

FUJITSU Software Systemwalker Software Configuration Manager



Operator's Guide

Windows/Linux

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Preface

Purpose of this Document

This document explains patch management procedures as well as how to manage configuration information and software parameters from the management console in Systemwalker Software Configuration Manager V15.3.0.

Intended Readers

This document is intended for those who want to understand how to operate the management console in Systemwalker Software Configuration Manager.

It is assumed that readers of this document already have the following knowledge:

- Basic knowledge of the operating system being used

Structure of this Document

The structure of this document is as follows:

Chapter 1 Management Console

This chapter provides an overview of functions of the management console in Systemwalker Software Configuration Manager.

Chapter 2 Configuration Management

This chapter explains how to manage configuration information from the management console.

Chapter 3 Patch Management

This chapter explains how to manage patch files from the management console.

Chapter 4 Job Management

This chapter explains how to manage jobs from the management console.

Conventions Used in this Document

Refer to the Documentation Road Map for information on the names, abbreviations, and symbols used in this manual.

Abbreviations and Generic Terms Used for Operating Systems

This document uses the following abbreviations and generic terms to indicate operating systems.

Official name	Abbreviation	
Microsoft(R) Windows Server(R) 2012 Datacenter Microsoft(R) Windows Server(R) 2012 Standard	Windows Server 2012	
Microsoft(R) Windows Server(R) 2012 R2 Datacenter Microsoft(R) Windows Server(R) 2012 R2 Standard	Windows Server 2012 R2	
Microsoft(R) Windows Server(R) 2008 Standard Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V Microsoft(R) Windows Server(R) 2008 Enterprise Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V	Windows Server 2008	Windows
Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise	Windows Server 2008 R2	
Microsoft(R) Windows Server(R) 2003 R2, Standard Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	Windows Server 2003 R2	

Official name	Abbreviation		
Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition			
Red Hat(R) Enterprise Linux(R) (for x86)	RHEL (x86)	RHEL	
Red Hat(R) Enterprise Linux(R) (for Intel 64)	RHEL (Intel 64)		
Oracle Solaris	Solaris Operating System	Oracle Solaris	

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Chapter 1 Management Console

Systemwalker Software Configuration Manager provides a management console as a GUI for managing hardware (chassis and servers), virtual environments (VM hosts and VM guests), the software configuration information, patches and software parameters for managed servers.

1.1 Overview of the Management Console

The management console can be used to perform the following operations:

- Configuration information management

Collect and manage hardware (chassis and servers), virtual environment (VM hosts and VM guests), and software configuration information (server names, tenant names, host names, IP addresses, installation software, and software parameters) on the managed servers. Software parameters can also be configured and scripts can be run.

If an error occurs on a server, compare its current configuration baseline with the configuration baseline when the server was last running correctly and check any patches that have been newly applied in the interim.

The configuration items in the CMDB can also be looked up, updated, deleted and registered.

- Patch management

Patch management involves managing the following patch information:

- Windows patches
- Linux patches
- Fujitsu middleware patches

The patch application status can also be collected from repository servers or managed servers and managed, and unapplied patches can be applied or distributed to managed servers.

- Software parameter management

Parameters configured in the software listed below can be collected to change parameters:

- Fujitsu middleware
- Software that is not supported by UpdateAdvisor (middleware)
- Job management

Manage jobs such as distributing and applying patches, configuring parameters, and running scripts.

Setting up the web browser

Before using the management console, a web browser must be set up as follows:

- Configure settings to accept cookies.
- Enable JavaScript.
- Configure settings to use SSL 3.0 and TLS 1.0.
- Depending on the security level of the browser, the management console may not be displayed even after login. In this case, register the URL of the management console in **Trusted sites**.
- To start the management console from the **Start** menu on Windows Server 2012 or later:

In Internet Explorer, select **Tools** >> **Internet options**, click the **Programs** tab, and then set **Choose how you open links** to **Always** in **Internet Explorer on the desktop**.

To start the management console without changing the Internet Explorer setting, start the desktop version of Internet Explorer and specify the URL of the management console for Systemwalker Software Configuration Manager.

- Use Internet Explorer in standard mode when logging in to the management console.

The procedure for configuring standard mode is as follows:

- 1. Press the "Alt" key on the keyboard to display the menu bar.
- 2. Click Tools > Compatibility View settings.
- 3. Remove the check from Display intranet sites in Compatibility View.

1.2 Flow of Operations

Systemwalker Software Configuration Manager uses the steps listed below to manage patches, parameters and configurations for servers.

1. Download patches

This step involves downloading patches for the operating system and Fujitsu middleware from the vendor's website and the UpdateSite respectively.

Patches for Windows operating systems are downloaded using Microsoft Windows Server Update Services (WSUS).

Patches for Linux operating systems are downloaded and registered with Yellowdog Updater Modified (yum) repository servers by the infrastructure administrator.

Patches for Fujitsu middleware are downloaded and registered with Systemwalker Software Configuration Manager by the infrastructure administrator.

2. Distribute and apply patches

Distribute and apply patches to managed servers based on an instruction from the tenant user.

Patches for Windows operating systems are distributed and applied by linking to Microsoft Windows Server Update Services (WSUS) based on a Systemwalker Software Configuration Manager operation.

Patches for Linux operating systems are distributed and applied by linking to Yellowdog Updater Modified (yum) based on a Systemwalker Software Configuration Manager operation.

Systemwalker Software Configuration Manager can also be used to distribute patches for Fujitsu middleware and apply these patches by registering scripts.

3. Configure software parameters and run scripts

Configure parameters for the software on the managed servers based on instructions from the tenant user. Scripts can also be run on managed servers.

The infrastructure administrator defines, in advance, those parameters that can be configured in the software.

4. Perform discovery

Periodically and automatically collect managed server patch application statuses, software parameter setting values, and configuration information of hardware and software from linkage servers and managed servers, and store this information in the Configuration Management Database (CMDB).

5. Manage patches, parameters, and configuration information

The infrastructure administrator and dual-role administrator can check hardware and software configuration information for all servers in the data center by logging in to the management console for Systemwalker Software Configuration Manager. Also, checking of the application status of patches discovered on the linkage server and managed servers, as well as the software parameter setting values, is possible.

Tenant administrators can check the software configuration information, patch application status, and software parameter settings for all servers in the tenant.

Tenant users can check the software configuration information, patch application status, and software parameter settings of the servers that they manage themselves.

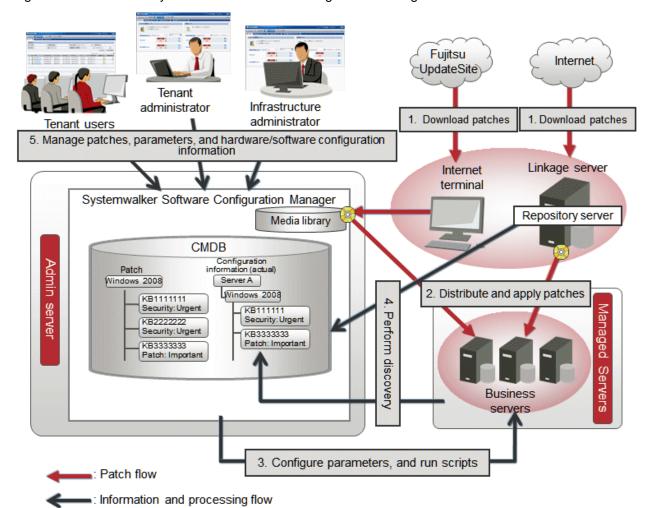


Figure 1.1 Overview of Systemwalker Software Configuration Manager

The user roles for this product

The explanations of this product assume that the roles of the people using this product can be classified as follows:

Infrastructure administrator

- Infrastructure administrators set up and maintain Systemwalker Software Configuration Manager.
- Infrastructure administrators define the managed servers for Systemwalker Software Configuration Manager.
- Infrastructure administrators define policies for managing Windows patches, release the patches obtained from Microsoft Windows Server Update Services (WSUS), and determine classification levels.
- Infrastructure administrators obtain Linux patches and register them with Yellowdog Updater Modified (yum) repository servers.
- Infrastructure administrators obtain patches for Fujitsu middleware and register them with Systemwalker Software Configuration Manager.
- Infrastructure administrators define the parameters to be collected from the software, as well as the parameters to be configured in the software.
- Infrastructure administrators can use the management console to look up the patch application status, software parameter setting values, and hardware and software configuration information for all servers in the center.

Dual-role administrator

- Dual-role administrators act as both an infrastructure administrator and a tenant administrator.

Tenant administrator

- Tenant administrators can use the management console to look up patch application status and software configuration information for their tenant's servers.
- Tenant administrators use the management console to configure parameters in software on servers belonging to their tenancy.
- Tenant administrators can use the management console to look up the patch application status, software parameter setting values, and software configuration information on servers belonging to their tenancy.

Tenant user

- Tenant users use the management console to apply patches to the servers that they manage.
- Tenant users use the management console to configure parameters in software on servers they manage themselves.
- Tenant users can use the management console to look up the patch application status, software parameter setting values, and software configuration information on servers they manage themselves.

1.3 List of Functions Available from the Management Console

The following table shows the functions that can be used with the management console, as well as which roles can use each function:

Table 1.1 Functions available from the management console

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks				
Home	Home	Function list	Y	Y	Y	Y	Y	A list of functions is displayed.				
		Notifications	Y	Y	Y	Y	Y	Notifications from the system are displayed.				
Configuration management	Hardware list	Chassis list	Y	Y	-	-	Y	Moves from the link to the chassis name to the chassis details.				
		Chassis details	Y	Y	-	-	Y	Moves from the link to the server blade name to the physical server details.				
			Physical server list	Y	Y	-	-	Y	Moves from the link to the physical server name and chassis name to the details.			
		Physical server details	Y	Y	-	-	Y	Displays the details of the physical server and a list of related VM guests.				
		OS list	Y	Y	-	-	Y	Displays the list of servers on which the OS is installed.				
						Map view	Y	Y	-	-	Y	Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants.
	Server list	Server list	Y	Y	Y	Y	-	Clicking the links for server names displays the server details.				
		Patch application button	-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard is displayed.				
		Parameter settings button	-	Y (*2)	Y (*2)	Y	-	The Parameter Settings wizard is displayed.				

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
		Script execution button	-	Y (*2)	Y (*2)	Y	-	The Script Execution wizard is displayed.
	Server Details	List of installed software programs	Y	Y	Y	Y	-	Clicking the links for product names displays the software details.
		List of unapplied OS patches	Y	Y	Y	Y	-	A list of unapplied OS patches is displayed.
		List of applied OS patches	Y	Y	Y	Y	-	A list of applied OS patches is displayed.
		List of unapplied Fujitsu middleware patches	Y	Y	Y	Y	-	A list of unapplied middleware patches is displayed.
		List of applied Fujitsu middleware patches	Y	Y	Y	Y	-	A list of applied middleware patches is displayed.
		Patch application button	-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard is displayed.
		Compare configuration baselines button	Y	Y	Y	Y	-	The Configuration Baseline List window is displayed.
		Download parameters in CSV format button	Y	Y	Y	Y	-	Parameter information is output in CSV format.
		Parameter details button	Y	Y	Y	Y	-	The Parameter Details window is displayed for the software.
	Paramete r Details	Detailed information about the parameters	Y	Y	Y	Y	-	Detailed information about the software parameters is displayed.
		Download CSV file button	Y	Y	Y	Y	-	Parameter information is output in CSV format.
		Download package button	Y	Y	Y	Y	-	The registered parameter package is downloaded.
		Parameter settings button	-	Y (*2)	Y (*2)	Y	-	The Parameter Settings wizard is displayed.

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
	Software lis	st	Y	Y	Y	Y	1	Clicking the links for product names displays the software details.
	Software Details	Detailed information about the software	Y	Y	Y	-	-	Detailed information about the software is displayed.
	Configur ation	Configuration baseline list	Y	Y	Y	-	1	The configuration baseline list is displayed.
	Baseline List	Compare button	Y	Y	Y	-	1	The two selected configuration baselines are compared.
	Configurat Compariso	ion Baseline n Results	Y	Y	Y	Y	-	The configuration baseline comparison results are displayed.
	Patch Application wizard		-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard for applying patches to specified servers is displayed.
	Parameter	Parameter Settings wizard		Y (*2)	Y (*2)	Y	-	The Parameter Settings wizard is displayed.
	Script Exec	cution wizard	-	Y (*2)	Y (*2)	Y	-	The Script Execution wizard is displayed.
	Maintena nce	View CI	Y	Y	1	-	Y	The configuration information registered in the CMDB can be viewed.
		Register CI	Y (*2)	Y (*2)	-	-	Y	New configuration information can be registered in the CMDB.
		Update/delete CI	Y (*2)	Y (*2)	-	-	Y	The configuration information registered in the CMDB can be updated or deleted.
		Import CI	Y (*2)	Y (*2)	-	-	Y	Configuration information can be imported in the CMDB.
Patch management	Summary view	Number of servers with unapplied patches	Y	Y	Y	Y	-	The number of servers with unapplied patches is displayed for each operating system and patch type.
								The List of Servers with Unapplied Patches window is displayed from the links.
		Number of new patches	Y	Y	Y	Y	-	The number of new patches is displayed for each operating system and patch type.
								The window for a list of the latest patches is displayed from the links.

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
	List of Servers with Unapplie d Patches	A list of servers with unapplied patches and a list of unapplied patches for the selected server	Y	Y	Y	Y	-	Patch details are displayed from the Patch ID links, whereas server details are displayed from the Server name links.
		Patch application button	-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard is displayed.
	List of New Patches	A list of new patches and a list of servers where the selected patch has not been applied	Y	Y	Y	Y	-	Patch details are displayed from the Patch ID links, whereas server details are displayed from the Server name links.
		Patch application button	1	Y (*2)	Y (*2)	Y	1	The Patch Application wizard is displayed.
	Patch list	Windows patch list	Y	Y	Y	Y	1	Patch details are displayed from the Patch ID links.
		Linux patch list	Y	Y	Y	Y	-	Patch details are displayed from the Patch ID links.
		Fujitsu middleware patch list	Y	Y	Y	Y	-	Patch details are displayed from the Patch ID links.
		Download CSV file button	Y	Y	Y	Y	-	A list of patches is output in CSV format.
		Patch application button	-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard is displayed.
	Patch Details	Detailed information about the selected patch	Y	Y	Y	Y	-	Detailed information about the patch is displayed.
		List of servers with unapplied patches	Y	Y	Y	Y	-	The servers where the selected patch has not been applied are displayed.
		List of servers with applied patches	Y	Y	Y	Y	-	The servers where the selected patch has been applied are displayed.
		Patch application button	-	Y (*2)	Y (*2)	Y	-	The Patch Application wizard is displayed.

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
	Patch Application wizard		-	Y (*2)	Y (*2)	Y	1	The Patch Application wizard for applying specified patches to servers is displayed.
Job management	Job list		Y	Y	Y	Y	1	Clicking the links for job names displays the job details.
	Job details	Detailed information about the job	Y	Y	Y	-	1	Clicking the links for process names displays the process details.
		Action button	-	Y	Y	-	-	Executes an action.
	Process details	Detailed information about the process	Y	Y	Y	-	-	Detailed information about the process is displayed.
		Action button	-	Y	Y	-	-	Executes an action.

Y: Can be used.

1.4 Login Users

The users who log in to this product must be registered with the directory service beforehand.

Before linking to ServerView Resource Orchestrator, users must be registered with ServerView Resource Orchestrator. The following table shows the correspondences between the roles for ServerView Resource Orchestrator and the roles for Systemwalker Software Configuration Manager.

If the roles have been customized on ServerView Resource Orchestrator, the basic roles of the copy source that correspond to the roles of this product are shown below. Refer to "Customizing Roles" in the ServerView Resource Orchestrator Cloud Edition Design Guide for information on customizing roles.

	ServerView Resource Orchestrator		Systemwalker Software Configuration Manager				
Role category	Role or basic role	Role	Viewing of Hardware Configuration Information Viewing of Virtual Environment Configuration Information	Patch distribution/ application operation Parameter configuration Script execution	Operations in the Configuration management >> Maintenance window		
Infrastructur e	Infrastructure administrator	Infrastructure administrator	A	-	A		
Administrati ve Role	Infrastructure operator		A	-	S (*1)		
	Infrastructure monitor		A	-	S (*1)		

^{-:} Cannot be used.

^{*1:} Indicates the functions which can be used in Systemwalker Software Configuration Manager Express.

^{*2:} These functions may not be available, depending on the ServerView Resource Orchestrator role that has been assigned to the login user. Refer to "1.4 Login Users" for information on roles.

ServerView Resource Orchestrator			Systemwalker Software Configuration Manager				
Role category	Role or basic role	Role	Viewing of Hardware Configuration Information Viewing of Virtual Environment Configuration Information	Patch distribution/ application operation Parameter configuration Script execution	Operations in the Configuration management >> Maintenance window		
Tenant Managemen	Tenant administrator	Tenant administrator	-	A	-		
t Roles	Tenant operator		-	-	-		
	Tenant monitor		-	-	-		
Tenant Use Roles	Tenant user	Tenant user	-	A	-		
Multiple	Multiple Administrator Dual-role A		A	A	A		
Roles	Operator	administrator	A	-	S (*1)		

A: All operations can be performed.

- S: Some operations can be performed.
- -: No operations can be performed.

Refer to "Restricting Access Using Roles" in the ServerView Resource Orchestrator Cloud Edition Design Guide for information on ServerView Resource Orchestrator roles.



Users who have not been registered using the user information management commands, and users who do not satisfy the conditions for users of this product, cannot use the management console. After they log in to the management console, the error "HTTP Status 403" is displayed.

Refer to "Managing User Information" in the Installation Guide for information on requirements to use this product.

1.5 Login and Logout

This section explains how to log in and log out of the management console.

1.5.1 Login

Use the following methods to open the management console:

Starting the management console from a URL

https://<FQDN on the admin server>:31500/

If the port number for accessing the management console was changed when Systemwalker Software Configuration Manager was installed, specify the new port number.

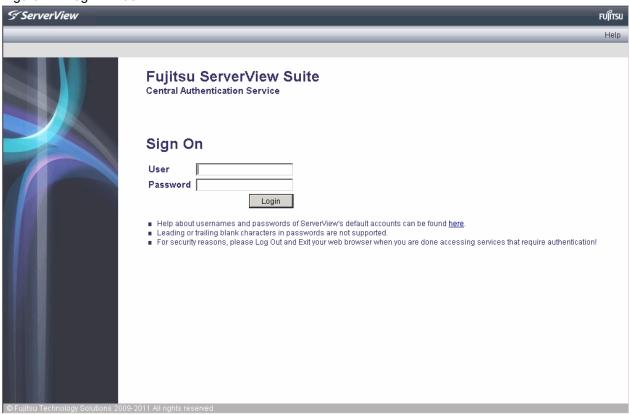
Starting the management console from the Start on the admin server

^{*1:} Only the View CI menu can be operated.

Start >> All programs or All apps >> Systemwalker Software Configuration Manager >> management console

When the management console is started, the following login window is displayed:

Figure 1.2 Login window



For the user name and password, log in using an account registered in the directory service.

To link to ServerView Resource Orchestrator, log in using a ServerView Resource Orchestrator account.

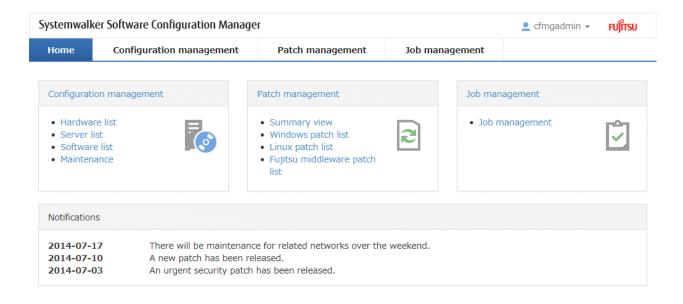
1.5.2 Logout

- 1. Click the user ID on the upper right of the window, and select Log out from the drop down list.
- 2. Close the browser after logging out.

1.6 Home

The **Home** window is displayed when the user logs in.

The Home window displays the Function list and Notifications for the management console.



Function list

The **Function list** displays a list of the functions for the management console. When each link is clicked, the corresponding window will be displayed as described below.

Configuration management

- Hardware list

Displays the Hardware list window.

- Server list

Clicking this link displays a server list window.

- Software list

Clicking this link displays a software list window.

