

FUJITSU Software Systemwalker Software Configuration Manager

Operator's Guide

Windows/Linux

B1X1-0129-06ENZ0(00)
November 2015

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.

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	Windows
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	
Microsoft(R) Windows Server(R) 2008 R2 Standard Microsoft(R) Windows Server(R) 2008 R2 Enterprise	Windows Server 2008 R2	
Red Hat(R) Enterprise Linux(R) (for x86)	RHEL (x86)	RHEL
Red Hat(R) Enterprise Linux(R) (for Intel 64)	RHEL (Intel 64)	

Official name	Abbreviation	
Oracle Solaris	Solaris Operating System	Oracle Solaris

Export Restrictions

Exportation/release of this document may require necessary procedures in accordance with the regulations of your resident country and/or US export control laws.

Trademarks

- Adobe, Adobe Reader, and Flash are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Interstage, ServerView, and Systemwalker are registered trademarks of Fujitsu Limited.
- Linux is a registered trademark of Linus Torvalds.
- Red Hat, RPM, and all Red Hat-based trademarks and logos are trademarks or registered trademarks of Red Hat, Inc. in the United States and other countries.
- Oracle and Java are registered trademarks of Oracle and/or its affiliates in the United States and other countries. Company names and product names used in this document are registered trademarks or trademarks of those companies.
- VMware, the VMware "boxes" logo and design, Virtual SMP, and VMotion are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions.
- Xen and XenSource are trademarks or registered trademarks of XenSource, Inc. in the United States and/or other countries.
- Microsoft, Internet Explorer, Hyper-V, Windows, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Other company names and product names are trademarks or registered trademarks of their respective owners.
- Note that system names and product names in this document are not accompanied by trademark symbols such as (TM) or (R).

Issue Date and Version

Version	Manual code
July 2012: First edition	B1X1-0129-02ENZ0(00) / B1X1-0129-02ENZ2(00)
January 2013: Second edition	B1X1-0129-03ENZ0(00) / B1X1-0129-03ENZ2(00)
March 2014: Third edition	B1X1-0129-04ENZ0(00) / B1X1-0129-04ENZ2(00)
August 2014: Fourth edition	B1X1-0129-05ENZ0(00) / B1X1-0129-05ENZ2(00)
November 2015 Fifth edition	B1X1-0129-06ENZ0(00) / B1X1-0129-06ENZ2(00)

Copyright

Copyright 2010-2015 FUJITSU LIMITED

Contents

Chapter 1 Management Console.....	1
1.1 Overview of the Management Console.....	1
1.2 Flow of Operations.....	2
1.3 List of Functions Available from the Management Console.....	4
1.4 Login Users.....	9
1.5 Login and Logout.....	10
1.5.1 Login.....	10
1.5.2 Logout.....	11
1.6 Home.....	12
Chapter 2 Configuration Management.....	14
2.1 Hardware List.....	15
2.1.1 Chassis list.....	15
2.1.1.1 Chassis details.....	16
2.1.2 Physical Server List.....	18
2.1.2.1 Physical Server Details.....	19
2.1.3 OS List.....	21
2.1.4 Map view.....	23
2.1.4.1 Displaying Details.....	24
2.2 Server List.....	26
2.2.1 Server Details.....	30
2.2.2 Parameter Details.....	33
2.3 Software List.....	35
2.3.1 Software Details Window.....	37
2.4 List of Configuration Modification Templates.....	38
2.4.1 Details of the Configuration Modification Template.....	39
2.5 Compare Configuration Baselines.....	41
2.5.1 Configuration Baseline Comparison Results.....	42
2.6 Patch Application Wizard.....	45
2.6.1 Select Type.....	46
2.6.2 Select Patches.....	47
2.6.3 Application Method.....	50
2.6.4 Confirm.....	52
2.6.5 Patching Request Complete.....	53
2.7 Parameter Settings Wizard.....	54
2.7.1 OS Selection.....	54
2.7.2 Software Selection.....	55
2.7.3 Parameter Settings.....	57
2.7.4 Editing Parameter Information.....	58
2.7.5 Editing Values.....	60
2.7.6 Execution Method.....	63
2.7.7 Confirmation.....	64
2.7.8 Checking Parameter Information.....	65
2.7.9 Complete.....	67
2.8 Script Execution Wizard.....	68
2.8.1 OS Selection.....	68
2.8.2 Execution Method.....	69
2.8.3 Confirm.....	70
2.8.4 Complete.....	71
2.9 Configuration Modification Template Wizard.....	72
2.9.1 Configuring Configuration Modification Templates.....	72
2.9.2 Creating Configuration Modification Templates.....	73
2.9.2.1 Definition of Template Information.....	73
2.9.2.2 Definition of Process.....	73
2.9.2.2.1 Work Directory.....	74

2.9.2.3 Definition of Setting Information.....	75
2.9.2.4 Definition of Parameters.....	78
2.9.2.5 Advisory Notes when Creating a Configuration Modification Template to Perform Software Installation.....	80
2.9.3 Operation Method.....	81
2.9.3.1 Template Information.....	81
2.9.3.2 Process Definition.....	82
2.9.3.3 Select assets.....	83
2.9.3.4 Definition of Parameters.....	84
2.9.3.5 Confirm.....	85
2.9.3.6 Complete.....	87
2.10 Configuration Modification Wizard.....	88
2.10.1 Select template.....	89
2.10.2 Enter parameters.....	89
2.10.3 Select assets.....	91
2.10.4 Execution Method.....	92
2.10.5 Confirm.....	93
2.10.6 Complete.....	94
2.11 Maintenance.....	95
2.11.1 View CI.....	95
2.11.1.1 Displaying a Tree of Configuration Items.....	95
2.11.1.2 Searching Configuration Items.....	97
2.11.1.3 Displaying Details.....	98
2.11.2 Registering Configuration Items.....	100
2.11.3 Update/delete CI.....	102
2.11.3.1 Updating Configuration Items.....	102
2.11.3.2 Deleting Configuration Items.....	104
2.11.4 Importing Configuration Items.....	104
Chapter 3 Patch Management.....	106
3.1 Summary View.....	106
3.1.1 List of Servers with Unapplied Patches.....	108
3.1.2 List of New Patches.....	111
3.2 Patch Management.....	114
3.2.1 Patch List.....	114
3.2.1.1 Patch Details.....	118
3.3 Patch Application Wizard.....	121
3.3.1 Select Patches.....	122
3.3.2 Select Servers.....	124
3.3.3 Application Method.....	127
3.3.4 Confirm.....	129
3.3.5 Patching Request Complete.....	130
Chapter 4 Job Management.....	132
4.1 Job configuration.....	132
4.1.1 Processes.....	134
4.1.2 Action.....	138
4.2 Operation.....	139
4.2.1 Job list.....	139
4.2.2 Job details.....	141
4.2.3 Process Details.....	144

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, tenants, host names, IP addresses, installation software, and software parameters) on the managed servers. Also, perform parameter settings, script execution, and configuration modification.

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 TLS 1.0.
- Configure settings to save the encrypted page to disk.
- 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**.
- 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. Install software

Install the software on the managed servers based on instructions from the tenant user.

The infrastructure administrator registers the files necessary for installation of the software in the media library beforehand.

4. 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.

5. 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).

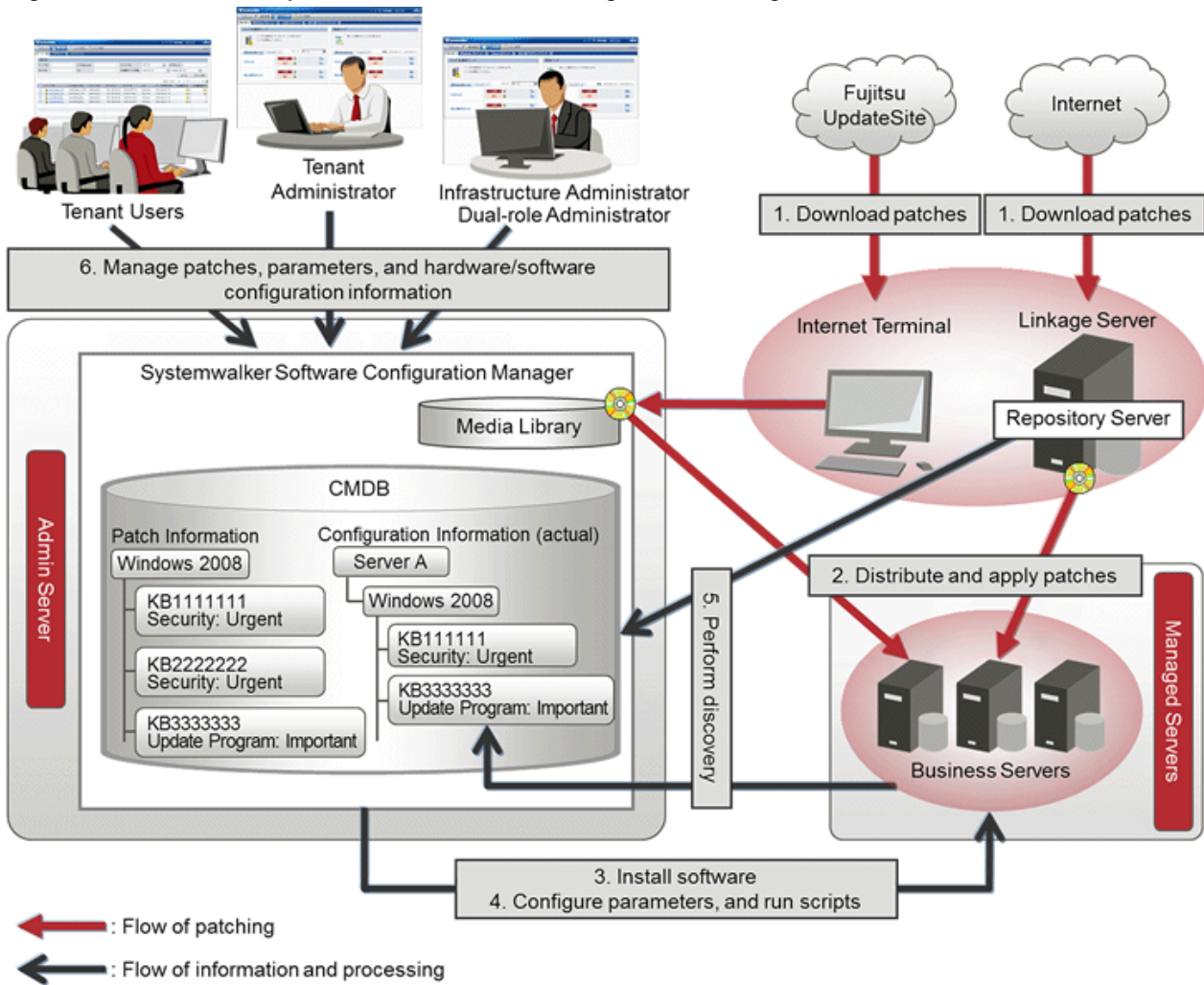
6. Manage patches, parameters, and configuration information

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 install the software on the servers belonging to their tenant.
- 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 install the software on the servers they manage themselves.
- 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	Infrastructure administrator	Dual-role administrator	Tenant administrator	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, server groups, 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.

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
		Parameter settings button	-	Y (*2)	Y (*2)	Y	-	The Parameter Settings wizard is displayed.
		Script execution button	-	Y (*2)	Y (*2)	Y	-	The Script Execution wizard is displayed.
		Configuration Modification button	-	Y (*2)	Y (*2)	Y	-	The Configuration Modification 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.
	Parameter Details	Detailed information about the parameters	Y	Y	Y	Y	-	Detailed information about the software parameters is displayed.

Function	Window	Information displayed/ button	Infrastructure administrator	Dual-role administrator	Tenant administrator	Tenant user	Express (*1)	Remarks
		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.
	Software list		Y	Y	Y	Y	-	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.
	List of Configuration Modification Templates	The Configuration Modification Template information	Y	Y	Y	Y	-	Details of the Configuration Modification Template are displayed from the link of the template name.
		Create button	Y	Y	Y	Y	-	The Configuration Modification Template wizard is displayed.
	Details of the Configuration Modification Template	Configuration Modification Template detailed information	Y	Y	Y	Y	-	Displays details of the Configuration Modification Template .
		Edit	Y	Y	Y	Y	-	The Configuration Modification Template wizard is displayed. Edits details of the Configuration Modification Template .
		Copy and edit	Y	Y	Y	Y	-	The Configuration Modification Template wizard is displayed. Creates a new Configuration Modification Template based on the already created Configuration Modification Template .
		Delete	Y	Y	Y	Y	-	Deletes the Configuration Modification Template .
	Configuration	Configuration baseline list	Y	Y	Y	-	-	The configuration baseline list is displayed.

Function	Window	Information displayed/ button	Infrastru cture administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
	Baseline List	Compare button	Y	Y	Y	-	-	The two selected configuration baselines are compared.
	Configuration Baseline Comparison 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 Settings wizard		-	Y (*2)	Y (*2)	Y	-	The Parameter Settings wizard is displayed.
	Script Execution wizard		-	Y (*2)	Y (*2)	Y	-	The Script Execution wizard is displayed.
	Maintena nce	View CI	Y	Y	-	-	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	-
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.
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.

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

Function	Window	Information displayed/ button	Infra- structure administ rator	Dual- role admini strator	Tenant administ rator	Tenant user	Express (*1)	Remarks
		about the process						
		Action button	-	Y	Y	-	-	Executes an action.

Y: Can be used.

-: 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.**

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 and application operation Parameter configuration operation Script execution operation Configuration modification operation	Operations in the Configuration management >> Maintenance window
Infrastructure Administrative Role	Infrastructure administrator	Infrastructure administrator	A	-	A
	Infrastructure operator		A	-	S (*1)
	Infrastructure monitor		A	-	S (*1)
Tenant Management Roles	Tenant administrator	Tenant administrator	-	A	-
	Tenant operator		-	-	-
	Tenant monitor		-	-	-
Tenant Use Roles	Tenant user	Tenant user	-	A	-
Multiple Roles	Administrator	Dual-role administrator	A	A	A
	Operator		A	-	S (*1)

A: All operations can be performed.

S: Some operations can be performed.

-: No operations can be performed.

