the power status of the server blade. On : On Off : Off Unknown : Not connected
3.	Server Status	Displays the status of the server blade. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Server status information is not available.
4.	ESXi Status	Displays the status of ESXi.
5.	Slot	Displays the slot number of the server blade.
6.	Product Name	Displays the product name of the server blade.
7.	Model Name	Displays the model name of the server blade.
8.	BMC IP Address	Displays the IP address of BMC.
9.	Server Firmware Version	Displays the firmware version of the server blade.
10.	EFI Firmware Version	Displays the firmware version of EFI.
11.	BMC Firmware Version	Displays the firmware version of BMC.
12.	ESXi Version	Displays the version of ESXi.
13.	LID	Displays the power on status of LID. On : Power on status Off : Power off status Unknown : LID status is not available.
14.	vCenter Server	Displays the name of the vCenter Server. Clicking the name jumps to the vCenter Server Summary window (vSphere Web Client standard function).
15.	Chassis	Displays the chassis in the Chassis ID (Chassis serial number) format. When you click here, jump to the Chassis details window.
16.	Cluster	Displays the cluster name on the vCenter consisting of ESXi hosts. Clicking here jumps to the Cluster Summary window (vSphere Web Client standard function).

6.4.4. Server Blade Details window

Server Blade Details window displays the detailed information of the server blade. Also, if you click **Related Objects** tab, you can see the list of the virtual machines as the server blade related objects.

To display the Server Blade Details window, either click the server blade in the Server Blade List of the Server Blade List window or double click the server blade in the Server Blade Information List (see Figure 6.4.3-1).

6.4.4.1. Summary

Summary displays the server blade details information.

To display the summary, click **Summary** in the Server Blade Details window.

Note:

A product image is not displayed in case of unsupported model.

Figure 6.4.4.1-1 Server Blade Details window (Summary)

323GGAGC0A1-TNNH14X00000298

Summary Related Objects

Power: On
 Server Status: Normal
 ESXi Status: Alert
 Slot: 4
 Product Name: BladeSymphony 520HA1
 Model Name: GGAGC0A1-TNNH14X
 BMC IP Address: 192.168.101.15
 Server Firmware Version: 01-43
 EFI Firmware Version: 02-13
 BMC Firmware Version: 01-44
 ESXi Version: 5.1.0
 LID: Off Enable LID
[Remote KVM](#)

Parent Object Information

vCenter Server	2008R2DAVM51
Chassis	BS500-1(323GG-RE3A1TBN...
Cluster	N/A

Spec Information

CPU: Intel(R) Xeon(R) CPU E5-262...

Total memory size(MB): 16384.0

NIC Module Information

Type	Card Slot Number	Port Number	
Mezzanine	1	0	00:0
Mezzanine	1	1	00:0
Mezzanine	1	3	00:0
Mezzanine	1	2	00:0

HBA Module Information

Type	Card Slot Number	Port Number	
Mezzanine	2	1	10:0
Mezzanine	2	0	10:0

Alarms

All (6) New (6) Acknowl...

- 172.16.6.56
Host connection and power ...
- 2008R2DAVM51
Health status monitoring
- 172.16.5.50
Host hardware power status
- 172.16.6.56
Host hardware power status
- 172.16.6.56
Host storage status
- 172.16.6.56
Host hardware temperature ...

Table 6.4.4.1-1 Property List of Summary

#	Property Name	Description
1.	Serial Number	Displays the same contents as the Server Blade Information List (See Table 6.4.3.2-1).
2.	Power	
3.	Server Status	
4.	ESXi Status	
5.	Slot	
6.	Product Name	
7.	Model Name	
8.	BMC IP Address	
9.	Server Firmware Version	
10.	EFI Firmware Version	
11.	BMC Firmware Version	
12.	ESXi Version	
13.	LID	
14.	Remote KVM	If you click the link, the remote KVM login window is displayed in the different window. For the details of the remote KVM, see the manual of the Hitachi server.

Table 6.4.4.1-2 Property List of Parent Object Information

#	Property Name	Description
1.	vCenter Server	Displays the same contents as the Server Blade Information List (See Table 6.4.3.2-1).
2.	Chassis	
3.	Cluster	

Table 6.4.4.1-3 Property List of Spec Information

#	Property Name		Description
1.	CPU	Name	Displays the CPU name.
2.		Number	Displays the number of CPUs.
3.		Cores	Displays the number of Cores.
4.	Total memory size(MB)		Displays the memory capacity (MB).

Table 6.4.4.1-4 Property List of NIC Module Information

#	Property Name	Description
1.	Type	Displays the type of MAC card.
2.	Card Slot Number	Displays the card slot number.
3.	Port Number	Displays the port number.
4.	MAC Address	Displays the MAC address.

Table 6.4.4.1-5 Property List of HBA Module Information

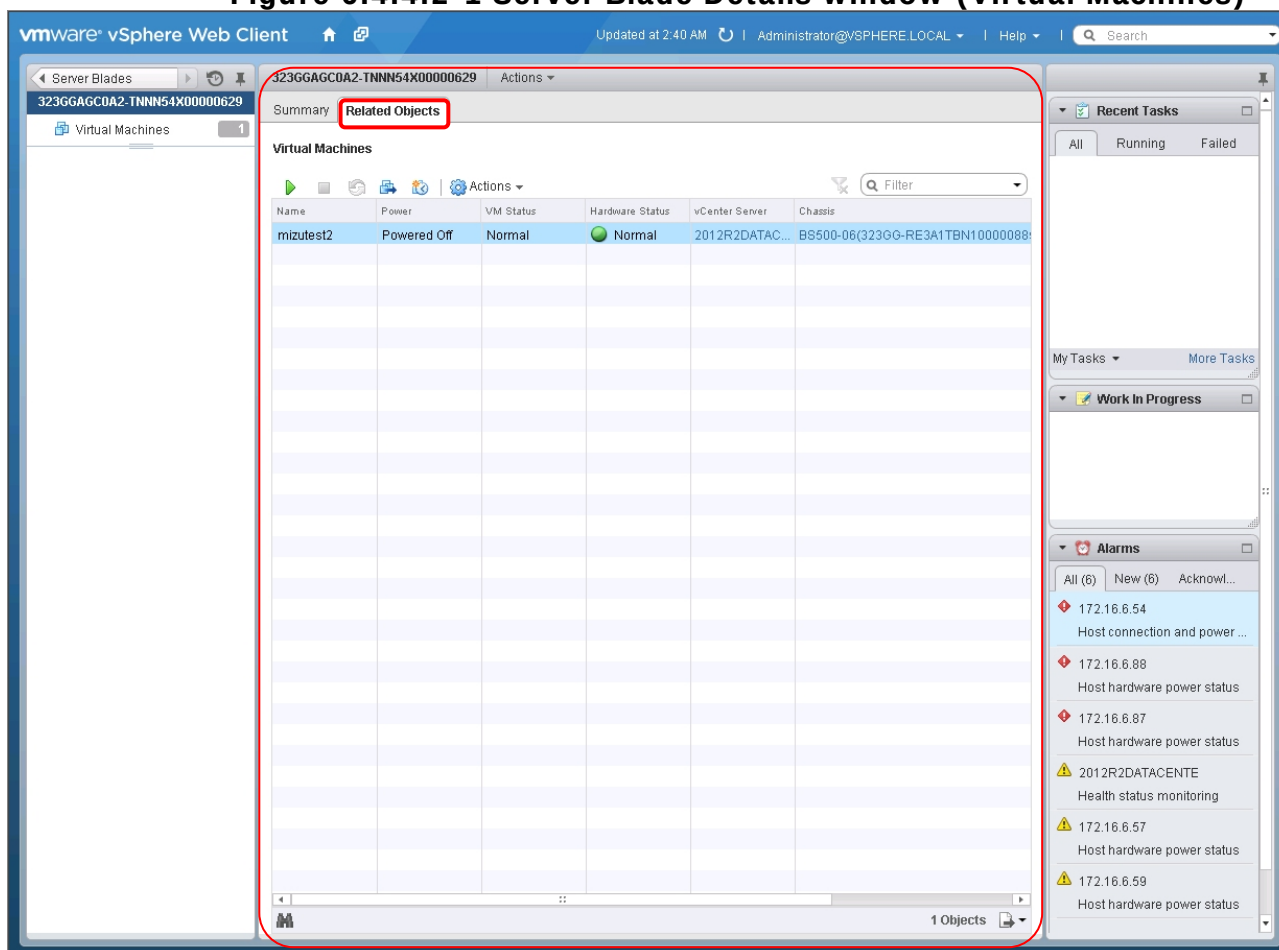
#	Property Name	Description
1.	Type	Displays the type of HBA.
2.	Card Slot Number	Displays the card slot number.
3.	Port Number	Displays the port number.
4.	WWPN	Displays the WWPN.
5.	WWNN	Displays the WWNN.

6.4.4.2. Relevant Objects Related to the Server Blade

Displays the list of virtual machines related to the server blade.

Click **Related Objects** tab in the Server Blade Details window.

Figure 6.4.4.2-1 Server Blade Details window (Virtual Machines)



For the property displayed in the list of the virtual machines, see Table 6.4.5.2-1.