- Maintenance

Clicking this link displays a window for looking up, registering, updating, deleting and importing configuration items.

Patch management

- Summary view

Clicking this link displays a window showing the aggregate results for the number of servers with unapplied patches and the number of new patches for each operating system and patch type.

- Windows patch list

Clicking this link displays a Windows patch list window.

- Linux patch list

Clicking this link displays a Linux patch list window.

- Fujitsu middleware patch list

Clicking this link displays a Fujitsu middleware patch list window.

Job management

- Job management

The **Job list** window is displayed.

Notifications

The **Notifications** section shows notifications from the system, such as maintenance information.

Refer to the Operation Guide for information on how to edit notifications.

Chapter 2 Configuration Management

The **Configuration management** window provides the following functions:

- Hardware list

Displays the list of chassis and physical server information collected by the discovery function, allowing you to view the detailed information of individual chassis and physical servers. If hypervisor is installed on the physical server, the list of guest OSs deployed on that hypervisor can be viewed as well.

Map view allows you to confirm dependency relationships between chassis, physical servers, servers, L-Platforms, and tenants as well as the information of the software installed on the server.



Information of L-Platforms and tenants is displayed when linking to ServerView Resource Orchestrator.

- Server list

The servers for which information has been collected by the discovery function can be displayed as a list, detailed information about each individual server can be looked up, including the patch application status for each server, and patches can also be applied. It is also possible to display information that has been filtered by specifying particular conditions.

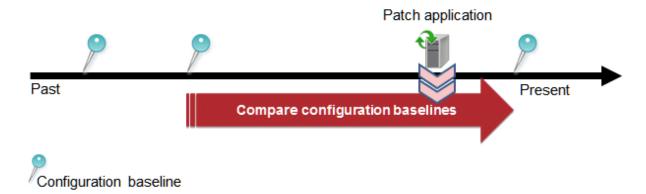
- Software list

The Fujitsu middleware products installed on the servers for which information has been collected using the discovery function can be displayed as a list, and detailed information about each individual server can be looked up, including the patch application status for each server. It is also possible to display information that has been filtered by specifying particular conditions.

- Compare configuration baselines

A configuration baseline is a snapshot of the information collected by the discovery function at a specific moment in time.

The **Configuration Baseline Comparison Results** window shows a list of the changes that have been made since the configuration baseline snapshot was taken.



If a problem occurs with a server, it is possible to check which patches have been applied since the server was last running correctly by comparing the current configuration baseline with the configuration baseline at the time when the server was running correctly.

The **Configuration Baseline Comparison Results** window also shows changes when there are differences in the definitions for RPM packages subject to Linux patch management between the two baselines being compared.

Configuration baselines are created by infrastructure administrators.

- Patch Application wizard

This wizard allows the user to apply patches by first selecting the target servers. Users can then select the required patches, and specify the application method.

- Parameter Settings wizard

This wizard allows the user to set parameters. The user selects the target server and software, and then the parameters to be set. The wizard also allows the user to edit the parameters to be set.

- Script Execution wizard

This wizard allows the user to run any script on the target server.

- Maintenance

The Maintenance window can be used to reference, update, delete, register and import the configuration items stored in the CMDB.

2.1 Hardware List

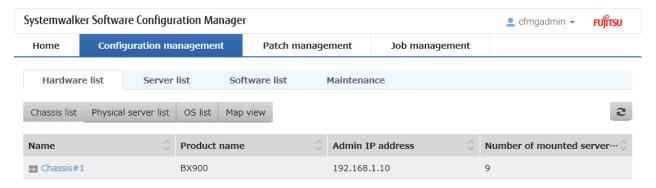
The Hardware list window displays the list of chassis and physical server information collected by the discovery function, allowing you to view the detailed information of individual chassis and physical servers. If hypervisor is installed on the physical server, the list of guest OSs deployed on that hypervisor can be viewed as well.

In addition, Map view allows you to confirm dependency relationships between chassis, physical servers, servers, L-Platforms, and tenants as well as the information of the software installed on the server.

2.1.1 Chassis list

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods.
 - a. Select Configuration management from the menu in the management console.
 - b. Click the link to Hardware list in the Home window.



Display item

Displays the list of blade server chassis.

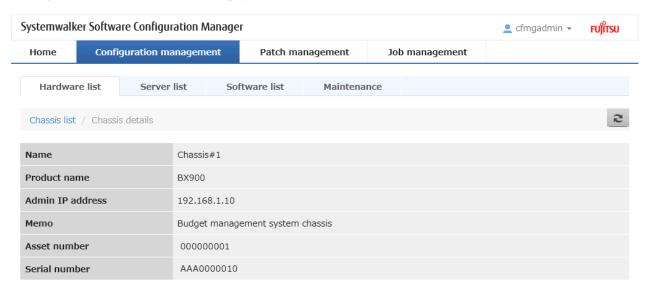
The following table shows the items that are displayed in the chassis list:

Display item	Description
Name	Displays the chassis name.
	Clicking a chassis name displays the Chassis Details window.
Product name	Displays the product name of the chassis.
Admin IP address	Displays the admin IP address of the chassis.
Mounted server blades	Displays the number of server blades mounted on the chassis.

2.1.1.1 Chassis details

Display method

Clicking a chassis name in the chassis list displays the Chassis Details window.



Server blade list

Slot n···	Server blade name	Product name	Admin IP address	os	OS IP address
5	Blade#5	PRIMERGY BX920 S1	192.168.1.205	VMware ESXi 5.1.0···	192.168.1.105
6	Blade#6	PRIMERGY BX920 S2	192.168.1.206	VMware ESX 4.1.0···	192.168.1.106
17	Blade#9	PRIMERGY BX920 S2	192.168.1.209	VMware ESXi 5.1.0···	192.168.1.109

Display item

Chassis details

The following table shows the items that are displayed in the **Chassis details** window:

Display item	Description
Name	Displays the chassis name.

Display item	Description
Product name	Displays the product name of the chassis.
Admin IP address	Displays the admin IP address of the chassis.
Memo	Displays the memo.
Asset number	Displays the asset number.
Serial number	Displays the serial number.
Server blade list	Displays the list of server blades mounted on the chassis.

Server blade list

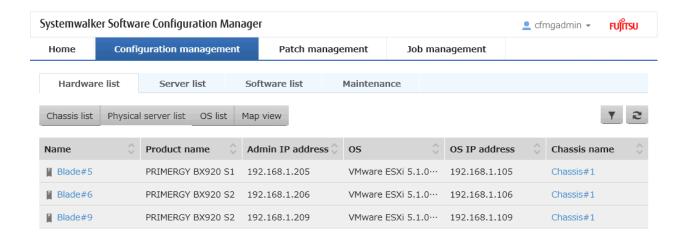
The following table shows the items that are displayed in the server blade list:

Display item	Description
Slot number	Displays the slot number.
Server blade name	Displays the server blade name.
	Clicking a server blade name displays the Physical Server Details window.
Product name	Displays the product name of the server blade.
Admin IP address	Displays the admin IP address of the server blade.
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.

2.1.2 Physical Server List

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods to display the **Hardware list** window.
 - a. Select Configuration management from the menu in the management console.
 - b. Click the link to **Hardware list** in the **Home** window.
- 3. Click the **Physical server list** tab in the **Hardware list** window.



Operation method

Filter search

Click the button at the top right of the window to specify the conditions for filtering the information in the physical server list.

Display item	Description
Filter	The following filter conditions can be specified. Multiple filter conditions can be specified.
	- Name
	- Product name
	- Admin IP address
	- OS
	- OS IP address
	- Chassis name

Display item

The following table shows the items that are displayed in the physical server list:

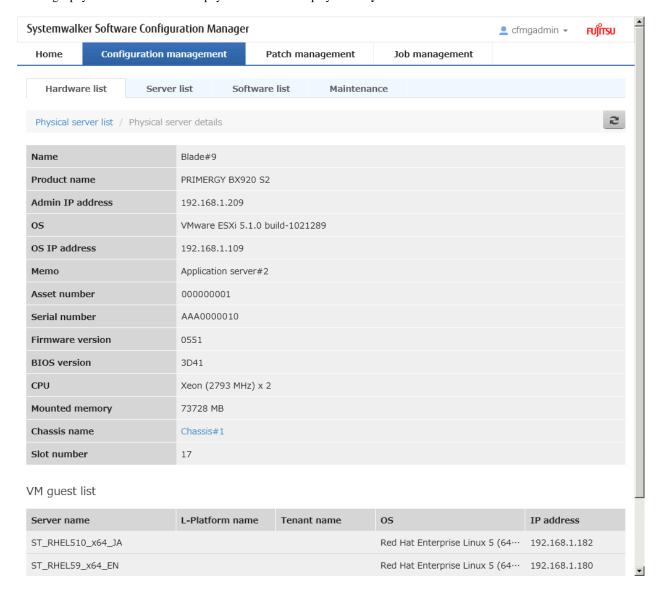
Display item	Description
Name	Displays the physical server name.
	Clicking a physical server name displays the Physical Server Details window.
Product name	Displays the product name of the physical server.

Display item	Description
Admin IP address	Displays the admin IP address of the physical server.
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.
Chassis name	For a server blade, the name of the chassis in which it is mounted is displayed.
	Clicking a chassis name displays the Chassis Details window.

2.1.2.1 Physical Server Details

Display method

Clicking a physical server name in the physical server list displays the **Physical Server Details** window.



Display item

Physical server details

The following table shows the items that are displayed in the **Physical server details** (server blades):

Display item	Description
Name	Displays the physical server name.
Product name	Displays the product name of the physical server.
Admin IP address	Displays the IP address of the physical server.
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.
Memo	Displays the memo.
Asset number	Displays the asset number.
Serial number	Displays the serial number.
Firmware version	Displays the firmware version.
BIOS version	Displays BIOS information.
CPU	Displays CPU information.
Mounted memory size	Displays the mounted memory size.
Chassis name	For a server blade, the chassis name is displayed.
	Clicking a chassis name displays the Chassis Details window.
Slot number	For a server blade, the slot number is displayed.
Server name	When an OS (except for a VM host) is installed on a physical server, the server name is displayed.
L-Platform name	When an OS (except for a VM host) is installed on a physical server, the L-Platform name is displayed.
Tenant name	When an OS (except for a VM host) is installed on a physical server, the tenant name is displayed.
VM guest list	Displays a list of related VM guests operating on the physical server.

Server list

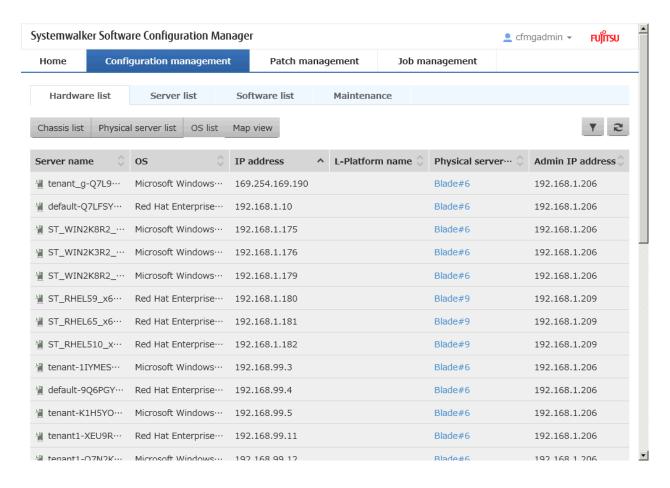
The following table shows the items that are displayed in the VM guest list:

Display item	Description
Server name	Displays the VM guest name. When linked to ROR, the L-Server name is displayed.
L-Platform name	Displays the L-Platform name.
Tenant name	Displays the tenant name.
OS	Displays the operating system name.
IP address	Displays the IP address of the operating system.

2.1.3 OS List

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods to display the **Hardware list** window.
 - a. Select Configuration management from the menu in the management console.
 - b. Click the link to **Hardware list** in the **Home** window.
- 3. Click the **OS list** tab in the **Hardware list** window.



Operation method

Filter search

Click the button at the top right of the window to specify the conditions for filtering the information in the OS list.

Display item	Description
Filter	The following filter conditions can be specified. Multiple filter conditions can be specified.
	- Server name
	- OS
	- IP address
	- L-Platform name
	- Physical server name
	- Admin IP address

Display item

Displays the list of servers on which the OS is installed.

The following table shows the items displayed in the OS list:

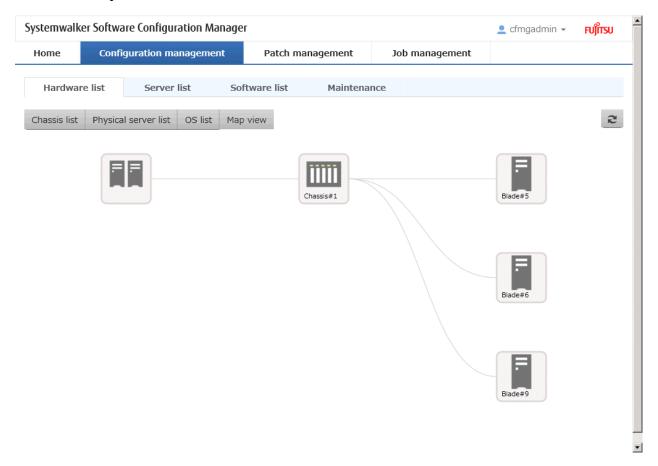
Display item	Description
Server name	Displays the name of the server on which the OS is installed.
OS	Displays the operating system name.

Display item	Description
IP address	Displays the IP address of the operating system.
L-Platform name	Displays the L-Platform name.
Physical server name	Displays the physical server name.
	Clicking a physical server name displays the Physical Server Details window.
Admin IP address	Displays the admin IP address of the physical server.

2.1.4 Map view

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods to display the **Hardware list** window.
 - a. Select Configuration management from the menu in the management console.
 - b. Click the link to **Hardware list** in the **Home** window.
- 3. Click the **Map view** tab in the **Hardware list** window.



Display item

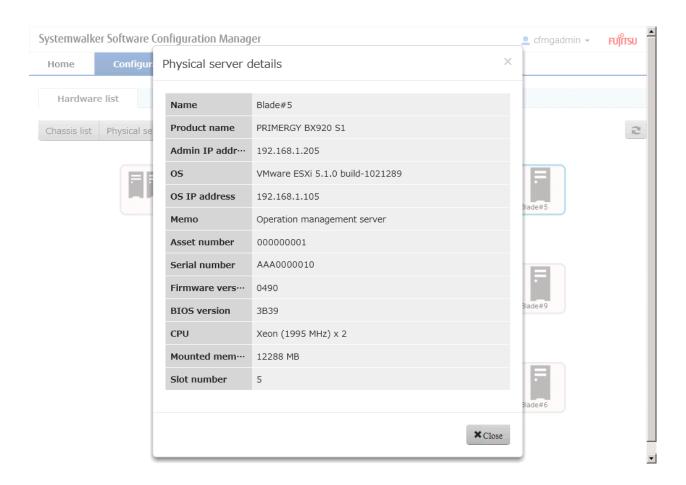
Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants.

The following table shows the items that are displayed in the map list:

Selection item	Description
Root	Indicates a collection of hardware. At least one is displayed.
Chassis	Displays relationships between the chassis and physical servers. Reselecting this item while it is still selected displays the detailed information.
Physical server	Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the physical server.
	Reselecting this item while it is still selected displays the detailed information.
Servers	Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the server.
	Reselecting this item while it is still selected displays the detailed information.
L-Platform	Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the L-platform.
	Reselecting this item while it is still selected displays the detailed information.
	Displays an L-Platform when a physical server is selected.
Tenant	Displays relationships between the tenant and L-Platforms.
	Reselecting this item while it is still selected displays the detailed information.
	Displays a tenant when a physical server is selected.

2.1.4.1 Displaying Details

Reselecting the resource still selected in the map displays the detailed information.



Display item

When a chassis is selected

The following table shows the items displayed when a chassis is selected:

Display item	Description
Name	Displays the chassis name.
Product name	Displays the product name of the chassis.
Admin IP address	Displays the admin IP address of the chassis.
Memo	Displays the memo.
Asset number	Displays the asset number.
Serial number	Displays the serial number.

When a physical server is selected

The following table shows the items displayed when a physical server is selected:

Display item	Description
Name	Displays the physical server name.
Product name	Displays the product name of the physical server.
Admin IP address	Displays the admin IP address of the physical server.
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.
Memo	Displays the memo.

Display item	Description
Asset number	Displays the asset number.
Serial number	Displays the serial number.
Firmware version	Displays the firmware version.
BIOS version	Displays BIOS information.
CPU	Displays CPU information.
Mounted memory size	Displays the mounted memory size.
Slot number	For a server blade, the slot number is displayed.

When a server is selected

When a server is selected, the **Server Details** window is displayed.

For the items displayed, refer to "2.2.1 Server Details".

When an L-Platform is selected

The following table shows the items displayed when an L-Platform is selected:

Display item	Description
Name	Displays the L-Platform name.
User ID	Displays the user ID.
User name	Displays the user name.
Phone number	Displays the phone number.
Email address	Displays the email address.

When a tenant is selected

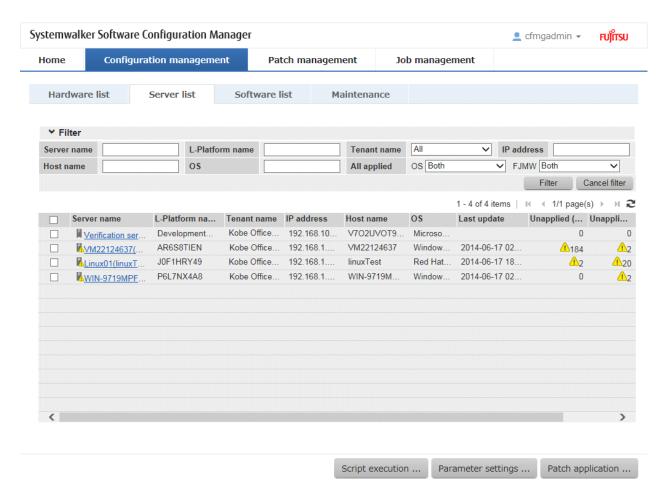
The following table shows the items displayed when a tenant is selected:

Display item	Description
Name	Displays the tenant name.
User ID	Displays the user ID.
User name	Displays the user name.
Phone number	Displays the phone number.
Email address	Displays the email address.

2.2 Server List

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods to display the server list:
 - $a. \ \ Select\ \textbf{Configuration\ management}\ from\ the\ menu\ in\ the\ management\ console,\ and\ then\ select\ the\ \textbf{Server}\ \textbf{list}\ tab.$
 - b. Click the **Server list** link in the **Home** window.





This window shows a list of the servers within the range managed by the login user.

Infrastructure administrator

Infrastructure administrators can reference information about all servers.

Dual-role administrator

Dual-role administrators can reference information about all servers.

Tenant administrator

Tenant administrators can reference information about the servers associated with their tenants (organization) to which they belong.

Tenant user

Tenant users can reference information about the servers that they manage.



About Solaris servers

For Solaris servers, only the following information can be checked.

- Applied OS patches (SRU information)
- Installed Fujitsu middleware
- Application status of Fujitsu middleware patches

It is not possible to perform patch application, parameter setting, or script execution on Solaris servers.



Conditions under which servers are counted as servers with unapplied patches

The conditions under which servers are counted as servers with unapplied patches differ with Windows patches, Linux patches, and Fujitsu middleware patches. These conditions are explained separately as below:

- Number of servers with unapplied Windows patches
 - The number of servers with unapplied Windows patches is the number of servers where the patches authorized by WSUS have not been applied.
- Number of servers with unapplied Linux patches
 - The number of servers with unapplied Linux patches is the number of servers where the patches registered with the yum repository server and have been defined as the management target have not been applied.
- Number of servers with unapplied Fujitsu middleware patches

The number of servers with unapplied Fujitsu middleware patches is the number of servers where the Fujitsu middleware patches distributed by Systemwalker Software Configuration Manager have not been applied.

The number of servers with unapplied Fujitsu middleware patches is the number of servers where the Fujitsu middleware patches registered using swcfmg_fjmwpatch_update (Fujitsu middleware patch registration command) have not been applied.

Operation method

Filter search

Specify the conditions for filtering the information in the server list.