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

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



Note

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

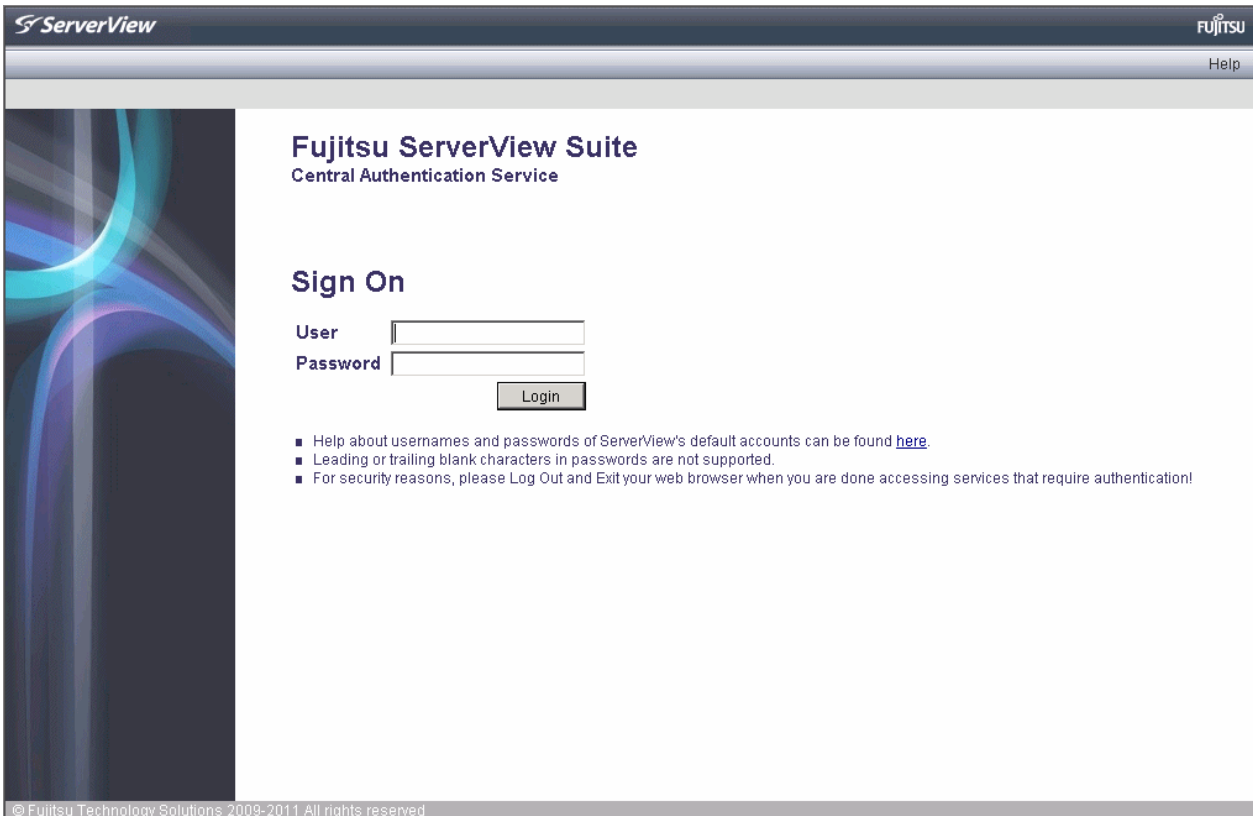
Use the following methods to open the management console:

```
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.

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.

Note

Confirming Licenses

When you log in to the management console, check the license. If there is a problem with the license, the following message is displayed. To register the license key, refer to "Registering a License Key" in the "Installation Guide".

- No license key has been registered. Register a license key for this product.

Register the license key provided with the licensed product.

- The edition of the license and the edition of the installed software do not match.

The edition of the license does not match the edition of the installed product. Perform one of the following actions:

- Register the license key for the edition you want to use.
- There may have been mistakes in the installation or setup procedure that were performed. Check the installation and setup procedures. For Systemwalker Software Configuration Manager, refer to the "Installation Guide". For Systemwalker Software Configuration Manager Express, refer to the "Express User's Guide".

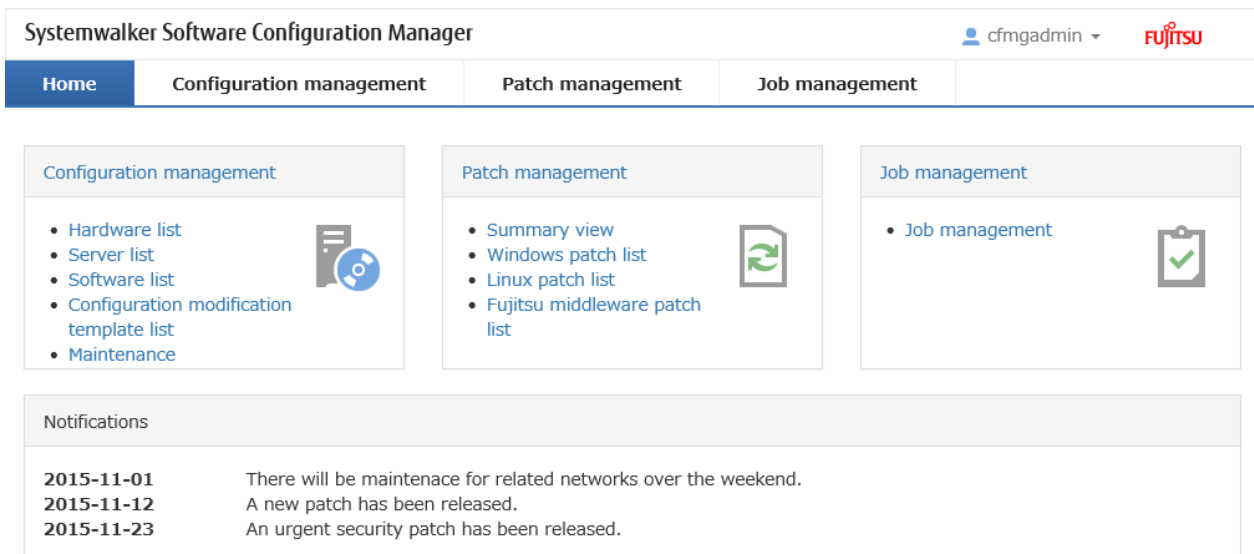
1.5.2 Logout


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.



Systemwalker Software Configuration Manager cfmgadmin 

Home Configuration management Patch management Job management

Configuration management

- Hardware list
- Server list
- Software list
- Configuration modification template list
- Maintenance

Patch management

- Summary view
- Windows patch list
- Linux patch list
- Fujitsu middleware patch list

Job management

- Job management

Notifications

2015-11-01	There will be maintenance for related networks over the weekend.
2015-11-12	A new patch has been released.
2015-11-23	An urgent security patch has been released.

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.

- List of **Configuration Modification Templates**

The **Configuration modification template list** window is displayed.

- **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, server groups, and tenants as well as the information of the software installed on the server.

Information

Information of server groups 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.

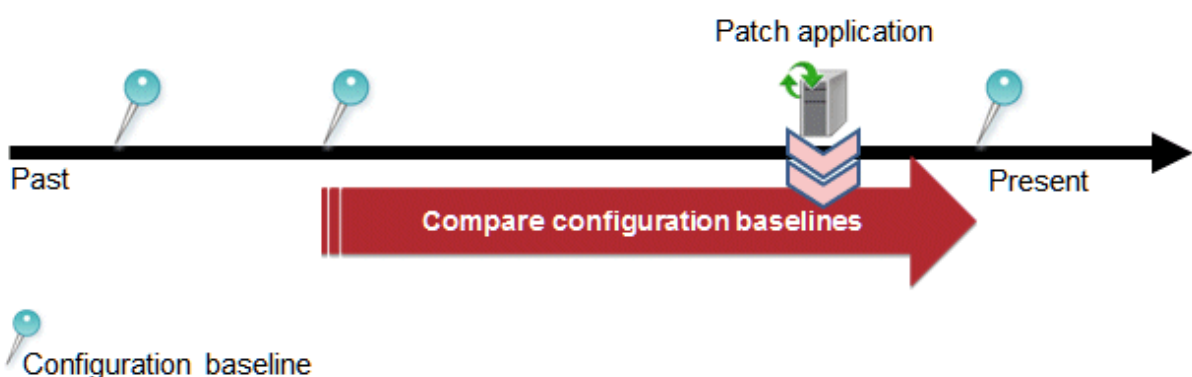
- **List of Configuration Modification Templates**

The detailed information of individual **Configuration Modification Templates** can be referred to, by displaying the list of the **Configuration Modification Template**.

- **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.

- Configuration Modification Template Wizard

Create and edit the **Configuration Modification Template** using the wizard.

- **Configuration Modification Wizard**

Execute configuration modification using the wizard. Select the **Configuration Modification Template** to execute, and specify the parameters.

- **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.

Map view also allows you to confirm dependency relationships between chassis, physical servers, servers, server groups, 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.

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management** Patch management Job management

Hardware list **Server list** Software list Configuration modification template list Maintenance

Chassis list Physical server list OS list Map view Items: 1

Name	Vendor name	Product name	Admin IP address	Mounted server...
Chassis#1	Fujitsu	BX900 S1	192.168.1.10	3

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.
Vendor name	Displays the vendor name of the chassis.
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.

Name	Chassis#1
Product name	BX900
Admin IP address	192.168.1.10
Memo	Budget management system chassis
Asset number	000000001
Serial number	AAA0000010

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.
Vendor name	Displays the vendor name of the chassis.
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.
Vendor name	Displays the vendor name of the server blade.

Display item	Description
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.

The screenshot shows the Systemwalker Software Configuration Manager interface. At the top, there is a navigation bar with 'Home', 'Configuration management' (selected), 'Patch management', and 'Job management'. Below this is a sub-menu with 'Hardware list' (selected), 'Server list', 'Software list', 'Configuration modification template list', and 'Maintenance'. Under 'Hardware list', there are tabs for 'Chassis list', 'Physical server list' (selected), 'OS list', and 'Map view'. A 'Items:3' indicator and a refresh button are visible. The main table displays three physical server entries:

Name	Vendor na...	Product name	Admin IP...	OS	OS IP add...	Chassis na...
Blade#5	Fujitsu	PRIMERGY BX920 S1	192.168.40....	VMware ESXi 5.1.0...	192.168.30....	Chassis#1
Blade#6	Fujitsu	PRIMERGY BX920 S1	192.168.40....	VMware ESXi 5.1.0...	192.168.30....	Chassis#1
Blade#7	Fujitsu	PRIMERGY BX920 S1	192.168.40.8	VMware ESXi 5.1.0...	192.168.30.8	Chassis#1

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

Display item	Description
	<ul style="list-style-type: none"> - Vendor 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	<p>Displays the physical server name.</p> <p>Clicking a physical server name displays the Physical Server Details window.</p>
Vendor name	Displays the vendor name of the physical server.
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.
Chassis name	<p>For a server blade, the name of the chassis in which it is mounted is displayed.</p> <p>Clicking a chassis name displays the Chassis Details window.</p>

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.



Name	Blade#5
Vendor name	Fujitsu
Product name	PRIMERGY BX920 S1
Admin IP address	192.168.40.235
OS	VMware ESXi 5.1.0 build-1021289
OS IP address	192.168.30.235
Memo	Application server#2
Asset number	000000001
Serial number	AAA00000010
Firmware version	0551
BIOS version	3D41
CPU	Xeon (2793 MHz) x 16
Mounted memory size	8192 MB
Chassis name	Chassis#1
Slot number	5

VM guest list

Server name	Server group name	Tenant	OS	IP address
ST_RHEL510_x64_JA	group-A	tenant-A	Red Hat Enterprise Linux 5	192.168.60.237
ST_RHEL59_x64_EN	group-B	tenant-B	Microsoft Windows Server 201...	192.168.60.239

Page Top ↑

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.
Vendor name	Displays the vendor name of the physical server.
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.

Display item	Description
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.
Server group name	When an OS (except for a VM host) is installed on a physical server, the server group name is displayed.
Tenant	When an OS (except for a VM host) is installed on a physical server, the tenant 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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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.

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management** Patch management Job management

Hardware list **Server list** Software list Configuration modification template list Maintenance

Chassis list Physical server list OS list **Map view** Items: 3

Server name	OS	IP address	Server gro...	Tenant	Physical server...	Admin IP...
CFMG-M	Red Hat Enterprise...	192.168.99.11	Group-A	Tenant-A	Blade #5	192.168.1.205
CFMG-M2	Red Hat Enterprise...	192.168.99.12	Group-A	Tenant-A	Blade #5	192.168.1.205
vm_win1	Microsoft Windows...	192.168.99.13	Group-A	Tenant-A	Blade #9	192.168.1.209

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	<p>The following filter conditions can be specified. Multiple filter conditions can be specified.</p> <ul style="list-style-type: none"> - Server name - OS - IP address - Server group name - Tenant - 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:

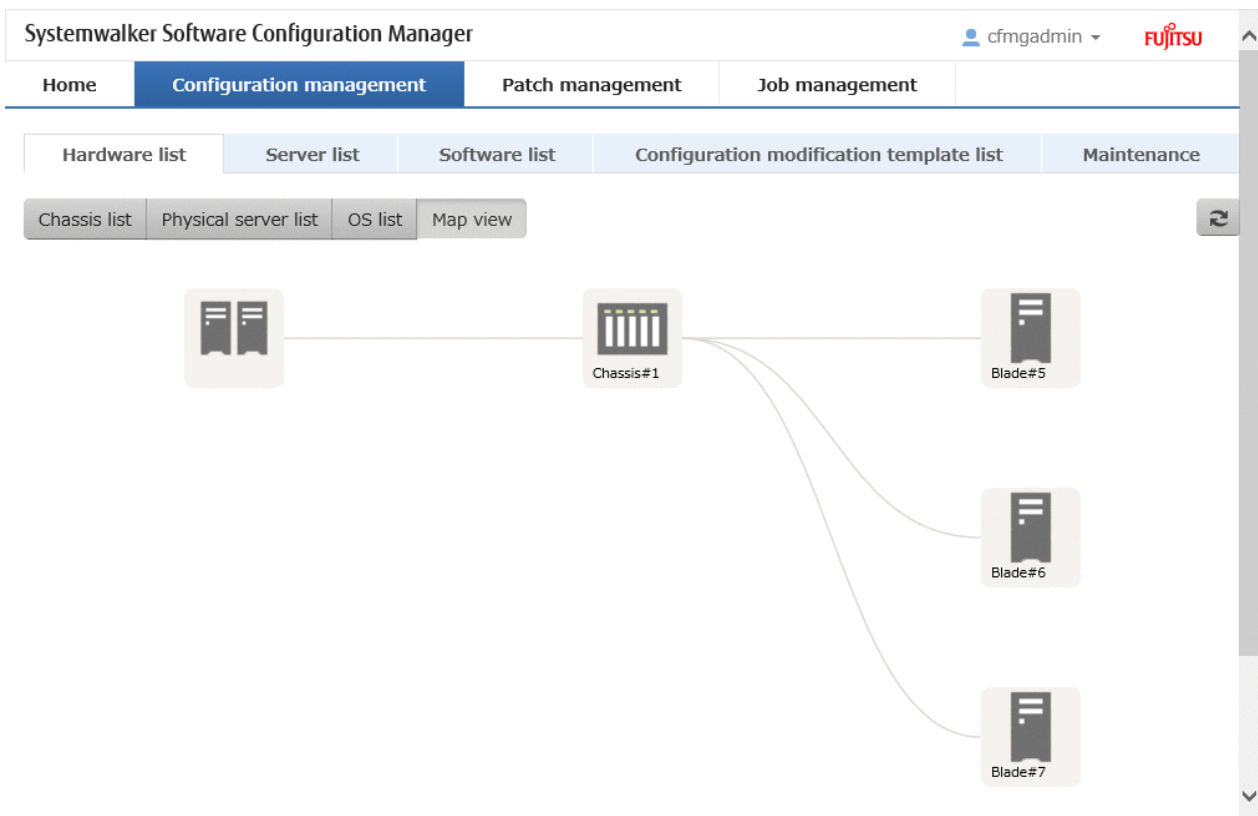
Display item	Description
Server name	Displays the name of the server on which the OS is installed.
OS	Displays the operating system name.

Display item	Description
IP address	Displays the IP address of the operating system.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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

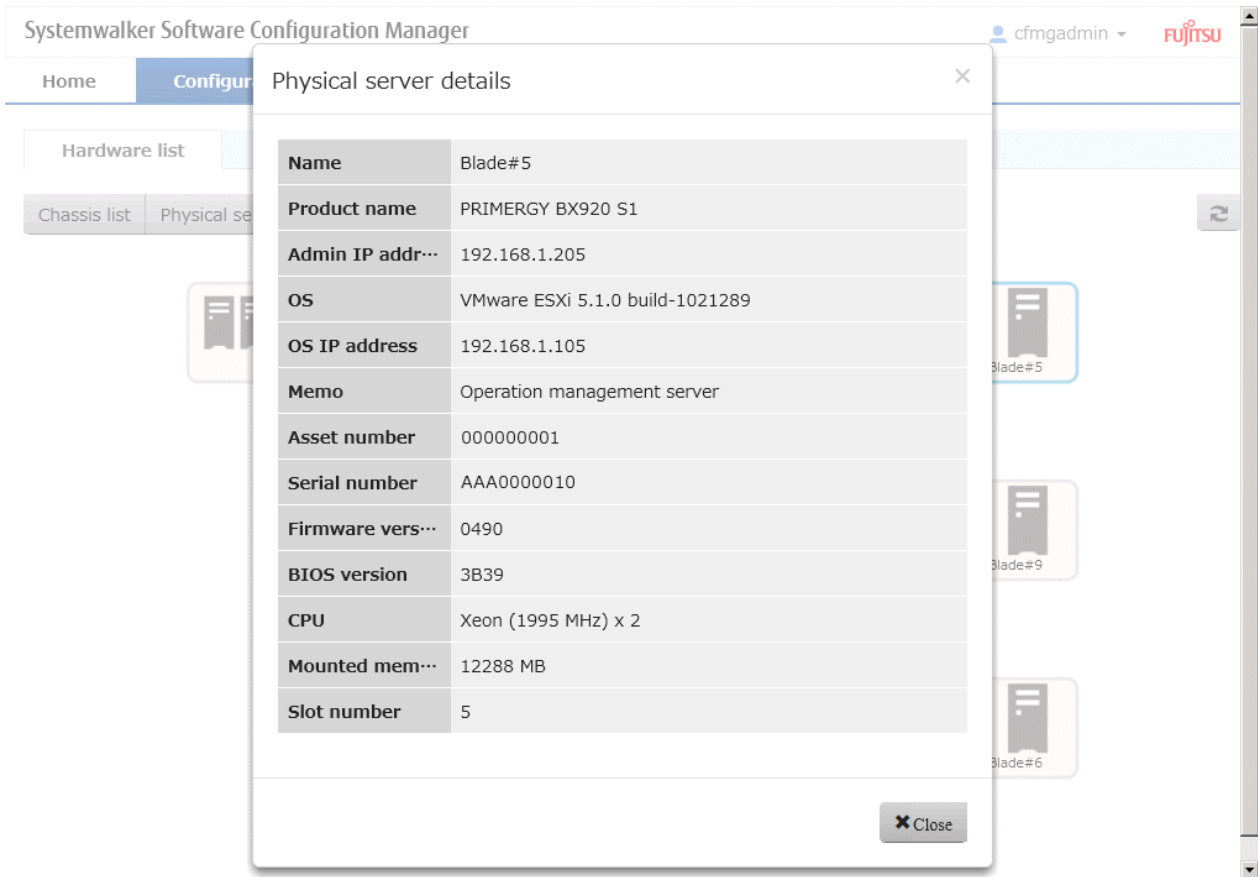
Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants.

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

Selection item	Description
 Root	<p data-bbox="518 241 853 271">Indicates a collection of hardware.</p> <p data-bbox="518 293 762 322">At least one is displayed.</p>
 Chassis	<p data-bbox="518 358 1289 421">Displays the relationships between chassis, physical servers, server groups, and tenants.</p> <p data-bbox="518 443 1278 472">Reselecting this item while it is still selected displays the detailed information.</p>
 Physical server	<p data-bbox="518 483 1321 546">Displays the relationships between chassis, physical servers, servers, server groups, and tenants, starting from the physical server.</p> <p data-bbox="518 568 1278 598">Reselecting this item while it is still selected displays the detailed information.</p>
 Servers	<p data-bbox="518 609 1321 672">Displays the relationships between chassis, physical servers, servers, server groups, and tenants, starting from the server.</p> <p data-bbox="518 694 1278 723">Reselecting this item while it is still selected displays the detailed information.</p>
 Server group	<p data-bbox="518 734 1321 797">Displays the relationships between chassis, physical servers, servers, server groups, and tenants, starting from the server group.</p> <p data-bbox="518 819 1278 848">Reselecting this item while it is still selected displays the detailed information.</p> <p data-bbox="518 871 1145 900">The server group is displayed when a physical server is selected.</p>
 Tenant	<p data-bbox="518 904 1289 967">Displays the relationships between chassis, physical servers, server groups, and tenants.</p> <p data-bbox="518 990 1278 1019">Reselecting this item while it is still selected displays the detailed information.</p> <p data-bbox="518 1041 1023 1070">Displays a tenant when a physical server is selected.</p>

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.
Vendor name	Displays the vendor name of the chassis.
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.
Vendor name	Displays the vendor name of the physical server.
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.

Display item	Description
OS IP address	Displays the IP address of the operating system.
Memo	Displays the note.
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 a server group is selected

When a server group is selected, the following items are displayed:

Display item	Description
Name	Displays the server group 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.
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 **Configuration management** from the menu in the management console, and then select the **Server list** tab.
 - b. Click the **Server list** link in the **Home** window.

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management** Patch management Job management

Hardware list **Server list** Software list Configuration modification template list Maintenance

▼ Filter

Server name Server group name Tenant IP address

Host name OS All applied OS FJMW

Site

Filter Cancel filter

1 - 3 of 3 items | 1/1 page(s)

<input type="checkbox"/>	Server name	Server group...	Tenant	IP address	Host name	OS	Last update	Unapplied (...)	Unappli...
<input type="checkbox"/>	linux1(linux1)	8QNP712QC	tenant_ad...	192.168.1.51	linux1	RHEL6.5		0	0
<input type="checkbox"/>	solaris1(solaris1)	8QNP712QC	tenant_ad...	192.168.1....	solaris1	Solaris11		-	0
<input type="checkbox"/>	WIN-CCF0MH...	TB8AS0WBS	tenant_ad...	192.168.1.47	WIN-CCF0M...	Window...		0	0

Configuration modification Script execution Parameter settings Patch application

Note

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.

Information

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	<p>The following filter conditions can be specified. Multiple filter conditions can be specified</p> <ul style="list-style-type: none"> - Server name - Server group name - Tenant - IP address - Host name - OS - All applied - FJMW - Site

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, script execution, or configuration modification.
Server name	<p>Displays the server names.</p> <p>Clicking a server name link displays the Server Details window.</p>
Server group name	Displays the server group name.

Display item	Description
Tenant	Displays the tenant.
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.

Note

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 **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.
Configuration Modification	Select the server using the checkbox, and click the Configuration Modification button. This displays the Configuration Modification wizard, enabling configuration modification of the selected server.

2.2.1 Server Details

Display method

- Use either of the following methods to display the server details:
 - Click a server name link in the **Server list** window.
 - Click a server name link in each window.
- 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.

The screenshot shows the 'Server Details' window with the following content:

Check details of the server.

Server name	WIN-CCF0MHQF0PO(WIN-CCF0MHQF0PO)
Server group name	TB8AS0WBS
Tenant	tenant_admin(tenant_admin)
IP address	192.168.1.47
Server ID	DVSVBIJC9@Direct
Site	Manual registration (Direct)
Host name	WIN-CCF0MHQF0PO
OS	Windows Server 2012 R2 Standard
Contact person	cfmgadmin Taro Fujitsu (Phone:1234-9999 Email:cfmgadmin@example.local)

Installed software | OS patches | Fujitsu middleware patches

Product name	Version	OS	Vendor
<input checked="" type="radio"/> Example Software	V1	Windows EM64T	Example company
<input type="radio"/> FJQSS(information collection tool)	V1.0.5	Windows EM64T	FUJITSU LIMITED
<input type="radio"/> Interstage Application Server Enterpri...	V11.1.0	Windows EM64T	FUJITSU LIMITED

1 - 3 of 3 items | 1/1page(s)

Parameter details

Compare configuration baselines | Patch application... | Download parameters in CSV format | Close

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.

Item	Description
Server ID	Displays the server ID.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
Site	Displays the site name.
IP address	Displays the IP address.
Host name	Displays the host name.
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. <ul style="list-style-type: none"> - 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.)

Item	Description
	<ul style="list-style-type: none"> - 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.
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. Displays in English.
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.

Information

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. <ul style="list-style-type: none"> - 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
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 " 2.5 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.

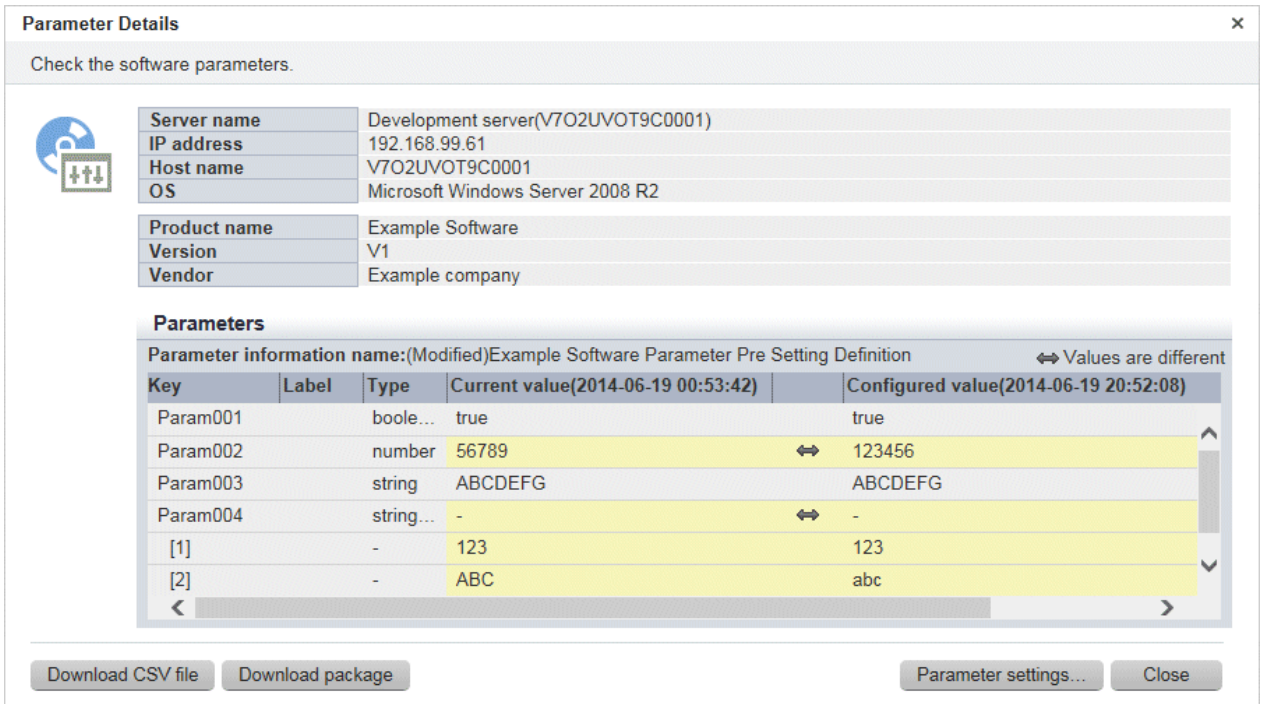
2.2.2 Parameter Details

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.



Operation method

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.
Type	- 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.
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.

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management** Patch management Job management

Hardware list Server list Software list **Configuration modification template list** Maintenance

▼ Filter

Product name Version OS All Vendor

Filter Cancel filter

1 - 2 of 2 items | 1/1 page(s)

Product name	Version	OS	Vendor	Servers with the pr...