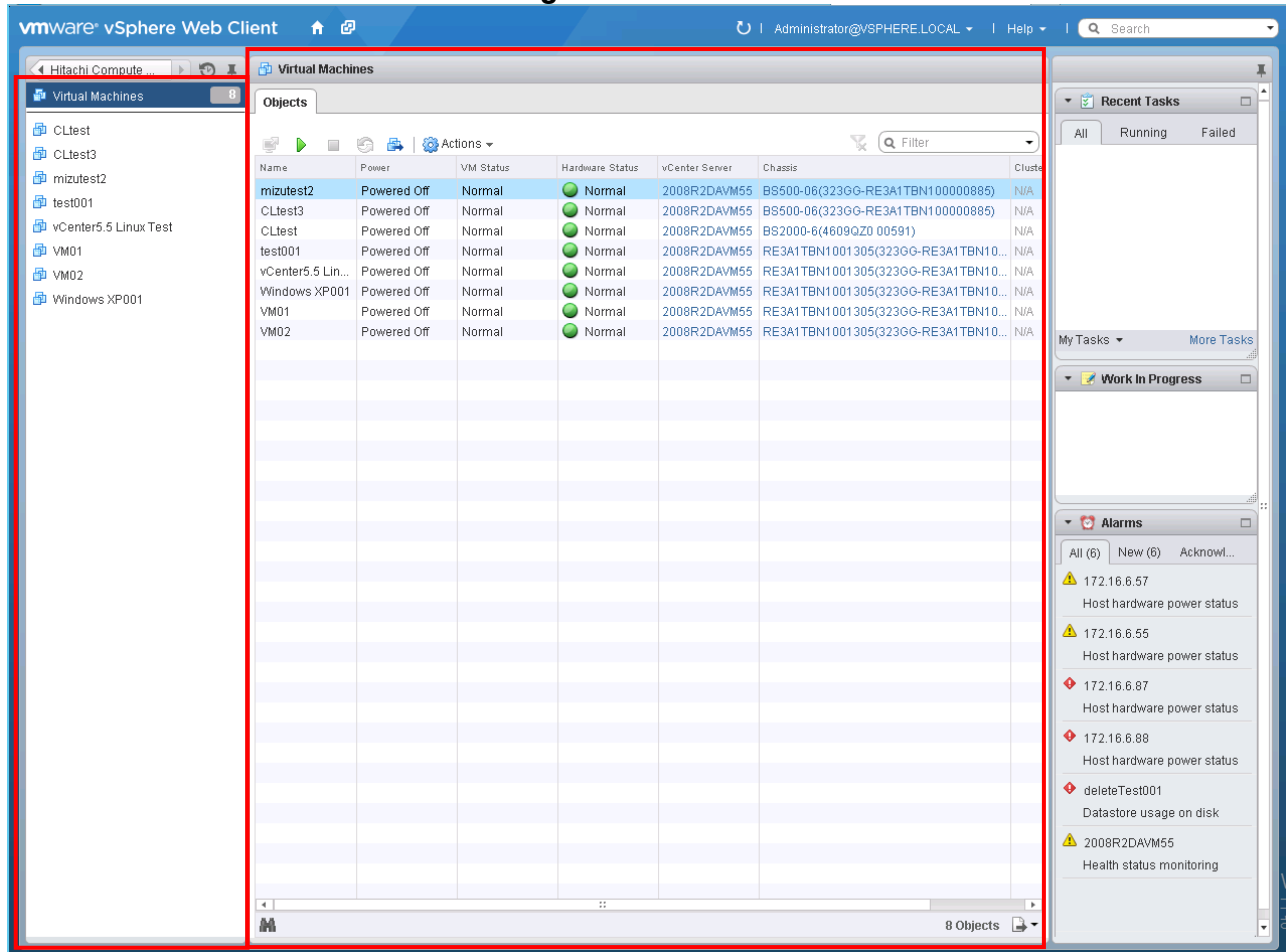
6.4.5. VM List window

VM List window displays the list of the virtual machines on the Hitachi server registered in the Hitachi Compute Plug-in.

Note that the virtual machines on the server which have been registered in vCenter Server as the host will only be displayed.

To display the VM List window, click **Virtual Machines** in the Hitachi Compute Plug-in navigator.

Figure 6.4.5-1 VM List window



6.4.5.1. VM List

VM List displays the list of the virtual machine names on the Hitachi server.

If you click the virtual machines, jump to the Summary window of the virtual machines (vSphere Web Client standard function).

6.4.5.2. VM Information List

VM Information List displays the virtual machines on the Hitachi server are displayed in the tabular form.

Double-clicking the virtual machine jumps to the Summary window of the virtual machine (vSphere Web Client standard function).

Table 6.4.5.2-1 Property List of VM Information List

#	Property Name	Description
1.	Name	Displays the name of the virtual machine.
2.	Power	Displays the power status of the virtual machine. Note that this value is same as the one stated in the Summary window of the virtual machine (vSphere Web Client standard function).
3.	VM Status	Displays the status of the virtual machine. Note that this value is same as the one stated in the Summary window of the virtual machine (vSphere Web Client standard function).
4.	Hardware Status	Displays the status of the hardware. Normal : Normal status Warning : Warning status Fail : Failure status Unknown : Hardware status is not available.
5.	vCenter Server	Displays the name of the vCenter Server. If you click here, jump to the vCenter Server Summary window (vSphere Web Client standard function).
6.	Chassis	Displays the chassis in the form of Chassis ID (Chassis serial number) . If you click here, jump to the Chassis details window.
7.	Cluster	Displays the cluster name on the vCenter consisting of ESXi hosts. Clicking here jumps to the Cluster Summary window (vSphere Web Client standard function).
8.	Server	Displays the serial number of the server. If you click here, jump to the Server Blade Details window.

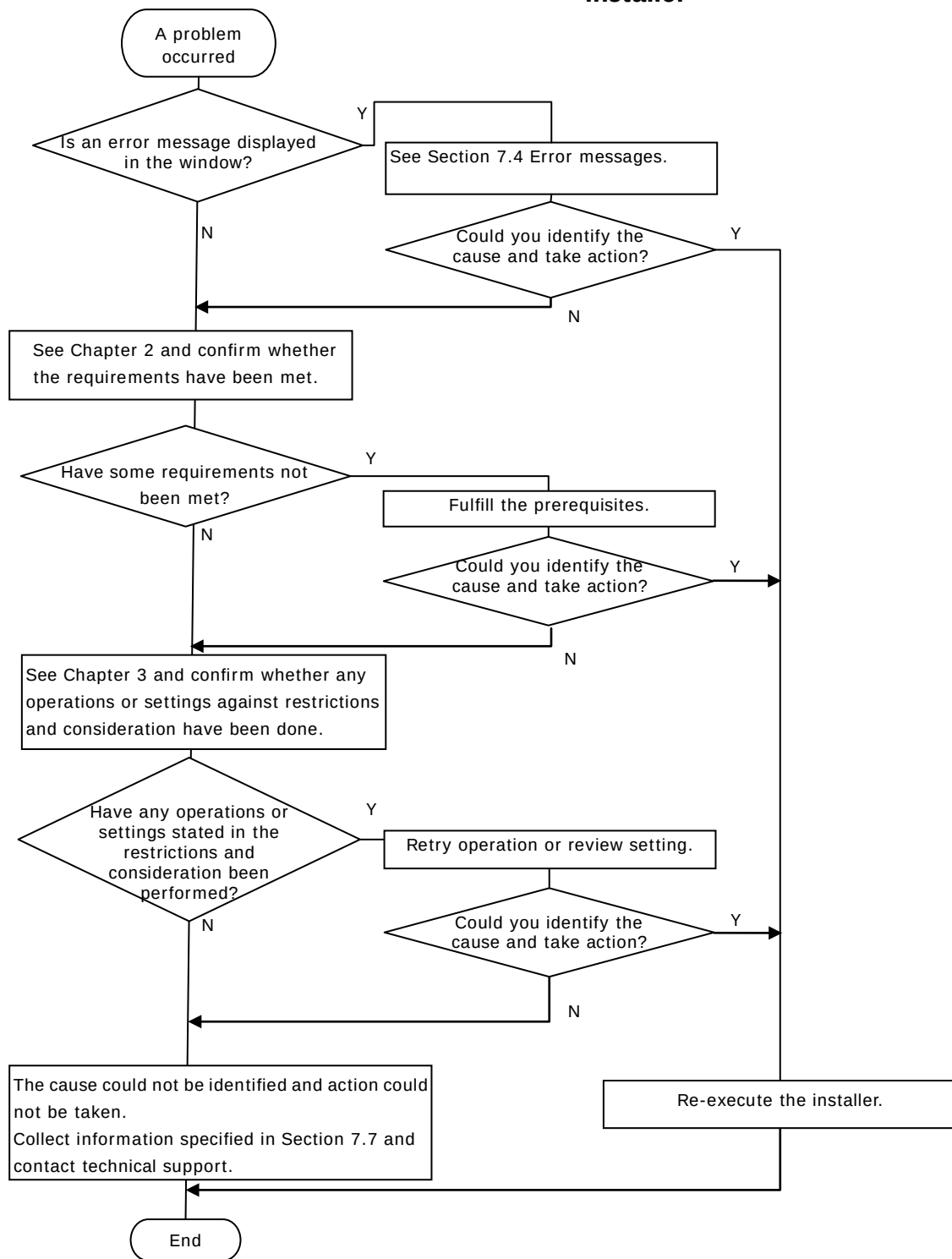
7. Troubleshooting

- ☐ [Troubleshooting during Installation of Hitachi Compute Plug-in](#)
- ☐ [Troubleshooting while using Hitachi Compute Plug-in](#)
- ☐ [Message IDs](#)
- ☐ [Messages](#)
- ☐ [Confirmation points in Operation Environment](#)
- ☐ [Log Files](#)
- ☐ [Information Collected During Problem Occurrence](#)

7.1. Troubleshooting during Installation of Hitachi Compute Plug-in

If problems occur when using the installer of Hitachi Compute Plug-in, error information is displayed in a message on the window. To display the relevant information for each error message, proceed along the following flowchart.

Figure 7.1-1 Troubleshooting flowchart for when problems occur with installer



7.2. Troubleshooting while using Hitachi Compute Plug-in

If problems occur while using Hitachi Compute Plug-in, error information is displayed and output to a log file. Proceed along the following flowchart.