Display item	Description
Filter	The following filter conditions can be specified. Multiple filter conditions can be specified
	- Server name
	- L-Platform name
	- Tenant name
	- IP address
	- Host name
	- os
	- All applied
	- FJMW

Display items

The following table shows the items that are displayed in the server list:

Display item	Description	
Checkbox	Checking the checkbox selects the corresponding server as a target server for patch application, parameter setting, or script execution.	
Server name	Displays the server names.	
	Clicking a server name link displays the Server Details window.	

Display item	Description
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.
IP address	Displays the IP addresses.
Host name	Displays the host names.
os	Displays the operating system names.
Last update	Displays the date and time when the patch application status was registered with WSUS. Not displayed for Linux patches.
Unapplied (OS)	Displays the number of OS patches that have not been applied.
Unapplied (MW)	Displays the number of Fujitsu middleware patches that have not been applied.



The number of patches in the "Unapplied (OS)" column of this window may not match the number of patches to be applied as detected by the Check for Updates function on the business server.

The inconsistency arises when some patches are provided as part of a cumulative patch. This is because Systemwalker Software Configuration Manager counts all of the patches in a cumulative patch as patches that can be applied, while the Check for Updates function does not count patches in a cumulative patch as patches that can be applied.

For example, if Patch 3 is a cumulative patch containing Patch 1 and Patch 2, then Systemwalker Software Configuration Manager will detect them as three different patches that can be applied, but the Check for Updates function will detect them as one patch that can be applied.

Patches detected	Systemwalker Software Configuration Manager	Check for Updates function
Patch 3 (containing Patch 1 and Patch 2)	D	D
Patch 2	D	-
Patch 1	D	-

- D: Detected as a patch that can be applied
- -: Not detected as a patch that can be applied

If some patches are provided as part of a cumulative patch, Systemwalker Software Configuration Manager will no longer detect such patches in a cumulative patch as patches that can be applied, by having these patches unapproved on the WSUS server.

Operation buttons

The following operations can be performed from the $\boldsymbol{Server\ list}$ window:

Operation button	Description
Patch application	Select the server using the checkboxes, and click Patch application button. This displays the Patch Application wizard, enabling the user to distribute and apply patches originating from the server.
Parameter settings	Select the server using the checkboxes, and click Parameter settings button. This displays the Parameter Settings wizard, enabling the user to configure parameters for software installed on the selected server.

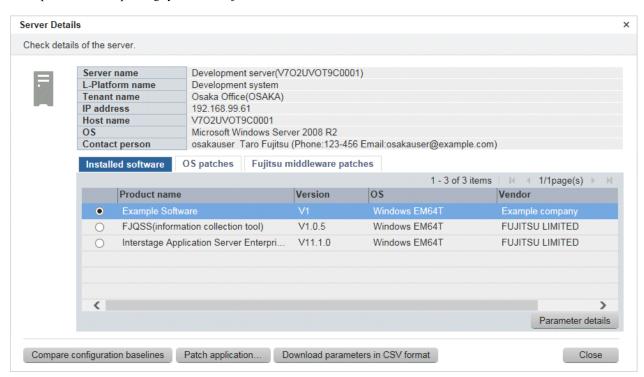
Operation button	Description
Script execution	Select the server using the checkboxes, and click Script execution button. This displays the Script Execution wizard, enabling the user to run scripts on the selected server.

2.2.1 Server Details

Display method

- 1. Use either of the following methods to display the server details:
 - a. Click a server name link in the Server list window.
 - b. Click a server name link in each window.
- 2. The **Server Details** window will be displayed.

The **Server Details** window shows information about the server, the installation status of software, and the application status of patches for the operating system and Fujitsu middleware.



Operation method

Detailed information about the server

Detailed information about the server is displayed in the top section of the window.

Item	Description
Server name	Displays the server name.
L-Platform name	Displays the L-Platform name.
Tenant name	Displays the tenant name.
IP address	Displays the IP address.
Host name	Displays the host name.

Item	Description
os	Displays the operating system name.
Contact person	Displays the user ID, user name, telephone number and email address.

Information about installed software

Clicking the **Installed software** tab in the bottom section of the window displays a list of the software (Fujitsu middleware) products that have been installed.

Item	Description
Product name	Displays the product names of the software products that have been installed.
Version	Displays the versions of the software products.
os	Displays the operating systems (platforms).
Vendor	Displays the vendors of the software products.

Operation button

The following operation can be performed from the **Installed software** tab:

Operation button	Description
Parameter details	Select the software using the radio buttons and click Parameter details button to display the Parameter Details window.

Information about OS patch application

Clicking the **OS patches** tab in the bottom section of the window displays a list of the patches that have been applied and a list of the patches that have not been applied.

Clicking the **Unapplied patches** link displays a list of unapplied patches.

Clicking the **Applied patches** link displays a list of applied patches.

Table 2.1 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers

Item	Description
	- Updates
	- Update Rollups
	- Definition Updates
Product name	Displays the product name (operating system name) corresponding to each patch.
Overview	Displays an overview (or title) of each patch.
Release date	Displays the date when each patch was released.

Table 2.2 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 2.3 For Solaris patches

Item	Description
SRU information	Displays SRU information.
	SRU information includes information on the "entire" package.



For Solaris patches, only the information for **Applied patches** is displayed.

Information about Fujitsu middleware patch application

When the **Fujitsu middleware patches** tab in the bottom section of the window is selected, the application status of Fujitsu middleware patches is displayed.

......

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.

Item	Description
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Update title	Displays an overview (title) of each patch.
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

Operation buttons

The following operations can be performed from the **Server Details** window:

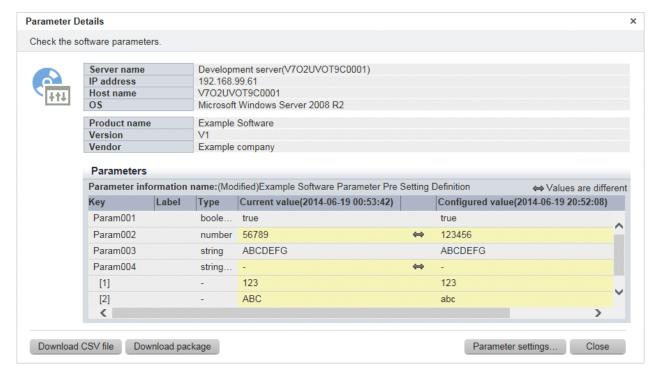
Operation button	Description
Compare configuration baselines	Compares configuration baselines. Refer to "2.4 Compare Configuration Baselines" for details.
Patch application	Displays the Patch Application wizard, enabling the user to distribute and apply unapplied patches to the relevant server.
Download parameters in CSV format	Outputs information on software parameters in CSV format.
Close	Closes the window.

2.2.2 Parameter Details

Display method

- 1. Select the software to reference using the radio buttons on the **Installed software** tab in the **Server Details** window. Click **Parameter details** button.
- 2. The Parameter Details window will be displayed.

The **Parameter Details** window displays the server and software information, as well as the values currently configured in the parameters, and those configured prior to the current values.



Server information

Server information is displayed in the top section of the window.

Item	Description
Server name	Displays the server name.
IP address	Displays the IP address.
Host name	Displays the host name.
os	Displays the operating system name.

Software information

Software information is displayed in the middle section of the window.

Item	Description
Product name	Displays the product name of installed software.
Version	- Displays the software version.
os	- Displays the operating system type (platform).

Parameter information

Parameter information is displayed in the bottom section of the window.

Item	Description
Key	Displays the parameter key value.
Label	- Displays the parameter label. Note that labels are not displayed for array type elements or map type subkeys.
Туре	- Displays the parameter type:
	- string
	- number
	- boolean
	- string array
	- map
Current value	Displays the parameter value that was discovered.
Configured value	Displays the value last set using parameter settings.

If there is a difference between **Current value** and **Configured value**, display this difference using the ó symbol.

Operation buttons

The following operations can be performed from the **Parameter Details** window:

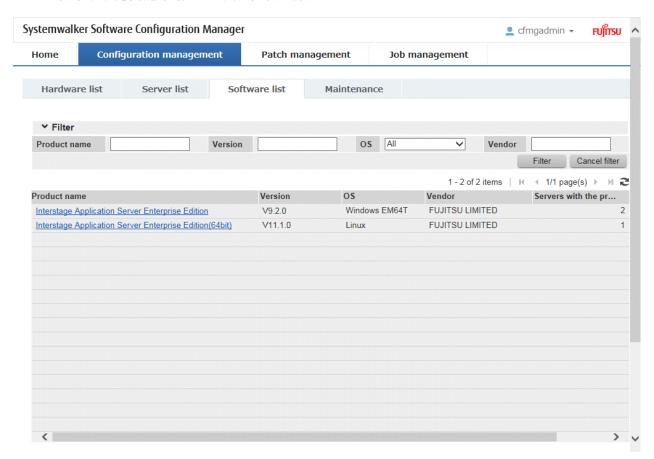
Operation button	Description
Download CSV file	Outputs information on parameters in CSV format.
Download package	Downloads the registered parameter package.

Operation button	Description
Parameter settings	Displays the Parameter Settings wizard, enabling the user to configure parameters for the relevant server and software.
Close	Closes the window.

2.3 Software List

Display method

- 1. Log in to the management console.
- 2. Use the following method to display the software list:
 - a. Select Configuration management from the menu in the management console, and then select the Software list tab.
 - b. Click the **Software list** link in the **Home** window.





A list of the software (Fujitsu middleware) products installed on the servers within the range managed by the login user will be displayed.

Infrastructure administrator

Infrastructure administrators can reference information about the software installed on all the servers.

Dual-role administrator

Dual-role administrators can reference information about the software installed on all the servers.

Tenant administrator

Tenant administrators can reference information about the software installed on the servers associated with the tenants (organization) to which they belong.

Tenant user

Tenant users can reference information about the software installed on the servers that they manage.

Operation method

Filter search

Specify the conditions for filtering the information in the software list.

Display item	Description
Filter	The following filter conditions can be specified. Multiple filter conditions can be specified.
	- Product name
	- Version
	- OS
	- Vendor

Display items

The following table shows the items that are displayed in the software list:

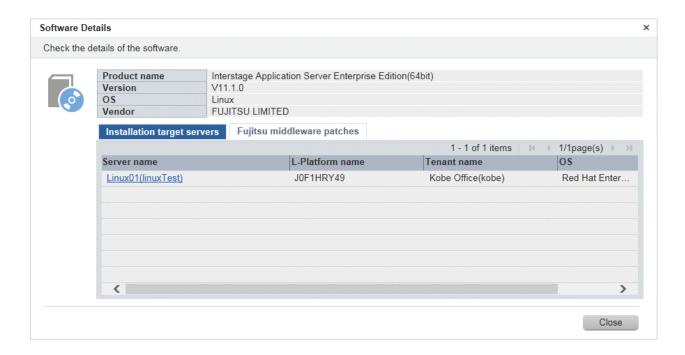
Display item	Description
Product name	Displays the product names of the software products that have been installed.
Version	Displays the versions of the software products.
os	Displays the operating systems (platforms).
Vendor	Displays the vendors of the software products.
Servers with the product	Displays the number of servers where the software has been installed.

2.3.1 Software Details Window

Display method

- 1. Click a product name link in the **Software list** window.
- 2. The **Software Details** window will be displayed.

The **Software Details** window displays information about the software, together with a list of the servers where it has been installed and a list of the registered patches for that software.



Software information

Information about the software is displayed in the top section of the window.

Item	Description
Product name	Displays the product name of installed software.
Version	Displays the version of the software.
os	Displays the operating system (platform).
Vendor	Displays the vendor of the software.

Installation target servers

When the **Installation target servers** tab in the bottom section of the window is selected, a list of servers where the software has been installed is displayed.

Item	Description
Server name	Displays the server names.
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.
os	Displays the operating systems.

Fujitsu middleware patches

When the **Fujitsu middleware patches** tab in the bottom section of the window is selected, a list of Fujitsu middleware patches is displayed.

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	 Required: Patches that are specified as "Required" in the operation policy settings

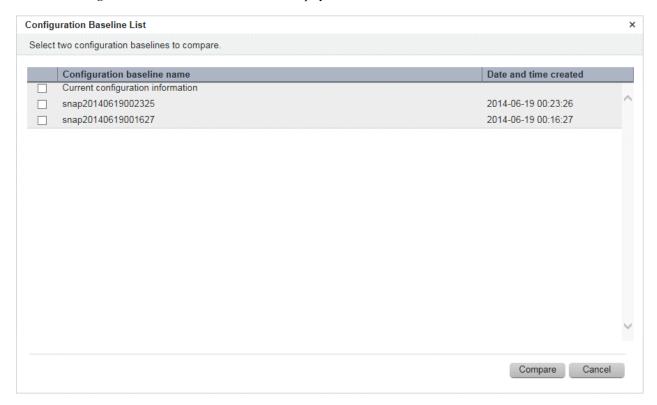
Item	Description
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Update title	Displays an overview (title) of each patch.
Unapplied servers	Displays the number of servers where the patch has not been applied.

2.4 Compare Configuration Baselines

Display method

1. Click Compare configuration baselines in the Server Details window.

The Configuration Baseline List window will be displayed.



Operation method

Display items

Item	Description
Configuration baseline name	Displays the configuration baseline names.
	Current configuration information is displayed at the top of the list.
Date and time created	Displays the date and time when the configuration baseline was created.

Item	Description
	The creation time for the Current configuration information is not displayed.

The following operations can be performed from the **Server Details** window:

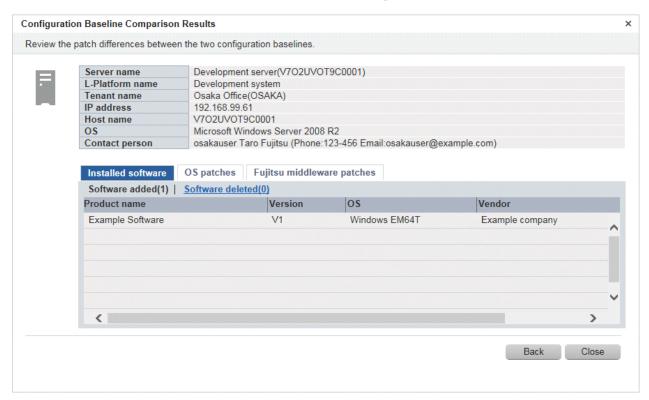
Operation button	Description
Compare	Compares the two selected configuration baselines.
Cancel	Returns to the Server Details window.

2.4.1 Configuration Baseline Comparison Results

Display method

- 1. Select the checkboxes for the two configuration baselines to be compared in the Configuration Baseline List window.
- 2. Click Compare.

The Configuration Baseline Comparison Results window will be displayed.



Operation method

Detailed information about the server

Detailed information about the server is displayed in the top section of the window.

Item	Description
Server name	Displays the server name.
L-Platform name	Displays the L-Platform name.
Tenant name	Displays the tenant name.
IP address	Displays the IP address.

Item	Description
Host name	Displays the host name.
os	Displays the operating system
Contact person	Displays the user ID, user name, telephone number and email address.

Information about the differences in installed software

When the **Installed software** tab in the bottom section of the window is selected, a list of the software products that have been added between the two configuration baselines will be displayed, together with a list of the software products that have been removed.

Item	Description
Product name	Displays the product names of the software products that have been installed.
Version	Displays the versions of the software products.
os	Displays the operating systems.
Vendor	Displays the vendors of the software products.

Information about the differences in OS patches

When the **OS patches** tab in the bottom section of the window is selected, a list of the patches that have been added between the two configuration baselines will be displayed, together with a list of the patches that have been removed.

Table 2.4 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
	Clicking a patch ID link displays the Patch Details window.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Product name	Displays the product name (operating system name) corresponding to each patch.
Release date	Displays the date when each patch was released.
Overview	Displays an overview (or title) of each patch.

For Linux patches, lists of the patches that have been changed, added and removed will be displayed.

Table 2.5 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Note: In the list of patches that have been changed, the version/release information is displayed using the format "new version/release (old version/release)".

Information about the differences in Fujitsu middleware patches

When the **Fujitsu middleware patches** tab in the bottom section of the window is selected, a list of the patches that have been added between the two configuration baselines will be displayed, together with a list of the patches that have been removed.

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

Operation buttons

The following operations can be performed from the Configuration Baseline Comparison Results window:

Operation button	Description
Back	Returns to the Configuration Baseline List window.
Close	Returns to the Server Details window.

2.5 Patch Application Wizard

Patch application is set up by first selecting the servers where the patches are to be applied.



The roles of the people who distribute and apply patches

The explanations in this section assume that the roles of the people who distribute and apply patches can be classified as follows:

Infrastructure administrator

- Infrastructure administrators are responsible for patch management (management for WSUS, yum repository servers and the media library).
- Infrastructure administrators do not distribute or apply patches.
- When an error occurs with the patch distribution/application processing, a message may be output to the event log or syslog. If this happens, infrastructure administrators need to check the content of the message and take the necessary action such as reviewing the environment settings.

Tenant administrator

- Tenant administrators use the management console to distribute and apply patches to the servers for the tenants to which they belong.

Tenant user

- Tenant users distribute and apply patches to those servers that they manage themselves.

Dual-role administrator

- Dual-role administrators have the roles of both infrastructure administrators and tenant administrators. When acting as a tenant administrator, a dual-role administrator can distribute and apply patches to the servers in all tenancies.

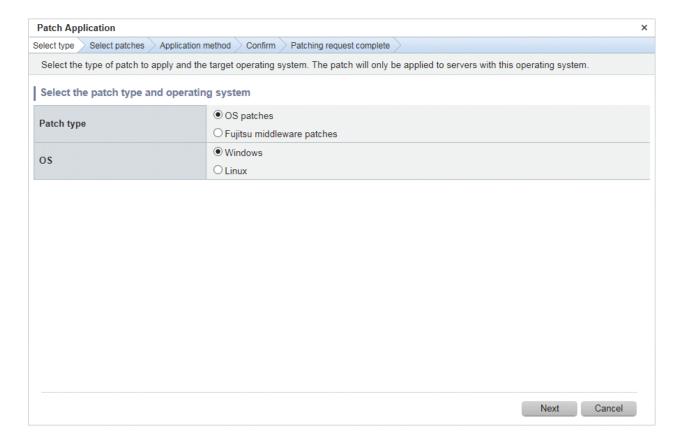
Display method

- 1. Click **Patch application** button in one of the following windows:
 - Server list window
 - Server Details window
- 2. Perform the following patch application setup and confirmation operations in the wizard:
 - a. Select the patch type
 - b. Select the patches to be applied
 - c. Set the application method
 - d. Check the settings
 - e. Completion

2.5.1 Select Type

If either of the following operations is performed, the Select type window of the Patch Application wizard will be displayed:

- Use the checkboxes in the Server list window to select servers, and then click Patch application button.
- Click Patch application button in the Server Details window.



Selecting patch types

Select the patch type and operating system for the patch to be applied.

Item	Description
Patch type	Select either of the following as the type of the patch to be applied:
	- OS patches
	- Fujitsu middleware patches
OS	Select either of the following as the operating system to which the patch is to be applied:
	- Windows
	- Linux
	- If only Windows servers or Linux servers have been selected, the radio buttons will be grayed out so that they cannot be selected.

Operation buttons

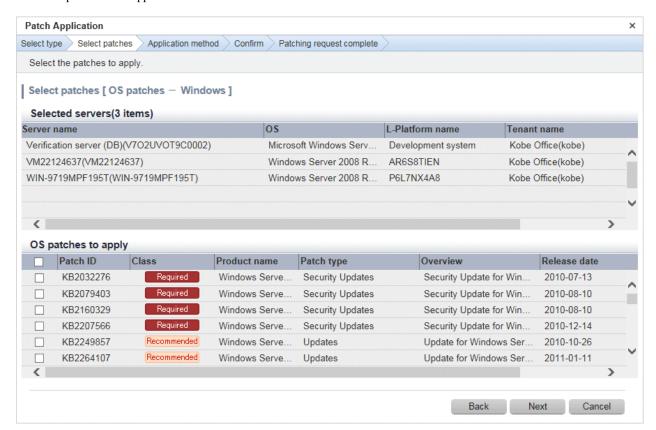
Operation button	Description
Next	Moves to the Select servers window.
Cancel	Closes the Patch Application wizard.

2.5.2 Select Patches

When Next is clicked in the Select type window, the Select patches window is displayed.

The patches that can be applied to the selected servers will be displayed in the list of patches.

Select the patches to be applied.



Operation method

Selected servers

This list displays the servers to which the patches are to be applied.

Item	Description
Server name	Displays the server names.
os	Displays the operating system names.
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.