Interstage Application Server Enterprise Edition	V9.2.0	Windows EM64T	FUJITSU LIMITED	2
Interstage Application Server Enterprise Edition(64bit)	V11.1.0	Linux	FUJITSU LIMITED	1

Note

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	<p>The following filter conditions can be specified. Multiple filter conditions can be specified.</p> <ul style="list-style-type: none"> - Product name - Version

Display item	Description
	- 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.

Operation method

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.

Item	Description
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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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 List of Configuration Modification Templates

Display method

1. Log in to the management console.
2. Use either of the following methods to display the list.
 - a. Select Configuration management from the menu of the management console, and then select the **Configuration modification template list** tab.
 - b. Click the **Configuration modification template list** link on the **Home** window.

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management** Patch management Job management

Hardware list Server list Software list Configuration modification template list Maintenance

Configuration modification template list Items: 5

Template name	Template ID	Scope	Owner
Template 0	0000000001	#GLOBAL	cfmgadmin
Template 1	0000000002	tenant1	cfmgadmin
Template 2	0000000003	tenant2	cfmgadmin
Template 3	0000000004	tenant3	cfmgadmin
Template 4	0000000005	tenant4	cfmgadmin

Create

Operation Method

Display items

The following table shows the items that are displayed in the configuration modification template list:

Display item	Description
Template name	Displays the template name. Clicking a template name displays the Template Details window.
Template ID	Displays the template ID.
Scope	Displays the scope.
Administrator	Displays the administrator.

Operation Buttons

The following operations can be performed from the **Configuration modification template list** window:

Operation button	Description
Create	The Configuration Modification Template wizard is displayed.

2.4.1 Details of the Configuration Modification Template

Display method

1. Click a template name on the **Configuration modification template list** window.

2. The **Configuration modification template details** window is displayed.

In the **Configuration modification template details** window, the detailed information of the configuration modification template is displayed.

The screenshot shows the 'Systemwalker Software Configuration Manager' interface. The top navigation bar includes 'Home', 'Configuration management' (selected), 'Patch management', and 'Job management'. Below this, there are sub-navigation tabs: 'Hardware list', 'Server list', 'Software list', 'Configuration modification template list' (selected), and 'Maintenance'. The breadcrumb path is 'Configuration modification template list / Configuration modification template details'. The main content area is divided into two sections: 'Template information' and 'Parameters'.

Template name	Template 0
Template ID	000000001
Scope	#GLOBAL
Owner	cfmgadmin
Description	desc

Parameter name	Description
Server: <code>ap-server</code>	Application server
File: <code>install_info_file</code>	Install information file
String: <code>setup_mode</code>	Setup mode
Password: <code>admin_password</code>	Administrator password
Boolean: <code>reboot</code>	Reboot
Number: <code>timeout</code>	Timeout

Processing

- Server operation check** Server operation check

Target	<code>ap-server</code>
--------	------------------------

Buttons: Edit, Copy and edit, Delete

Operation Method

Template Information

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

Display item	Description
Template name	Displays the template name.
Template ID	Displays the template ID.
Scope	Displays the scope.
Administrator	Displays the administrator.
Description	Displays a description.

Parameter

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

Display item	Description
Parameter name	Displays the type and name of the parameter.
Description	Displays a description.

Process

Process information is displayed in the bottom section of the window. The following information is displayed in the order processes are executed.

Display information	Description
Process type	Displays the type of the process.
Process name	Displays the name of the process.
Setting information	Displays the setting information configured for the process.

Operation Buttons

The following operations can be performed from the **Configuration modification template details** window:

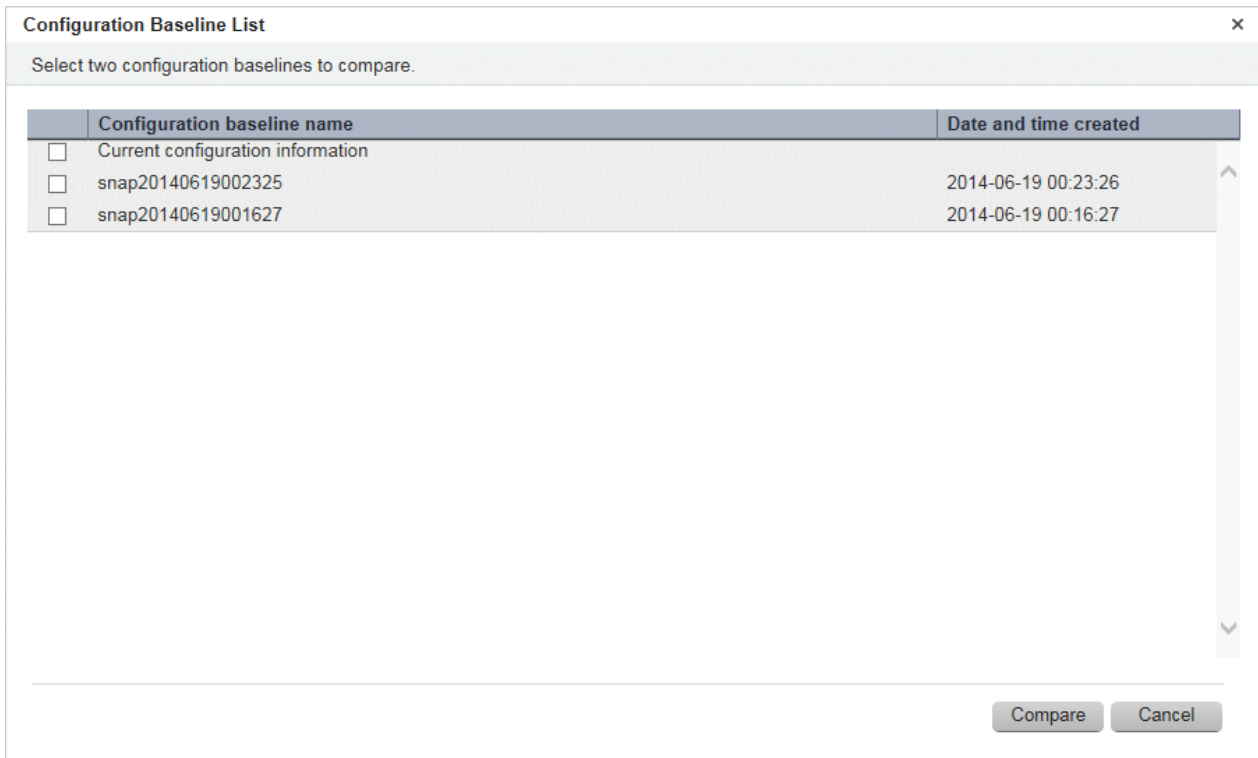
Operation button	Description
Edit	The Configuration Modification Template wizard is displayed. Edits details of the Configuration Modification Template .
Copy and edit	The Configuration Modification Template wizard is displayed. Creates a new Configuration Modification Template based on the already created Configuration Modification Template .
Delete	Deletes the Configuration Modification Template .

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

Operation buttons

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

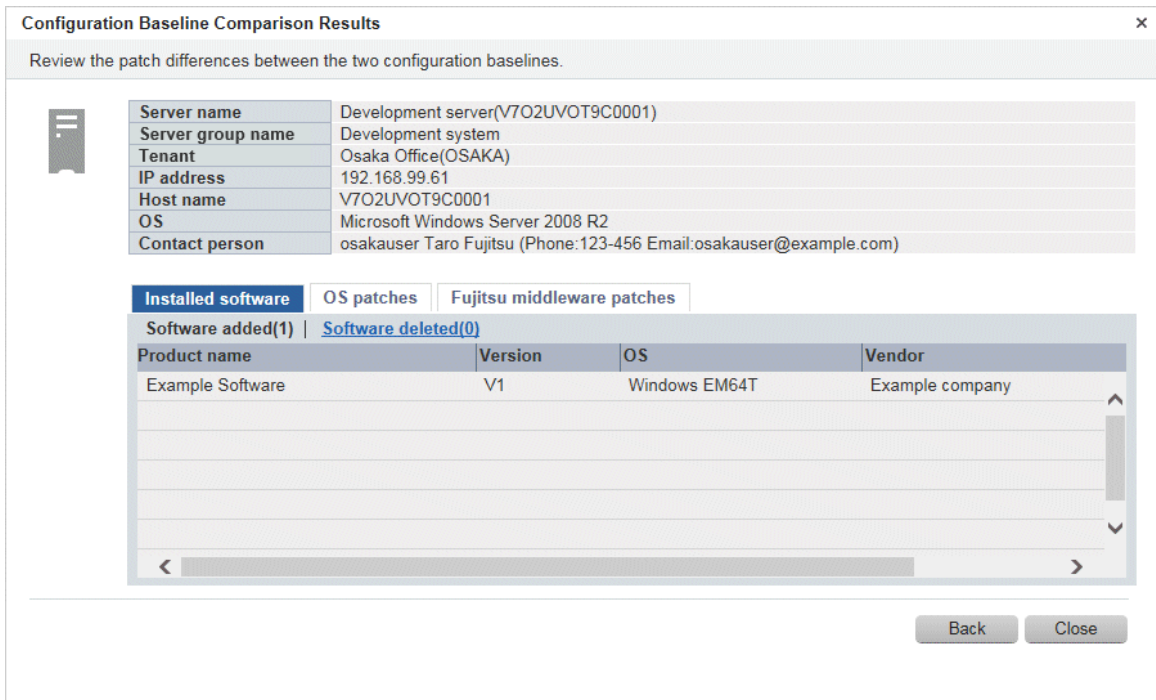
Operation button	Description
Compare	Compares the two selected configuration baselines.
Cancel	Returns to the Server Details window.

2.5.1 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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
IP address	Displays the IP address.
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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.

2.6 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

2.6.1 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.

Patch Application x

Select type > Select patches > Application method > Confirm > Patching request complete >

Select the type of patch to apply and the target operating system. The patch will only be applied to servers with this operating system.

Select the patch type and operating system

Patch type	<input checked="" type="radio"/> OS patches <input type="radio"/> Fujitsu middleware patches
OS	<input checked="" type="radio"/> Windows <input type="radio"/> Linux

Operation method

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: <ul style="list-style-type: none"> - OS patches - Fujitsu middleware patches
OS	Select either of the following as the operating system to which the patch is to be applied: <ul style="list-style-type: none"> - 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.

2.6.2 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.

The screenshot shows a 'Patch Application' wizard with the following steps: Select type, Select patches, Application method, Confirm, and Patching request complete. The current step is 'Select patches [OS patches – Windows]'. It displays a table of 'Selected servers(3 items)' and a table of 'OS patches to apply'.

Server name	OS	Server group name	Tenant
Verification server (DB)(V7O2UVOT9C0002)	Microsoft Windows Serv...	Development system	Kobe Office(kobe)
VM22124637(VM22124637)	Windows Server 2008 R...	AR6S8TIEN	Kobe Office(kobe)
WIN-9719MPF195T(WIN-9719MPF195T)	Windows Server 2008 R...	P6L7NX4A8	Kobe Office(kobe)

Patch ID	Class	Product name	Patch type	Overview	Release date
<input type="checkbox"/> KB2032276	Required	Windows Serve...	Security Updates	Security Update for Win...	2010-07-13
<input type="checkbox"/> KB2079403	Required	Windows Serve...	Security Updates	Security Update for Win...	2010-08-10
<input type="checkbox"/> KB2160329	Required	Windows Serve...	Security Updates	Security Update for Win...	2010-08-10
<input type="checkbox"/> KB2207566	Required	Windows Serve...	Security Updates	Security Update for Win...	2010-12-14
<input type="checkbox"/> KB2249857	Recommended	Windows Serve...	Updates	Update for Windows Ser...	2010-10-26
<input type="checkbox"/> KB2264107	Recommended	Windows Serve...	Updates	Update for Windows Ser...	2011-01-11

Buttons: Back, Next, Cancel

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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.

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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - Security Updates

Item	Description
	<ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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

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.

2.6.3 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. <ul style="list-style-type: none"> - 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 return values to determine the operations have completed successfully during script execution. Also specify whether to execute a post-

Item	Description
	<p>execution script at single-user execution level when distributing Fujitsu middleware patches.</p> <p>To apply Fujitsu middleware patches, a script specifying the application processing must be created and then registered as a post-execution script.</p> <p>It is recommended to create the scripts registered here so that they output "0" as the return value to indicate normal completion and a value other than "0" as the return value to indicate an error.</p> <p>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.</p> <p>Specify one of the following values for the return value to use to determine that the operation has completed successfully.</p> <ul style="list-style-type: none"> - 0: The return value "0" is handled as normal termination, whereas values other than "0" are handled as errors. - All: All return values are handled as normal termination. <p>Configure whether to execute the script at single-user execution level by specifying one of the following values: If the execution target is a Windows server, "on" cannot be specified.</p> <ul style="list-style-type: none"> - on: Switches the execution level to single-user and executes a script. - off: Executes a script without switching the execution level. <p>Refer to "Creating Scripts and Specifying Commands" in the Operation Guide for information on the scripts that are registered here.</p> <p>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.</p>
<p>Restart operating system after application</p>	<p>Select whether to restart the server after the patch is distributed and applied. When executing the post-execution script at single-user execution level, the OS is restarted after the script is executed. Therefore, it is not necessary to select "Yes".</p> <ul style="list-style-type: none"> - Yes <p>The behavior varies depending on the patch type, as follows:</p> <ul style="list-style-type: none"> - OS patches <p>The server will only be restarted for those patches that need to have the server restarted.</p> <ul style="list-style-type: none"> - Fujitsu middleware patches <p>The server will be restarted without fail.</p> <ul style="list-style-type: none"> - No <p>The server will not be restarted.</p>

Operation buttons

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

2.6.4 Confirm

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

Check the settings that have been entered.

x
Patch Application

Select type >
Select patches >
Application method >
Confirm >
Patching request complete >

Check the patch application details.

Confirm

Application method

Schedule	Immediately		
Script registration	Before execution	-	Normal return value: -
	After execution	-	Normal return value: -
Restart operating system after application	Reboot (when required)		

Update details

Server name	Patch ID	Class	Patch type	Server group name	Tenant
windows01	KB2800095	Recommended	Updates	Development Server	Kobe Office

Download CSV file
Back
Execute
Cancel

Operation method

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 type of each patch ("Urgent").
Server group name	Displays the server group name.	

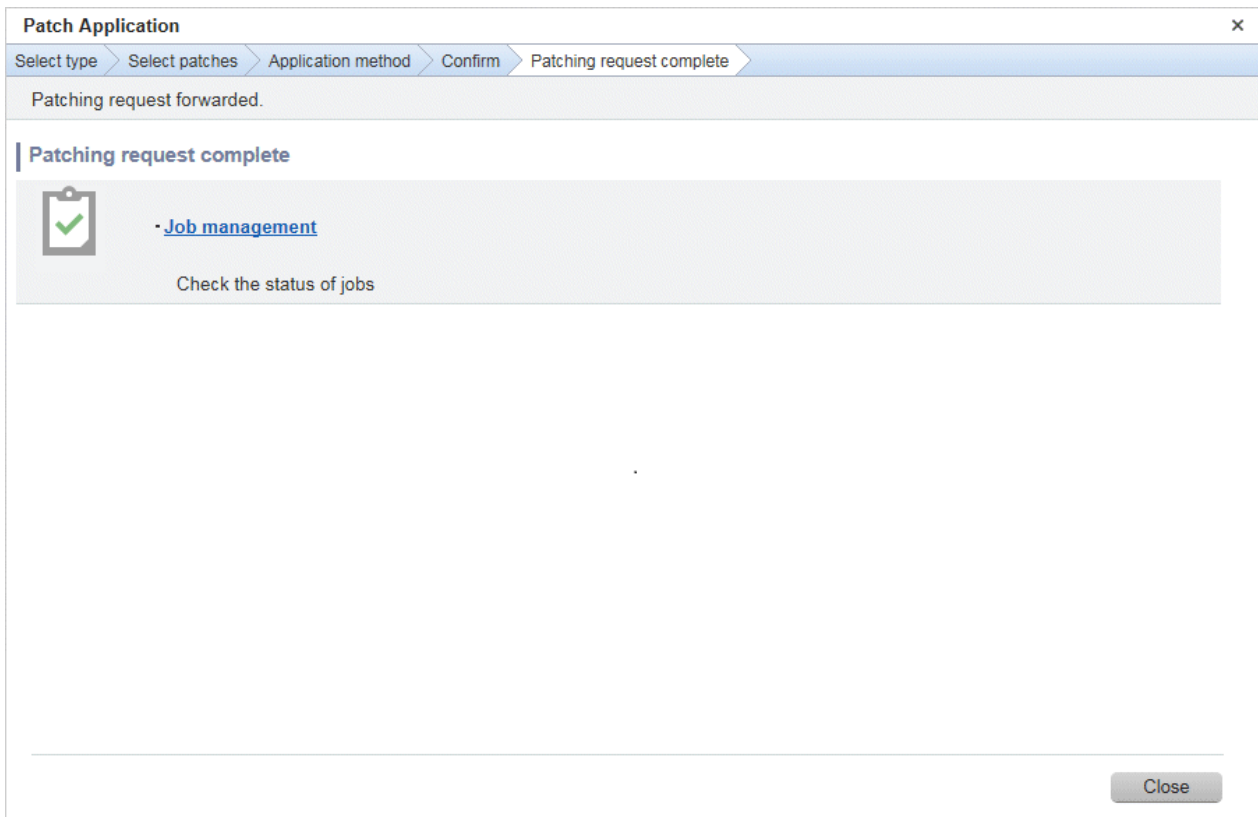
Item	Description
Tenant	Displays the tenant.

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.

2.6.5 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.

2.7 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

2.7.1 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.

Operation method

OS Selection

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

Item	Description
OS	<p>Select one of the following operating systems for the server on which the parameter settings are to be applied:</p> <ul style="list-style-type: none"> - Windows - Linux <p>If only Windows servers or Linux servers have been selected, the radio buttons will be grayed out so that they cannot be selected.</p>

Operation buttons

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

2.7.2 Software Selection

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

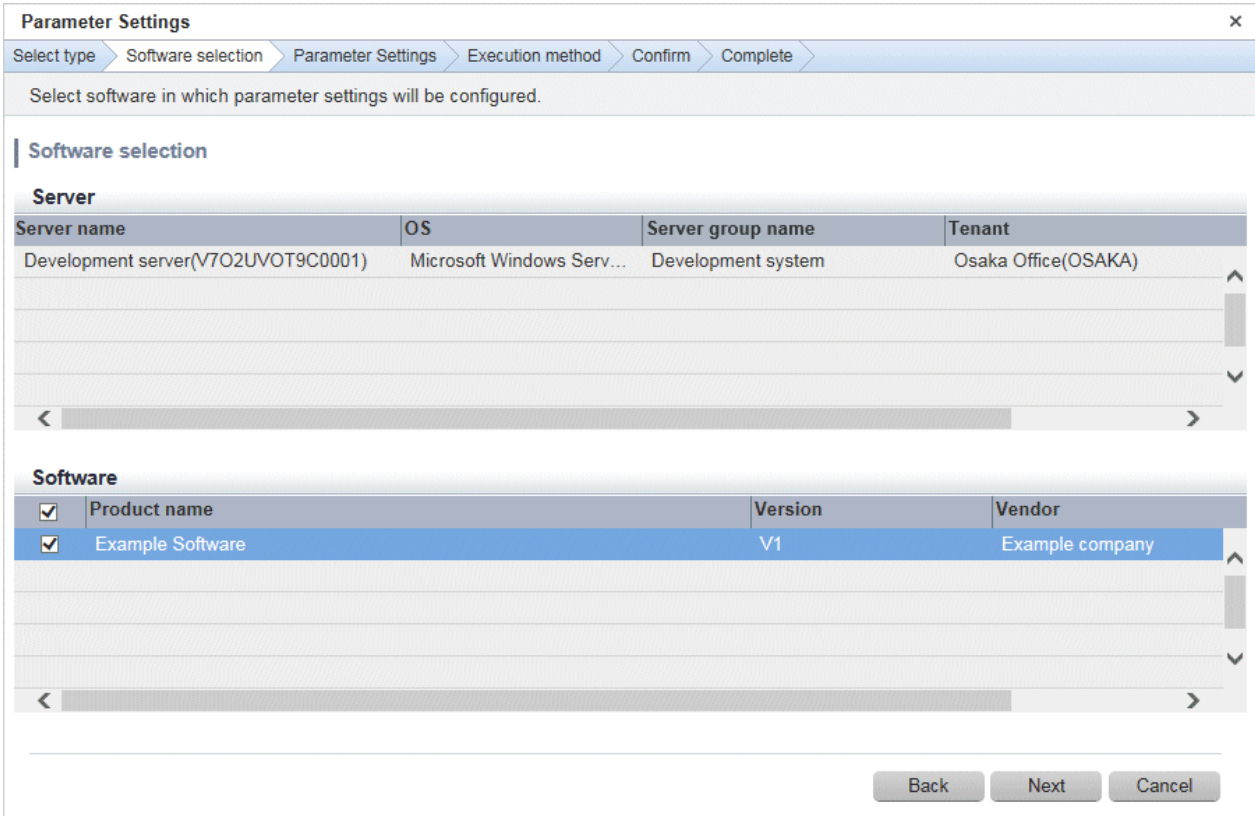
The **Software list** displays the software on the selected server for which parameters can be configured.

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.



Operation method

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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.

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.

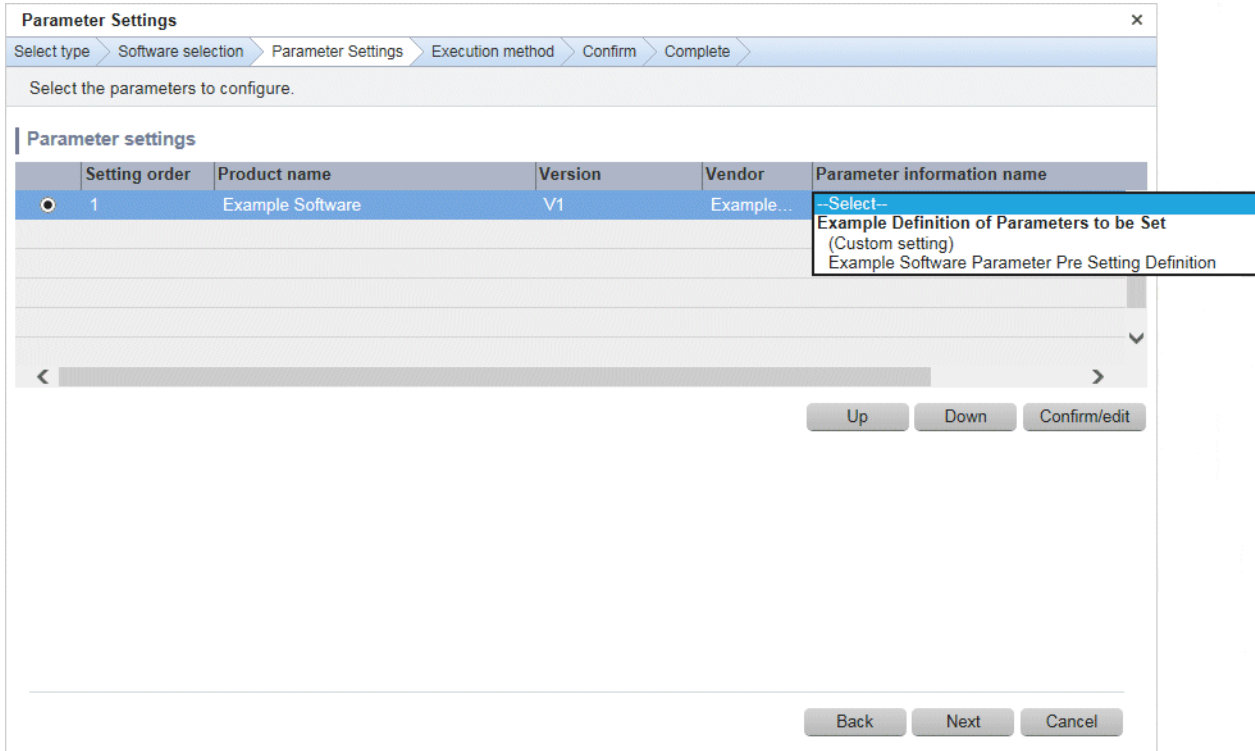
Operation button	Description
Cancel	Closes the Parameter Settings wizard.

2.7.3 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. 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.

2.7.4 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.

Edit Parameter Information ✕

Enter parameter value.

Software information

Product name (version) Example Software (V1)

Parameter information

Parameter information name Example Definition of Parameters to be Set
↳ Example Software Parameter Pre Setting Definition

Description Example Definition

Package Do not use New upload Use defined package

* Modified

	Key	Label	Type	Current value	Value to configure
<input checked="" type="radio"/>	Param001	Parameter of bo...	boolean	true	true
<input type="radio"/>	Param002		number	56789	* 123456
<input type="radio"/>	Param003	Parameter of ch...	string	ABCDEFGFG	* abcdefg
<input type="radio"/>	Param004	Parameter of stri...	string array	-	-
	[1]		-	123	123
	[2]		-	ABC	abc
	[3]		-	ABC	ABC

< >

Edit Cancel editing Set default value

OK Cancel

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: <ul style="list-style-type: none"> - 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.
Type	Displays the parameter type: <ul style="list-style-type: none"> - 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 buttons

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.

Information

- 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

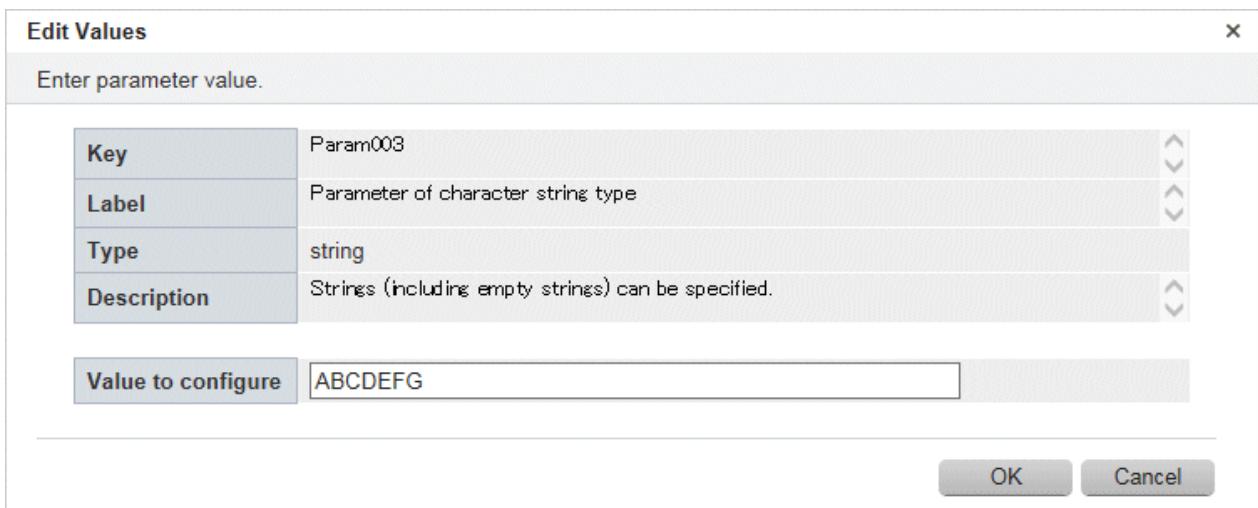
You cannot use Japanese in file names. Other restrictions conform to operating system conventions.

2.7.5 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



Key	Value
Key	Param003
Label	Parameter of character string type
Type	string
Description	Strings (including empty strings) can be specified.

Value to configure: ABCDEFGH

OK Cancel

'boolean' parameter key types

Edit Values [X]

Enter parameter value.

Key	Param001
Label	Parameter of boolean type
Type	boolean
Description	The values true and false can be specified.

Value to configure true false

OK Cancel

'string array' parameter types

Edit Values [X]

Enter parameter value.

Key	Param004
Label	Parameter of string array type
Type	string array
Description	String arrays with zero or more elements can be specified.

	[Array number]	Value to configure
<input checked="" type="radio"/>	1	123
<input type="radio"/>	2	abc
<input type="radio"/>	3	ABC

Up Down Delete Add

OK Cancel

'map' parameter types

Edit Values [Close]

Enter parameter value.

Key	Param005
Label	Parameter of map type
Type	map
Description	Zero or more pairs (entries) of subkeys and values can be specified as values.

	[Subkey]	Value to configure
<input checked="" type="radio"/>	subkey001	abc
<input type="radio"/>	subkey002	def