Figure 7.2-1 Troubleshooting flowchart for when problems occur during operation (1/2)

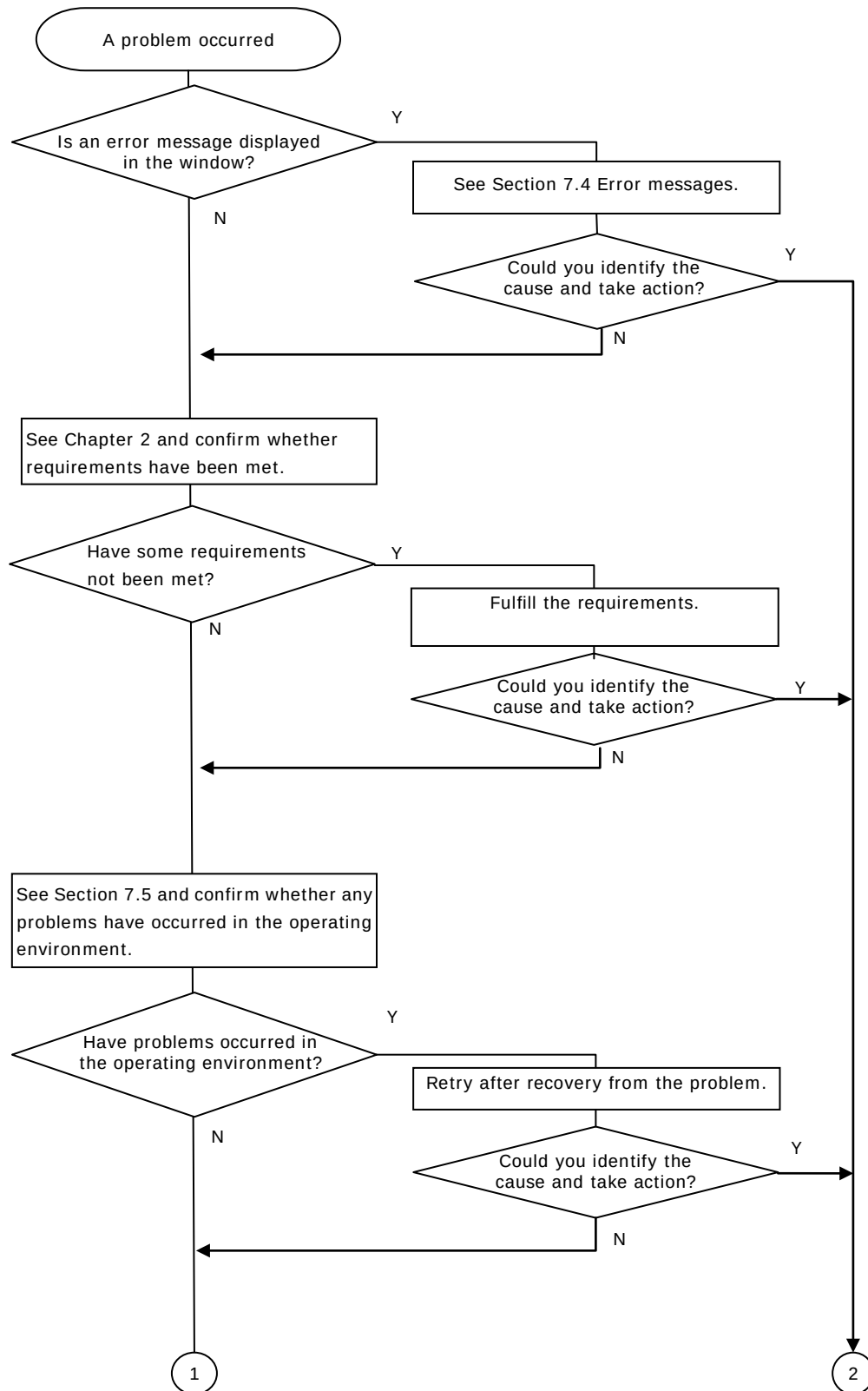
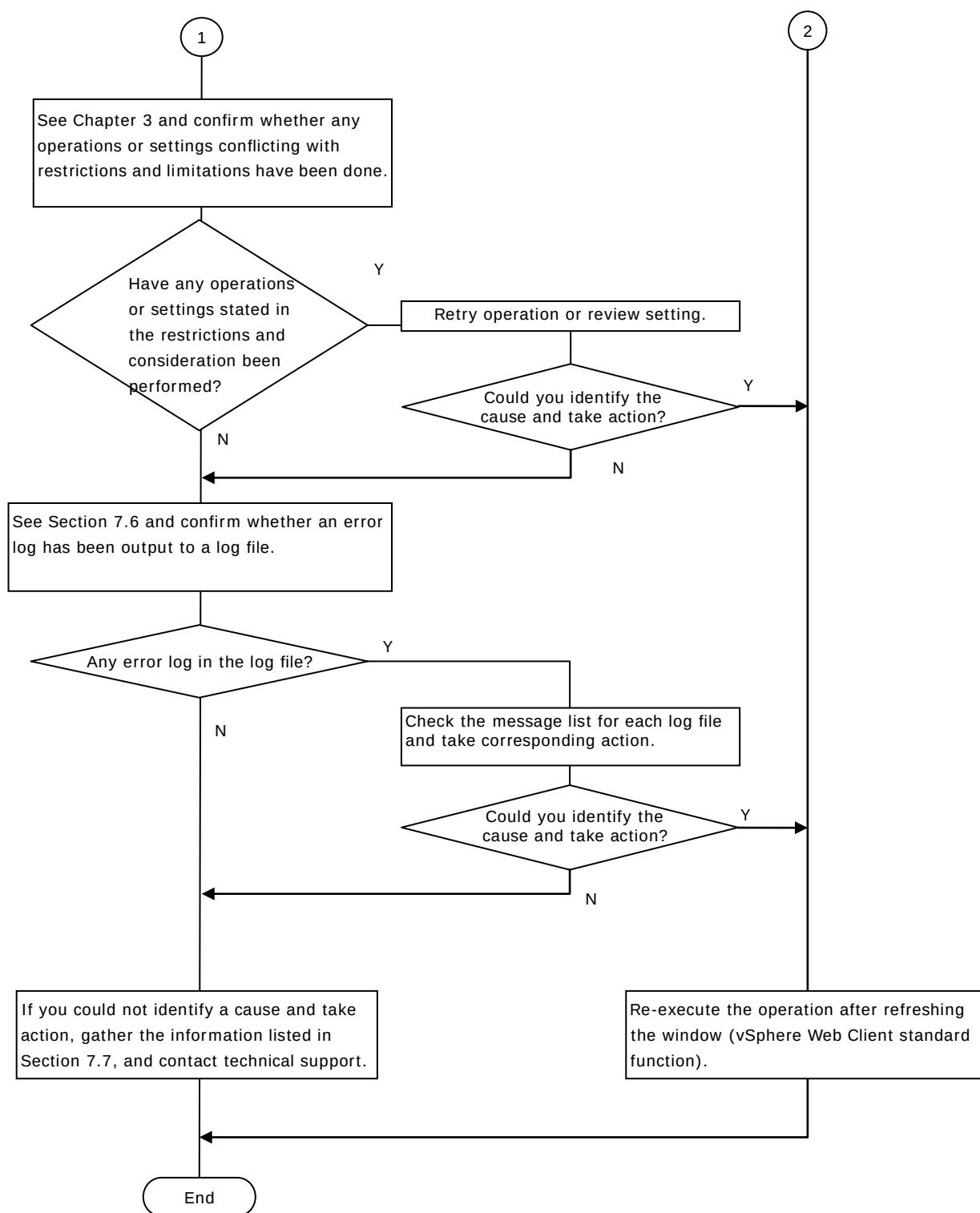


Figure 7.2-1 Troubleshooting flowchart for when problems occur during operation (2/2)



7.3. Message IDs

7.3.1. Message Classifications

Error messages are output with accompanying 8-digits message ID. The first digit at the start of the message ID indicates the classification of the message. Table 7.3.1-1 explains the classifications.

Table 7.3.1-1 First Digit (Alphanumeric) at the Start of the Message ID

#	First digit	Classification	Description
1.	E	Error	A problem has already occurred.
2.	W	Warning	A problem may occur.
3.	I	Info	This message asks whether a user wants to continue the operation.

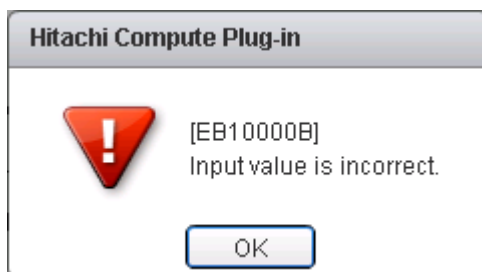
7.3.2. Viewing Messages

For instructions on how to view the error message, see the following.

(1) A Message Displayed in Dialog Box

An output example of an error message displayed in the dialog message is shown below. For the details of displayed message ID, see the message list.

Figure 7.3.2-1 Example of a Message Displayed in the Dialog Box



(2) A message output at the time of invalid input validation rule

An output example of an error message at the time of invalid validation rule is shown in Figure 7.3.2-2. For the details of displayed message ID, see the message list.

Figure 7.3.2-2 Output example of error message at the time of invalid validation rule

The screenshot shows a dialog box titled "Add Chassis" with a green plus icon and a close button. The dialog has a sidebar with "Information", "Discovery", and "Summary". The main area is titled "Input your HCSM information" and contains four input fields: "HCSM Host/IP Address :", "Port Number :", "User ID :", and "Password :". The "HCSM Host/IP Address :" field contains a single forward slash "/" and is highlighted with a red border. A red callout box points to this field with the text "[EB100002] It is the invalid value." At the bottom right of the dialog are "Next" and "Cancel" buttons.