Selecting patches

Select the patches to be applied.

Table 2.6 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches. - Required: Patches that are specified as "Required" in the operation policy settings - Recommended: Patches that are specified as "Recommended" in the operation policy settings
Product name	Displays the product name (operating system name) corresponding to each patch.

Item	Description
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Overview	Displays an overview (or title) of each patch.
Release date	Displays the date when each patch was released.

Table 2.7 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 2.8 Fujitsu middleware patches

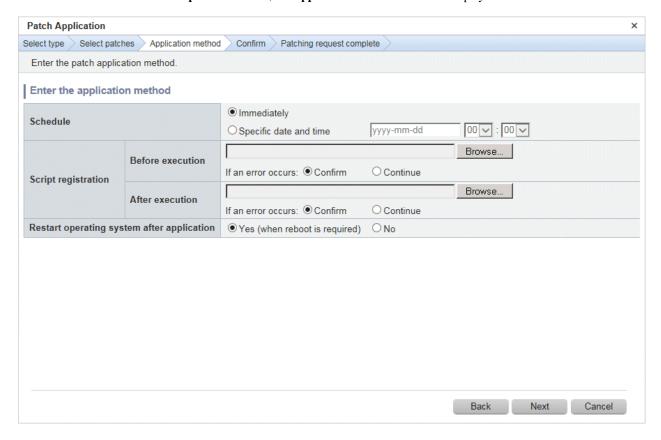
Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	 Required: Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).

Item	Description
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

Operation button	Description
Back	Returns to the Select servers window.
Next	Moves to the Application method window if a patch has been selected using a checkbox.
Cancel	Closes the Patch Application wizard.

2.5.3 Application Method

When Next is clicked in the Select patches window, the Application method window is displayed.



Operation methods

Setting up the application method

Item	Description
Schedule	Specify a schedule.
	 Immediately: Select this option to perform the processing as soon as settings in the wizard are complete.
	 Specific date and time: Specify the date and time when processing is to be executed.
	Specify a date and time that is later than the current date and time on the admin server.

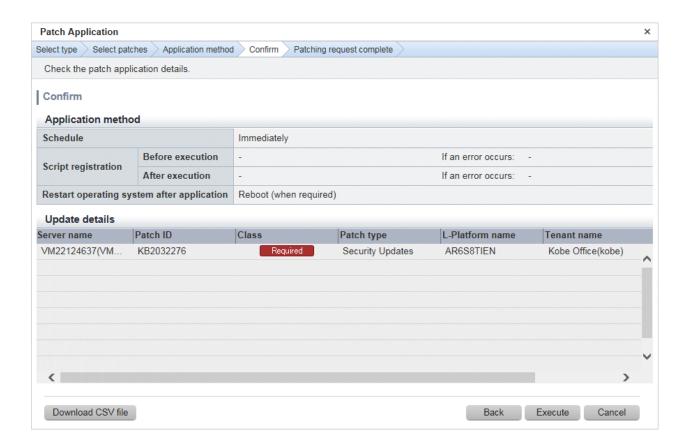
Item	Description
Script	Specify the scripts to be executed before and after patch distribution/application, as well as the behavior of patch application processing if an error occurs during script execution.
	To apply Fujitsu middleware patches, a script specifying the application processing must be created and then registered as a post-execution script.
	Create the scripts registered here so that they output "0" as a return value to indicate normal completion and a value other than "0" as a return value to indicate an error.
	For the script to be registered, specify the full path to the file that is stored on the local machine where the browser is running.
	- Confirm: If an error occurs, the user can select the process to take when the corresponding script fails (such as "retry", "continue processing", or "cancel processing") from the Job management window or by using the job information management command. Refer to "Chapter 4 Job Management" for details on the Job management window. Refer to "Job Information Management Command" in the Reference Guide for details on the command.
	- Continue: Processing will continue even if an error occurs.
	Refer to "Creating Scripts" in the <i>Operation Guide</i> for information on the scripts that are registered here.
Restart operating system	Select whether to restart the server after the patch is distributed and applied.
after application	- Yes
	The behavior varies depending on the patch type, as follows:
	- OS patches
	The server will only be restarted for those patches that need to have the server restarted.
	- Fujitsu middleware patches
	The server will be restarted without fail.
	- No
	The server will not be restarted.

Operation button	Description
Back	Returns to the Select patches window.
Next	Moves to the confirmation window.
Cancel	Closes the Patch Application wizard.

2.5.4 Confirm

When Next is clicked in the Application method window, the Confirm window is displayed.

Check the settings that have been entered.



Application method

This section displays the settings that have been specified in the **Application method** window.

Update details

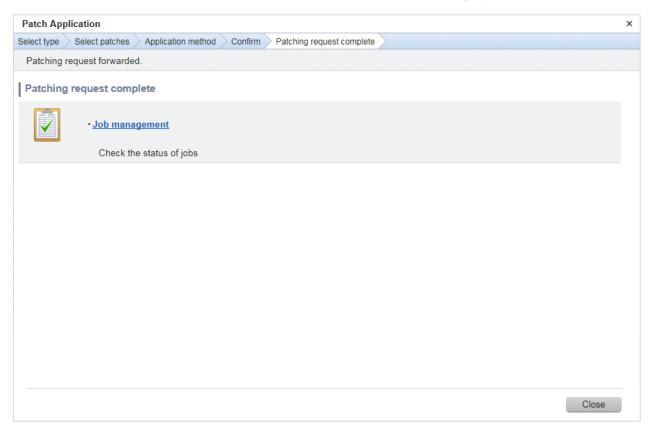
	Item	Description
Server name		Displays the server names.
For Windows	Patch ID	Displays the patch IDs.
	Class	Displays the classification levels ("Required" or "Recommended") of the patches.
	Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
For Linux	Package name	Displays the names of the packages.
	Version	Displays the versions of the packages.
	Release	Displays the release numbers of the packages.
For Fujitsu	Patch ID	Displays the patch IDs.
middleware	Importance	Displays the importance of each patch ("Recommended", "Important" or "Security").
	Update type	Displays the update type of each patch ("Urgent").
L-Platform na	me	Displays the L-Platform names.
Tenant name		Displays the tenant names.

Operation buttons

Operation button	Description
Download CSV file	Outputs the information displayed in Update details to a CSV file.
Back	Returns to the Application method window.
Execute	Executes the patch application.
Cancel	Closes the Patch Application wizard.

2.5.5 Patching Request Complete

When Next is clicked in the Confirm window, the Patching request complete window is displayed.



Operation method

Job management

Item	Description
Job management	Moves to the Job management window where the user can check the status of the patch application operation that was executed. The status of the patch application operation that was executed can also be checked by using the job information management command. Refer to "Job Information Management Command" in the <i>Reference Guide</i> for details.

Operation button

Operation button	Description
Close	Closes the Patch Application wizard.

2.6 Parameter Settings Wizard

This wizard configures the software parameters.

Display method

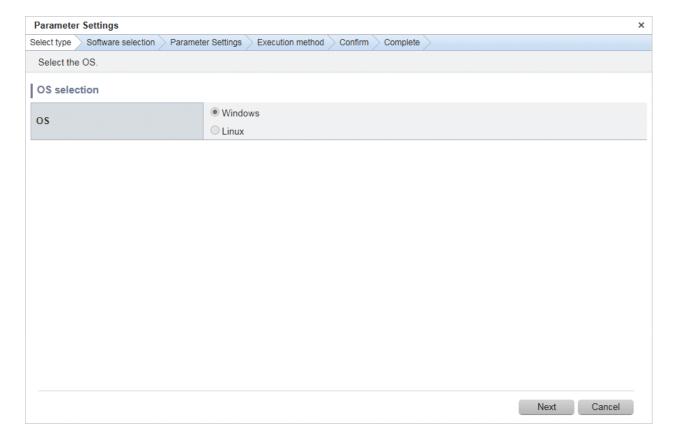
- 1. Click **Parameter settings** button in one of the windows below:
 - Server list window
 - Parameter Details window
- 2. The parameter settings and checks listed below are carried out using the wizard:
 - a. Select the OS of the server on which the parameters will be configured
 - b. Select the software to which parameters apply
 - c. Select the parameters to be configured
 - d. Edit the parameters for custom configurations
 - e. Configure how the parameters will be executed
 - f. Check the settings
 - g. Patching request complete

2.6.1 OS Selection

If the operation below is performed, the Select type window of the Parameter Settings wizard will be displayed.

- Use the checkboxes in the **Server list** window to select the server and click **Parameter settings** button.

Note that the **Select type** window will not appear if the **Parameter Settings** wizard is displayed by clicking **Parameter settings** button in the **Parameter Details** window.



OS Selection

Select the OS of the server on which the parameters will be configured.

Item	Description
OS	Select one of the following operating systems for the server on which the parameter settings are to be applied:
	- Windows
	- Linux
	If only Windows servers or Linux servers have been selected, the radio buttons will be grayed out so that they cannot be selected.

Operation buttons

Operation button	Description
Next	Moves to the Software Selection window.
Cancel	Closes the Parameter Settings wizard.

2.6.2 Software Selection

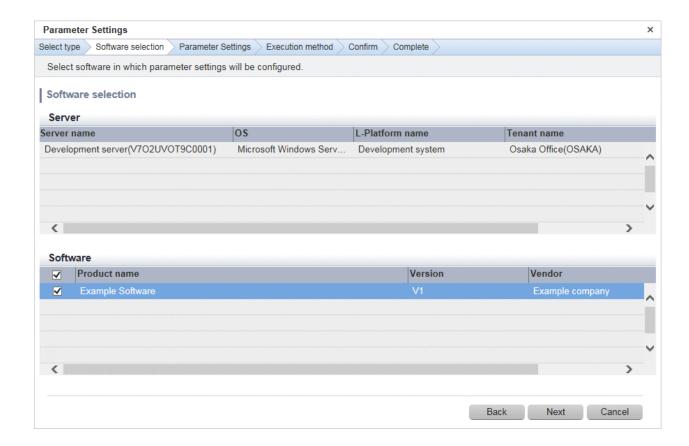
Click **Next** in the **Select type** window to display the **Software Selection** window.

The **Software list** displays the software on the selected server for which parameters can be configured.

Select the software for which parameters are to be set.

Note that the **Software list** will not be displayed if there is no software on the selected server for which parameters can be configured. Click **Cancel** to re-select the server.

Also, note that the **Software Selection** window will not appear if the **Parameter Settings** wizard is displayed by clicking **Parameter settings** button in the **Parameter Details** window.



Servers

This list displays the servers for which parameters can be configured.

Item	Description
Server name	Displays the server name.
os	Displays the operating system name.
L-Platform name	Displays the L-Platform name.
Tenant name	Displays the tenant name.

Software

Select the software for which parameters are to be set.

Item	Description
Product name	Displays the product name(s).
Version	Displays the version.
Vendor	Displays the vendor.

Operation buttons

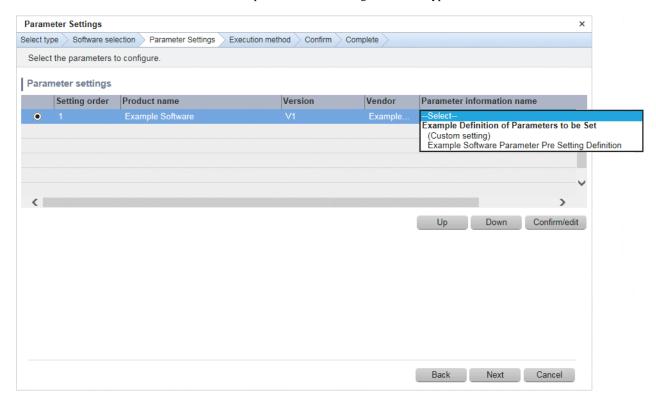
Operation button	Description
Back	Returns to the Select type window.
Next	Moves to the Parameter Settings window if software is selected.
Cancel	Closes the Parameter Settings wizard.

2.6.3 Parameter Settings

Perform any of the following operations to display the **Parameter Settings** window:

- Click **Next** in the **Software Selection** window.
- Click Parameter settings button in the Parameter Details window to display the Parameter Settings wizard.

Select the **Parameter information name** for the parameters to be configured in each type of software.



Operation method

Parameter configuration

Select the parameter information to be configured in each type of software.

Item	Description
Setting order	Displays the sequence in which the parameters are to be set.
	Parameters are configured in descending order from the top. To change the configuration sequence, use the radio buttons to select the software and click Up or Down to modify the order.
Product name	Displays the product name(s).
Version	Displays the version.
Vendor	Displays the vendor.
Parameter information name	Allows you to select the parameter information to be set.
	If (Custom setting) is selected, click Confirm/edit to display the Edit Parameter Information window and customize the parameter settings.

Operation buttons

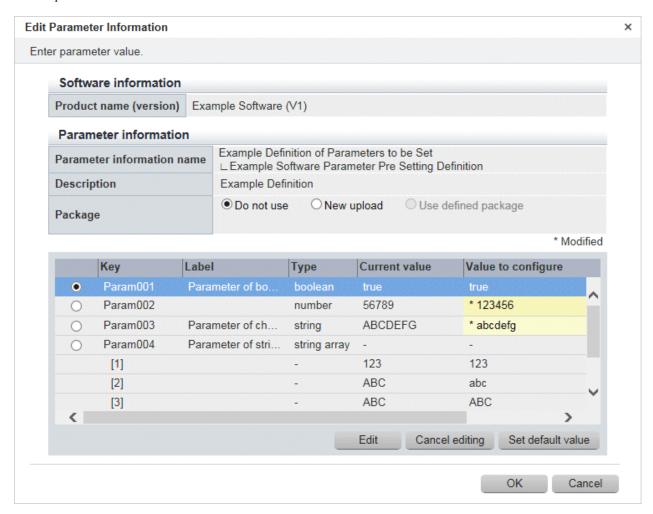
Operation button	Description
Confirm/edit	Enables checking/editing of the parameters set in the software selected using radio
	buttons.

Operation button	Description
	The Edit Parameter Information window is displayed.
Up	The selected software will move up one position in the parameter settings order.
Down	The selected software will move down one position in the parameter settings order.
Back	Returns to the Software Selection window.
Next	Moves to the Execution Method window if parameter information names are selected for all software.
Cancel	Closes the Parameter Settings wizard.

2.6.4 Editing Parameter Information

Display the **Edit Parameter Information** window by selecting the parameter information name to configure in the software on the **Parameter Settings** window, and then click **Confirm/edit**.

Edit the parameters to be set.



Operation method

Software information

Item	Description
Product name (version)	Displays the product name and version.

Parameter information

Item	Description
Parameter information name	Displays the parameter information name.
Reference source	Select the parameter information name to be referenced in Custom Setting.
Description	Displays a description of the parameter information name.
Package	Allows you to select the parameter package method using one of the following radio buttons: - Do not use: Do not use a package.
	- New upload: Use the Browse button to specify the package file to be uploaded.
	 Use defined package: Use the package registered in the parameter information.
Key	Displays the parameter key.
Label	Displays the parameter label.
Туре	Displays the parameter type:
	- string
	- number
	- boolean
	- string array
	- map
Current value	Displays the parameter value that was discovered.
Value to configure	Displays the value last set using parameter settings.

Operation button	Description
Browse	Specifies the path of the package file to be uploaded.
Download	Downloads the package file registered in the parameter information.
Edit	Edits the value to be configured in the selected key. Displays the Edit Values window.
Cancel editing	Returns the value configured for the key selected using radio buttons to its value prior to the edit.
Set default value	Sets the value configured for the key selected using radio buttons as the default in the parameter settings definition.
OK	Confirms the configured details and closes the Edit Parameter Information window.
Cancel	Discards the configured details and closes the Edit Parameter Information window.



- Parameters that can be set

Use the parameter settings definitions associated with your software to define the parameters that can be set in the software. Refer to the section on software products in "Parameter Reference" for information on the parameter settings definitions for software pre-registered with this product. For other software, check its parameter settings definitions.

- Specifying a parameter package

The parameter settings definitions determine what can be specified for parameter packages. Check the parameter settings definitions for your software.

- Notes regarding files to be included in a parameter package

In some cases parameter setting fails because the format of a file contained in a parameter package is invalid. Exercise caution when using the following due to their effect on file format:

- Linefeed

In Windows, use CR+LF. In Linux, use LF.

- Byte order mark (BOM)

Including the UTF-8 byte order mark (BOM) can cause an error.

- Character encoding

The default character encoding is different in Windows and Linux.

- Japanese is prohibited in file names

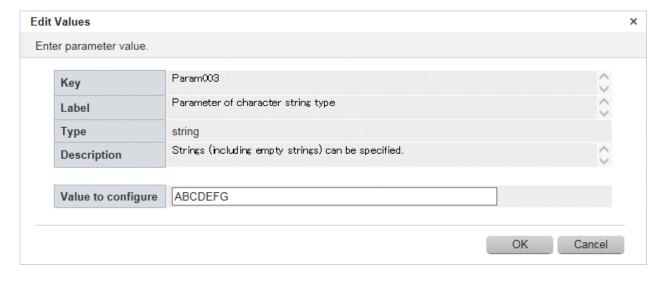
You cannot use Japanese in file names. Other restrictions conform to operating system conventions.

2.6.5 Editing Values

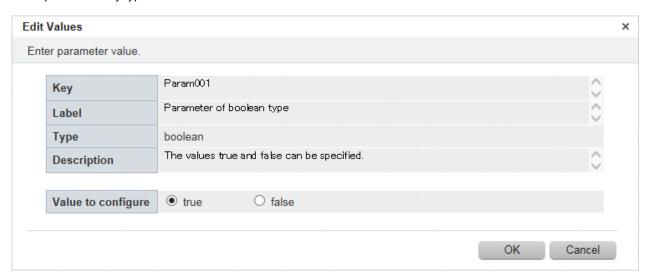
To display the Edit Values window, select a parameter key in the Edit Parameter Information window, and then click Edit.

Edit the parameters to be set.

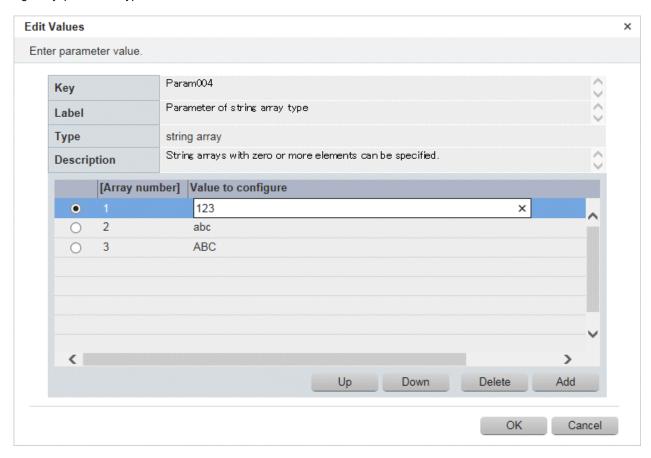
'string' or 'number' parameter key types



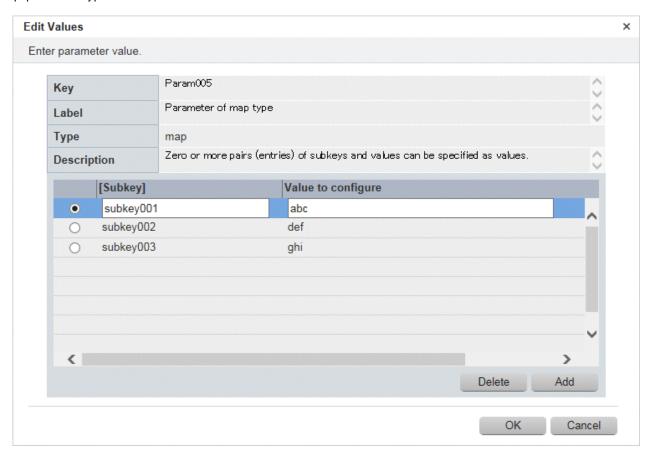
'boolean' parameter key types



'string array' parameter types



'map' parameter types



Operation method

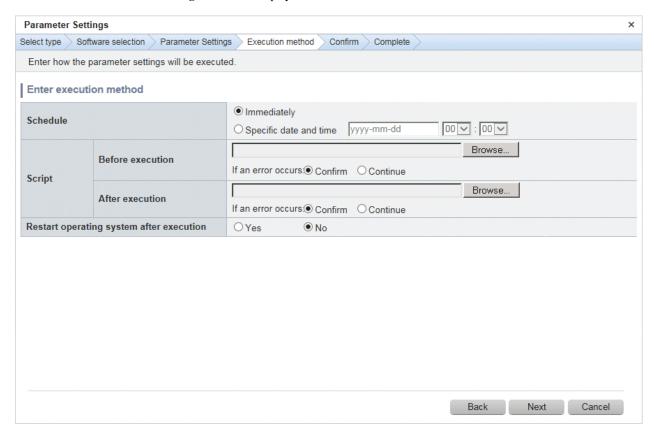
Software information

Item	Description
Key	Displays the parameter key.
Label	Displays the parameter label.
Туре	Displays the parameter type.
Description	Displays a description of the parameter.
Value to configure	- 'string' or 'number' types:
	Enter the parameter value.
	- 'boolean' types:
	Use the radio buttons to select "true" or "false".
	- 'string array' type:
	Enter the value by using the radio button to select the appropriate array number.
	The Up and Down buttons may be used to change the array sequence for the values thus entered. Arrays may also be added or deleted.
	- 'map' type:
	Select the relevant subkey radio button and enter the value. A subkey can also be edited, added or deleted.