<input type="radio"/>	subkey003	ghi

Delete Add

OK Cancel

Operation method

Software information

Item	Description
Key	Displays the parameter key.
Label	Displays the parameter label.
Type	Displays the parameter type.
Description	Displays a description of the parameter.
Value to configure	<ul style="list-style-type: none"> - '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 buttons

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.
OK	Confirms the configured details and closes the Edit Values window.
Cancel	Discards the configured details and closes the Edit Values window.



Note

When specifying the variables of the host name for the value

The information of the host name cannot be collected on OpenStack servers. When configuring the parameters for an OpenStack server, an empty string is specified for the variable values of the host name.

2.7.6 Execution Method

Click **Next** in the **Parameter Settings** window to display the **Execution Method** window.

Parameter Settings
x

Select type
Complete

Software selection
Confirm

Parameter Settings
Execution method

Enter how the parameter settings will be executed.

Enter execution method

Schedule		<input checked="" type="radio"/> Immediately <input type="radio"/> Specific date and time <input type="text" value="yyyy-mm-dd"/> <input type="text" value="00"/> : <input type="text" value="00"/>
Script	Before execution	<input type="text"/> <input type="button" value="Browse..."/> Normal return value: <input checked="" type="radio"/> 0 <input type="radio"/> All
	After execution	<input type="text"/> <input type="button" value="Browse..."/> Normal return value: <input checked="" type="radio"/> 0 <input type="radio"/> All
Restart operating system after execution		<input type="radio"/> Yes <input checked="" type="radio"/> No

Operation method

Execution method input

Item	Description
Schedule	Specify a schedule.

Item	Description
	<ul style="list-style-type: none"> - 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	<p>Specify the scripts to be executed before and after setting the parameters, as well as the return values to determine the operations have completed successfully during script execution.</p> <p>It is recommended to create the scripts registered here so that they output "0" as the return value to indicate normal completion and a value other than "0" as the return value to indicate an error.</p> <p>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.</p> <p>Specify one of the following values for the return value to use to determine that the operation has completed successfully.</p> <ul style="list-style-type: none"> - 0: The return value "0" is handled as normal termination, whereas values other than "0" are handled as errors. - All: All return values are handled as normal termination. <p>Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the scripts that are registered here.</p> <p>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 <i>Reference Guide</i> for details on the command.</p>
Restart operating system after execution	<p>Select whether to restart the server after parameters have been set.</p> <ul style="list-style-type: none"> - Yes: Restart server. - No: Do not restart server.

Operation buttons

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

2.7.7 Confirmation

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

Check the settings that have been entered.

Parameter Settings ×

Select type > Software selection > Parameter Settings > Execution method > Confirm > Complete

Check the parameter setting details.

Confirm

Execution method

Schedule	Immediately		
Script	Before execution	-	Normal return value: -
	After execution	-	Normal return value: -
Restart operating system after execution	No		

Parameter settings

Setting order	Server name	Server group name	Tenant	Product name	Version	Parameter information name
1	Developmen...	Development sys...	fnst_auto_te...	Example Software	V1	(Modified) Example Software...

Download CSV file Back Execute Cancel

Operation method

Parameter settings

Item	Description
Setting order	Displays the order in which parameters will be configured for each server.
Server name	Displays the server name.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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.

2.7.8 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.

Check Parameter Information ✕

Check the parameter values.

Software information

Product name (version) Example Software (V1)

Parameter information

Parameter information name Example Definition of Parameters to be Set
L (Modified)Example Software Parameter Pre Setting Definition

Description Example Definition

Package

* Modified

Key	Label	Type	Current value	Value to configure
Param001	Parameter of boo...	boolean	true	true
Param002		number	56789	* 123456
Param003	Parameter of cha...	string	ABCDEFGF	* abcdefg
Param004	Parameter of stri...	string array	-	-
[1]		-	123	123
[2]		-	ABC	abc
[3]		-	ABC	ABC

Close

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.
Type	Displays the parameter type: <ul style="list-style-type: none"> - string - number - boolean - string array - map
Current value	Displays the parameter value that was discovered.

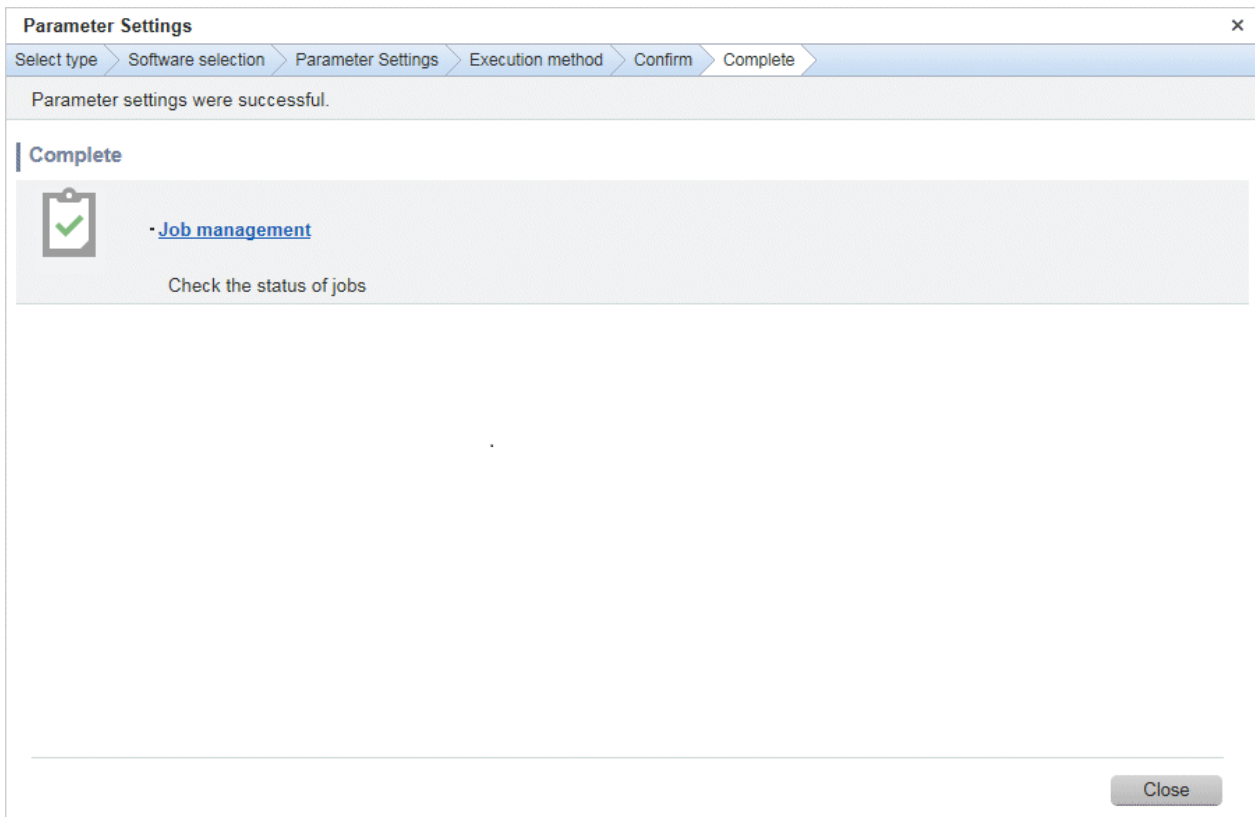
Item	Description
Value to configure	Displays the value last set using parameter settings.

Operation buttons

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

2.7.9 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.

2.8 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

2.8.1 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.

The screenshot shows a window titled "Script Execution" with a close button (X) in the top right corner. Below the title bar is a progress indicator with four steps: "Select type", "Execution method", "Confirm", and "Complete". The "Select type" step is currently active. The main content area contains the text "Select the OS." followed by a section titled "OS selection". Under "OS selection", there is a table with one row labeled "OS". To the right of this row are two radio button options: "Windows" (which is selected) and "Linux". At the bottom right of the window, there are two buttons: "Next" and "Cancel".

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
	<ul style="list-style-type: none"> - Windows - Linux <p>If only Windows servers or Linux servers have been selected, the radio buttons will be grayed out so that they cannot be selected.</p>

Operation buttons

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

2.8.2 Execution Method

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

x
Script Execution

Select type > Execution method > Confirm > Complete >

Configure how the script will be executed.

Enter execution method

Schedule	<input checked="" type="radio"/> Immediately <input type="radio"/> Specific date and time <input style="width: 100px;" type="text" value="yyyy-mm-dd"/> <input style="width: 30px;" type="text" value="00"/> <input style="width: 30px;" type="text" value="00"/> <input type="button" value="Browse..."/>
Script	Normal return value: <input checked="" type="radio"/> 0 <input type="radio"/> All Single-user mode: <input type="radio"/> on <input checked="" type="radio"/> off
Restart operating system after execution	<input type="radio"/> Yes <input checked="" type="radio"/> No

Operation method

Execution method input

Item	Description
Schedule	Specify a schedule. <ul style="list-style-type: none"> - 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	<p>Specify the script to be executed and the return value to determine the operation has completed successfully during script execution. Also specify whether to execute a post-execution script at single-user execution level.</p> <p>It is recommended to create the scripts registered here so that they output "0" as the return value to indicate normal completion and a value other than "0" as the return value to indicate an error.</p> <p>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.</p> <p>Specify one of the following values for the return value to use to determine that the operation has completed successfully.</p> <ul style="list-style-type: none"> - 0: The return value "0" is handled as normal termination, whereas values other than "0" are handled as errors. - All: All return values are handled as normal termination. <p>Configure whether to execute the script at single-user execution level by specifying one of the following values: If the execution target is a Windows server, "on" cannot be specified.</p> <ul style="list-style-type: none"> - on: Switches the execution level to single-user and executes a script. - off: Executes a script without switching the execution level. <p>Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the scripts that are registered here.</p> <p>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 <i>Reference Guide</i> for details on the command.</p>
Restart operating system after execution	<p>Select whether to restart the server after the script has been executed.</p> <ul style="list-style-type: none"> - Yes: Restart server. - No: Do not restart server.

Operation buttons

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

2.8.3 Confirm

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

Check the settings that have been entered.

Script Execution x

Select type > Execution method > **Confirm** > Complete

Check the execution details of the script.

Confirm

Execution method

Schedule	Immediately	
Script	test.bat	Normal return value: 0
Restart operating system after execution	Single-user mode: off	
Restart operating system after execution	No	

Server Information

Server name	Server group name	Tenant
Windows Server	Development Server	Tokyo

Download CSV file
Back
Execute
Cancel

Operation method

Server information

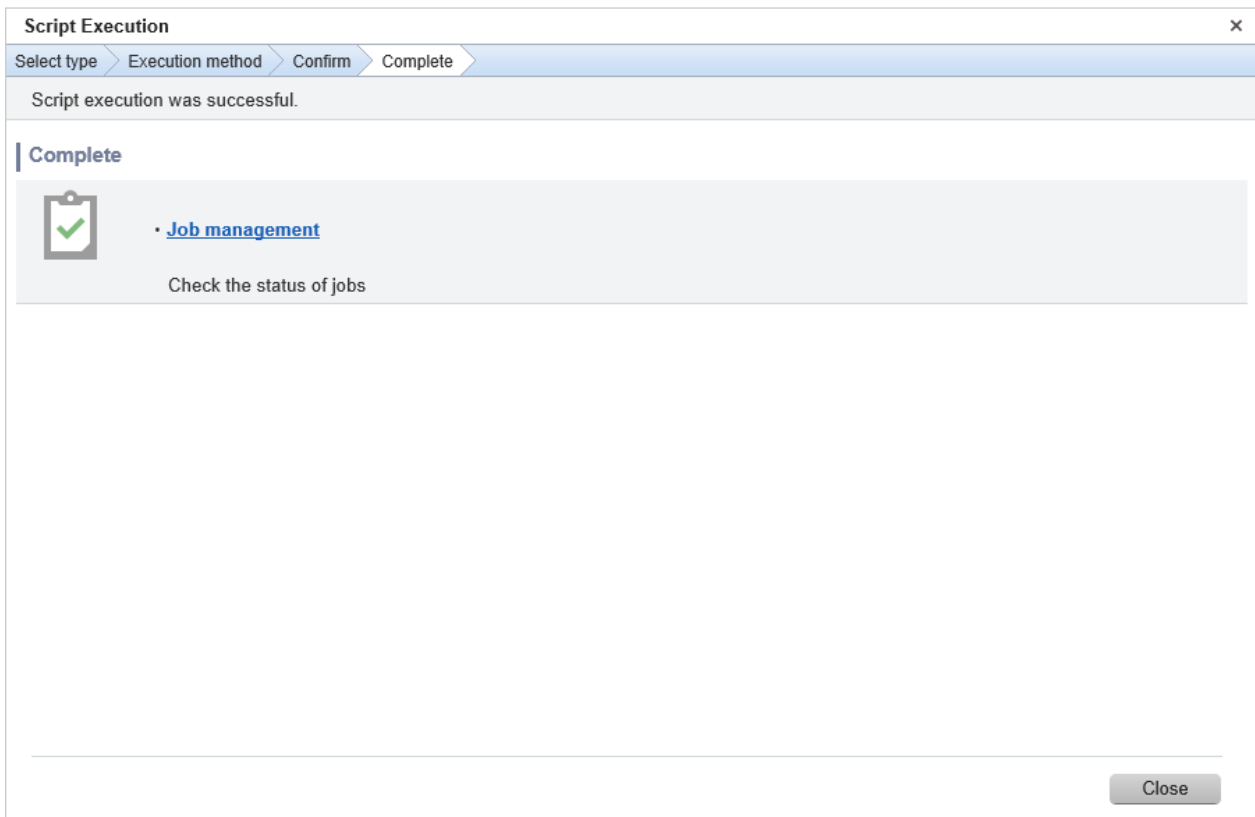
Item	Description
Server name	Displays the server name.
Server group name	Displays the server group name.
Tenant	Displays the tenant.

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.

2.8.4 Complete

Click **Execute** 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 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.

2.9 Configuration Modification Template Wizard

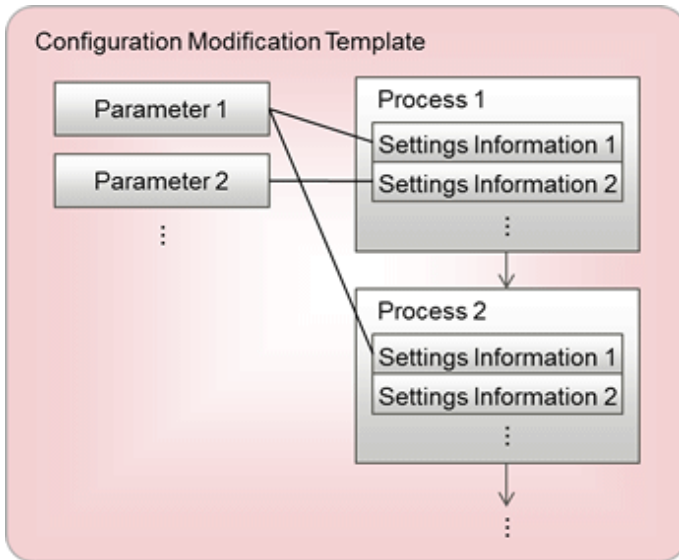
In the **Configuration modification template wizard** window, execute creation, reference, and edition of configuration modification templates.

2.9.1 Configuring Configuration Modification Templates

This section explains configuration of the **Configuration Modification Template**. The information comprising a **Configuration Modification Template** is as follows.

Information	Description
Process	A process of configuration modification that is executed from the Configuration Modification Template . Multiple processes are executed sequentially.

Information	Description
Setting information	A parameter to define the behavior of a process.
Parameter	A parameter of the Configuration Modification Template . The setting information of the process can be defined as parameters of the template. For the parameter, the values are specified when performing configuration modification using the Configuration Modification Template . A high rate of reuse of templates is possible by defining the setting information that is frequently modified as parameters.



2.9.2 Creating Configuration Modification Templates

This section explains the flow of creating a **Configuration Modification Template**. Create a **Configuration Modification Template** based on the information provided by the software vendor described in manuals.

2.9.2.1 Definition of Template Information

Decide the information of a **Configuration Modification Template**. Specify the following information:

Item	Description
Name	A template name. Specify a character string of up to 85 characters (excluding <, >, &, ", ', , and ,). Names cannot be omitted.
Scope	The scope of the template. For dual-role administrators and infrastructure administrators, global is configured as the default value. Select the desired scope. For tenant administrators and tenant users, the scope is fixed to the tenant belonged to. Scopes cannot be omitted.
Description	A description of a tenant. Specify a character string of up to 256 characters. Descriptions can be omitted.

2.9.2.2 Definition of Process

Define the process to execute. Select the desired process from the following processes, and decide the order for execution. The same type of process can be selected multiple times. After this operation, specify a character string of up to 85 characters (excluding <, >, &, ", ', |, and ,) for the name of selected process. The name of the process type is configured as the default value. Process names cannot be omitted.

Process type	Description
Server operation check	Checks the operational status of the business server. Use this process to check the operational status of a server before installation.
Script execution	Transfers the specified scripts to the business server, and executes them. Use this process for executing the installer.

Process type	Description
	Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the scripts that can be executed here.
OS restart	Restarts the OS of the business server. Use this process when restarting the OS after installing software on the OS that requires restarting after installation.
Command execution	Executes the commands specified for the business server. Use this process for executing the installer. Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the commands that can be executed here.
File distribution	Distributes the files specified for the business server. Use this process for distributing the installer. <ul style="list-style-type: none"> - When files with the same names exist in the distribution destination, they are overwritten. - When the business server is Linux or Solaris, the access authority of distributed files is 644.
File collection	Collects files from the business server, and stores them in the specified directory of the admin server. For the storage location, specify a directory under the reference directory that is the standard storage location. Use this process when collecting execution results such as installation logs, etc. <ul style="list-style-type: none"> - When there is no directory for the storage location, one will be automatically created. - When files with the same names exist in the storage location, they are overwritten. - When the admin server is Linux, the access authority for the collected file is 755.

Reference directory for the storage location

The reference directories for the storage location are the following directories of the admin server. For details on how to modify the reference directory for the storage location, refer to "Changing the Reference Directory for the Storage Location" in the *Operation Guide*.

[Windows]

%ProgramData%\Fujitsu\SWCFMGM\storagedir

[Linux]

/var/opt/FJSVcfmgm/storagedir

2.9.2.2.1 Work Directory

A work directory is the directory created for each job on the business server, when configuration modification is executed. There are the following features:

- Script execution, scripts executed when commands are executed, and current directories of the commands
- Can be specified for file distribution, file collection, distribution destination, and collection files
- Automatically deleted when the job is completed

Note

- Note that the work directories are not deleted by command execution or by processing of script execution. If the work directories are deleted, configuration modification may not be executed correctly.
- If the business server is not operating correctly when a job is completed, deletion of the work directory will fail. In this case, manually delete the following directories after a job is completed. Be careful not to delete a work directory for which a job has not been completed by accident.

[Windows]

[Systemwalker Software Configuration Manager installation directory]\SWCFMGB\var\process\

[Linux/Solaris]