(3) A Log File Message

An example of a log file message is shown below. For the details of the displayed message ID, see the message list.

Figure 7.3.2-3 Example of a message displayed in the log file

```
[14452] [12/25/13-01:46:36.874] [DATASERV] ERROR [EB101105]  
{com.hitachi.hiserverplugin.agent.ccm.CCMAgent::makeChassisList}:  
Login to HCSM failed. User name or password is invalid.
```

(4) Message displayed in Task window

An output example of an error message displayed in Recent Tasks or Task Console is shown in Figure 7.3.2-4 and Figure 7.3.2-5. For the details of displayed message ID, see the message list. If the message ID does not start with "EB1" or "WB1", an HCSM message is output. Check the corresponding message in the manual for HCSM and take appropriate action.

vSphere Web Client 6.0 cannot display the task details in the default layout. To confirm the message, click "More Tasks" to go to "Task Console". Alternatively, layout change is required.

Figure 7.3.2-4 Example of Message displayed in Recent Tasks on Task window

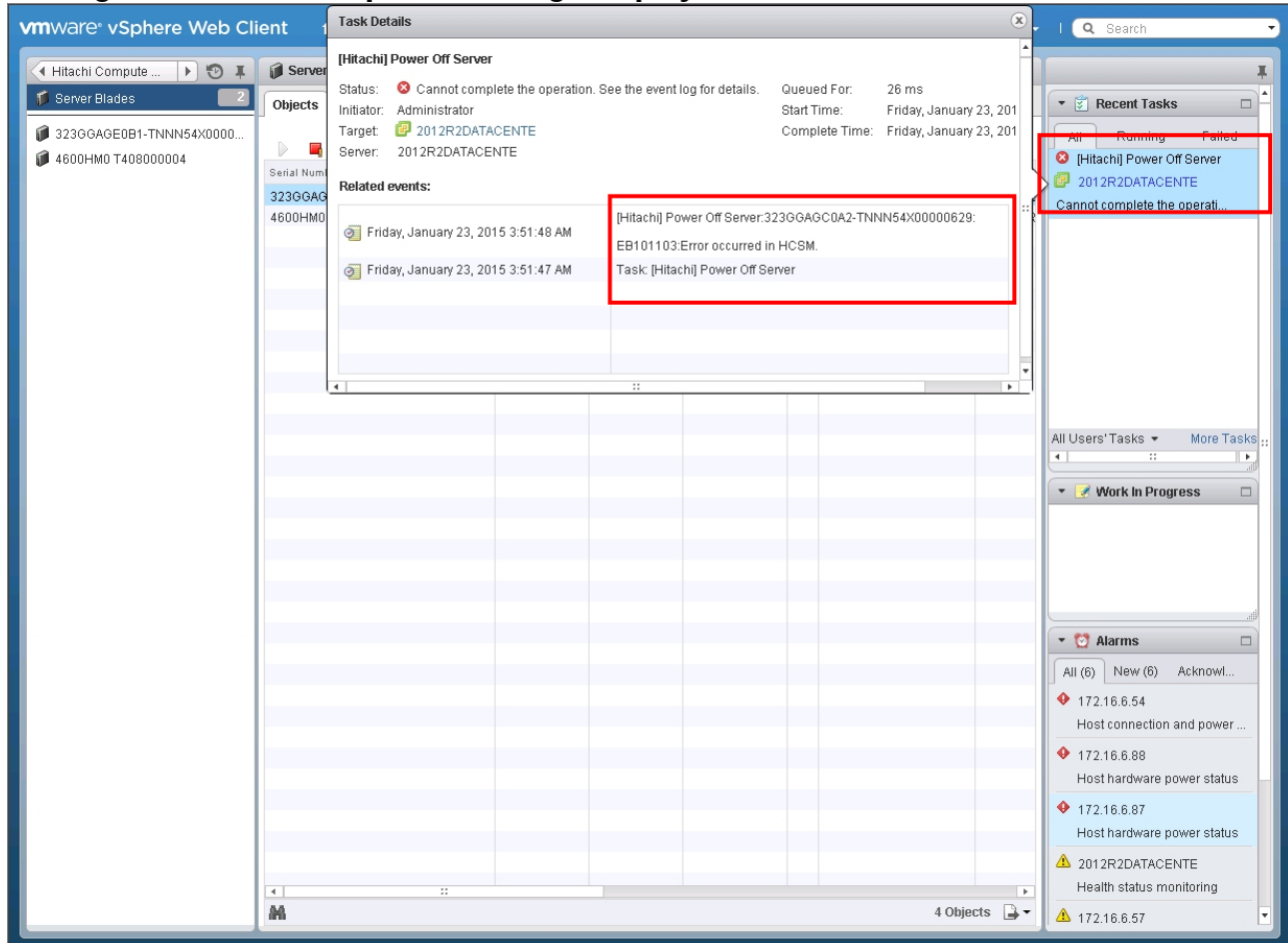


Figure 7.3.2-5 Example of Message displayed in Task window

The screenshot displays the VMware vSphere Web Client interface. The left sidebar shows navigation options like Home, vCenter, Rules and Profiles, Hybrid Cloud Services, vCenter Orchestrator, Administration, Tasks, Log Browser, Events, Tags, New Search, and Saved Searches. The main area is titled 'Task Console' and contains a table of tasks.

Task Name	Target	Status	Initiator	Queued For
[Hitachi] Power Off Server	2012R2DATACENTE	Cannot complete t...	Administrator	
[Hitachi] Power On Server	2012R2DATACENTE	The task was canc...	Administrator	
[Hitachi] Refresh Servers	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power Off Server	2012R2DATACENTE	The task was canc...	Administrator	
Add standalone host	Datacenter	Completed	VSPHERE.LOCAL\...	
[Hitachi] Lid Off Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Lid Off Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Lid On Server	2012R2DATACENTE	The task was canc...	Administrator	
[Hitachi] Lid On Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power On Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power Off Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Refresh Servers	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power Reset Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Refresh Servers	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power On Server	2012R2DATACENTE	Completed	Administrator	
[Hitachi] Power Off Server	2012R2DATACENTE	Completed	Administrator	

Below the table, the details for the selected task '[Hitachi] Power Off Server' are shown:

Status: ✖ Cannot complete the operation. See the event log for details.
Initiator: Administrator
Target: 2012R2DATACENTE
Server: 2012R2DATACENTE

Related events:

Time	Message
Friday, January 23, 2015 3:51:48 AM	[Hitachi] Power Off Server:323GGAGC0A2-TNNN54X00000629:EB101103:Error occurred in HCSM.
Friday, January 23, 2015 3:51:47 AM	Task: [Hitachi] Power Off Server

On the right side, the 'Recent Tasks' panel shows the failed task '[Hitachi] Power Off Server' with the message 'Cannot complete the operati...'. The 'Alarms' panel shows several active alarms, including 'Host connection and power ...' and 'Host hardware power status' for IP addresses 172.16.6.54, 172.16.6.88, and 172.16.6.87, as well as 'Health status monitoring' for 2012R2DATACENTE.

7.4. Messages

7.4.1. Error Messages Output by the Installer

When an error occurs during the Hitachi Compute Plug-in installation, an error message is displayed in a dialog box.

Table 7.4.1-1 lists the messages displayed by the installer.

Table 7.4.1-1 Error Messages Displayed by the Installer

#	Message ID	Message	Cause	Action
1.	EB108001	This Windows account lacks sufficient privileges to install Hitachi Compute Plug-in for VMware vCenter. Please log in using an account that's a member of the Administrators group and try again.	Installer has been used with the user account which does not have administrator privileges.	Use a Windows logon account with Administrator privileges.
2.	EB108003	VMware vSphere Web Client is either not installed, or the version that's installed isn't supported by this release of Hitachi Compute Plug-in for VMware vCenter. Please install a supported version and try again.	vSphere Web Client has not been installed or a version of vSphere Web Client not supported is installed.	Install a supported version of vSphere Web Client. (See Subsection 2.3.2)
3.	EB108004	The installation folder is not found. If you upgraded VMware vSphere Web Client, remove Hitachi Compute Plug-in for VMware vCenter from your computer, then re-install.	No installation folder exists at the time of the update installation or repair installation.	Remove Hitachi Compute Plug-in for VMware vCenter first, and then install it again.
4.	-	1152 Error extracting to the temporary location	The capacity of the drive to start the installer is insufficient.	Provide the sufficient free capacity to meet the requirements. (See Section 2.2)
5.	-	Error writing to the temporary location	The capacity of the drive to start the installer is insufficient.	Provide the sufficient free capacity to meet the requirements. (See Section 2.2)
6.	-	There is not enough space on the disk.	The capacity of the drive to install Hitachi C Plug-in is insufficient.	Provide the sufficient free capacity to meet the requirements. (See Section 2.2)

Standard Windows InstallShield error messages are displayed when an error occurs during installation.

Typical messages are shown in Table 7.4.1-2.

Table 7.4.1-2 Windows Installer Error Messages

#	Message ID	Message	Cause	Action
1.	-	Error 1321. The Installer has insufficient privileges to modify the file <file path>.	There is no write permission for the file.	(1) Give the full control of permission for the installation folder to the Windows logon account. (2) When a file is being used by another process, finish the other process first, and then enable writing to the file.
2.	-	Error 1406. Could not write value <registry key item> to key <registry key>. Verify that you have sufficient access to that key, or contact your support personnel.	There is no write permission for the registry.	Give the full control of permission for a Registry key displayed by the Windows logon account.
3.	-	Error 1310. Error writing to file: <file path>. Verify that you have access to that directory.	There is no write permission for the folder.	Give the full control of permission for a Registry key displayed by the Windows logon account.
4.	-	Out of disk space -- Volume: '<Install drive>'; required space: < required space >; available space: < Free some disk space >. Free some disk space and retry.	Insufficient disk space during installation. (Disk space displayed in the message is the disk space at the time the error occurred)	Provide sufficient disk space as specified in the requirements for an install drive. (See Section 2.2).
5.	-	There is not enough space on the disk.	Insufficient disk space at the time of starting to install.	Provide sufficient disk space as specified in the requirements for an install drive. (See Section 2.2).
6.	-	There is not enough disk space to install the file <file path >, Free some disk space and click Retry. or click Cancel to exit.	Insufficient disk space at the time of starting to upgrade.	Provide sufficient disk space as specified in the requirements for an install drive. (See Section 2.2).