Operation button	Description
Up	Move the selected array up one position.
Down	Move the selected array down one position.
Add	Adds an array below the last line.
Delete	Deletes the selected array.
ОК	Confirms the configured details and closes the Edit Values window.
Cancel	Discards the configured details and closes the Edit Values window.

2.6.6 Execution Method

 ${\bf Click}\; {\bf Next}\; {\bf in}\; {\bf the}\; {\bf Parameter}\; {\bf Settings}\; {\bf window}\; {\bf to}\; {\bf display}\; {\bf the}\; {\bf Execution}\; {\bf Method}\; {\bf window}.$



Operation method

Execution method input

Item	Description
Schedule	Specify a schedule.
	- Immediately : Select this option to immediately execute processing when the settings in the wizard are complete.
	 Specific date and time: Specify the date and time when the processing is to be executed. Specify a date and time that is later than the current date and time on the admin server.
Script	Specify the script to be executed before and after setting the parameters, as well as the behavior of the parameter processing if an error occurs during script execution.

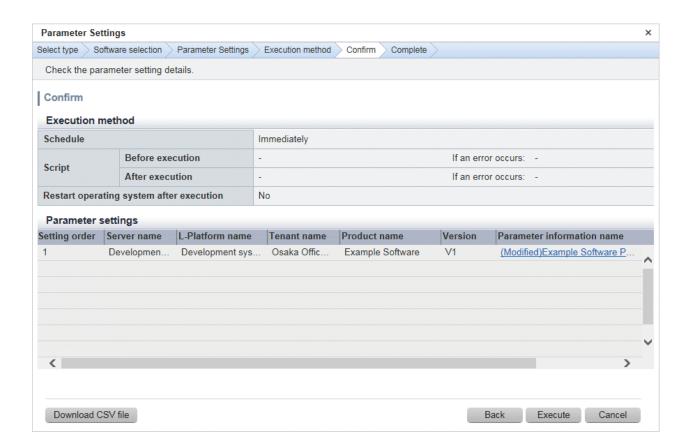
Item	Description
	Create the scripts registered here so that they output a return value of "0" to indicate normal completion and a return value other than "0" to indicate an error.
	For a script to be registered, specify the full path to the file that is stored on the local machine where the browser is running.
	 Confirm: If an error occurs, the user can select the process to take when the corresponding script fails (such as "retry", "continue processing", or "cancel processing") from the Job management window or by using the job information management command. Refer to "Chapter 4 Job Management" for details on the Job management window. Refer to "Job Information Management Command" in the Reference Guide for details on the command. Continue: Continue processing even if an error occurs.
Restart operating system	Select whether to restart the server after parameters have been set.
after execution	- Yes: Restart server.
	- No: Do not restart server.

Operation button	Description
Back	Returns to the Parameter Settings window.
Next	Moves to the confirmation window.
Cancel	Closes the Parameter Settings wizard.

2.6.7 Confirmation

Click Next in the Execution Method window to display the Confirm window.

Check the settings that have been entered.



Parameter settings

Item	Description
Setting order	Displays the order in which parameters will be configured for each server.
Server name	Displays the server name.
L-Platform name	Displays the L-Platform name.
Tenant name	Displays the tenant name.
Product name	Displays the software product name.
Version	Displays the software version.
Parameter information name	Displays the parameter information name to be set.
	Details of the parameters to be configured can be confirmed by displaying the Check Parameter Information window from the link.

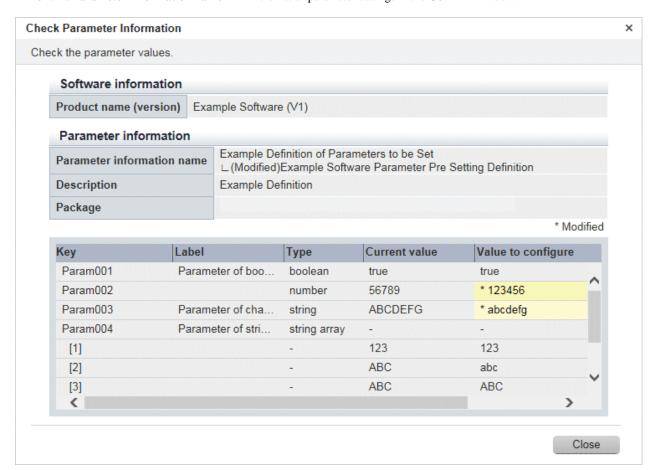
Operation buttons

Operation button	Description
Download CSV file	Outputs information displayed in Parameter settings to a file in CSV format.
Back	Returns to the Execution Method window.
Execute	Executes the parameter setting as a job. When multiple servers are selected, one job is executed for each server.
Cancel	Closes the Parameter Settings wizard.

2.6.8 Checking Parameter Information

Perform the following operations to display the Check Parameter Information window.

- Click a **Parameter information name** link in the list of parameter settings in the **Confirm** window.



Operation method

Software information

Item	Description
Product name (version)	Displays the product name and version.

Parameter information

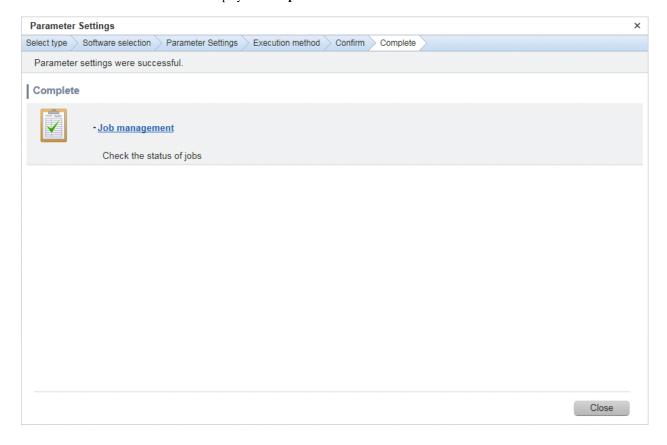
Item	Description
Parameter information name	Displays the parameter information name.
Description	Displays a description of the parameter information name.
Package	Displays the package name.
Key	Displays the parameter key.
Label	Displays the parameter label.
Туре	Displays the parameter type:
	- string
	- number
	- boolean
	- string array
	- map
Current value	Displays the parameter value that was discovered.

Item	Description
Value to configure	Displays the value last set using parameter settings.

Operation button	Description
Download	Downloads a package.
Close	Closes the Check Parameter Information window.

2.6.9 Complete

Click **Next** in the **Confirm** window to display the **Complete** window.



Operation method

Job management

Item	Description
Job management	Moves to the Job management window, where the status of the executed parameters can be checked. The status of the parameter setting that was executed can also be checked by using the job information management command. Refer to "Job Information Management Command" in the <i>Reference Guide</i> for details.

Operation button

Operation button	Description	
Close	Closes the Parameter Settings wizard.	

2.7 Script Execution Wizard

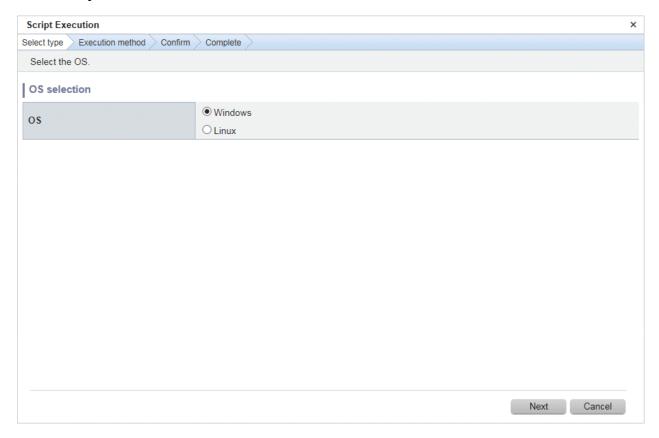
This wizard configures the settings for running scripts on servers.

Display method

- 1. Click **Script execution** button in the window below:
 - Server list window
- 2. The script execution settings and checks listed below are carried out in wizard format:
 - a. Select the OS of the server on which the script will be run
 - b. Configure how the scripts will be run
 - c. Check the settings
 - d. Complete

2.7.1 OS Selection

To display the **Select type** window in the **Script Execution** wizard, use the checkboxes in the **Server list** window to select a server, and then click **Script execution** button.



Operation method

OS Selection

Select the OS of the server on which the scripts will be run.

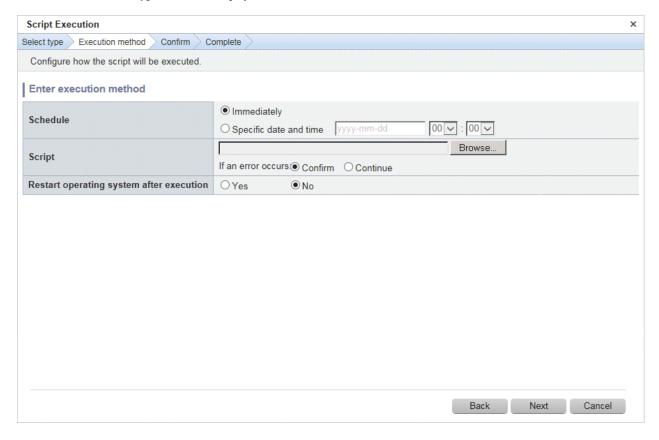
Item	Description	
os	Select one of the following operating systems for the server on which the scripts are to be executed:	

Item	Description	
	- Windows	
	- Linux	
	If only Windows servers or Linux servers have been selected, the radio buttons will be grayed out so that they cannot be selected.	

Operation button	Description	
Next	Moves to the Execution Method window.	
Cancel	Closes the Script Execution wizard.	

2.7.2 Execution Method

Click Next in the Select type window to display the Execution Method window.



Operation method

Execution method input

Item	Description	
Schedule	Specify a schedule.	
	- Immediately : Select this option to immediately execute processing when the settings in the wizard are complete.	
	- Specific date and time : Specify the date and time when the processing is to be executed. Specify a date and time that is later than the current date and time on the admin server.	

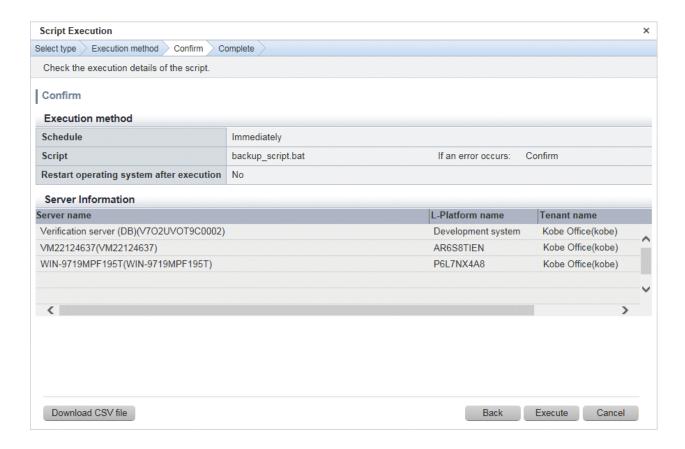
Item	Description	
Script	Specify the scripts to be executed, as well as the behavior if an error occurs during script execution.	
	Create the scripts registered here so that they output a return value of "0" to indicate normal completion and a return value other than "0" to indicate an error.	
	For a script to be registered, specify the full path to the file that is stored on the local machine where the browser is running.	
	 Confirm: If an error occurs, the user can select the process to take when the corresponding script fails (such as "retry", "continue processing", or "cancel processing") from the Job management window or by using the job information management command. Refer to "Chapter 4 Job Management" for details on the Job management window. Refer to "Job Information Management Command" in the Reference Guide for details on the command. Continue: Continue processing even if an error occurs. 	
Restart operating system	Select whether to restart the server after the script has been executed.	
after execution	- Yes: Restart server.	
	- No: Do not restart server.	

Operation button	Description	
Back	Returns to the Select type window.	
Next	Moves to the confirmation window.	
Cancel	Closes the Script Execution wizard.	

2.7.3 Confirm

Click $N\!ext$ in the $Execution\ M\!ethod$ window to display the Confirm window.

Check the settings that have been entered.



Server information

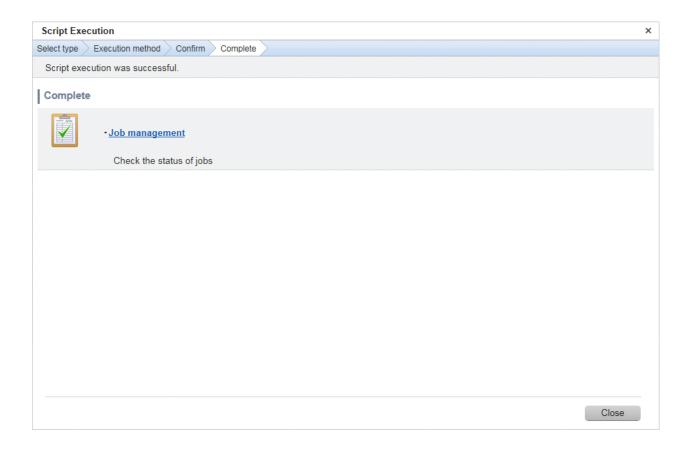
Item	Description	
Server name	Displays the server name.	
L-Platform name	Displays the L-Platform name.	
Tenant name	Displays the tenant name.	

Operation buttons

Operation button	Description	
Download CSV file	Outputs information displayed in Server information to a file in CSV format.	
Back	Returns to the Execution Method window.	
Execute	Executes a script.	
Cancel	Closes the Script Execution wizard.	

2.7.4 Complete

Click $\boldsymbol{Execute}$ in the $\boldsymbol{Confirm}$ window to display the $\boldsymbol{Complete}$ window.



Job management

Item	Description	
Job management	Moves to the Job management window, where the status of script execution can be checked.	
	The status of script execution can also be checked by using the job information management command. Refer to "Job Information Management Command" in the <i>Reference Guide</i> for details.	

Operation button

Operation button	Description	
Close	Closes the Script Execution wizard.	

2.8 Maintenance

The **Maintenance** window provides the following functions:

- View CI

This window displays the relationships between configuration items using a tree, as well as the details of configuration items. It is also used to search for configuration items based on the specified conditions.

- Register CI

This window is used to register new configuration items in the CMDB.

- Update/delete CI

This window is used to update or delete configuration items that have already been registered in the CMDB.

- Import CI

This window is used to register configuration items in the CMDB via a file.

2.8.1 View CI

2.8.1.1 Displaying a Tree of Configuration Items

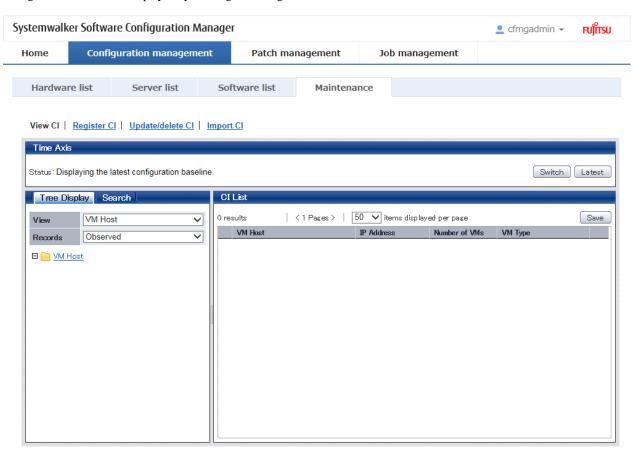
Display method

1. Click the Maintenance tab in the Configuration management window.

The View CI window will be displayed.

2. Click the **Tree Display** tab.

Summary information about configuration items is displayed in the **CI List** in the **View CI** window. Also, detailed information about a configuration item can be displayed by clicking the configuration item in the list.



Operation method

Item		Description
Tree Display tab (Displays the	View	Pull-down list box used to select the tree model for the CIs to be displayed.
relationships between configuration items using a tree.)	Records	Pull-down list box used to select the record type for the configuration items to be manipulated. There are three record types: Expected , Observed , and Catalog .
List display	Tree display	Displays folders representing the types of configuration items and trees of configuration items. The configuration items associated with a

Item		Description
(Left pane)		particular configuration item (where there is a link) can be traced using the tree.
CI List (Displays a list of the configuration items in	GID	Displays the GIDs of the configuration items. A "GID" is a unique ID for configuration management items. The list can be sorted by GIDs by clicking the GID column header.
the folder selected in the tree. This list is		Clicking a GID link opens a window displaying detailed information about the corresponding configuration item.
displayed when the following item is selected in the View	CI Type	Displays the types of the configuration items. The list can be sorted by CI types by clicking the CI Type column header.
pull-down list box. Tenant)	Nickname	Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the Nickname column header.
	Records	Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
	items displayed per page	Specifies the number of configuration items to be displayed in the list. If there are more configuration items than the specified number, those items not displayed can be displayed by clicking the > link.
		To go back, click the < link.
	Save button	Saves the configuration items selected using checkboxes to a file.
CI List (Displays a list of the	VM Host	Displays the VM hosts. The list can be sorted by VM hosts by clicking the VM Host column header.
configuration items in the folder selected in the tree. This list is displayed when the following item is	IP address	Displays the IP addresses. The list can be sorted by IP addresses by clicking the IP address column header.
	Number of VMs	Displays the number of VMs. The list can be sorted by the number of VMs by clicking the Number of VMs column header.
selected in the View pull-down list box:	VM Type	Displays the VM types. The list can be sorted by VM types by clicking the VM Type column header.
VM Host)	items displayed per page	Specifies the number of configuration items to be displayed in the list. If there are more configuration items than the specified number, those items not displayed can be displayed by clicking the > link.
		To go back, click the < link.
	Save button	Saves the configuration items selected using checkboxes to an XML file.
		- Save selected search results: Saves only the configuration items selected by checkboxes to an XML file.
		- Save all search results: Saves all of the configuration items displayed in the CI list to an XML file.

The method for displaying a list of configuration items from the tree is as follows:

- 1. Click the **Tree Display** tab in the configuration management window.
- 2. Select the desired configuration item tree model from the ${\bf View}$ pull-down list box.

Select the tree model for the CIs to be displayed. Configuration items associated with the selected configuration item in terms of the selected perspective will be displayed in tree format.

The configuration item tree models that can be displayed are as follows:

- Tenant

Displays the tenant and the L-Platforms and L-Servers currently used by the tenant.

- VM Host

Displays a list of VM hosts.

- 3. Select the type of record to be displayed from the Records pull-down list box.
- 4. Click the + buttons in the tree to display the configuration item and the other configuration items associated with the target configuration item.
- 5. Select a folder to display a list of configuration items in the CI List.

2.8.1.2 Searching Configuration Items

Display method

- $1. \ \, {\rm Click} \ the \ {\bf Maintenance} \ tab \ in \ the \ {\bf Configuration} \ {\bf management} \ window.$
 - The View CI window will be displayed.
- 2. Click the **Search** tab.