```
/var/opt/FJSVcfmgb/process/<Job ID>_<yyyyMMddHHmmss>
```

2.9.2.3 Definition of Setting Information

Define the setting information of the process. Define the following setting information values according to the process types. For values, specify the fixed value or a parameter.

- For the fixed values, the values that can be specified differ depending on the setting information.
- For parameters, specify the parameter in the following format: For parameter names, alphanumeric characters (up to 256 characters), and ".", "_", and "-" can be used. However, parameter names must start with an alphabetic character. Parameter names cannot be omitted.

```
{{Parameter name}}
```

- When specifying the work directory in the setting information, enter the variables. Enter the variables in the following format:

```
#{Variable name}
```

The available variable is shown below.

Variable Name	Description
work.directory	Work directory

- In some setting information, both the fixed value and the parameter can be specified at the same time.

Example:

```
timeout={{param}}
```

- A single parameter can be specified for multiple pieces of setting information. In this case, the setting information that can be specified differs based on the parameter types used. For details, refer to "[Specifiable parameter types for setting information](#)" in "[2.9.2.4 Definition of Parameters](#)".

Process type	Setting information	Description	Use with parameters
Server operation check	Target	The target of process execution. - Targets cannot be omitted.	-
	Monitoring time	The monitoring time of servers. - Specify the monitoring time, in minutes, using a number between 0 and 1440. - When 0 is specified, the operational status is checked once. When it has been confirmed that the server is operating, the operation completes normally. - When a value larger than 0 is specified, the operation check can be executed multiple times during the specified monitoring time. The operation completes when the operational status is confirmed. - 0 is configured as the default value. - Monitoring time cannot be omitted.	-
Script execution	Target	The target of process execution. - Targets cannot be omitted.	-

Process type	Setting information	Description	Use with parameters
	Script	<p>A script file for execution.</p> <ul style="list-style-type: none"> - Up to 155 alphanumeric characters, blank spaces, and the following symbols can be used in the file name. <p>~, \, -, ., (,)</p> <ul style="list-style-type: none"> - Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the scripts that can be executed here. - Scripts cannot be omitted. 	-
	Argument	<p>An argument of the scripts to execute.</p> <ul style="list-style-type: none"> - Specify 3,800 or less characters, including the file names of the scripts. (*1) - When omitted, the scripts are executed without arguments. 	Y
	Normal return value	<p>A return value to determine that the operation has completed successfully.</p> <ul style="list-style-type: none"> - Specify the return value to use to determine that the operation has completed successfully. Multiple return values can be specified separated by commas ",". - When all return values are used to indicate an operation was completed successfully, specify only an asterisk (*). - When the same return value is specified multiple times, an error occurs. - 0 is configured as the default value. - Normal return values cannot be omitted. 	Y
	Single-user mode	<p>Specify whether to execute at single-user execution level. This setting is only valid when the execution target is Linux or Solaris.</p> <ul style="list-style-type: none"> - When "true" is specified, the execution level is switched to single-user and then the script is executed. After the script is executed, the execution level is switched back to the level that it was before switchover. - When "false" is specified, the script is executed without switching the execution level. - When something other than "true" or "false" is specified, an error will occur. - "false" is specified by default. - In single-user mode, this item cannot be omitted. 	
OS restart	Target	<p>The target of process execution.</p> <ul style="list-style-type: none"> - Targets cannot be omitted. 	-
Command execution	Target	<p>The target of process execution.</p> <ul style="list-style-type: none"> - Targets cannot be omitted. 	-
	Command	<p>The file path of the command to execute. When the blank spaces are included in the file path, enclose the file path in double quotes "" based on the OS specifications. When the work directory is also included in the file path, enclose the file path in double quotes "".</p> <ul style="list-style-type: none"> - Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the commands that can be executed here. - Commands cannot be omitted. 	Y

Process type	Setting information	Description	Use with parameters
	Argument	An argument for the command to be executed. <ul style="list-style-type: none"> - Specify using 3,800 or less characters, including commands. (*1) - When omitted, the commands are executed without arguments. 	Y
	Normal return value	A return value to determine that the operation has completed successfully. <ul style="list-style-type: none"> - Specify the return value to use to determine that the operation has completed successfully. Multiple return values can be specified separated by commas ",". - When all return values are used to indicate an operation was completed successfully, specify only an asterisk (*). - When the same return value is specified multiple times, an error occurs. - 0 is configured as the default value. - Normal return values cannot be omitted. 	Y
	Single-user mode	Specify whether to execute at single-user execution level. This setting is only valid when the execution target is Linux or Solaris. <ul style="list-style-type: none"> - When "true" is specified, the execution level is switched to single-user and then the script is executed. After the script is executed, the execution level is switched back to the level that it was before switchover. - When "false" is specified, the script is executed without switching the execution level. - When something other than "true" or "false" is specified, an error will occur. - "false" is specified by default. - In single-user mode, this item cannot be omitted. 	
File distribution	Target	The target of process execution. <ul style="list-style-type: none"> - Targets cannot be omitted. 	-
	Distribution file	A file to distribute. <ul style="list-style-type: none"> - Alphanumeric characters, blank spaces, and the following symbols can be used for the file name. ~, _, -, ., (,) - Distribution files cannot be omitted. 	-
	Distribution destination	The directory path of the distribution destination of the file. <ul style="list-style-type: none"> - Specify the directory path using an absolute path. - Even if blank spaces are included in the directory path, it is not necessary to enclose the directory path in double quotes "". - Environment variables cannot be used. - Alphanumeric characters, blank spaces, double-byte characters, and the following symbols can be used for the directory name. ~, _, -, ., (,) - Specify using 254 or less characters, including the file names of the distribution files. (*1) 	Y

Process type	Setting information	Description	Use with parameters
		<ul style="list-style-type: none"> - Directories in the installation directory of this product cannot be specified. - #{work.directory} (work directory) is configured as the default value. - Distribution destinations cannot be omitted. 	
File collection	Target	<p>The target of process execution.</p> <ul style="list-style-type: none"> - Targets cannot be omitted. 	-
	Collection file	<p>The file path for file collection.</p> <ul style="list-style-type: none"> - Specify the file path using an absolute path. - Even if blank spaces are included in the file path, it is not necessary to enclose the file path in double quotes "". - Environment variables cannot be used. - Specify a file path of up to 255 characters. (*1) - Alphanumeric characters, blank spaces, and the following symbols can be used for the file name. ~ , _ , - , . , (,) - Alphanumeric characters, blank spaces, double-byte characters, and the following symbols can be used for the directory name. ~ , _ , - , . , (,) - It is only possible to collect one file. '*' Wildcards, such as asterisks, cannot be used. - Collection files cannot be omitted. 	Y
	Storage location	<p>The directory path for the storage location of collection files.</p> <ul style="list-style-type: none"> - Specify the directory path using a relative path from the reference directory for the storage location. Directories above the reference directory for the storage location cannot be specified. - Even if blank spaces are included in the directory path, it is not necessary to enclose the directory path in double quotes "". - Environment variables cannot be used. - Specify the file path of the reference directory for the storage location, including the file name of the collection file, using 254 characters or less. - Alphanumeric characters, blank spaces, double-byte characters, and the following symbols can be used for the directory name. ~ , _ , - , . , (,) - The storage location cannot be omitted. 	Y

Y: Both a fixed value and a parameter can be specified at the same time.

N: Either a fixed value or a parameter can be specified.

*1: When the work directory is included in the specified value, the number of characters for the work directory must be 100.

2.9.2.4 Definition of Parameters

Defines the parameter. A description using 256 or less characters can be attached to a parameter. Descriptions can be omitted.

For the parameter, specify the values when executing configuration modification from the **Configuration Modification Template**. The specifiable values differ based on the parameter types.

Parameter type	Description
Servers	A server. Specify a server among the business servers for the value.
File	A file. Specify a file from among the assets for the value. The file can also be uploaded from the management console. In this case, the file size that can be uploaded is up to 2 MB. A file name using a character string of up to 255 printable ASCII characters can be specified.
Character string	A character string. Specify the desired character string. Empty strings can also be specified.
Numeric value	A numeric value. Specify a numeric value from "-2,147,483,648" to "2,147,483,647".
Truth value	A truth value. Specify "true" or "false" for the truth value.
Password	A password. Specify the desired password using a character string. For the value, "****" is displayed. Empty strings can also be specified.

Specifiable parameter types for setting information

The following table shows the types of parameter that can be specified in the setting information. The parameter types that are not character strings can also be handled as character strings. When a server is handled as a character string, the IP address of the server used as the value is evaluated as a character string. When a file is handled as a character string, the name of the file used as the value is evaluated as a character string.

Process type	Setting information	Specifiable parameter type
Server operation check	Target	Servers
	Monitoring time	Numeric value
Script execution	Target	Servers
	Script	File
	Argument	Character string
	Normal return value	Character string
	Single-user mode	Truth-value
OS restart	Target	Servers
Command execution	Target	Servers
	Commands	Character string
	Argument	Character string
	Normal return value	Character string
	Single-user mode	Truth-value
File distribution	Target	Servers
	Distribution file	File
	Distribution destination	Character string
File collection	Target	Servers
	Collection file	Character string
	Storage location	Character string

2.9.2.5 Advisory Notes when Creating a Configuration Modification Template to Perform Software Installation

This section explains advisory notes about creating a **Configuration Modification Template** to perform installation. Only software for which silent installation can be performed can be installed for configuration modification. Perform silent installation by executing commands or scripts according to the following advisory notes:

Software requiring restarting during installation

When the server must be restarted during installation, do so by executing commands or scripts after performing silent installation. When installing software that is automatically restarted during installation, use the following installation methods:

Software for which automatic restart during installation can be prevented

Perform silent installation preventing automatic restart by executing commands or scripts, and then restart the server.

Software for which automatic restart during installation cannot be prevented

Perform silent installation by executing commands or scripts. The last process of configuration modification must be command execution or script execution. When executing commands or scripts, perform silent installation asynchronously in order to recover the commands or scripts immediately after silent installation.

When using Windows, the commands can be executed asynchronously using Start-Process of PowerShell. OS standard start commands cannot be used. An example of the command to execute is shown below.

Example:

```
powershell -Command Start-Process -FilePath 'C:\wok\setup.exe'
```

Software for which the executing user must be specified during installation

When software requires installation using a user with Administrator authority or a domain user, perform silent installation after changing the executing user by executing commands or scripts. Based on the OS type of the business server, the executing user can be changed using the following methods:

[Windows]

Use PsTools provided by Microsoft. Distribute PsTools to the business server in advance, and then specify the command and user to use to execute PsTools. An example of the command to execute is shown below. For details on PsTools, refer to the information provided by Microsoft.

Example:

```
C:\tmp\Psexec.exe /accepteula \\localhost -u "cfmg.local\cfmgadmin" -p "systemwalker#1" "C:\work\setup.exe"
```

[Linux/Solaris]

Use the OS standard su command. An example of the command to execute is shown below.

Example:

```
su - cfmgadmin -c /tmp/setup.sh
```

Software for which a window opens during installation

When a window of Windows software is opened when performing silent installation, silent installation cannot be performed using commands or scripts. When executing commands or scripts, perform silent installation asynchronously in order to recover the commands or scripts immediately after silent installation.

When using Windows, the commands can be executed asynchronously using Start-Process of PowerShell. OS standard start commands cannot be used. An example of the command to execute is shown below.

Example:

```
powershell -Command Start-Process -FilePath 'C:\wok\setup.exe'
```

2.9.3 Operation Method

This section explains the operation procedure of the **Configuration Modification Template Wizard** window.

Display method

1. Use the following method to display the software list:
 - a. Click the **Create** button in the **Configuration modification template list** window.
 - b. Click the **Edit** button in the **Configuration modification template details** window.
 - c. Click the **Copy and edit** button in the **Configuration modification template details** window.
2. Perform the following operations in the wizard format:
 - a. Entry of template information
 - b. Definition of processes
 - c. Definition of parameters
 - d. Confirmation of template details
 - e. Completion

2.9.3.1 Template Information

Enter the template information.

Systemwalker Software Configuration Manager cfmgadmin ▾ FUJITSU

Configuration management / Configuration modification template list / Create Configuration Modification Template

Template information > Process defini... > Parameter de... > Confirm > Complete

Enter information about the template.

Template name < > & " ' | , cannot be used. Entry is mandatory.

Scope #GLOBAL ▾

Description Can be omitted.

Next > **Cancel** ✕

Operation Method

Template Information

Item	Description
Template name	Enter the template name.

Item	Description
Scope	Enter the scope.
Description	Enter the description.

Operation Buttons

Operation button	Description
Next	Moves to Process definition .
Cancel	Closes the Configuration Modification Template wizard.

2.9.3.2 Process Definition

When **Next** is clicked in the **Template information** window, the **Process definition** window is displayed.

Operation Method

Define processes and the settings information in the order to be used for execution. Configure the following information for each process. Dragging a process enables to changing of the order of execution.

Item	Description
Process type	<p>Selects the type of the process. When the process type is selected, the values can be specified from the displayed settings information.</p> <p>When performing processing of file collection, note the following points:</p> <ul style="list-style-type: none"> - Tenant administrators and tenant users cannot create templates that include file collection.

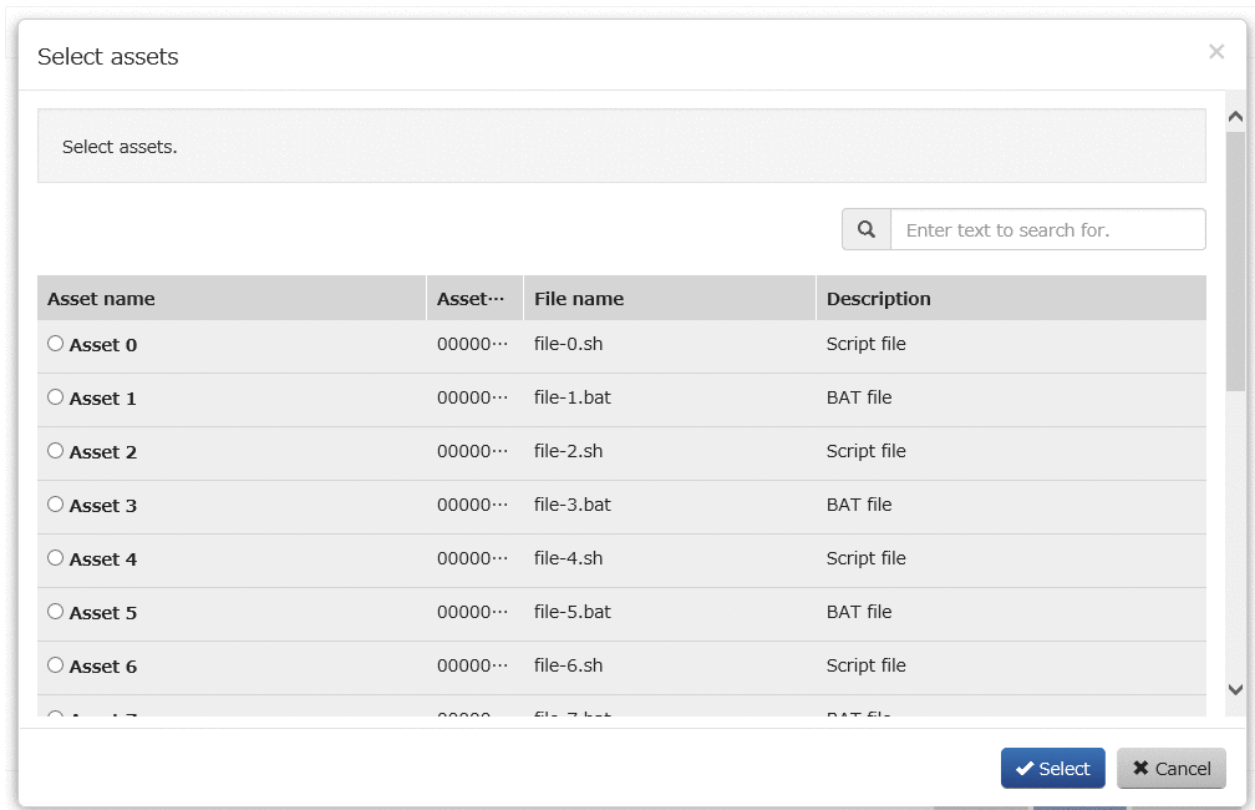
Item	Description
	<ul style="list-style-type: none"> - When a tenant administrator or a tenant user acquires files collected when performing file collection, it is necessary to contact the infrastructure administrator and acquire files on the admin server.
Process name	Enters the name of the process.
Setting information	<p>Specifies the values of setting information. The specifiable setting information differs depending on the process type. Refer to "2.9.2.3 Definition of Setting Information" for details.</p> <p>Use the following method to specify the values of the setting information:</p> <ul style="list-style-type: none"> - When specifying a fixed value, enter the value directly. - When specifying a parameter, enter {{parameter_name}}. - Fixed values cannot be specified for the target setting information. Ensure that a parameter is specified. - When using a parameter that is already specified using other settings information, the parameter can be selected from the Select parameters button. - When specifying both a fixed value and a parameter at the same time, enter the values directly. In this case, enter {{parameter_name}} for the parameter. - For the setting information of scripts and distribution files, it is necessary to select values from assets using the radio buttons or to specify the parameters. <p>Select assets: Select the values from assets. When Select is clicked, the Select assets window is displayed, and the asset can be selected. Select an asset in the Select assets window, and then select the version of the asset. When selecting "Newest", the latest version is automatically selected when executing configuration modification.</p> <p>Select parameters: Specify the parameter for the value.</p>

Operation Buttons

Operation button	Description
Add	Adds the process.
Select	Displays the Select assets window.
Back	Returns to Template information .
Next	Moves to Parameter definition .
Cancel	Closes the Configuration Modification Template wizard.

2.9.3.3 Select assets

Click the **Select** button in the **Process definition** window to display the **Select assets** window. When a tenant administrator or a tenant user uses assets, contact the infrastructure administrator in advance, and request registration of the assets.



Operation Method

Filter search

Clicking the button at the top right of the window enables filtering of the assets to display. Displays the asset name, asset ID, file name, and description including the values entered in the right part of the section.

Display Item

Item	Description
Asset name	Displays the asset name.
Asset ID	Displays the asset ID.
File Name	Displays the name of the file.
Description	Displays a description.

Operation Buttons

Operation button	Description
Select	When selecting an asset using the radio button and clicking the Select button to display the Process definition window, the asset selected in the setting information is specified.
Cancel	Returns to the Process definition window.

2.9.3.4 Definition of Parameters

Click **Next** in the **Process definition** window to display the **Parameter definition** window.

Systemwalker Software Configuration Manager cfmgadmin

Configuration management / Configuration modification template list / Create Configuration Modification Template

Template info... > Process defini... > **Parameter definition** > Confirm > Complete

Define parameters.

Parameter type	Parameter name	Description
Server	ap-server	Application server
File	install_info_file	Install information file
String	setup_mode	Setup mode
Password	admin_password	Administrator password
Boolean	reboot	Reboot
Number	timeout	Timeout

Processing

1 **Server operation check** Server operation check

Target	ap-server
Monitoring period (Min.)	0

< Back
Next >
✕ Cancel

Operation Method

Define the parameters. The parameters specified in the setting information are displayed in the **Process definition** window.

Item	Description
Parameter type	Displays the parameter type. The parameter type may be able to be selected depending on the setting information specified by the parameter. Refer to " 2.9.2.4 Definition of Parameters " for details.
Parameter name	Displays the parameter name.
Description	Enter the description.

Operation Buttons

Operation button	Description
Back	Returns to Process definition .
Next	Moves to Confirm .
Cancel	Closes the Configuration Modification Template wizard.

2.9.3.5 Confirm

Click **Next** in the **Parameter definition** window to display the **Confirm** window.

Systemwalker Software Configuration Manager cfmgadmin

Configuration management / Configuration modification template list / Create Configuration Modification Template

Template info... > Process defini... > Parameter de... > **Confirm** > Complete

Confirm the details of the template.

Template name	Copy - Template 0
Scope	#GLOBAL
Description	desc

Parameter name	Description
Server <code>ap-server</code>	Application server
File <code>install_info_file</code>	Install information file
String <code>setup_mode</code>	Setup mode
Password <code>admin_password</code>	Administrator password
Boolean <code>reboot</code>	Reboot
Number <code>timeout</code>	Timeout

Processing

- Server operation check Server operation check

Target	<code>ap-server</code>
--------	------------------------

< Back
✓ Create
✕ Cancel

Operation Method

Template Information

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

Display item	Description
Template name	Displays the template name.
Template ID	Displays the template ID. The template ID is displayed when started using the Edit button.
Scope	Displays the scope.
Description	Displays a description.

Parameter

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

Display item	Description
Parameter name	Displays the type and name of the parameter.
Description	Displays a description.

Process

Process information is displayed in the bottom section of the window. The following information is displayed in the order processes are executed.

Display information	Description
Process type	Displays the type of the process.
Process name	Displays the name of the process.
Setting information	Displays the setting information configured for the process.

Operation Buttons

Operation button	Description
Back	Returns to Parameter definition .
Create	Creates the Configuration Modification Template . The created template is available immediately. Templates which have created and saved temporarily in the middle of editing cannot be used. Therefore, make it clear in the template name or description that the template cannot be used, and ensure the template is not used. The template is displayed when starting using the Create button or the Copy and edit button.
Updates	Edits the details of the Configuration Modification Template . The template ID is displayed when started using the Edit button.
Cancel	Closes the Configuration Modification Template wizard.

2.9.3.6 Complete

Click the **Next** or **Updates** button in the **Confirm** window to display the **Complete** window.

Systemwalker Software Configuration Manager cfmgadmin

Configuration management / Configuration modification template list / Create Configuration Modification Template

Template info... > Process defini... > Parameter de... > Confirm > Complete

Creation was successful.



- [Server list](#)
- [Configuration modification template list](#)

Complete

Operation Method

Display details

Display item	Description
List of Configuration Modification Templates	Moves to the Configuration modification template list window.
Server list	Moves to the Server list window.

Operation Buttons

Operation button	Description
Complete	Closes the Configuration Modification Template wizard.

2.10 Configuration Modification Wizard

The wizard executes configuration modification.

Display method

1. Use the checkboxes in the **Server list** window to select servers, and then click **Configuration Modification** button.
2. Perform the following operations in the wizard format:
 - a. Selection of templates
 - b. Entry of parameters
 - c. Entry of execution methods
 - d. Confirmation of execution details
 - e. **Complete**

2.10.1 Select template

The screenshot shows the 'Systemwalker Software Configuration Manager' interface. At the top, the breadcrumb navigation reads 'Configuration management / Server list / Configuration modification'. Below this is a progress bar with five steps: 'Select template' (highlighted in blue), 'Enter parame...', 'Execution me...', 'Confirm', and 'Complete'. The main content area contains the text 'Select a template.' and a search input field with the placeholder 'Enter text to search for.'. Below the search field is a table with two columns: 'Template name' and 'Description'. The table lists five templates, each with a radio button and the description 'desc'. At the bottom right, there are two buttons: 'Next >' and 'Cancel'.

Template name	Description
<input type="radio"/> Template 0	desc
<input type="radio"/> Template 1	desc
<input type="radio"/> Template 2	desc
<input type="radio"/> Template 3	desc
<input type="radio"/> Template 4	desc

Operation Method

Select the **Configuration Modification Template** to execute.

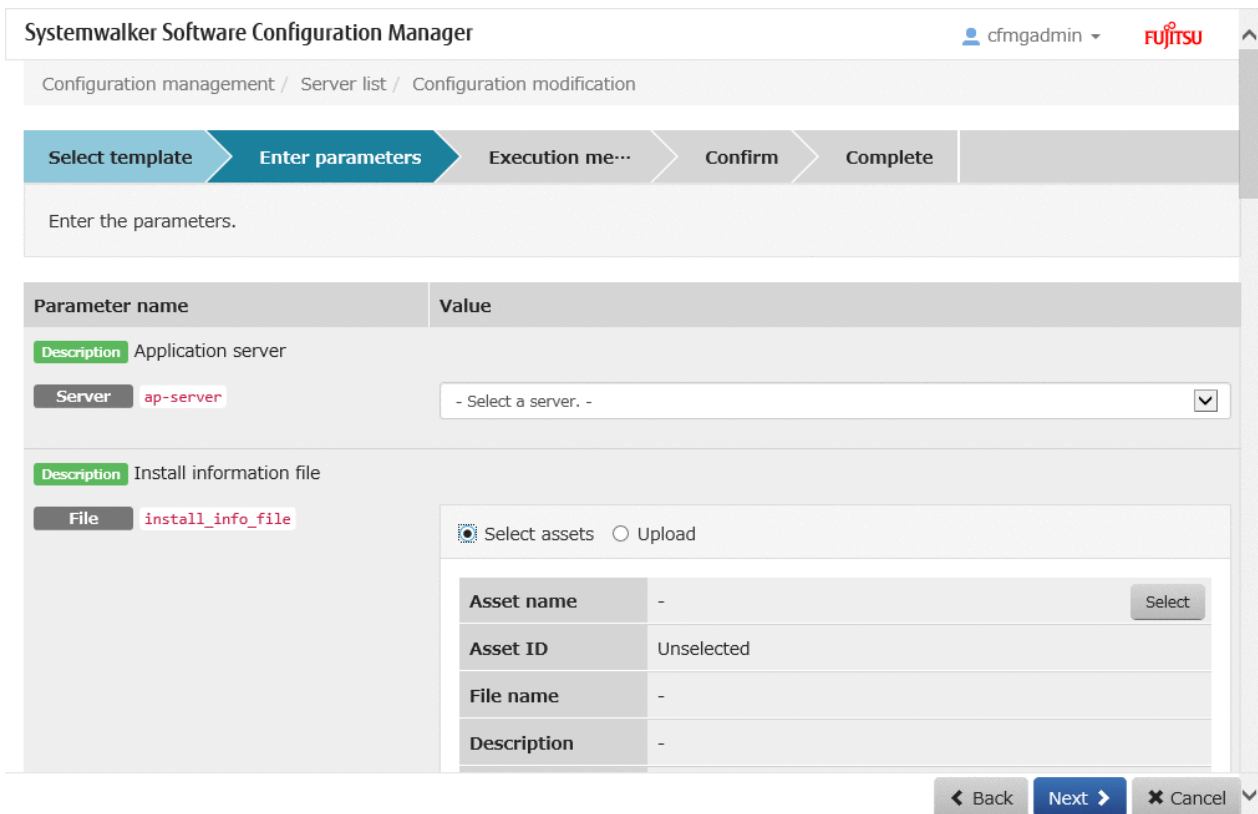
Display item	Description
Template name	Displays the template name.
Description	Displays a description.

Operation Buttons

Operation button	Description
Next	Moves to Enter parameters .
Cancel	Closes the Configuration modification wizard.

2.10.2 Enter parameters

When **Next** is clicked in the **Select template** window, the **Enter parameters** window is displayed.



Operation Method

Parameter

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

Display item	Description
Parameter type	Displays the parameter type.
Parameter name	Displays the parameter name.
Description	Displays the description.
Value (Server)	Select the server. Select a server from the servers selected using checkboxes in the Server list window.
Value (Number)	Enter a numeric value.
Value (Character string)	Enter a character string.
Value (File)	Specify the file. Select whether to select the file from the assets using the radio buttons, or if uploading the file from the browser. <ul style="list-style-type: none"> - Select assets: Select the file from the assets. When the Select assets button is clicked in the Select assets window, the asset can be selected. Select an asset in the Select assets window, and then select the version of the asset. When selecting "Newest", the latest version is automatically selected when executing configuration modification. - Upload: Upload the file from the browser. After clicking the Browse button, specify the full path of the file that is stored on the local machine where the browser is running.
Value (Truth-value)	Select true or false.
Value (Password)	Enter the password.

Process

Process information is displayed in the bottom section of the window. The following information is displayed in the order processes are executed.

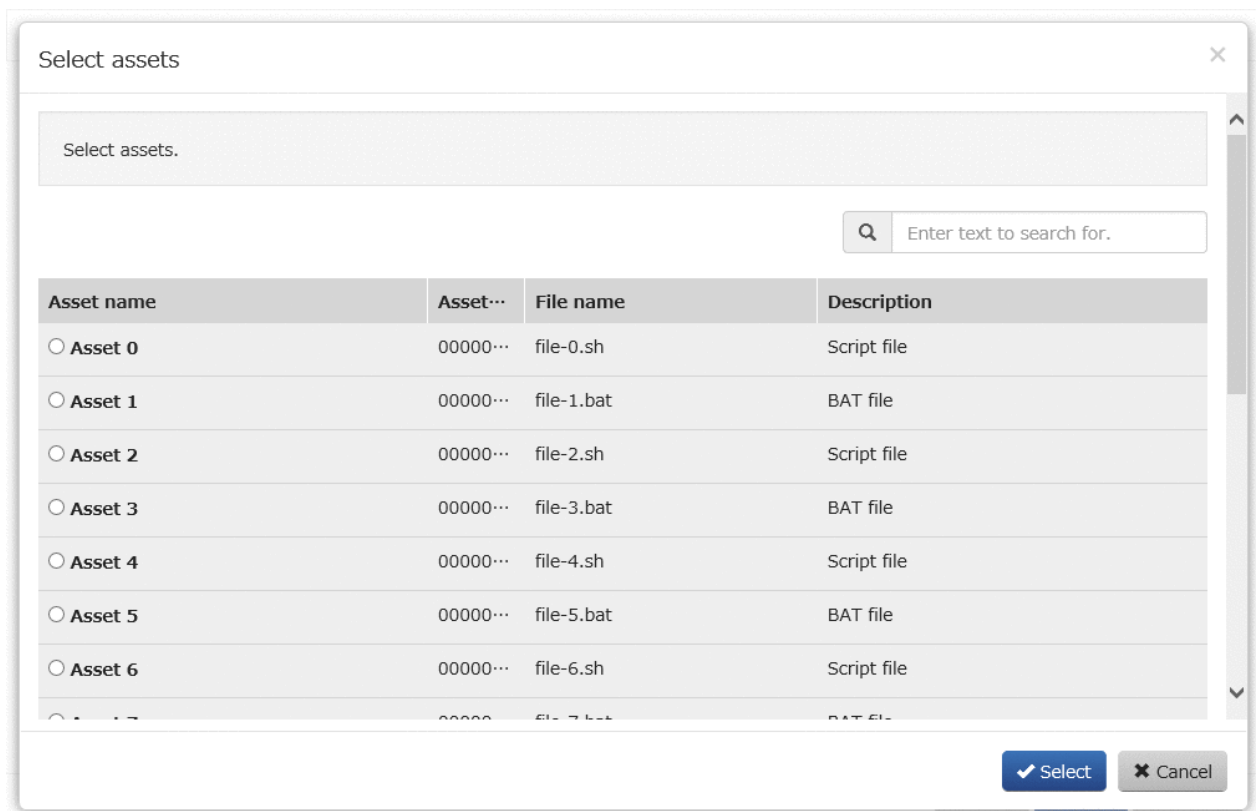
Display information	Description
Process type	Displays the type of the process.
Process name	Displays the name of the process.
Setting information	Displays the setting information configured for the process.

Operation Buttons

Operation button	Description
Select	Displays the Select assets window.
Back	Returns to Select template .
Next	Moves to Execution method .
Cancel	Closes the Configuration modification wizard.

2.10.3 Select assets

Click **Select** in the **Enter parameters** window to display the **Select assets** window. When a tenant administrator or a tenant user uses assets, contact the infrastructure administrator in advance, and request registration of the assets.



Operation Method

Filter search

Clicking the button at the top right of the window enables filtering of the assets to display. Displays the asset name, asset ID, file name, and description including the values entered in the right part of the section.

Display Item

Item	Description
Asset name	Displays the asset name.
Asset ID	Displays the asset ID.
File Name	Displays the name of the file.
Description	Displays a description.

Operation Buttons

Operation button	Description
Select	When selecting the asset using the radio buttons and clicking the Select button, the Enter parameters window is displayed and the selected asset can be specified for the value.
Cancel	Returns to the Enter parameters window.

2.10.4 Execution Method

Click **Next** in the **Enter parameters** window to display the **Execution Method** window.

Systemwalker Software Configuration Manager
cfmgadmin

Configuration management / Server list / Configuration modification

Select template
Enter parame...
Execution method
Confirm
Complete

Enter the execution method.

Job name

Schedule Immediately Specify date & time

← Back
Next >
✖ Cancel

Operation Method

Execution method input

Item	Description
Job name	Enter the name of the job.
Schedule	Specify a schedule. <ul style="list-style-type: none"> - Immediately: Select this option to perform the processing as soon as settings in the wizard are complete.

Item	Description
	- 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.

Operation Buttons

Operation button	Description
Back	Returns to Enter parameters .
Next	Moves to Confirm .
Cancel	Closes the Configuration modification wizard.

2.10.5 Confirm

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

Operation Method

Execution Method

This section displays the settings specified in the **Execution Method** window.

Process details

Process details are displayed in the bottom section of the window. The following information is displayed in the order processes are executed.

Display information	Description
Process type	Displays the type of the process.
Process name	Displays the name of the process.
Setting information	Settings information about the process is displayed.

Operation Buttons

Operation button	Description
Back	Returns to Execution Method .
Execute	Executes configuration modification.
Cancel	Closes the Configuration modification wizard.

2.10.6 Complete


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


Systemwalker Software Configuration Manager cfmgadmin ▾ FUJITSU

Configuration management / Server list / Configuration modification

Select template > Enter param... > Execution me... > Confirm > **Complete**

Configuration modification was successful.

 • [Job details](#)



Operation method

Display details

Display item	Description
Job details	Moves to the Job management window, where the status of the executed configuration modification can be checked. The status of configuration modification can also be checked 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
Complete	Closes the Configuration modification wizard.

2.11 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.



The L-Platform and the L-Server used in the [Maintenance] window indicate the same terms as the following:

- L-Platform: Server group
 - L-Server: Server
-

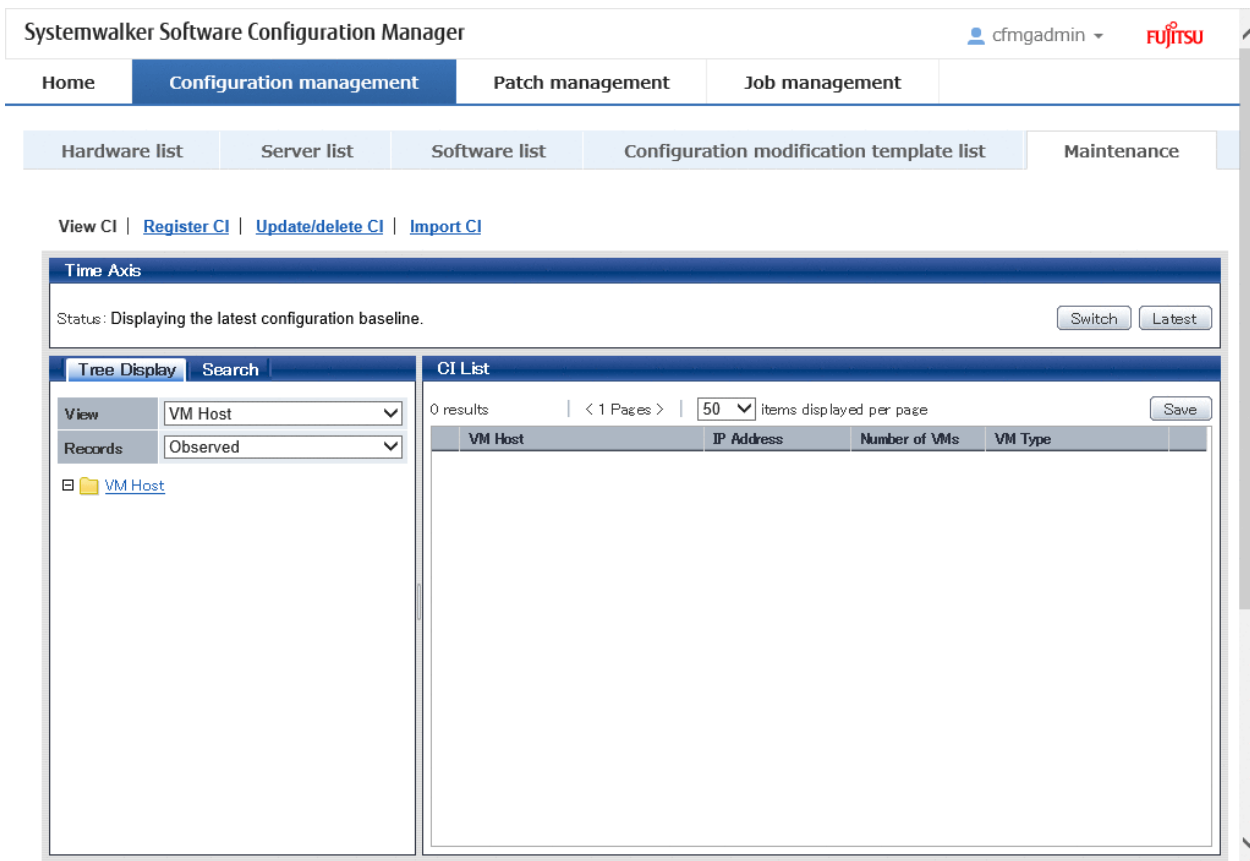
2.11.1 View CI

2.11.1.1 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 relationships between configuration items using a tree.)	View	Pull-down list box used to select the tree model for the CIs to be displayed.
	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 (Left pane)	Tree display	Displays folders representing the types of configuration items and trees of configuration items. The configuration items associated with a particular configuration item (where there is a link) can be traced using the tree.
CI List (Displays a list of the configuration items in the folder selected in the tree. This list is displayed when the following item is selected in the View pull-down list box. Tenant)	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. 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 a file.	
CI List (Displays a list of the configuration items in the folder selected in the tree. This list is displayed when the following item is selected in the View pull-down list box: VM Host)	VM Host	Displays the VM hosts. The list can be sorted by VM hosts by clicking the VM Host column header.
	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.
	VM Type	Displays the VM types. The list can be sorted by VM types by clicking the VM Type column header.
	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 **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 (server groups) and L-Servers (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**.

2.11.1.2 Searching Configuration Items

Display method