7.4.2. Warning Messages output by the Installer

Error messages output during installation are shown in Table 7.4.2-1.

Table 7.4.2-1 Error Messages Output During Installation

#	Message ID	Message	Cause	Action
1.	WB108002	Do you want to completely remove the selected application and all of its features?	Confirmation message before executing the uninstallation.	Click OK to uninstall Hitachi Compute Plug-in. (See Section 4.3).
2.	-	A later version of 'Hitachi Compute Plug-in for VMware vCenter' is already installed on this machine. The setup cannot continue.	A later version of Hitachi Compute Plug-in has been already installed.	Hitachi Compute Plug-in does not support a downgrade installation by an installer. Take the following procedures for a downgrade installation. (1) Uninstall Hitachi Compute Plug-in. (2) Delete all the files remained in the installation folder of Hitachi Compute Plug-in. (3) Install Hitachi Compute Plug-in. (4) Reregister the Hitachi server to manage using the Add function.

7.4.3. Error Messages

Table 7.4.3-1 shows the error messages output by Hitachi Compute Plug-in.

Table 7.4.3-1 Error Messages Displayed in Hitachi Compute Plug-in

#	Message ID	Message	Cause	Action
1.	EB100001	It is the mandatory field.	Value has not been input.	Input a value.
2.	EB100002	It is the invalid value.	Value is invalid	Input the IP address or host name of the correct HCSM server.
3.	EB100003	Input value is too small.	Input value of port number is less than 0.	Input a value within the specified range.
4.	EB100004	Input value is too large.	Input value of the Port number is more than 65536.	Input a value within the specified range.
5.	EB100006	Web Client server error occurred. Message= <Message>	No response or error has returned from vSphere Web Client.	- Confirm whether the object of the display target or the operation target becomes the management target of Hitachi Compute Plug-in. - Ask the Hitachi server administrator whether the configuration of the Hitachi server has been changed or the problem has occurred. - Execute again after a while. - Take an appropriate action according to a message after "Message=" if a problem cannot be solved by executing the above.
6.	EB100007	Cannot connect to remote KVM.	Acquisition of URL for remote KVM has failed.	- Ask the Hitachi server administrator whether the environment can use remote KVM. - If the acquisition of the server information has failed. Execute Refresh Chassis or Refresh Servers to acquire the information again.
7.	EB100008	HCSM Web console cannot open.	Acquisition of URL for HCSM Web console has failed.	If the acquisition of the Hitachi server information has failed, execute Refresh Chassis or Refresh Servers to acquire the information again.

Table 7.4.3-1 Error Messages Displayed in Hitachi Compute Plug-in

#	Message ID	Message	Cause	Action
8.	EB100009	Hitachi server Web console cannot open.	Acquisition of URL for Hitachi server Web console has failed.	- If the acquisition of the Hitachi server information has failed, execute Refresh Chassis or Refresh Servers to acquire the information again. - Ask the HCSM administrator whether the HCSM version fulfills the prerequisites.
9.	EB10000A	There is no Hitachi server information to be registered.	There is no any Hitachi server to be registered in HCSM.	Register a Hitachi server in HCSM.
10.	EB10000B	Input value is incorrect.<Maintenance information>	Input value check error	Move the cursor to the input item surrounded by a red box to refer to the error message and take appropriate action.
11.	EB101101	Specified information is not found. Serial No=<Serial No>	No target resource exists on HCSM.	Confirm that the target resource has been registered in HCSM and reexecute if necessary.
12.	EB101104	Failed to connect to HCSM. Please verify the HCSM Hostname or IP, Protocol, and Port Number values, confirm that HCSM has been configured to accept connections using SSL if communication protocol is HTTPS, and try again.	Connection to HCSM has failed.	- Execute again after a while. - Specify the correct IP address, host name, protocol, and port number of the HCSM server, then execute again. If the host name of the HCSM server is specified, confirm availability of the DNS server or hosts file in which the correct information is registered. - If communication protocol is HTTPS, ask the administrator of HCSM environment whether SSL communication setting of HCSM has been valid. - Ask the HCSM administrator whether HCSM service has been operated normally and no problem with the communication path to HCSM.
13.	EB101105	Login to HCSM failed. User name or password is invalid.	User ID or password is invalid.	- Input the correct user ID and password. Then execute again. - Ask the HCSM administrator that the user ID or password of the target HCSM account has not been changed.
14.	EB101106	HCSM license is invalid.	HCSM license is invalid.	Ask the HCSM administrator that HCSM license has not been invalid.

Table 7.4.3-1 Error Messages Displayed in Hitachi Compute Plug-in

#	Message ID	Message	Cause	Action
15.	EB101107	HCSM account authorization is insufficient.	HCSM account authorization is insufficient.	Ask the HCSM administrator to assign the Administrator privileges or Modify privileges to the HCSM account.
16.	EB101108	HCSM is busy state.	HCSM server is busy state.	HCSM server is busy state. Retry after a while. If the same errors occur repeatedly, ask the administrator of HCSM environment that HCSM service has been operated normally.
17.	EB10110F	vCenter is not registered.	vCenter Server is not registered.	Register a vCenter Server.
18.	EB101110	Failed in task making of vCenter.	Failed in task making of vCenter.	- Confirm that the execution user has an authority of task making. - Confirm a connection state of registered vCenter Server.
19.	EB101112	The vCenter task processing failed. <message>	An error occurred in the vCenter task.	Take appropriate action according to the error message added to the end. When a message ID does not begin with "EB1" or "WB1", an HCSM message is output. Check the error message in the HCSM manual, and take appropriate action.
20.	EB101200	Hitachi server is not registered yet. Serial No=<Serial No>	Target Hitachi server does not exist.	- Confirm whether the object of the display target or the operation target becomes the management target of Hitachi Compute Plug-in. - Ask the Hitachi server administrator whether the configuration of the Hitachi server has been changed or the problem has occurred.
21.	EB101201	Hitachi server of the target serial No does not exist. Serial No=<Serial No>	Target Hitachi server does not exist on HCSM.	Confirm that the target Hitachi server has been register in HCSM and execute again if necessary.
22.	EB101202	Hitachi server has already been registered. Serial No=<Serial No>	Target Hitachi server has already been registered.	After refreshing and confirming the window refresh, reexecute if necessary.
23.	EB101203	Server of the target serial No does not exist. Server serial No=<Server serial No>	Target server does not exist.	- Confirm whether the object of the display target or the operation target becomes the management target of Hitachi Compute Plug-in. - Ask the Hitachi server administrator whether the configuration of the server system has been changed or the problem has occurred.

**Table 7.4.3-1 Error Messages Displayed in Hitachi
Compute Plug-in**

#	Message ID	Message	Cause	Action
24.	EB101204	Not able to acquire session information. Maintenance information= <Maintenance information>	Acquisition of session information from vSphere Web Client has failed.	The session was disconnected. Log in again and reexecute.
25.	EB101205	Not able to acquire Hitachi server information. Ask the HCSM administrator whether the HCSM version fulfills the prerequisites.	Acquisition of Hitachi server information has failed.	Ask the HCSM administrator whether the HCSM version fulfills the prerequisites.
26.	EB102008	Communication with vCenter failed. vCenterURL name: <vCenterURL name>	Communication to vCenter Server has failed.	Ask the vSphere administrator that vCenter Server has been operated normally and no problem with the communication path to vCenter Server.
27.	EB10201C	Request to vCenter failed. vCenterURL name: <vCenterURL name>	Request to vCenter Server failed.	- Confirm that the execution user has an authority of task making. - The session was disconnected. Log in again and reexecute.
28.	EB103003	SOAP connection for the specified HCSM server failed. (message= <message> cause= <cause>)	Error has occurred in the connection to HCSM.	- Execute again after a while. - Specify the correct IP address, host name, protocol, and port number of the HCSM server, then execute again. If the host name of the HCSM server is specified, confirm availability of the DNS server or hosts file in which the correct information is registered. - If communication protocol is HTTPS, ask the HCSM administrator of HCSM environment whether SSL communication setting of HCSM has been valid. - Ask the HCSM administrator whether HCSM service has been operated normally and no problem with the communication path to HCSM.

**Table 7.4.3-1 Error Messages Displayed in Hitachi
Compute Plug-in**

#	Message ID	Message	Cause	Action
29.	EB103004	HCSM API terminated in error.(resultCode= <resultCode> message= <message>)	HCSM API error return.	Take an appropriate action according to the resultCode. 1000: Confirm that HCSM user ID and password are correct. If the problem has not been solved, ask the HCSM administrator that HCSM user ID or password has not been changed. 2012: Confirm that the target chassis or server is registered in HCSM, and then execute the process again, as necessary. 2020: HCSM server is busy state. Execute again after a while. If the same errors occur repeatedly, ask the HCSM administrator of HCSM environment that HCSM service has been operated normally.
30.	EB103006	HTTP connection to HCSM failed.(responseCode= <responseCode> message= <message>)	Communication failure	Ask the HCSM administrator that HCSM service has been operated normally and no problem with the communication path to HCSM.
31.	EB103007	I/O error occurred during HTTP request. (message= <message>)	Communication failure	Ask the HCSM administrator that HCSM service has been operated normally and no problem with the communication path to HCSM.
32.	EB10300D	Processing suspended as the number of retries reached the upper limit.	HCSM server is busy state.	HCSM server is busy state. Execute again after a while. If the same errors occur repeatedly, ask the HCSM administrator of HCSM environment that HCSM service has been operated normally.