Operation method

ltem		Description
Search tab (Used to specify the	CI Type	Pull-down list box used to select the type of configuration item to be searched for.
search conditions for the configuration item search)	Records	Pull-down list box used to select the record type for the configuration items to be searched. There are three record types: Expected , Observed , and Catalog .
	All Clear button	Initializes the settings for the type of configuration item to be searched for and the filter conditions.
	Search button	Performs searches based on the specified type of configuration item to be searched for and the specified filter conditions.
	The Add button for attribute-based conditions	Sets the conditions for filtering results based on the attribute values of configuration items. If multiple attribute values have been specified, searches can be performed by linking the conditions with a logical AND or a logical OR.
	The Add button for conditions based on related configuration items	Specifies the conditions for filtering results based on the configuration items associated with the target configuration item. If multiple attribute values have been specified, searches can be performed by linking the conditions with a logical AND or a logical OR.
CI List (Displays a list of configuration items as	GID	Displays the GIDs of the configuration items. A "GID" is a unique ID for configuration management items. The list can be sorted by GIDs by clicking the GID column header.
the search results.)		Clicking a GID link opens a window displaying detailed information about the corresponding configuration item.
	CI Type	Displays the types of the configuration items. The list can be sorted by CI types by clicking the CI Type column header.
	Nickname	Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the Nickname column header.
	Records	Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
	items displayed per page	Specifies the number of configuration items to be displayed in the list. If there are more configuration items than the specified number, those items not displayed can be displayed by clicking the > link.

Item		Description
		To go back, click the < link.
	Save button	Saves the configuration items selected using checkboxes to an XML file. - Save selected search results: Saves only the configuration items
		selected by checkboxes to an XML file. - Save all search results: Saves all of the configuration items
		displayed in the CI list to an XML file.

2.8.1.3 Displaying Details

Display method

- 1. Click the **Maintenance** tab in the **Configuration management** window.
 - The View CI window will be displayed.
- 2. Click the **Tree Display** tab or the **Search** tab.
- 3. The detailed display window is displayed when the link for a GID in the CI List of either the Tree Display window or the Search window is clicked.

Operation method

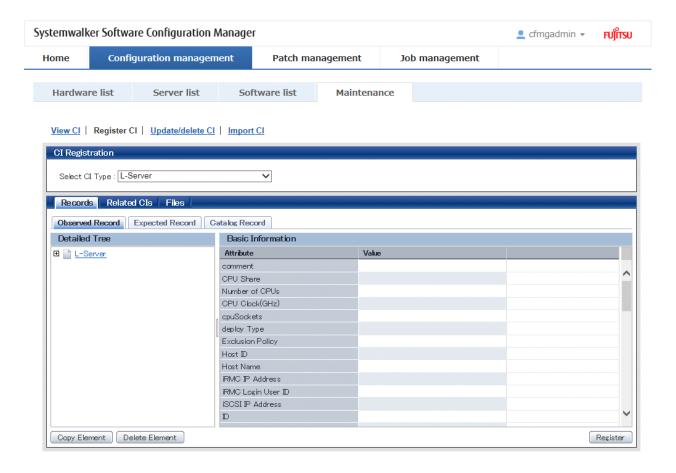
Item			Description
Selected	GID		Displays the GID of the selected configuration item.
Information	CI Type		Displays the CI type of the selected configuration item.
	Nickname		Displays the nickname of the selected configuration item.
	Records		Displays the record type of the selected configuration item. There are three record types: Expected , Observed , and Catalog .
Records tab (Displays information about	Displays		A tree of elements that make up the configuration item. When an element is selected, the attribute values for the element are displayed in the Basic Information section.
expected, observed or catalog records)	Basic Information	Attribute	Displays the names of the attributes. The list can be sorted by attribute names by clicking the Attribute column header.
		Value	Displays the values of the attributes. The list can be sorted by attribute values by clicking the Value column header.
Related CIs tab GID (Displays a list of the			Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the GID column header.
configuration items that are related to the configuration item for which the details are being displayed.)	CI Type		Displays the types of the configuration items. The list can be sorted by CI types by clicking the CI Type column header.
	Nickname		Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the Nickname column header.
	Records		Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
	Direction		Displays the direction of the relation for the configuration items related to the selected configuration item. The list can be sorted by the direction of the relation by clicking the Direction column header.

Item		Description
Files tab (Displays a list of the	File Name	Displays the names of the files. The list can be sorted by file names by clicking the File Name column header.
files held by the configuration item	Nickname	Displays the nicknames of the files. The list can be sorted by nicknames by clicking the Nickname column header.
for which the details are being displayed.)	Annotation	Displays the comments for the files. The list can be sorted by annotations by clicking the Annotation column header.
	File Size	Displays the size of each file. The list can be sorted by file size by clicking the File Size column header.
	Last Updated	Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the Last Updated column header.
	File ID	Displays the IDs of the files. The list can be sorted by file IDs by clicking the File ID column header.
	Version	Displays the version names of the files. The list can be sorted by version names by clicking the Version column header.
	Hash value	Displays the hash values for the files. The list can be sorted by hash values by clicking the Hash value column header.
Close button		Closes the window.

2.8.2 Registering Configuration Items

Display method

- $1. \ \ Click \ the \ {\color{red} {\bf Maintenance}} \ tab \ in \ the \ {\color{red} {\bf Configuration}} \ {\color{red} {\bf management}} \ window.$
- 2. Select the **Register CI** link.



	Item		Description
Register CI	Select CI Type		Pull-down list box used to select the CI type of the configuration items to be registered.
Records tab (Displays expected, observed and catalog	Detailed Tree		A tree of elements that make up the configuration item. When an element is selected, the attribute values for the element are displayed in the Basic Information section.
information)	Basic Information	Attribute	Displays the names of the attributes. The list can be sorted by attribute names by clicking the Attribute column header.
			Values must be entered for the following attributes of each CI type:
			- id
			- nickname (if this attribute exists)
			The value of the id attribute must be unique within each CI type. If a configuration item has been registered by specifying an existing value for the id attribute, the existing configuration item will be updated by overwriting it.
			For the following CI types, in addition to the above attributes, values must be entered for the attributes below.
			- L-Server: IP Address attribute
			- InstalledSoftware: productName attribute
			- InstalledPatch: name attribute

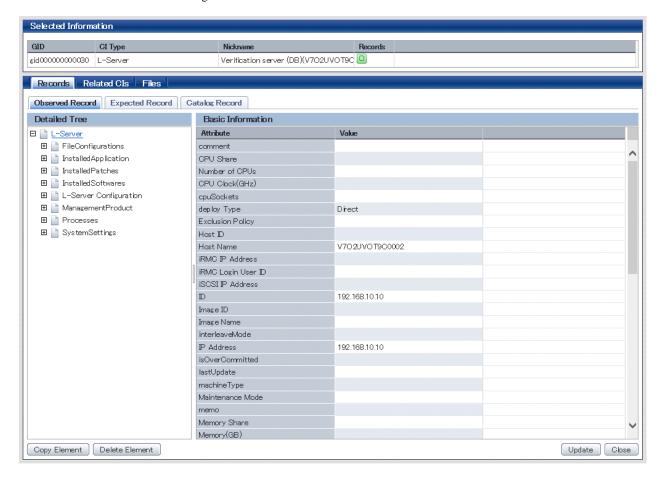
	Item		Description
		Value	Displays the values of the attributes. The value of an attribute can be edited by selecting the Value column corresponding to the attribute and then either clicking the column or pressing the Enter key. The list can be sorted by attribute values by clicking the Value column header.
	Copy Element	button	Creates a duplicate of the element selected in the Detailed Tree .
	Delete Elemen	t button	Deletes the element selected in the Detailed Tree .
Related CIs tab (Displays a list of the	GID		Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the GID column header.
configuration items that are related to the	CI Type		Displays the types of the configuration items. The list can be sorted by CI types by clicking the CI Type column header.
configuration item for which the details are being displayed.)	Nickname		Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the Nickname column header.
	Records		Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
	Direction		Displays the direction of the relation for the configuration items related to the selected configuration item. The list can be sorted by the direction of the relation by clicking the Direction column header.
	Add button		Associates the configuration item being edited with another configuration item.
	Remove button		Deletes the relationship with the configuration item selected in the list of related configuration items.
Files tab (Displays a list of the	File Name		Displays the names of the files. The list can be sorted by file names by clicking the File Name column header.
files held by the configuration item	Nickname		Displays the nicknames of the files. The list can be sorted by nicknames by clicking the Nickname column header.
for which the details are being displayed.)	Annotation		Displays the annotations for the files. The list can be sorted by annotations by clicking the Annotation column header.
	File Size		Displays the size of each file. The list can be sorted by file size by clicking the File Size column header.
	Last Updated		Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the Last Updated column header.
	File ID		Displays the IDs of the files. The list can be sorted by file IDs by clicking the File ID column header.
	Version		Displays the version names of the files. The list can be sorted by version names by clicking the Version column header.
	Hash value		Displays the hash values for the files. The list can be sorted by hash values by clicking the Hash value column header.
	Add button		Adds a file to the configuration item.
	Remove button		Deletes a file that has been registered with the configuration item.
Register button			Registers the settings with the CMDB.

2.8.3 Update/delete CI

2.8.3.1 Updating Configuration Items

Display method

- 1. Click the **Maintenance** tab in the **Configuration management** window.
- 2. Select the Update/delete CI link.
- 3. Click the GID link for the configuration item to be edited in the CI List.



Operation method

	Item		Description
Selected	GID		Displays the GID of the selected configuration item.
Information	CI Type		Displays the CI type of the selected configuration item.
	Nickname		Displays the nickname of the selected configuration item.
	Records		Displays the record type of the selected configuration item. There are three record types: Expected , Observed , and Catalog .
Records tab (Displays expected, observed and catalog	Detailed Tree		A tree of elements that make up the configuration item. When an element is selected, the attribute values for the element are displayed in the Basic Information section.
information)	Basic Information	Attribute	Displays the names of the attributes. The list can be sorted by attribute names by clicking the Attribute column header.

Item			Description
		Value	Displays the values of the attributes. The value of an attribute can be edited by selecting the Value column corresponding to the attribute and then either clicking the column or pressing the Enter key. The list can be sorted by attribute values by clicking the Value column header.
Related CIs tab (Displays a list of the	GID		Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the GID column header.
configuration items that are related to the	CI Type		Displays the types of the configuration items. The list can be sorted by CI types by clicking the CI Type column header.
configuration item for which the details are being displayed.)	Nickname		Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the Nickname column header.
	Records		Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
Files tab (Displays a list of the	File Name		Displays the names of the files. The list can be sorted by file names by clicking the File Name column header.
files held by the configuration item for which the details are being displayed.)	Nickname		Displays the nicknames of the files. The list can be sorted by nicknames by clicking the Nickname column header.
	Annotation		Displays the comments for the files. The list can be sorted by comments by clicking the Annotation column header.
	File Size		Displays the size of each file. The list can be sorted by file size by clicking the File Size column header.
	Last Updated		Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the Last Updated column header.
	File ID		Displays the IDs of the files. The list can be sorted by file IDs by clicking the File ID column header.
	Version		Displays the version names of the files. The list can be sorted by version names by clicking the Version column header.
	Hash value		Displays the hash values for the files. The list can be sorted by hash values by clicking the Hash value column header.
Close button	-		Closes the window.



The value for the "ID" attribute

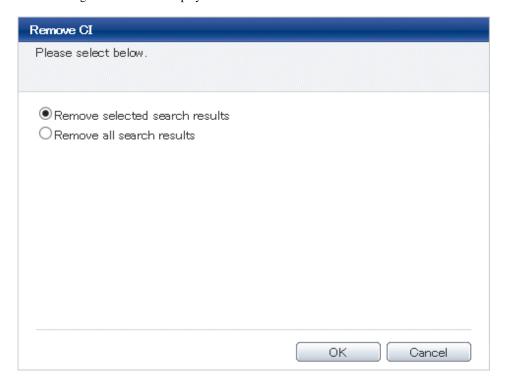
Do not change the value for the "ID" attribute. If the value for the "ID" attribute is changed and then an update operation is performed, a new configuration item will be registered with the new value, and the target configuration item will not be updated.

2.8.3.2 Deleting Configuration Items

Display method

- 1. Click the **Maintenance** tab in the **Configuration management** window.
- 2. Select the Update/delete CI link.

3. Use the checkboxes to select the configuration items to be deleted from the **CI List**, and then click **Remove**. The following window will be displayed.

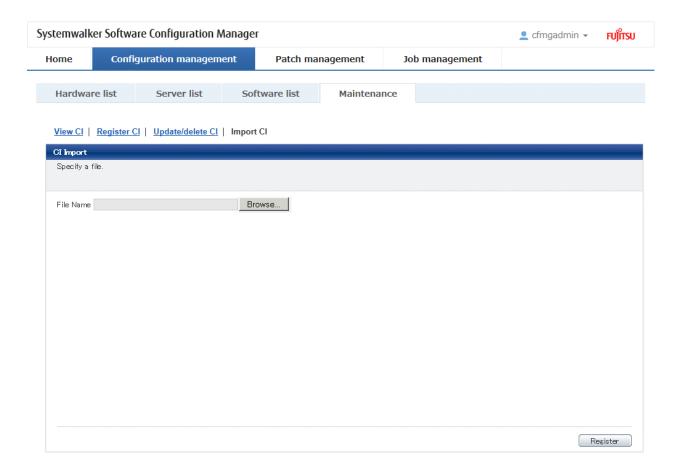


- 4. Select either of the following values:
 - Remove selected search results: Deletes only the configuration items selected using checkboxes.
 - Remove all search results: Deletes all of the configuration items displayed in the CI list.
- 5. Click OK.

2.8.4 Importing Configuration Items

Display method

- 1. Click the **Maintenance** tab in the **Configuration management** window.
- 2. Select the **Import CI** link.



ltem		Description
Import CI Browse button		Specifies an XML file where configuration items have been marked up.
Register button		Registers the content of the specified file with the CMDB.

Chapter 3 Patch Management

The **Patch management** window contains the following tabs:

- Summary view

This tab displays the number of servers with unapplied patches, and the number of new patches for each operating system and patch type.

- Windows patch list

This tab displays a list of Windows patches. It can be used to reference detailed information about each individual patch, as well as the application status of each patch. It is also possible to display information that has been filtered by specifying particular conditions.

- Linux patch list

This tab displays a list of Linux patches. It can be used to reference detailed information about each individual patch, as well as the application status of each patch. It is also possible to display information that has been filtered by specifying particular conditions.

- Fujitsu middleware patch list

This tab displays a list of Fujitsu middleware patches. It can be used to reference detailed information about each individual patch, as well as the application status of each patch. It is also possible to display information that has been filtered by specifying particular conditions.

- Patch Application wizard

This wizard allows the user to apply patches by first selecting the required patches. Users can then select the target servers, and specify the application method.



About Solaris patches

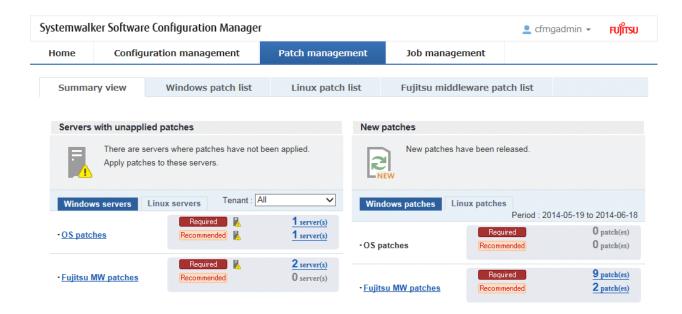
Solaris patch information is not displayed on the Patch management window.

To confirm the OS patches (SRU information) already applied on a Solaris server, select the Solaris server on the **Configuration** management - Server list window and then check the patches on the Server Details window.

3.1 Summary View

Display method

- 1. Log in to the management console.
- 2. Use either of the following methods to display the **Summary** window:
 - a. Select Patch management from the menu in the management console.
 - b. Click the Patch management link in the Home window.



Total number of servers with unapplied patches

The number of servers indicates the number of servers with unapplied patches.

- OS patches and Fujitsu middleware patches in the Windows servers tab
 - Number of servers where required patches have not been applied
 - Number of servers where recommended patches have not been applied
- OS patches in the Linux servers tab
 - Number of servers with unapplied patches

For Windows patches and Fujitsu middleware patches, the number of servers with unapplied patches is counted separately for "Required" patches and "Recommended" patches.

For Linux patches, the number of servers with unapplied patches is counted.

If an infrastructure administrator logs in, the total number of applicable servers collected from all managed servers will be displayed. If a tenant administrator or tenant user logs in, the results will be filtered so that only the number of applicable servers collected from the tenancies or servers managed by the tenant administrator or tenant user will be displayed.

If an infrastructure administrator logs in, the results displayed can also be filtered by tenants.

The **List of Servers with Unapplied Patches** window is displayed when the **OS patches** or **Fujitsu middleware patches** link or the link for each number (of servers with unapplied patches) is clicked.



Patches with prerequisite patches

For Windows patches, if a patch has a prerequisite patch and neither the patch nor the prerequisite patch have been applied to a business server, the business server may not be counted as a server with unapplied patches, even though it has the same environment (the same operating system) as other business servers.

This is because when the patch is released by WSUS it is managed as an "applicable" patch but when a "check for update programs" operation is performed on the business server the patch will be managed as "not applicable" if the prerequisite patch has not been applied.

Systemwalker Software Configuration Manager does not handle "not applicable" patches as unapplied patches when counting the number of servers with unapplied patches.



Conditions under which servers are counted as servers with unapplied patches

The conditions under which servers are counted as servers with unapplied patches differ with Windows patches, Linux patches, and Fujitsu middleware patches. These conditions are explained separately as below:

- Number of servers with unapplied Windows patches

The number of servers with unapplied Windows patches is the number of servers where the patches authorized by WSUS have not been applied.

- Number of servers with unapplied Linux patches

The number of servers with unapplied Linux patches is the number of servers where the patches registered with the yum repository server and have been defined as the management target have not been applied.

- Number of servers with unapplied Fujitsu middleware patches

The number of servers with unapplied Fujitsu middleware patches is the number of servers where the Fujitsu middleware patches registered using swcfmg_fjmwpatch_update (Fujitsu middleware patch registration command) have not been applied.

Number of new patches

- OS patches in the Windows patches tab
 - Number of new required patches
 - Number of new recommended patches

The patches that have been newly released by the operating system vendor during the **Period** displayed are output as the number of new patches. The **Period** is the last one month, counting backwards from the day when the user logged in.

- Fujitsu middleware patches

- Number of new required patches
- Number of new recommended patches

The patches that have been registered with Systemwalker Software Configuration Manager during the **Period** displayed are output as the number of new patches. The **Period** is the last one month, counting backwards from the day when the user logged in.

- OS patches in the Linux patches tab
 - Number of new patches

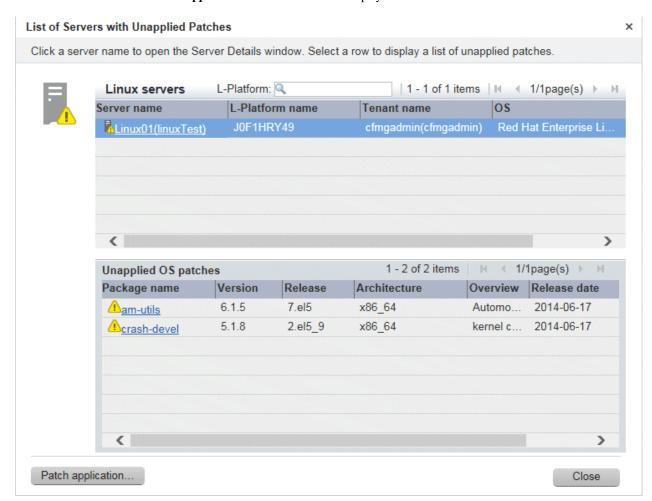
The RPM packages that have been defined as the management target for Systemwalker Software Configuration Manager and registered with yum during the **Period** displayed are output as the number of new patches. The **Period** is the last one month, counting backwards from the day when the user logged in.

The **List of New Patches** window is displayed when the **OS patches** or **Fujitsu middleware patches** link or the link for each number is clicked.

3.1.1 List of Servers with Unapplied Patches

Display method

Click on the links in the Servers with unapplied patches section in the Summary view window for Patch management.
 The List of Servers with Unapplied Patches window will be displayed.



Operation method

Server list

A list of the servers with unapplied patches is displayed in the top section of the window.

Item	Description	
Server name	Displays the server names.	
	Clicking a server name link displays the Server Details window.	
L-Platform name	Displays the L-Platform names.	
Tenant name	Displays the tenant names.	
os	Displays the operating system names.	

List of unapplied patches

When a server is selected from the list of servers in the top section of the window, a list of the patches that have not been applied to that server is displayed in the bottom section.