1. Click the **Maintenance** tab in the **Configuration management** window.
The **View CI** window will be displayed.
2. Click the **Search** tab.

Operation method

Item		Description
Search tab (Used to specify the search conditions for the configuration item search)	CI Type	Pull-down list box used to select the type of configuration item to be searched for.
	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 the search results.)	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. 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. 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.

2.11.1.3 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 Information	GID	Displays the GID of the selected configuration item.	
	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 expected, observed or catalog records)	Detailed Tree		
	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 (Displays a list of the configuration items that are related to the configuration item for which the details are being displayed.)	GID		
	CI Type		
	Nickname		
	Records		
	Direction		
Files tab (Displays a list of the files held by the configuration item for which the details are being displayed.)	File Name		
	Nickname		
	Annotation		
	File Size		
	Last Updated		
	File ID		
	Version		
	Hash value		

Item	Description
Close button	Closes the window.

2.11.2 Registering Configuration Items

Display method

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

Operation method

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 information)	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.
	Basic Information	<p>Attribute</p> <p>Displays the names of the attributes. The list can be sorted by attribute names by clicking the Attribute column header.</p> <p>Values must be entered for the following attributes of each CI type:</p> <ul style="list-style-type: none"> - id - nickname (if this attribute exists)

Item		Description
		<p>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.</p> <p>For the following CI types, in addition to the above attributes, values must be entered for the attributes below.</p> <ul style="list-style-type: none"> - L-Server: IP Address attribute - InstalledSoftware: productName attribute - InstalledPatch: name attribute
	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 Element button	Deletes the element selected in the Detailed Tree .
Related CIs tab (Displays a list of the configuration items that are related to the configuration item for which the details are being displayed.)	GID	Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the GID column header.
	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.
	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 files held by the configuration item for which the details are being displayed.)	File Name	Displays the names of the files. The list can be sorted by file names by clicking the File Name column header.
	Nickname	Displays the nicknames of the files. The list can be sorted by nicknames by clicking the Nickname column header.
	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.

Item		Description
	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.

2.11.3 Update/delete CI

2.11.3.1 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 Information	GID	Displays the GID of the selected configuration item.
	CI Type	Displays the CI type of the selected configuration item.

Item		Description	
	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 information)	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.	
	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 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 configuration items that are related to the configuration item for which the details are being displayed.)	GID	Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the GID column header.	
	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).	
Files tab (Displays a list of the files held by the configuration item for which the details are being displayed.)	File Name	Displays the names of the files. The list can be sorted by file names by clicking the File Name column header.	
	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.	



Note

The value for the "ID" attribute

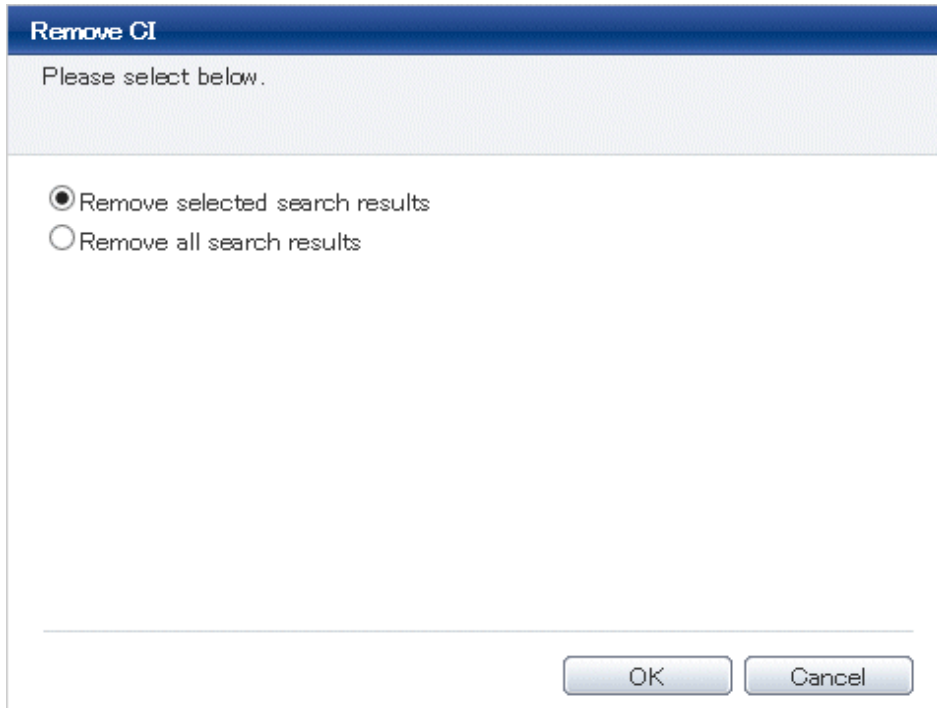
Do not change the value for the "ID" attribute. If the value for the "ID" attribute is changed and then an update operation is performed, a new configuration item will be registered with the new value, and the target configuration item will not be updated.

2.11.3.2 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**.

2.11.4 Importing Configuration Items

Display method

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

Systemwalker Software Configuration Manager cfmgadmin

Home | **Configuration management** | Patch management | Job management

Hardware list | Server list | Software list | Configuration modification template list | Maintenance

[View CI](#) | [Register CI](#) | [Update/delete CI](#) | Import CI

CI Import

Specify a file.

File Name

Operation method

Item		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.



Information

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.

Servers with unapplied patches

There are servers where patches have not been applied.
Apply patches to these servers.

Tenant : All ▾

Category	Required	Recommended	Total
Windows servers	1 server(s)	1 server(s)	2 server(s)
Linux servers	0 server(s)	0 server(s)	0 server(s)

[OS patches](#)

[Fujitsu MW patches](#)

New patches

New patches have been released.

Period : 2014-05-19 to 2014-06-18

Category	Required	Recommended	Total
Windows patches	0 patch(es)	0 patch(es)	0 patch(es)
Linux patches	9 patch(es)	2 patch(es)	11 patch(es)

[OS patches](#)

[Fujitsu MW patches](#)

Operation method

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.



Note

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

1. 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.

List of Servers with Unapplied Patches
✕

Click a server name to open the Server Details window. Select a row to display a list of unapplied patches.

Windows servers Server group: | 1 - 1 of 1 items | 1/1page(s)

Server name	Server group name	Tenant	OS
WIN-CCF0MHQF0...	TB8AS0WBS	tenant_admin(tenant_...	Windows Server 2012...

Unapplied OS patches
1 - 5 of 5 items | 1/1page(s)

Patch ID	Class	Patch type	Overview	Release date
KB2919355	Required	Security Upd...	Windows Server 2012...	2014-05-15
KB2939087	Required	Critical Updates	Update for Windows S...	2014-04-09
KB2913270	Required	Critical Updates	Update for Windows S...	2014-03-12
KB2913152	Recommended	Updates	Update for Windows S...	2014-03-01
KB2900986	Required	Security Upd...	Cumulative Security U...	2014-03-01

Patch application...
Close

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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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
	<ul style="list-style-type: none"> - Security - Important - Recommended
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.

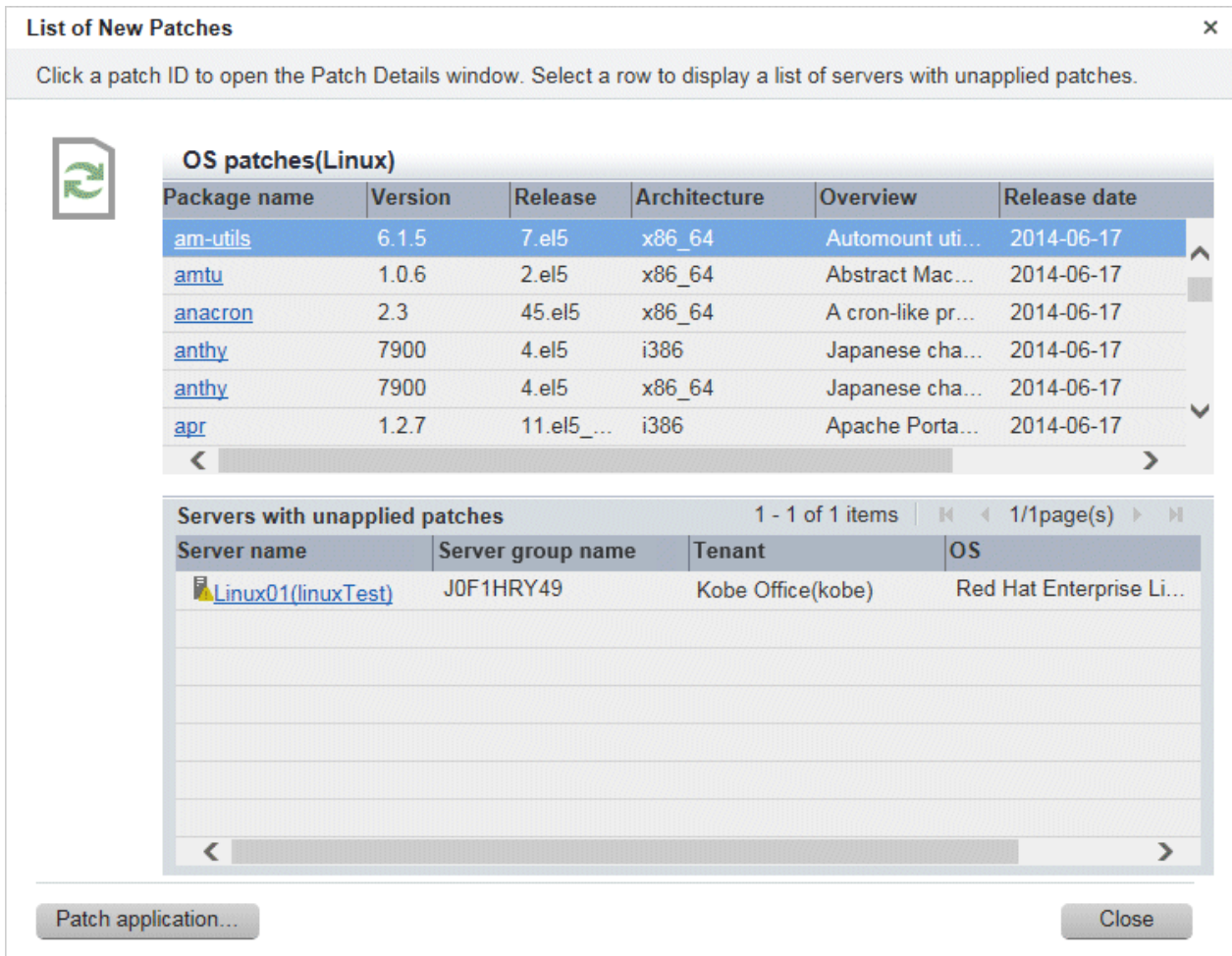
Operation buttons	Description
Patch application	Displays the Patch Application wizard, enabling the user to configure patch distribution and patch application for a specified server.
Close	Closes the window.

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.



Operation method

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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - Security Updates - Critical Updates - Feature Packs - Service Packs

Item	Description
	<ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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.

Systemwalker Software Configuration Manager cfmgadmin

Home Configuration management **Patch management** Job management

Summary view Windows patch list Linux patch list Fujitsu middleware patch list

▼ Filter

Patch ID: Class: All Product name: Patch type: All

Overview: Release date: - Applied to all: Both

Filter Cancel filter

1 - 13 of 189 items | 1/15 page(s)

<input type="checkbox"/>	Patch ID	Class	Product name	Patch type	Overview	Release d...	Unapplie...
<input type="checkbox"/>	KB2917500	Required	Windows Vista; Windows...	Security Updates	Security Update for Window...	2014-01-14	1
<input type="checkbox"/>	KB2840149	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-04-23	1
<input type="checkbox"/>	KB2813347	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-04-09	1
<input type="checkbox"/>	KB2813170	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-04-09	1
<input type="checkbox"/>	KB2808735	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-04-09	1
<input type="checkbox"/>	KB2807986	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-03-12	1
<input type="checkbox"/>	KB2791765	Recommended	Windows Server 2008 R2	Updates	Update for Windows Server...	2013-03-12	1
<input type="checkbox"/>	KB2799494	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-02-12	1
<input type="checkbox"/>	KB2790655	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-02-12	1
<input type="checkbox"/>	KB2790113	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-02-12	1
<input type="checkbox"/>	KB2778344	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-02-12	1
<input type="checkbox"/>	KB2786400	Recommended	Windows Server 2008 R2	Updates	Update for Windows Server...	2013-01-08	1
<input type="checkbox"/>	KB2785220	Required	Windows Server 2008 R2	Security Updates	Security Update for Window...	2013-01-08	1

Download CSV file Patch application ...

Operation method

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	<ul style="list-style-type: none"> - Patch ID - Class - Product name - Patch type - Overview - Release date - Applied to all
Linux patch list	<ul style="list-style-type: none"> - Package name - Version - Release - Architecture - Overview - Release date - Applied to all

Patch type	Filter conditions
Fujitsu middleware patch list	<ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.



Note

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.

Patch Details ✕

Check the patch details.



Patch ID	KB2917500
Product name	Windows Vista; Windows Server 2008; Windows 7; Windows Server 2008 R2
Overview	Security Update for Windows Vista, Windows 7, Server 2008, Server 2008 R2 (KB2917500)
Patch type	Security Updates
Class	Required
Release date	2014-01-14
Details	Install this update to resolve an issue which requires an update to the untrusted certificate store on Windows systems and to keep your systems up to date. After you install this update, you may have to restart your system.
Update ID	b5a80fe4-5ad2-4bb0-a522-80b37f37f929

Unapplied(1) | [Updated\(0\)](#) 1 - 1 of 1 items | 1/1 page(s)

Server name	Server group name	Tenant	OS
VM22124637(VM...	AR6S8TIEN	Kobe Office(kobe)	Windows Server 200...

Patch application...
Close

Operation method

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	<p>Displays the patch type. (This indicates the classification of updates, which represents the WSUS update program type.)</p> <ul style="list-style-type: none"> - Security Updates - Critical Updates - Feature Packs - Service Packs - Tools - Drivers - Updates

Item	Description
	<ul style="list-style-type: none"> - Update Rollups - Definition Updates
Class	<p>Displays the classification level of the patch.</p> <ul style="list-style-type: none"> - 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. Displays in English.
Details	Displays a detailed description of the patch that is provided by the vendor. Displays in English.

Table 3.12 Fujitsu middleware patches

Item	Description
Patch ID	Displays the patch ID.
Class	<p>Displays the classification level of the patch.</p> <ul style="list-style-type: none"> - 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	<p>Displays the importance of the patch.</p> <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	<p>Displays the update types of the patch.</p> <ul style="list-style-type: none"> - 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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.
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.

<input type="checkbox"/>	Package name	Version	Release	Architecture	Overview	Release date
<input checked="" type="checkbox"/>	am-utils	6.1.5	7.el5	x86_64	Automount utilities in...	2014-06-17
<input type="checkbox"/>	amtu	1.0.6	2.el5	x86_64	Abstract Machine Te...	2014-06-17
<input type="checkbox"/>	anacron	2.3	45.el5	x86_64	A cron-like program t...	2014-06-17
<input type="checkbox"/>	anthy	7900	4.el5	i386	Japanese character s...	2014-06-17
<input type="checkbox"/>	anthy	7900	4.el5	x86_64	Japanese character s...	2014-06-17
<input type="checkbox"/>	apr	1.2.7	11.el5_6.5	i386	Apache Portable Run...	2014-06-17
<input type="checkbox"/>	apr	1.2.7	11.el5_6.5	x86_64	Apache Portable Run...	2014-06-17
<input type="checkbox"/>	apr-util	1.2.7	11.el5_5.2	i386	Apache Portable Run...	2014-06-17
<input type="checkbox"/>	apr-util	1.2.7	11.el5_5.2	x86_64	Apache Portable Run...	2014-06-17
<input type="checkbox"/>	aspell	0.60.3	13	i386	A spelling checker.	2014-06-17
<input type="checkbox"/>	aspell	0.60.3	13	x86_64	A spelling checker.	2014-06-17
<input type="checkbox"/>	aspell-en	6.0	3	x86_64	English dictionaries f...	2014-06-17
<input type="checkbox"/>	at	3.1.8	84.el5	x86_64	Job spooling tools.	2014-06-17
<input type="checkbox"/>	at-spi	1.7.11	3.el5	i386	Assistive Technology...	2014-06-17
<input type="checkbox"/>	at-spi	1.7.11	3.el5	x86_64	Assistive Technology...	2014-06-17

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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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
	<ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.

x
Patch Application

Select patches
Select servers
Application method
Confirm
Patching request complete

Select the servers to which the patch will be applied.

Select servers

Selected OS patches(1 items)

Package name	Version	Release	Architecture	Overview	Release date
am-utils	6.1.5	7.el5	x86_64	Automount utilities inclu...	2014-06-17

Servers to update L-Platform:

<input type="checkbox"/>	Server name	OS	Server group name	Tenant
<input type="checkbox"/>	Linux01(linuxTest)	Red Hat Enterprise Linu...	J0F1HRY49	Kobe Office(kobe)

Back Next Cancel

Operation method

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. <ul style="list-style-type: none"> - 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.) <ul style="list-style-type: none"> - 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. Displays in English.
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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - Recommended - Important - Security
Update type	Displays the update types of the patches. <ul style="list-style-type: none"> - 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.
Server group name	Displays the server group name.
Tenant	Displays the tenant.

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.

Operation method

Setting up the application method

Item	Description
Schedule	Specify a schedule. <ul style="list-style-type: none"> - 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 return values to determine the operations have completed successfully during script execution. Also specify whether to execute a post-

Item	Description
	<p>execution script at single-user execution level when distributing Fujitsu middleware patches.</p> <p>To apply Fujitsu middleware patches, a script specifying the application processing must be created and then registered as a post-execution script.</p> <p>It is recommended to create the scripts registered here so that they output "0" as the return value to indicate normal completion and a value other than "0" as the return value to indicate an error.</p> <p>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.</p> <p>Specify one of the following values for the return value to use to determine that the operation has completed successfully.</p> <ul style="list-style-type: none"> - 0: The return value "0" is handled as normal termination, whereas values other than "0" are handled as errors. - All: All return values are handled as normal termination. <p>Configure whether to execute the script at single-user execution level by specifying one of the following values: If the execution target is a Windows server, "on" cannot be specified.</p> <ul style="list-style-type: none"> - on: Switches the execution level to single-user and executes a script. - off: Executes a script without switching the execution level. <p>Refer to "Creating Scripts and Specifying Commands" in the <i>Operation Guide</i> for information on the scripts that are registered here.</p> <p>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 <i>Reference Guide</i> for details on the command.</p>
<p>Restart operating system after application</p>	<p>Select whether to restart the server after the patch is distributed and applied. When executing the post-execution script at single-user execution level, the OS is restarted after the script is executed. Therefore, it is not necessary to select "Yes".</p> <ul style="list-style-type: none"> - Yes <p>The behavior varies depending on the patch type, as follows:</p> <ul style="list-style-type: none"> - OS patches <p>The server will only be restarted for those patches that need to have the server restarted.</p> <ul style="list-style-type: none"> - Fujitsu middleware patches <p>The server will be restarted without fail.</p> <ul style="list-style-type: none"> - No <p>The server will not be restarted.</p>

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.

✕
Patch Application

Select type > Select patches > Application method > **Confirm** > Patching request complete >

Check the patch application details.

Confirm

Application method

Schedule	Immediately		
Script registration	Before execution	-	Normal return value: -
	After execution	-	Normal return value: -
Restart operating system after application		Reboot (when required)	

Update details

Server name	Patch ID	Class	Patch type	Server group name	Tenant
windows01	KB2800095	Recommended	Updates	Development Server	Kobe Office

Download CSV file

Back
Execute
Cancel

Operation method

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").
Server group name	Displays the server group name.	

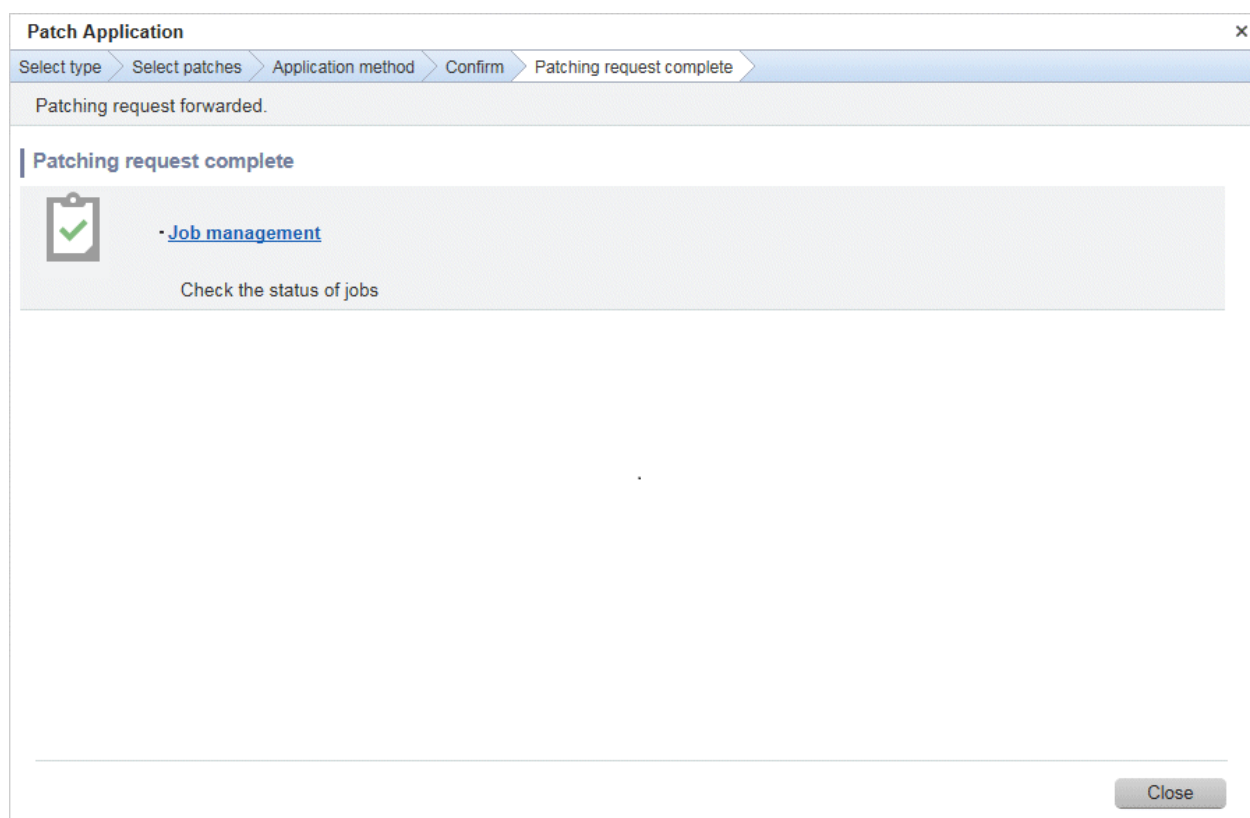
Item	Description
Tenant	Displays the tenant.

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 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.



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.



Advisory Notes when Stopping Systemwalker Software Configuration Manager

When stopping Systemwalker Software Configuration Manager, execute the following command first to confirm that jobs for patch distribution/application, parameter configuration, script execution, or configuration modification are not running. If a job is not running, it will not be displayed in the list.

[Windows]