7.4.4. Warning Messages

Table 7.4.4-1 shows the warning messages output in Hitachi Compute Plug-in.

Table 7.4.4-1 Warning Messages Output by Hitachi Compute Plug-in

#	Message ID	Message	Description	Action
1.	WB101086	Specified server is not found.	Target server does not exist.	- Confirm whether the object of the display target or the operation target becomes the management target of Hitachi Compute Plug-in. - Ask the Hitachi server administrator whether the configuration of the Hitachi server has been changed or the problem has occurred..
2.	WB101087	Specified VM is not found.	Target VM does not exist.	- Confirm whether the object of the display target or the operation target becomes the management target of Hitachi Compute Plug-in. - Ask the administrator of vSphere environment whether the configuration of the vSphere environment has been changed or the problem has occurred.
3.	WB102007	Specified ESXi or VirtualMachine is not found. Type= <Type>, Value= <Value>	Target ESXi or VirtualMachine does not exist.	Confirm that the target ESXi or VirtualMachine has been registered in vCenter Server and execute Refresh Chassis or Refresh Servers if necessary.
4.	WB10300B	Property file (<File Path>) open failed.	Invalid environment (Property file open failure)	Confirm that the property file exists. If not, execute the repair installation.

7.4.5.Alert Messages Output in Event Log

Table 7.4.5-1 Alert messages to be output in an event log

#	Event ID	Event Type	Message	Description	Action
1.	5032	Alert	Writing to Adapter log stopped. Hitachi Logger Version : [<version>]	A log file or a temporary log file could not be written.	(1) Check whether the log file and temporary log file are locked or read-only. (2) Check whether the disk is full. If the disk capacity is insufficient, create some free disk space by deleting unnecessary files. (3) Check for a disk failure.
2.	5033	Alert	Some backup log files are not writable. Writing to overflow log [<file path>] Please check Adapter log folder and clean up unused overflow log files. Hitachi Logger Version : [<version>]	Because a log file could not be backed up, an overflow file was created.	(1) Check whether the backup log file is locked or read-only. (2) Check whether the disk is full. If the disk capacity is insufficient, create some free disk space by deleting unnecessary files.

7.5. Confirmation points in Operation Environment

7.5.1. Confirmation points in Hitachi Server Environment

If any problem or error occurs when using Hitachi Compute Plug-in, a problem may have occurred in the Hitachi server environment. Confirm the items in the table below, and take appropriate action if a problem is found.

If a failure cannot be solved even after reconfirming the Hitachi server environment, follow the troubleshooting flowchart.

Table 7.5.1-1 Confirmation Points in Hitachi Server Environment

#	Item	Contents
1.	Checking the Hitachi server environment	Confirm that the Hitachi server has started up without a problem. Also, confirm whether the Hitachi server requirements stated in Section 2.5 are still fulfilled even if the Hitachi server configuration have changed, and confirm that the Hitachi server environment does not conflict with the restrictions and limitations stated in Chapter 3.
2.	Confirming the network environment	- Confirm that a LAN cable is connected to the Hitachi server and that the two of them are linked up. - Confirm that the information of the Hitachi server can be retrieved and set from the Web console of the Hitachi server.
3.	Confirming the IP address	Confirm that IP address of the Hitachi server is correct using HCSM and also confirm that the IP address is same as the IP address displayed in the Hitachi Compute Plug-in window.
4.	Confirming the HTTPS port number	Confirm that the Hitachi server has been set to use the HTTPS port and the HTTPS port has not been changed.
5.	Confirming the Firewall settings	Confirm that communication with the Hitachi server has not been blocked by Firewall. If communication has been blocked, set the Firewall to allow communication with the Hitachi server.

7.5.2. Confirmation points in HCSM Server Environment

If a problem occurs while using Hitachi Compute Plug-in, a problem may have occurred in the HCSM server environment. Confirm the items in the table below, and take appropriate action if a problem is found.

If a failure of Hitachi Compute Plug-in cannot be solved even after checking the HCSM server environment, follow the troubleshooting flowchart.

Table 7.5.2-1 Confirmation Points in HCSM Server Environment

#	Item	Contents
1.	Confirming the HCSM server environment	Confirm that the HCSM server has started without problems. Also, confirm that HCSM service has been operated normally.
2.	Confirming the network environment	Confirm that the LAN cable is connected to NIC of the HCSM server and that the two of them are linked up
3.	Confirming the IP address	Confirm that the IP address used for the HCSM server has not been changed.
4.	Confirming the TCP port number	Confirm that the TCP port number used for the HCSM server has not been changed. Also, confirm that the communication protocol (HTTP/HTTPS) has not been changed. If the protocol has been changed, register the Hitachi server again by specifying the changed protocol and port number of HCSM (See subsection 6.2.1).
5.	Confirming the Firewall settings	Confirm that communication with the HCSM server has not been blocked by Firewall. If communication has been blocked, set the Firewall to allow communication with the HCSM server.
6.	Management resource of the HCSM	(1) If the Hitachi server which is used for the management resource of the HCSM server has not been registered, register the Hitachi server. (2) Confirm that the Hitachi server information can be retrieved and configured from HCSM.
7.	Confirming the HCSM user account	(1) If a valid user account does not exist, ask the HCSM administrator for a valid user account and re-execute. (2) If the current user account is disabled, ask the HCSM administrator to enable the current user account and re-execute. (3) If the using user password has been changed, enter the correct password and re-execute. (4) If the Admin privileges or the Modify privileges have not been assigned to the using user account, newly assign the privileges or use the Admin privileges or the Modify privileges assigned user account and reexecute

7.5.3. Confirmation points in vSphere Environment

If a problem occurs while you are using Hitachi Compute Plug-in, a failure may have occurred in the vSphere environment. Confirm the items in the table below, and take appropriate action if a problem is found.

If a failure of Hitachi Compute Plug-in cannot be solved even after checking the vSphere environment, follow the troubleshooting flowchart.

Table 7.5.3-1 Confirmation Points in vSphere Environment

#	Item	Contents
1.	Confirming the event	Check the Event in vSphere Web Client and confirm whether an error has occurred. If an error is found to have occurred, either take the appropriate action to address the error or ask the administrator of the vSphere environment to resolve the error.
2.	Checking ESXi	From vSphere Web Client, confirm that ESXi has been started and is connected to vCenter Server.
3.	Confirming the operating status of each machine	Contact the vSphere environment administrator to check the followings for vSphere Web Client, vCenter Server and ESXi respectively. If any problem occurs, ask for the recovery. (1) Whether the machine has been activated. (2) Whether a lack of memory capacity, CPU high-load and access concentration have not been occurred. (3) Whether TCP/IP communications between machines are enabled. In addition, restart vSphere Web Client when it falls under the following situation: When vSphere Web Client has been running continuously for a long time. When network communication problem has occurred between vSphere Web Client and vCenter Server while using Hitachi Compute Plug-in.
4.	Checking the configuration file (constitution.dat)	Confirm that the configuration file (constitution.dat) under the installation folder of Hitachi Compute Plug-in has not been corrupted. If the configuration file (constitution.dat) has been corrupted, either caused by an unexpected power outage or a file system error, any of the following events may occur. - A registered Hitachi server is not displayed after vSphere Web Client is restarted. - Registration of the Hitachi server fails. If one of the above events occurs, delete the configuration file (constitution.dat) first, and then execute a repair installation. Then, reregister the required Hitachi server using the Add function (See subsection 6.2.1).

7.6. Log Files

7.6.1. List of Log Files

Hitachi Compute Plug-in outputs error messages to the log files. If a problem occurs, confirm the information in the log file.

The log file list of Hitachi Compute Plug-in is shown in Table 7.6.1-1.

Table 7.6.1-1 Log files

#	Log File	Description
1.	Log file HiAppServerModule.log	Log information for Hitachi Compute Plug-in is output.
2.	Backup log files HiAppServerModule.log.<num> num=1 - 255	If the log file size reaches the upper limit of the log file size specified in the maintenance configuration file, the log file is renamed and a backup log file is generated. <num> (num=1 - 255) is added to the end of the log file name when it is renamed. When there is the file which already backed up at the time of renaming, a number is count up and a log file is renamed. Larger numbers are chronologically older as shown in the following examples. Example When the following log file and backup files already exist: - HiAppServerModule.log - HiAppServerModule.log.1 - HiAppServerModule.log.2 They are renamed as shown below: - HiAppServerModule.log (newly created) - HiAppServerModule.log -> Renamed to HiAppServerModule.log.1 - HiAppServerModule.log.1 -> Renamed to HiAppServerModule.log.2 - HiAppServerModule.log.2 -> Renamed to HiAppServerModule.log.3
3.	Temporary log files HiAppServerModule.log.tmp	If writing into the log file fails when the log is output, the log is written into a temporary log file.