Table 3.1 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
	Clicking a patch ID link displays the Patch Details window.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the patch management policy settings
	- Recommended : Patches that are specified as "Recommended" in the patch management policy settings
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Overview	Displays an overview (or title) of each patch.
Release date	Displays the date when the vendor (Microsoft) released the patch.

Table 3.2 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 3.3 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.

Item	Description
	- Security
	- Important
	- Recommended
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

Operation buttons

The following operations can be performed from the **List of Servers with Unapplied Patches** window.

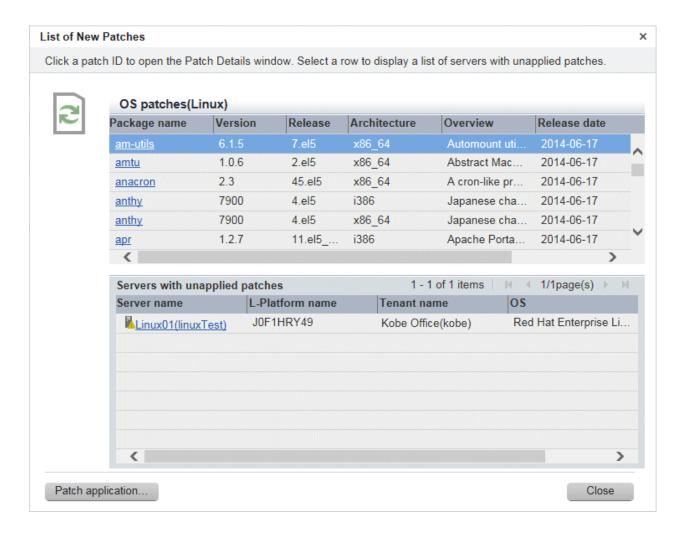
Operation buttons	Description
Patch application	Displays the Patch Application wizard, enabling the user to configure patch distribution and patch application for a specified server.
Close	Closes the window.

3.1.2 List of New Patches

Display method

1. Click on the links in the **Summary view** window for **Patch management**.

The List of New Patches window will be displayed.



List of new patches

The list of new patches will be displayed in the top section of the window.

Table 3.4 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
	Clicking a patch ID link displays the Patch Details window.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the patch management policy settings
	- Recommended : Patches that are specified as "Recommended" in the patch management policy settings
Product name	Displays the product name (operating system name) corresponding to each patch.
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs

Item	Description
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Overview	Displays an overview (or title) of each patch.
Release date	Displays the date when the vendor (Microsoft) released the patch.

Table 3.5 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 3.6 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Release date	Displays the release dates of the patches.

List of servers with unapplied patches

When a patch is selected from the list of new patches in the top section of the window, a list of the servers where that patch has not been applied are displayed in the bottom section.

Item	Description
Server name	Displays the server names.
	Clicking a server name link displays the Server Details window.
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.
os	Displays the operating system names.

Operation buttons

The following operations can be performed from the List of Servers with Unapplied Patches window.

Operation button	Description
Patch application	Displays the Patch Application wizard, enabling the user to configure patch distribution and patch application for a specified patch.
Close	Closes the window.

3.2 Patch Management

3.2.1 Patch List

Display method

- 1. Use either of the following methods to display the patch list:
 - a. Select Patch management from the menu in the management console.
 - b. Click the Patch management link in the Home window.

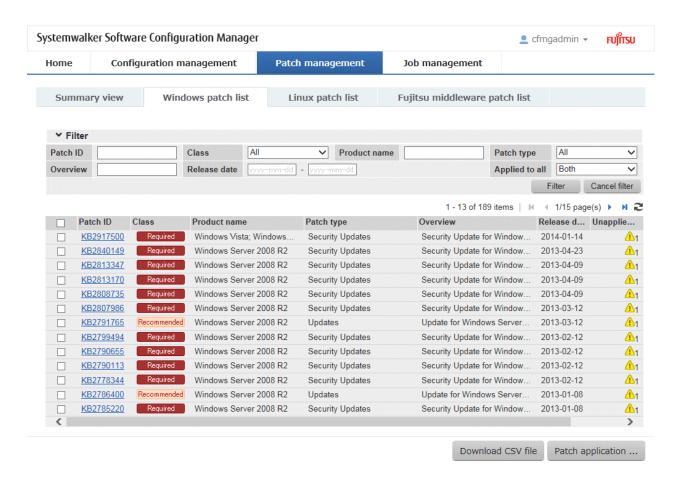
Patch lists for Windows operating systems, Linux operating systems and Fujitsu middleware can be displayed by selecting each tab.

All of the patches obtained from WSUS are displayed in the list of Windows patches, except for those patches that the infrastructure administrator has not approved on WSUS.

For Linux patches, the patches that have been registered with the yum repository server and have been defined as the management target are displayed. For Fujitsu middleware patches, the patches that have been registered with Systemwalker Software Configuration Manager are displayed.

The number of servers to which each patch has not been applied can also be displayed.

Users with all roles can reference information about all patches. However, if a tenant administrator or tenant user logs in, the results displayed for the number of servers with unapplied patches will be filtered by the tenants or the range of servers that the tenant administrator or tenant user manages.



Filter search

Specify the conditions for filtering the information in the patch list. The filter conditions shown below can be specified for each patch type. Multiple filter conditions can be specified.

Patch type	Filter conditions
Windows patch list	- Patch ID
	- Class
	- Product name
	- Patch type
	- Overview
	- Release date
	- Applied to all
Linux patch list	- Package name
	- Version
	- Release
	- Architecture
	- Overview
	- Release date
	- Applied to all

Patch type	Filter conditions
Fujitsu middleware patch list	- Patch ID
	- Class
	- Importance
	- Update type
	- Product name
	- os
	- Update title
	- Applied to all
	- Release date

Display items

The following table shows the items that are displayed in the patch list:

Table 3.7 Windows patch list

Display item	Description
Checkboxes	Specifies the patch to be applied.
Patch ID	Displays the patch IDs.
	Clicking a patch ID link displays the Patch Details window.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Product name	Displays the product name (operating system name) corresponding to each patch.
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Overview	Displays a title for each patch.
Release date	The date when the vendor (Microsoft) released the patch
Unapplied servers	Displays the number of machines where the patch has not been applied.
	The number of servers without patches that the infrastructure administrator has not approved on WSUS is not counted. Also, the total number of machines

Display item	Description
	displayed here is only for the machines within the range that can be looked up by the login user.

Table 3.8 Linux patch list

Item	Description
Checkboxes	Specifies the patch to be applied.
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.
Unapplied servers	Displays the number of machines where the patch has not been applied.
	The number of servers with unapplied patches is not counted if these patches have been registered with the yum repository server but have not been defined as the Linux patch management target. Also, the total number of machines displayed here is only for the machines within the range that can be looked up by the login user.

Table 3.9 Fujitsu middleware patch list

Item	Description
Checkboxes	Specifies the patch to be applied.
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Update title	Displays the update titles of the patches.
Release date	Displays the release dates of the patches.
Unapplied servers	Displays the number of machines where the Fujitsu middleware patches registered using swcfmg_fjmwpatch_update (Fujitsu middleware patch registration command) have not been applied.

Item	Description
	Also, the total number of machines displayed here is only for the machines within the range that can be looked up by the login user.

Operation buttons

The following operations can be performed from the patch list window.

Operation button	Description
Download CSV file	Output patch list information in CSV format. If the information displayed has been filtered, only the filtered information will be output.
Patch application	Displays the Patch Application wizard, enabling the user to configure patch distribution and patch application for a specified patch.



Patches with prerequisite patches

For Windows patches, if a patch has a prerequisite patch and neither the patch nor the prerequisite patch have been applied to a business server, the business server may not be counted as a server with unapplied patches, even though it has the same environment (the same operating system) as other business servers.

This is because when the patch is released by WSUS it is managed as an "applicable" patch but when a "check for update programs" operation is performed on the business server the patch will be managed as "not applicable" if the prerequisite patch has not been applied.

Systemwalker Software Configuration Manager does not handle "not applicable" patches as unapplied patches when counting the number of servers with unapplied patches.

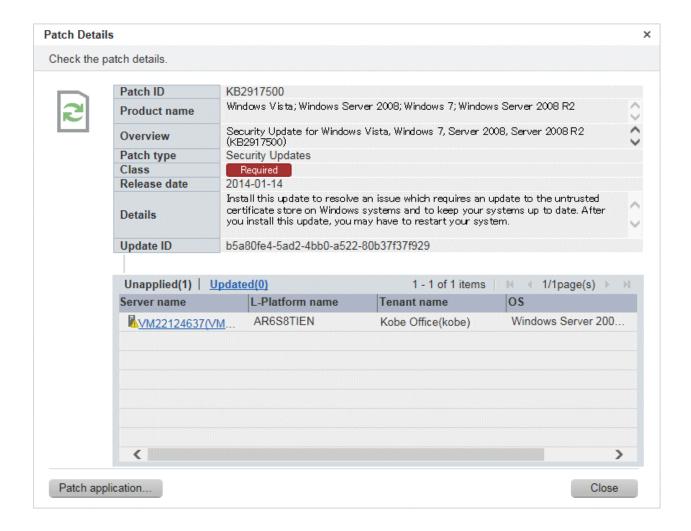
3.2.1.1 Patch Details

Display method

- 1. Use either of the following methods to display the patch details:
 - a. Click a patch ID link in the patch list window.
 - b. Click a patch ID link in each window.

The Patch Details window will be displayed.

The Patch Details window shows a description of the patch, and the patch application status.



Detailed information about the patch

Detailed information about the patch is displayed in the top section of the window.

The following table shows the items that are displayed in the patch list:

Table 3.10 Windows patches

Item	Description
Patch ID	Displays the patch ID.
Product name	Displays the product name (operating system name) corresponding to the patch.
Overview	Displays the patch overview (or for Windows, the title).
Patch type	Displays the patch type. (This indicates the classification of updates, which represents the WSUS update program type.) - Security Updates - Critical Updates - Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates

Item	Description
	- Update Rollups
	- Definition Updates
Class	Displays the classification level of the patch.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Release date	Displays the date when the vendor (Microsoft) released the patch.
Details	Displays a detailed description of the patch that is provided by the vendor.
Update ID	Displays the Update ID.

Table 3.11 Linux patches

Item	Description
Package name	Displays the name of the package.
Version	Displays the version of the package.
Release	Displays the release number of the package.
Architecture	Displays the architecture for each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.
Overview	Displays an overview of the package.
Details	Displays a detailed description of the patch that is provided by the vendor.

Table 3.12 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch ID.
Class	Displays the classification level of the patch.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of the patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patch.
	- Urgent
Product name	Displays the product name.
os	Displays the operating system (platform).
Release date	Displays the release date of the patch.
Update title	Displays the update title of the patch.

Information about patch application

The bottom section of the window displays a list of the servers where the patch has not been applied and a list of the servers where the patch has been applied.

Clicking an Unapplied link displays a list of servers with unapplied patches.

Clicking an **Updated** link displays a list of servers with applied patches.

Item	Description
Server name	Displays the server names.
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.
os	Displays the operating system names.

Operation buttons

The following operations can be performed from the List of Servers with Unapplied Patches window.

Operation button	Description
Patch application	Displays the Patch Application wizard, enabling the user to configure patch distribution and patch application for a specified patch.
Close	Closes the window.

3.3 Patch Application Wizard

Patch application is set up by first selecting the patches that are to be applied.



The roles of the people who distribute and apply patches

The explanations in this section assume that the roles of the people who distribute and apply patches can be classified as follows:

Infrastructure administrator

- Infrastructure administrators are responsible for patch management (management for WSUS, yum repository servers and the media library).
- Infrastructure administrators do not distribute or apply patches.
- When an error occurs with the patch distribution/application processing, a message may be output to the event log or syslog. If this happens, infrastructure administrators need to check the content of the message and take the necessary action such as reviewing the environment settings.

Tenant administrator

- Tenant administrators use the management console to distribute and apply patches to their tenant's servers.

Tenant user

- Tenant users distribute and apply patches to those servers that they manage themselves.

Dual-role administrator

- Dual-role administrators have the roles of both infrastructure administrators and tenant administrators. When acting as a tenant administrator, a dual-role administrator can distribute and apply patches to the servers in all tenancies.

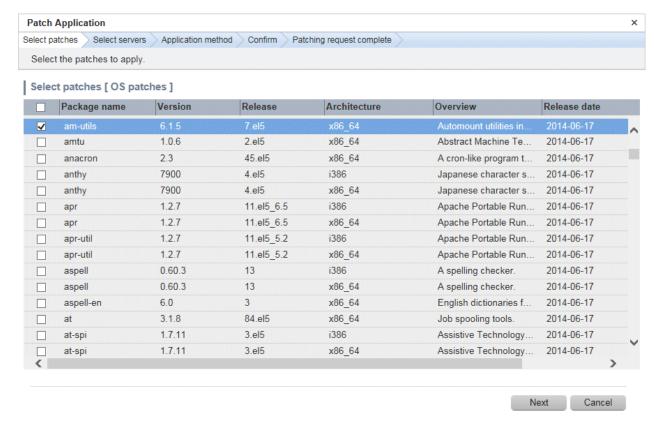
Display method

- 1. Click the **Patch application** button in one of the following windows:
 - Patch list window
 - Patch Details window
 - New patches window
 - List of Servers with Unapplied Patches window
- 2. Perform the following patch application setup and confirmation operations in the wizard:
 - a. Select the patches to be applied
 - b. Select the target servers
 - c. Set the application method
 - d. Check the settings
 - e. Completion

3.3.1 Select Patches

If following operations is performed, the Select patches window of the Patch Application wizard will be displayed:

- Click the Patch application button in the List of New Patches window.



Operation method

Selecting patches

Select the patches to be applied.

Table 3.13 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Product name	Displays the product name (operating system name) corresponding to each patch.
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups
	- Definition Updates
Overview	Displays a title for each patch.
Release date	Displays the date when the patch was released.

Table 3.14 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 3.15 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.

Item	Description
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Update title	Displays the update titles of the patches.
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

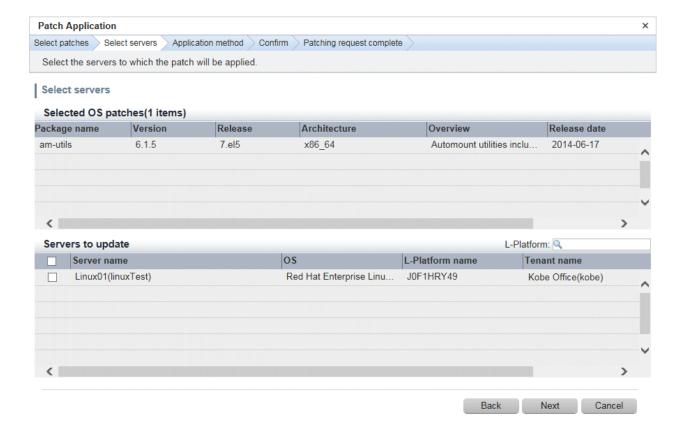
Operation buttons

Operation button	Description
Next	Moves to the Select servers window.
Cancel	Closes the Patch Application wizard.

3.3.2 Select Servers

The **Select servers** window is displayed when one of the following operations has been performed:

- Clicking the Next button in the Select patches window
- Using the checkboxes in the patch list window to select patches, and then clicking the **Patch application** button
- Clicking the Patch application button in the Patch Details window
- Click the Patch application button in the List of Servers with Unapplied Patches window.



Selected patches

A list of the patches to be applied is displayed.

Table 3.16 Windows patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Product name	Displays the product name (operating system name) corresponding to each patch.
Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
	- Security Updates
	- Critical Updates
	- Feature Packs
	- Service Packs
	- Tools
	- Drivers
	- Updates
	- Update Rollups

Item	Description
	- Definition Updates
Overview	Displays a title of each patch.
Release date	Displays the date when the patch was released.

Table 3.17 Linux patches

Item	Description
Package name	Displays the names of the RPM packages.
	Clicking a package name link displays the Patch Details window.
Version	Displays the versions of the packages.
Release	Displays the release numbers of the packages.
Architecture	Displays the architecture for each package.
Overview	Displays an overview of each package.
Release date	Displays the date when the package information was registered with Systemwalker Software Configuration Manager.

Table 3.18 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch IDs.
Class	Displays the classification levels of the patches.
	- Required : Patches that are specified as "Required" in the operation policy settings
	- Recommended : Patches that are specified as "Recommended" in the operation policy settings
Importance	Displays the importance of each patch.
	- Recommended
	- Important
	- Security
Update type	Displays the update types of the patches.
	- Urgent
Product name	Displays the product names.
os	Displays the operating systems (platforms).
Update title	Displays the update titles of the patches.
Release date	Displays the date when the patch information was registered with Systemwalker Software Configuration Manager.

Selecting servers

Select the servers to which the patches are to be applied.

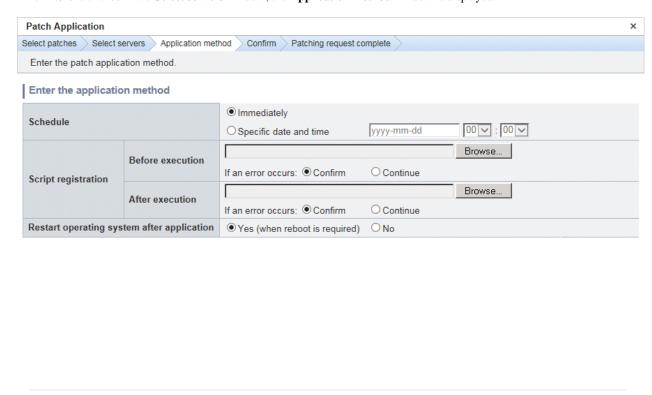
Item	Description
Server name	Displays the server names.
os	Displays the operating systems.
L-Platform name	Displays the L-Platform names.
Tenant name	Displays the tenant names.

Operation buttons

Operation button	Description
Back	Returns to the Select patches window.
Next	Moves to the Select patches window if servers have been selected using checkboxes.
Cancel	Closes the Patch Application wizard.

3.3.3 Application Method

When Next is clicked in the Select servers window, the Application method window is displayed.



Back

Next Cancel

Operation method

Setting up the application method

Item	Description
Schedule	Specify a schedule.
	- Immediately : Select this option to perform the processing as soon as settings in the wizard are complete.
	- Specific date and time : Specify the date and time when processing is to be executed.
	Specify a date and time that is later than the current date and time on the admin server.
Script	Specify the scripts to be executed before and after patch distribution/application, as well as the behavior of patch application processing if an error occurs during script execution.

Item	Description
	To apply Fujitsu middleware patches, a script specifying the application processing must be created and then registered as a post-execution script.
	Create the scripts registered here so that they output "0" as a return value to indicate normal completion and a value other than "0" as a return value to indicate an error.
	For the script to be registered, specify the full path to the file that is stored on the local machine where the browser is running.
	- Confirm: If an error occurs, the user can select the appropriate script processing (such as "retry", "continue processing", or "cancel processing") from the Job management window or by using the job information management command. Refer to "Chapter 4 Job Management" for details on the Job management window. Refer to "Job Information Management Command" in the Reference Guide for details on the command.
	- Continue: Processing will continue even if an error occurs.
	- Refer to "Creating Scripts" in the <i>Operation Guide</i> for information on the scripts that are registered here.
Restart operating system	Select whether to restart the server after the patch is distributed and applied.
after application	- Yes
	The behavior varies depending on the patch type, as follows:
	- OS patches
	The server will only be restarted for those patches that need to have the server restarted.
	- Fujitsu middleware patches
	The server will be restarted without fail.
	- No
	The server will not be restarted.

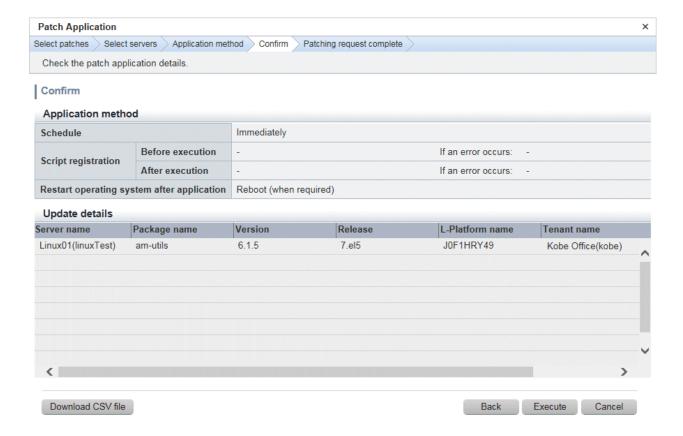
Operation buttons

Operation button	Description
Back	Returns to the Select servers window.
Next	Moves to the confirmation window.
Cancel	Closes the Patch Application wizard.