Table 7.6.1-1 Log files

#	Log File	Description
4.	Backup Temporary log files HiAppServerModule.log.tmp.<num> num=1 - 255	If the temporary log file size reaches the upper limit of the temporary log file size specified in the maintenance configuration file, the log file is renamed and a backup log file is generated. <num> (num=1 - 255) is added to the end of temporary log file name when it is renamed. When there is the file which already backed up at the time of renaming, a number is count up and a log file is renamed. Larger numbers are chronologically older as shown in the following examples. Example) When the following temporary log file and backup temporary log files exist: - HiAppServerModule.log.tmp - HiAppServerModule.log.tmp.1 - HiAppServerModule.log.tmp.2 They are renamed as shown below. - HiAppServerModule.log.tmp (newly created) - HiAppServerModule.log.tmp -> Renamed to HiAppServerModule.log.tmp.1 - HiAppServerModule.log.tmp.1 -> Renamed to HiAppServerModule.log.tmp.2 - HiAppServerModule.log.tmp.2 -> Renamed to HiAppServerModule.log.tmp.3
5.	Overflow log files Note HiAppServerModule.log.<num>._YYYYMMDD_hhmmss.bak num=1 - 255 YYYYMMDD_hhmmss: Time stamp	If the renaming of the backup log file fails, a log is written into an overflow log file.
6.	Overflow Temporary log files^{*1} HiAppServerModule.log.tmp.<num>._YYYYMMDD_hhmmss.bak num=1 - 255 (This is the same as the backup temporary log file number.) YYYYMMDD_hhmmss: Time stamp	If the renaming of the backup temporary log fails, a log is written into an overflow temporary log file.

Note:

The overflow log files and the overflow temporary log files are not automatically deleted. If an overflow file is older than the last generation backup log, the associated overflow file log file and overflow temporary log file can be deleted.

7.6.2. Output Layout of a Log File

Figure 7.6.2-1 and Table 7.6.2-1 show the output layout of a log file.

Figure 7.6.2-1 Output layout of log file

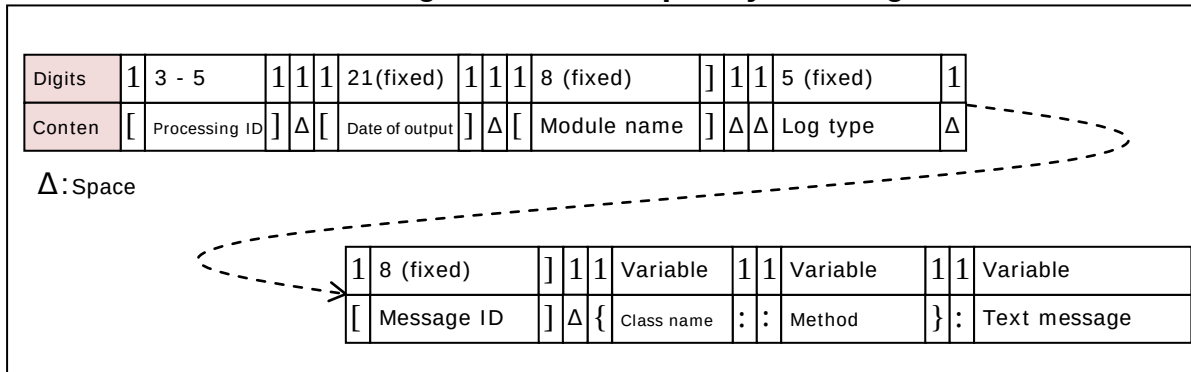


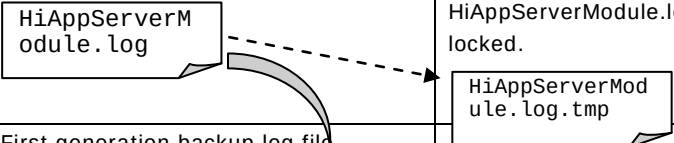
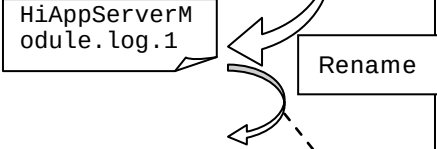
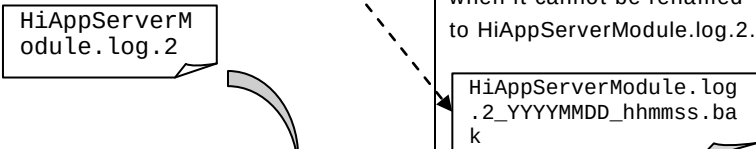
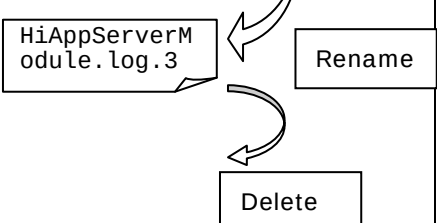
Table 7.6.2-1 Output Information and Formats

#	Item	Indication type	Size	Definition
1.	Process ID	In decimal	Variable (3 to 5 digits)	Enclosed by [].
2.	Output time	USA standard time format	21 digits fixed	Output as follows. MM/dd/yy-HH:mm:ss.fff - MM = month - dd = day - yy = year - HH = time (24 hours) - mm = minute - ss = second - fff = millisecond
3.	Module name	Character strings	8 digits fixed	Enclosed by []. Left-aligned. If the module name is less than eight characters, the spaces are filled so it becomes eight characters. This item is separated from the subsequent output item by two blank spaces.
4.	Log type	Character strings	5 digits fixed	A log type is defined for each log.
5.	Message ID	Character strings	8 digits fixed	There is supposed to be an ID for each message. If there is no message ID, [-----] is displayed.
6.	Class name and method name	Character strings	Variable	Log output class name and method name. Output in "{Class name::Method name}" format.
7.	Text message	Character strings	Variable	Individual messages.

7.6.3. Generation Management of Log Files

Generations of log files can be managed by specifying the number of generations and log file size in the maintenance configuration file. For details on the maintenance configuration file, see Subsection 4.2.1. If the file size at the output destination exceeds the upper limit of the log file size specified in the maintenance configuration file due to the output of the log file, a file backup is executed. For an overview of log file generation management, see Table 7.6.3-1.

Table 7.6.3-1 Overview of the Log File Generation Management

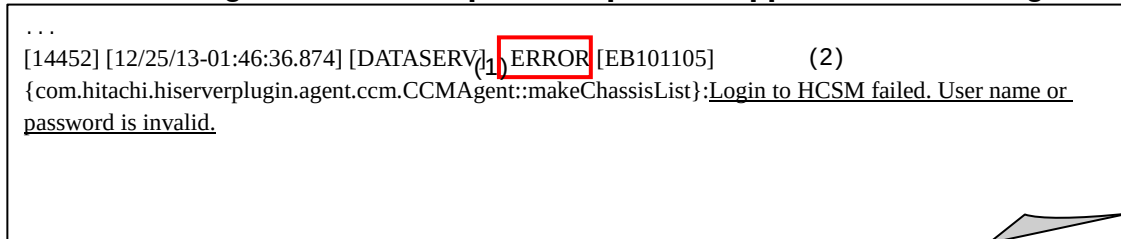
#	Classification	Generation	New Old	Behavior
1.	Log file	The latest	New	Latest log file 
2.	Backup log files	First generation		First generation backup log file 
3.		Second generation		Second generation backup log file 
4.		Third generation	Oldest	Third generation backup log file 

7.6.4. HiAppServerModule.log

Service processing log data from Hitachi Compute Plug-in is output to this log file.

An output example of a log file error message is shown in Figure 7.6.4-1. Search that the log type ((1) in Figure 7.6.4-1) is ERROR/WARN and confirm the content of the message ((2) in Figure 7.6.4-1) with the Error Message List.

Figure 7.6.4-1 Output example of HiAppServerModule.log file



7.7. Information Collected During Problem Occurrence

When a problem cannot be solved by troubleshooting, provide the following to the customer service for this software. The types of information collected are shown in Table 7.7-1, Table 7.7-2, Table 7.7-3, Table 7.7-4, Table 7.7-5 or Table 7.7-6.

Table 7.7-1 Information Collected in VMware Management Client

#	Type	Contents	Collecting Method
1.	Windows	Windows system information	Collect information by following the steps below. (1) Open System information . (2) Click Export from the menu File . (3) Click the save location for the file by clicking Export As . (4) Input the file name in the File name box. (5) Click Save .
2.	Hitachi Compute Plug-in	Screenshot	Store a screen at the time of the phenomenon occurrence in an image file with the Print Screen.

Table 7.7-2 Information Collected in vSphere Web Client Server (VMware vSphere Web Client)

#	Type	Contents	Collecting Method
1.	Windows	Windows event logs (1) Application event log (2) System event log	Collect information by following the steps below. (1) Open Event viewer . (2) From the console tree, right click on the log to be saved and click Save All Event As.... (3) Input the archive log file name in the File name box. (4) Click the appropriate file format in the File type box and click Save .
2.		Windows system information	Collect information by following the steps below. (1) Open System information . (2) Click Export from the menu File . (3) Click the save location for the file by clicking Export As . (4) Input the file name in the File name box. (5) Click Save .
3.	vSphere Web Client	vSphere Client version	Confirm the vSphere Client version by following the steps below. (1) From the Menu in vSphere Web Client, select Help -> About VMware vSphere . (2) Confirm the vSphere Web Client version displayed in the dialog box.
4.		vSphere Web Client, vCenter server log	Collect the all subordinate files shown below by using Explorer function or so on. Since the log size is huge, provide the log folder after zipping. For vSphere Web Client 5.1 or 5.5 <Installation folder of vSphere Web Client>\server\serviceability\logs. For vSphere Web Client 6.0 or later C:\ProgramData\VMware\vCenterServer\logs\vsphere-client\logs.

Table 7.7-2 Information Collected in vSphere Web Client Server (VMware vSphere Web Client)

#	Type	Contents	Collecting Method
5.	Hitachi Compute Plug-in	Log file Following all files under the log folder Note 1 of Hitachi Compute Plug-in.	Collect the log files shown on the left using Explore for each log folder. Due to the huge size of each log file, zip log folders to provide.
6.		Intermediate file Following files under the installation folder Note 1 of Hitachi Compute Plug-in. - constitution.dat	Collect the files shown on the left using Explorer.
7.		Hitachi Compute Plug-in version Following file under the installation folder Note 1 of Hitachi Compute Plug-in. - version.txt	Collect the files shown on the left using Explorer.

Note 1:

- vSphere Web Client 5.1/5.5
<Installation folder of vSphere Web Client>\Plugin-packages\HitachiComputePlugin
- vSphere Web Client 6.0
<Installation folder of vCenter Server>\vCenter Server\WebClient\plugin-packages\HitachiComputePlugin\

**Table 7.7-3 Information Collected in VMware Management Server
(vCenter Server)**

#	Type	Contents	Collecting Method
1.	Windows	Windows event log (1) Application event log (2) System event log	Collect information by following the steps below. (1) Open Event viewer . (2) From the console tree, right click on the log to be saved and click Save All event As... (3) Input the archive log file name in the File name box. (4) Click the appropriate file format in the File type box and click Save
2.		Windows system information	Collect information by following the steps below. (1) Open System information . (2) Click Export from the menu File . (3) Click the save location for the file by clicking Export As . (4) Input the file name in the File name box. (5) Click Save .
3.	vCenter Server	vCenter Server version	Confirm the version by following the steps below. (1) From the home window of vSphere Web Client, select vCenter->vCenter Servers . (2) From the tree view, select vCenter Server and confirm the version displayed in Summary window.

Figure 7.7-1 vCenter Server version

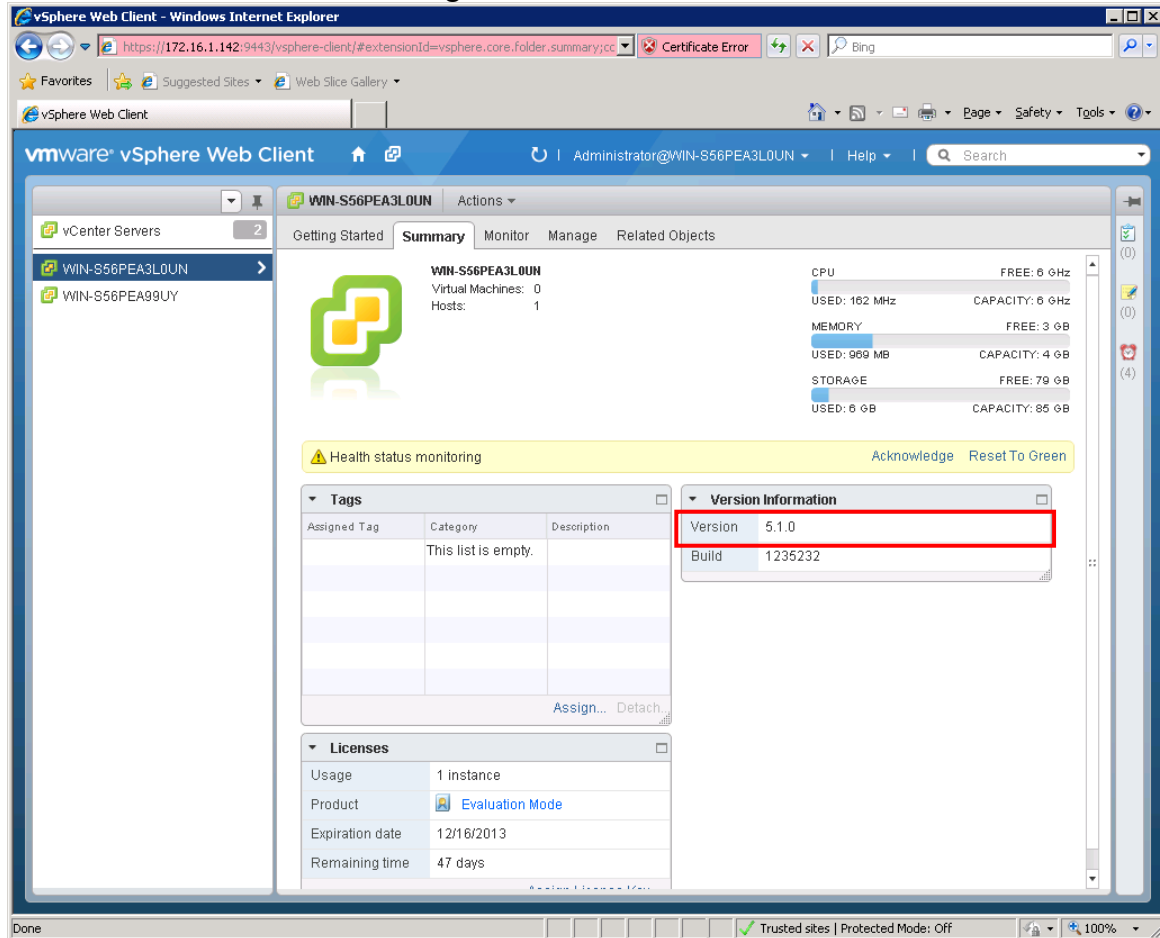


Table 7.7-4 Information Collected in ESXi

#	Type	Contents	Collecting Method
1.	ESXi	ESXi version	Confirm the version by following the steps below. (1) From the Home window of vSphere Web Client, select vCenter -> Host. (2) From the tree view, select ESXi which was used when the problem occurred and confirm the ESXi version displayed in Summary window.

Figure 7.7-2 ESXi Version

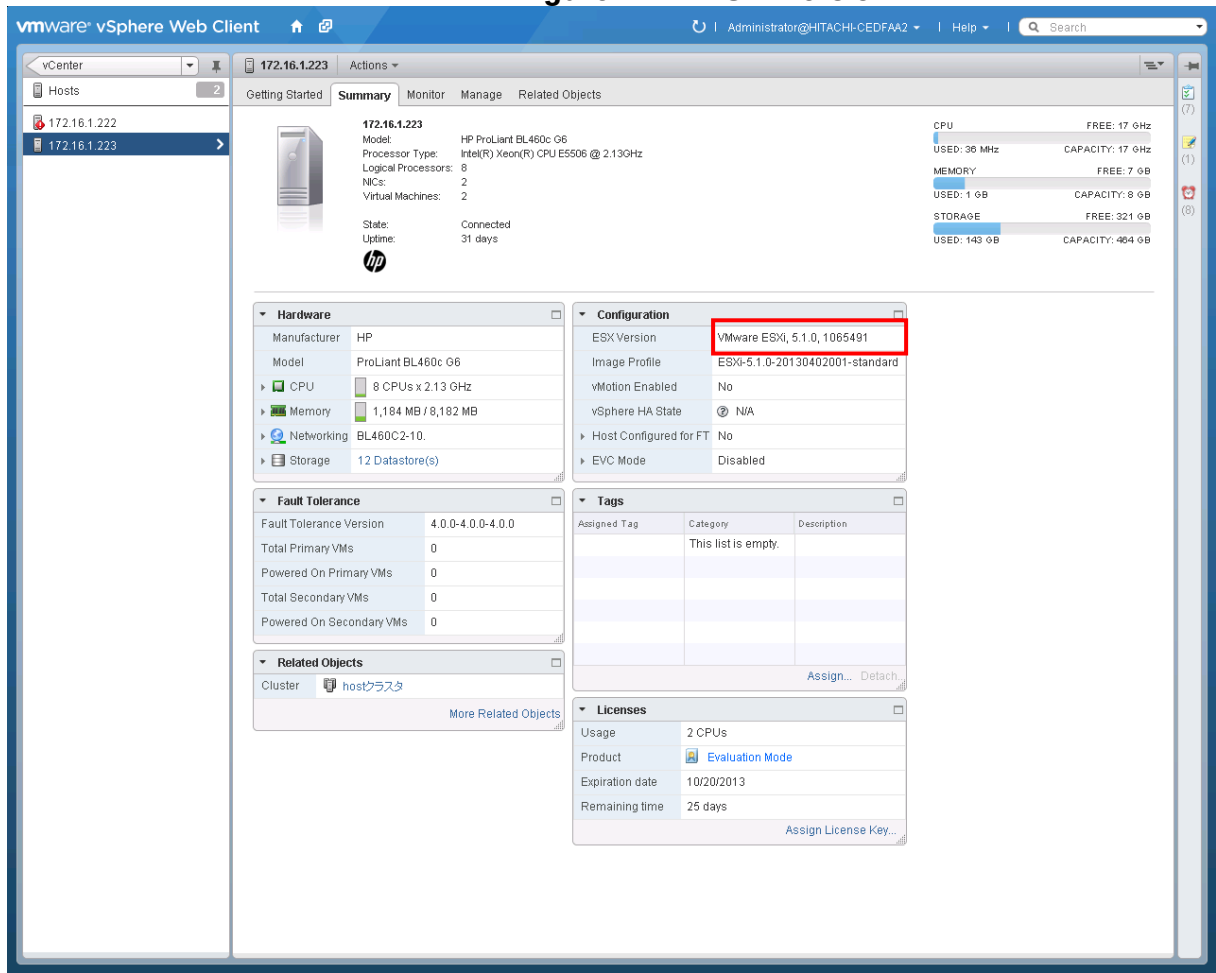


Table 7.7-5 Information Collected in Hitachi Server

#	Type	Contents	Collecting Method
1.	CB500/CB2000/CB2500	Log	Ask the Hitachi server administrator to collect a log using the function of the Hitachi server.

Table 7.7-6 Information Collected in HCSM Server

#	Type	Contents	Collecting Method
1.	Windows	Windows event log (1) Application event log (2) System event log	Collect information by following the steps below. (1) Open Event viewer . (2) From the console tree, right click on the log to be saved and click Save All event As... (3) Input the archive log file name in the File name box. (4) Click the appropriate file format in the File type box and click Save.
2.		Windows system information	Collect information by following the steps below. (1) Open System information . (2) Click Export from the File menu. (3) Click the save location for the file by clicking Export As . (4) Input the file name in the File name box. (5) Click Save .
3.	HCSM	Maintenance information of HCSM	Ask the HCSM administrator to collect the maintenance information of HCSM using the function of HCSM.

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