3.3.4 Confirm

When Next is clicked in the Application method window, the Confirm window is displayed.

Check the settings that have been entered.



Application method

This section displays the settings that have been specified in the Application method window.

Update details

	Item	Description
Server name		Displays the server names.
For Windows	Patch ID	Displays the patch IDs.
	Class	Displays the classification levels ("Required" or "Recommended") of the patches.
	Patch type	Displays the patch types. (This indicates the classification of updates, which represents the WSUS update program type.)
For Linux	Package name	Displays the names of the packages.
	Version	Displays the versions of the packages.
	Release	Displays the release numbers of the packages.
For Fujitsu middleware	Patch ID	Displays the patch IDs.
	Importance	Displays the importance of each patch ("Recommended", "Important" or "Security").
	Update type	Displays the update types of the patches ("Urgent").
L-Platform name		Displays the L-Platform names.
Tenant name		Displays the tenant names.

Operation buttons

Operation button	Description
Download CSV file	Outputs the information displayed in Update details to a CSV file.

Operation button	Description
Back	Returns to the Application method window.
Execute	Executes the patch application as a job. When multiple servers are selected, one job is executed for each server.
Cancel	Closes the Patch Application wizard.

3.3.5 Patching Request Complete

When Next is clicked in the Confirm window, the Patching request complete window is displayed.



Close

Operation method

Job Management

Item	Description
Job Management	Displays the Job management window where the user can check the status of the patch application operation that was executed.
	The status of the patch application operation that was executed can also be checked by using the job information management command. Refer to "Job Information Management Command" in the <i>Reference Guide</i> for details.

Operation buttons

Operation button	Description
Close	Closes the Patch Application wizard.

Chapter 4 Job Management

The following operations can be performed from the Job management window:

- Job list

Displays a list of jobs. It is possible to display information that has been filtered by specifying particular conditions.

- Job details

Displays job details. Job status can be checked. Actions can also be taken.

- Process details

Displays process details. Process details and results can be checked. Actions can also be taken.



Stopping ServerView Resource Orchestrator or Systemwalker Runbook Automation

Stop ServerView Resource Orchestrator or Systemwalker Runbook Automation only after checking whether the patch distribution/application process, parameter configuration process, or script execution process is running by using the following command. If a process is not running, it will not be displayed in the list.

Specify the process control user information in -user and -password. If it has changed from the default value, specify the changed value.

[Windows]

%SWRBA_HOME%\bin\swrba_admin pi-list -user swrbaadmin -password systemwalker#1 -state running -appid cfmgApplication

[Linux]

/opt/FJSVswrbam/bin/swrba_admin pi-list -user swrbaadmin -password systemwalker#1 -state running -appid cfmgApplication



See

If an error occurs on the admin server while a process is in progress

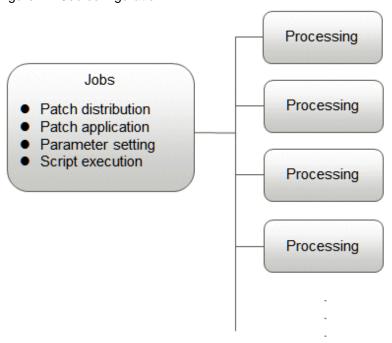
If an error, such as system failure, occurs on the admin server while the patch distribution/application process, parameter configuration process, or script execution process is running, the process is stopped. In such cases, you must restart the process after the admin server has been restored.

Refer to the *Troubleshooting Guide* for information on how to resume a process.

4.1 Job configuration

The job configuration is shown below.

Figure 4.1 Job configuration



Items that can be checked by jobs are listed below:

Item	Description	Checked using:
Job ID	An ID that uniquely identifies the job	- Job list window
Job name	Name of the job.	- Job details window
	The strings below will automatically be set in the job name: If patches are applied using the Patch Application wizard or the patch application command: Patch application request + "_"+ Job ID + "_" + "server name" If patches are distributed using the Patch Application wizard or the patch application command: Patch distribution request + "_"+ Job ID + "_" + "server name" If parameters are configured using the Parameter Settings wizard or swcfmg_param_startsetting (Parameter Setting command): Parameter settings request + "_"+ Job ID + "_" + "server name" If scripts are executed using the Script Execution wizard or the script execution command: Script execution request + "_"+ Job ID + "_" + "server name"	List display of job information management commands Detailed display of job information management commands
Job type	Type of job. The job types are shown below: Patch application: If patches are applied using the Patch Application wizard or the patch application command Patch distribution: If patches are distributed using the Patch Application wizard or the patch application command Parameter settings: If parameters are configured using the Parameter Settings wizard or swcfmg_param_startsetting (Parameter Setting command) Script execution: If scripts are executed using the Script Execution wizard or the script execution command	
Status	Status of the job. The status values are shown below:	

Item	Description	Checked using:
	Executing: The job is executing	
	Complete: The job has ended normally	
	Selecting (error): The job process has ended in an error and is waiting for the user to select an action	
	Complete (error): An unexpected error has occurred during the job process, and the job has ended in error	
	Waiting: The job is waiting for the scheduled time	
	Canceled: The job has been canceled by request	
Owner	Administrator of the job.	
	The person making the request becomes the administrator.	
Tenant	The tenant managing the job.	
Start datetime	Date and time the job was started.	
End datetime	Date and time the job ended.	
Target	Execution target of the job.	
	For example, the patch application target refers to the server(s) that will have patches applied.	
Process details	Execution content of the job.	- Process details window
Process results	Execution results of the job.	Detailed display of job information management commands

4.1.1 Processes

The following tables show the processes executed by jobs. The processes executed by a job differ depending on the job type.

Patch application

Process name	Process type	Description	Settings information	Value
Acceptance	Acceptance	Always executed.	None	None
Schedule standby	Schedule standby	Executed if Specific date and time was specified at Application method >> Schedule.	Schedule datetime	Value specified in Specific date and time at Application method >> Schedule
Server operation check	Server operation check	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
Pre-execution script	Script execution	Executed if a pre- execution script is	Target server(s)	Server(s) specified in the Server list window or at Select servers
		registered at Application method >> Script registration.	Script information	Script registered at Application method >> Script registration
Patch application	Patch application	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers

Process name	Process type	Description	Settings information	Value
			Patch information	The patch specified in the Windows patch list window, Linux patch list window, or Select patches
Post-execution script		•	Target server(s)	Server(s) specified in the Server list or at Select servers
		Script information	Script registered at Application method >> Script registration	
Restart operating system	Restart operating system	Executed if Yes was selected at Application method >> Reboot after application.	Target server(s)	Server(s) specified in the Server list window or at Select servers

Patch distribution

Process name	Process type	Description	Settings information	Value
Acceptance	Acceptance	Always executed.	None	None
Schedule standby	Schedule standby	Executed if Specific date and time was specified at Application method >> Schedule.	Schedule datetime	Value specified in Specific date and time at Application method >> Schedule
Server operation check	Server operation check	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
Pre-execution script	Script execution	Executed if a pre- execution script is	Target server(s)	Server(s) specified in the Server list window or at Select servers
		registered at Application method >> Script registration.	Script information	Script registered at Application method >> Script registration
Patch distribution	Patch distribution	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Patch information	Patch(es) specified in the Fujitsu middleware patch list window or at Select patches
Post-execution script	Script execution	Executed if a post- execution script is registered at Application method >> Script registration.	Target server(s)	Server(s) specified in the Server list or at Select servers
			Script information	Script registered at Application method >> Script registration
Restart operating system	Restart operating system	Executed if Yes was selected at Application method >> Reboot after application.	Target server(s)	Server(s) specified in the Server list window or at Select servers

Parameter settings

Process name	Process type	Description	Settings information	Value
Acceptance	Acceptance	Always executed.	None	None
Schedule standby	Schedule standby	Executed if Specific date and time was specified at Execution method >> Schedule.	Schedule datetime	Value specified in Specific date and time at Execution method >> Schedule
Server operation check	Server operation check	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
Pre-execution script	Script execution	Executed if a pre- execution script is	Target server(s)	Server(s) specified in the Server list window or at Select servers
		registered at Execution method >> Script registration.	Script information	Script registered at Enter execution method
Parameter settings	Parameter settings	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Software information	Software information specified in the Server Details window or at Software selection
			Parameter settings information	Parameter settings information specified in Parameter Settings or at Edit Parameter Information
Post-execution Script execut	Script execution Executed if a post- execution script is registered at Execution method >> Script registration.	Target server(s)	Server(s) specified in the Server list or at Select servers	
		Execution method >> Script	Script information	Script registered at Execution method
Restart operating system	Restart operating system	Executed if Yes was selected at Execution method >> Restart after execution.	Target server(s)	Server(s) specified in the Server list window or at Select servers

Script execution

Process name	Process type	Description	Settings information	Value
Acceptance	Acceptance	Always executed.	None	None
Schedule standby	Schedule standby	Executed if Specific date and time was specified at Execution method >> Schedule.	Schedule datetime	Value specified in Specific date and time at Execution method >> Schedule
Server operation check	Server operation check	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers

Process name	Process type	Description	Settings information	Value
Script execution	Script execution	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Script information	Script registered at Enter execution method
Restart operating system	Restart operating system	Executed if Yes was selected at Execution method >> Restart after execution.	Target server(s)	Server(s) specified in the Server list window or at Select servers

4.1.2 Action

When an error or something that requires a decision by the user occurs, a pre-defined response (action) can be performed for the corresponding process and job.

Actions can be performed from the **Job management** window or using the job information management command. For details, refer to "Job Management" in the *Operator's Guide* or "Job Information Management Command" in the *Reference Guide*. Actions that can be executed for each process are shown below.

Process type	Action	Description
Schedule standby	Cancel	Cancels the schedule and the job.
		Can be performed during execution of this process.
Server operation check	Retry	Reexecutes this process.
		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
Script execution	Retry	Reexecutes this process.
		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
	Continue	Moves to the next process.
		Can be performed if an error occurs during this process.
Patch application	Retry	Reexecutes this process.
		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
	Continue	Moves to the next process.
		Can be performed if an error occurs during this process.
Patch distribution	Retry	Reexecutes this process.
		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
	Continue	Moves to the next process.
		Can be performed if an error occurs during this process.

Process type	Action	Description
Parameter settings Retry all		Reexecutes this process. Sets parameters for all software in which settings can be configured.
		Can be performed if an error occurs during this process.
	Retry	Reexecutes this process. Sets parameters for software in which an error occurred during the parameter setting process, or for software in which parameters have not yet been configured.
		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
	Continue	Moves to the next process.
		Can be performed if an error occurs during this process.
Restart operating	Retry	Reexecutes this process.
system		Can be performed if an error occurs during this process.
	Cancel	Cancels the job.
		Can be performed if an error occurs during this process.
	Continue	Moves to the next process.
		Can be performed if an error occurs during this process.

4.2 Operation

This section explains the operation procedure of the ${\bf Job\ management}$ window.

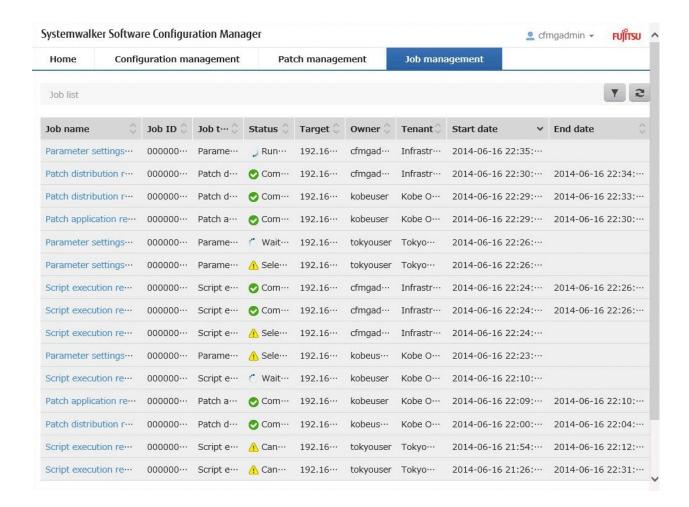
4.2.1 Job list

Display method

1. Log in to the management console.

Use either of the following methods to display the list.

- a. Select $\boldsymbol{Job\ management}$ from the menu in the management console.
- b. Click the **Job management** link in the **Home** window.



Operation method

Filter search

Click the button at the top right of the window to specify the conditions for filtering the information in the server list.

Display item	Description
Filter	The following filter conditions can be specified. Multiple filter conditions can be specified.
	- Job name
	- Job type
	- Status
	- Target
	- Owner
	- Tenant name
	- Start date
	- End date

Display item

The following table shows the items that are displayed in the job list:

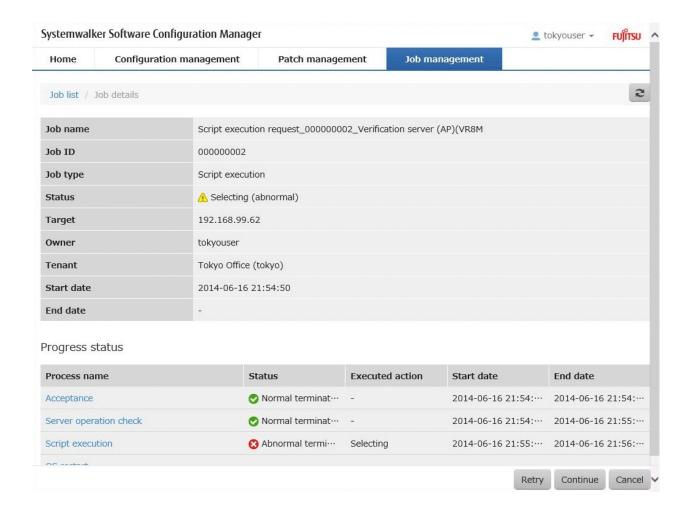
Display item	Description
Job name	Displays the name of the job.
	Clicking a job name displays the Job details window.
Job ID	Displays the job ID.
Job type	Displays the type of the job.
	- Patch application
	- Patch distribution
	- Parameter settings
	- Script execution
Status	Displays the status of the job.
	- Running
	- Waiting
	- Selecting (abnormal)
	- Completed
	- Completed (abnormal)
	- Canceled
Target	Displays the target of the job.
Owner	Displays the administrator of the job.
Tenant name	Displays the tenant name that the job belongs to.
Start date	Displays the date and time the job was started.
End date	Displays the date and time the job ended.

4.2.2 Job details

Display method

- 1. Click a job name from the **Job list** window.
- 2. The **Job details** window is displayed.

The **Job details** window shows the information and the progress of the job. Actions can also be taken.



Operation method

Job details

Job information is displayed in the top section of the window.

Display item	Description
Job name	Displays the name of the job.
Job ID	Displays the job ID.
Job type	Displays the type of the job.
	- Patch application
	- Patch distribution
	- Parameter settings
	- Script execution
Status	Displays the status of the job.
	- Running
	- Waiting
	- Selecting (abnormal)
	- Completed
	- Completed (abnormal)
	- Canceled

Display item	Description
Target	Displays the target of the job.
Owner	Displays the administrator of the job.
Tenant name	Displays the tenant name that the job belongs to.
Start date	Displays the date and time the job was started.
End date	Displays the date and time the job ended.

Progress status

Job progress is displayed in the top section of the window. Progress status shows the status of the process executed by the job as history data.

Display item	Description	
Process name	Displays the name of the process.	
	Clicking a process name displays the Process details window.	
Status	Displays the status of the process.	
	When Running is displayed, the process is being executed.	
	When Canceled is displayed, the process is not executed because the job was canceled using the Cancel action.	
	- Normal termination	
	- Abnormal termination	
	- Unexpected error	
	- Waiting	
	- Running	
	- Canceled	
Executed action	The action which was executed.	
	When Selecting is displayed, execution of the action by the user is being waited.	
	- Retry	
	- Retry all	
	- Cancel	
	- Continue	
	- Selecting	
Start date	The date and time the process was started.	
End date	The date and time the process ended.	

Operation buttons

Actions can be executed from the **Job details** window. For the actions that can be executed, refer to "Action" in the *Operator's Guide*.

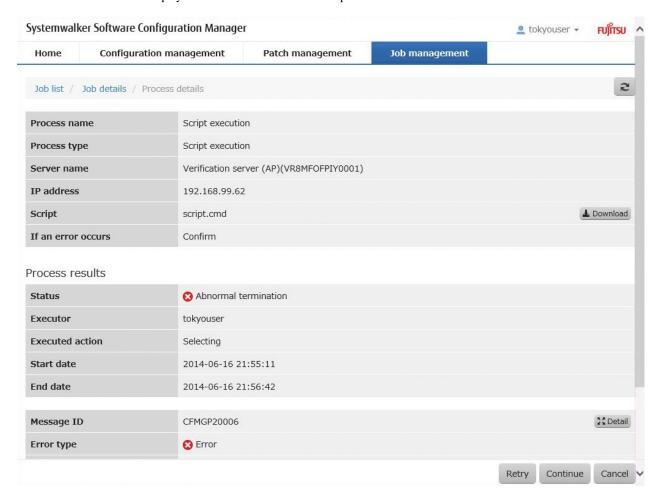
Operation buttons	Description
- Retry	Executes an action.
- Retry all	
- Cancel	
- Continue	

4.2.3 Process Details

Display method

- 1. Click a job name from the **Job list** window.
- 2. The **Job details** window is displayed. Click a process name from **Progress status** in the **Job details** window.
- 3. The **Process details** window will be displayed.

The **Process details** displays the details and the result of the process. Actions can also be taken.



Operation method

Process details

Detailed information about the process is displayed in the top section of the window.

Display item	Description
Process name	Displays the name of the process.
Process type	Displays the type of the process.
Setting information	Settings information about the process is displayed. Items displayed for Settings Information differ depending on the process type.

The following table shows the items displayed in Settings Information: The acceptance process does not have settings information.

Process type	Display item	Description
Scheduled standby	Schedule date	The scheduled date and time.

Server operation check Server name The server name. Patch application (Windows patches) Server name The server name. Patch application (Windows patches) 1P address The Patch ID. Class The patch ID. Class Patch polication (Linux patches) Server name The patch type. Patch application (Linux patches) Server name The patch type. Patch application (Linux patches) Package name The patches. Patch application (Linux patches) Package name The patches. Patch application (Linux patches) Package name The patches. Patch patches The Paddress. Patches. Patch patches The release. Patches. Patch distribution Server name Server name. IP address The Paddress. Patch ID The patch ID. Importance The patch ID. Importance The patch ID. Importance The patch ID. Importance The patches. Server name The Server name. IP address </th <th>Process type</th> <th>Display item</th> <th>Description</th>	Process type	Display item	Description
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- Confirm - Continue OS restart Server name The server name.		When an error has	The operation for when an error occurs during processing.
OS restart Server name The server name.		occurred	- Confirm
			- Continue
IP address The IP address.	OS restart	Server name	The server name.
		IP address	The IP address.

Process results

Process results are displayed in the top section of the window.

Display item	Description
Status	Displays the status of the process.
	When Running is displayed, the process is being executed.

Display item	Description	
	When Canceled is displayed, the process is not executed because the job was canceled using the Cancel action.	
	- Normal termination	
	- Abnormal termination	
	- Unexpected error	
	- Waiting	
	- Running	
	- Canceled	
Executor	Displays the user who executed the process If the process was executed using a command, "#COMMAND" is displayed.	
Executed action	The action which was executed.	
	When Selecting is displayed, execution of the action by the user is being waited.	
	- Retry	
	- Retry all	
	- Cancel	
	- Continue	
	- Selecting	
Start date	Displays the date and time the process was started.	
End date	Displays the date and time the process ended.	
Message information	Displays message information regarding the process.	

The following table shows the items displayed in *Message information*: Multiple message information may be displayed. For message details, refer to the *Message Guide*.

Display item	Description
Message ID	Displays the message ID.
Error type	Displays the type of the error.
Message text	Displays the message text.
Parameter information	When the message text contains the following variable items, parameter and index values are displayed. Multiple parameter information may be displayed. [Parameter:{Index}]

Operation buttons

Actions can be executed from the **Job details** window. For the actions that can be executed, refer to "Action" in the *Operator's Guide*.

Operation button	Description
- Retry	Executes an action.
- Retry all	
- Cancel	
- Continue	