```
[Systemwalker Software Configuration Manager installation directory]\SWCFMGM\sample
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_job -list -status running
```



Actions when the admin server goes down while a job is operating

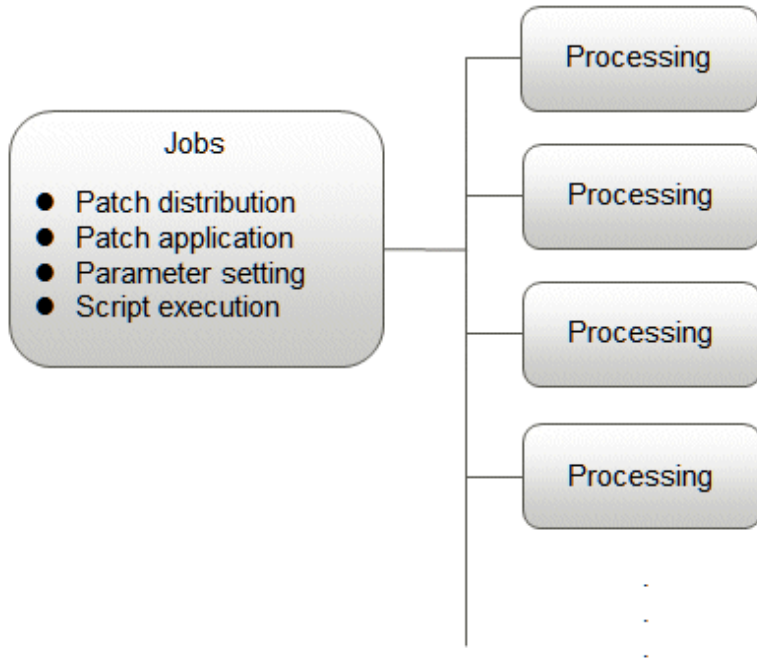
During job operations such as patch distribution/application, parameter settings, script execution, or configuration modification, when the system of the admin server goes down, after recovery of the admin server, it is necessary to stop the job that did not operate correctly.

For details on how to take corrective action when the admin server goes down, refer to the Troubleshooting Guide.

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	<p>The name of the job. For each job name, the following character string is automatically set: When performing configuration modification using the Configuration Modification wizard or the Configuration Modification commands.</p> <p>If patches are applied using the Patch Application wizard or the patch application command: Patch application request + "_" + Job ID + "_" + "server name"</p> <p>If patches are distributed using the Patch Application wizard or the patch application command: Patch distribution request + "_" + Job ID + "_" + "server name"</p> <p>If parameters are configured using the Parameter Settings wizard or swcfmg_param_startsetting (Parameter Setting command): Parameter settings request + "_" + Job ID + "_" + "server name"</p> <p>If scripts are executed using the Script Execution wizard or the script execution command: Script execution request + "_" + Job ID + "_" + "server name"</p>	<p>- Job details window</p> <p>- List display of job information management commands</p> <p>Detailed display of job information management commands</p>
Job type	<p>Type of job.</p> <p>The job types are shown below:</p> <p>Patch application: If patches are applied using the Patch Application wizard or the patch application command</p> <p>Patch distribution: If patches are distributed using the Patch Application wizard or the patch application command</p> <p>Parameter settings: If parameters are configured using the Parameter Settings wizard or swcfmg_param_startsetting (Parameter Setting command)</p> <p>Script execution: If scripts are executed using the Script Execution wizard or the script execution command</p>	

Item	Description	Checked using:
	- Configuration Modification : When performing configuration modification using the Configuration Modification wizard or the Configuration Modification command.	
Status	Status of the job. The status values are shown below: Running: The job is executing Complete: The job has ended normally Selecting (Abnormal): The job process has ended in an error and is waiting for the user to select an action Complete (Abnormal): 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
			Monitoring time	A value specified using the application method. When executing the scripts from the

Process name	Process type	Description	Settings information	Value
				management console, 0 minutes is specified.
Pre-execution script	Pre-execution script	Executed if a pre-execution script is registered at Application method >> Script registration.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Script information	Script registered at Application method >> Script registration
			Normal return value	A value specified using the application method.
Patch application	Patch application	Always executed.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Patch information	The patch specified in the Windows patch list window, Linux patch list window, or Select patches
Post-execution script	Post-execution script	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
			Normal return value	A value specified using the application method.
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
			Monitoring time	A value specified using the application method. When executing the scripts from the management console, 0 minutes is specified.
Pre-execution script	Pre-execution script	Executed if a pre-execution script is registered at Application method >> Script registration.	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Script information	Script registered at Application method >> Script registration
			Normal return value	A value specified using the application method.

Process name	Process type	Description	Settings information	Value
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	Post-execution script	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
			Normal return value	A value specified using the application method.
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
			Monitoring time	A value specified using the execution method. When executing the scripts from the management console, 0 minutes is specified.
Pre-execution script	Pre-execution script	Executed if a pre-execution script is registered at Execution method >> Script registration .	Target server(s)	Server(s) specified in the Server list window or at Select servers
			Script information	Script registered at Enter execution method
			Normal return value	A value specified using the 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

Process name	Process type	Description	Settings information	Value
Post-execution script	Post-execution script	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
			Script information	Script registered at Execution method
			Normal return value	A value specified using the 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
			Monitoring time	A value specified using the execution method. When executing the scripts from the management console, 0 minutes is specified.
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
			Normal return value	A value specified using the 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

Configuration Modification

Process name	Process type	Description	Setting information	Value to specify
Reception	Reception	Always executed.	None	None
Scheduled standby	Scheduled standby	When the schedule has been specified in Execution Method , the process is executed.	Schedule date	A date specified in the schedule of the Execution Method

Process name	Process type	Description	Setting information	Value to specify
For the process the above, the process defined in the Configuration Modification Template is executed.				

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	<p>Cancels the schedule and the job.</p> <p>Can be performed during execution of this process.</p>
	Retry	<p>Reexecutes this process.</p> <p>Can be performed if an error occurs during this process.</p>
Server operation check	Cancel	<p>Cancels the job.</p> <p>Can be performed if an error occurs during this process.</p>
	Continue	<p>Moves to the next process.</p> <p>Can be performed if an error occurs during this process.</p>
	Retry	<p>Reexecutes this process.</p> <p>Can be performed if an error occurs during this process.</p>
Script execution	Cancel	<p>Cancels the job.</p> <p>Can be performed if an error occurs during this process.</p>
	Continue	<p>Moves to the next process.</p> <p>Can be performed if an error occurs during this process.</p>
	Retry	<p>Reexecutes this process.</p> <p>Can be performed if an error occurs during this process.</p>
Patch application	Cancel	<p>Cancels the job.</p> <p>Can be performed if an error occurs during this process.</p>
	Continue	<p>Moves to the next process.</p> <p>Can be performed if an error occurs during this process.</p>
	Retry	<p>Reexecutes this process.</p> <p>Can be performed if an error occurs during this process.</p>
Patch distribution	Cancel	<p>Cancels the job.</p> <p>Can be performed if an error occurs during this process.</p>
	Continue	<p>Moves to the next process.</p> <p>Can be performed if an error occurs during this process.</p>
	Retry	<p>Reexecutes this process.</p> <p>Can be performed if an error occurs during this process.</p>
Parameter settings	Retry all	<p>Reexecutes this process. Sets parameters for all software in which settings can be configured.</p> <p>Can be performed if an error occurs during this process.</p>
	Retry	<p>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.</p> <p>Can be performed if an error occurs during this process.</p>

Process type	Action	Description
	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 system	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.
Command execution	Retry	Re-executes this process. This can be performed if an error occurs during this process.
	Cancel	Cancels the job. This can be performed if an error occurs during this process.
	Continue	Moves to the next process. This can be performed if an error occurs during this process.
File distribution	Retry	Re-executes this process. This can be performed if an error occurs during this process.
	Cancel	Cancels the job. This can be performed if an error occurs during this process.
	Continue	Moves to the next process. This can be performed if an error occurs during this process.
File collection	Retry	Re-executes this process. This can be performed if an error occurs during this process.
	Cancel	Cancels the job. This can be performed if an error occurs during this process.
	Continue	Moves to the next process. This can be performed if an error occurs during this process.

4.2 Operation

This section explains the operation procedure of the **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 **Job management** from the menu in the management console.
- b. Click the **Job management** link in the **Home** window.

Systemwalker Software Configuration Manager cfmgadmin

Home Configuration management Patch management **Job management**

Job list Items: 21

Job name	Job ID	Job t...	Status	Target	Owner	Tenant	Start date	End date
Patch distribution	00000...	Patch a...	Wai...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Patch application	00000...	Config...	Sele...	Server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Patch distribution	00000...	Patch d...	Co...	server-...	admin	Infrastr...	2014-03-08 15:12...	2014-03-09 15:55...
Parameter settings	00000...	Script...	Sele...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Configuration modi...	00000...	Patch d...	Wai...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Patch application	00000...	Config...	Wai...	Server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Script execution	00000...	Patch a...	Sele...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Script execution	00000...	Patch d...	Co...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Script execution	00000...	Config...	Co...	Server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...
Script execution	00000...	Param...	Sele...	server-...	admin	Infrastr...	2014-03-08 15:12...	2014-03-09 15:55...
Configuration modi...	00000...	Patch d...	Sele...	server-...	admin	Infrastr...	2014-03-08 15:12...	2014-03-09 15:55...
Script execution	00000...	Patch d...	Co...	server-...	admin	Tenant...	2014-03-08 15:12...	2014-03-09 15:55...

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	<p>The following filter conditions can be specified. Multiple filter conditions can be specified.</p> <ul style="list-style-type: none"> - Job name - Job type - Status - Target - Owner - Tenant - Start date - End date

Display item

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

Display item	Description
Job name	<p>Displays the name of the job.</p> <p>Clicking a job name displays the Job details window.</p>

Display item	Description
Job ID	Displays the job ID.
Job type	Displays the type of the job. <ul style="list-style-type: none"> - Patch application - Patch distribution - Parameter settings - Script execution - Configuration Modification
Status	Displays the status of the job. <ul style="list-style-type: none"> - Running - Waiting - Selecting (abnormal) - Completed - Completed (abnormal) - Canceled
Target	Displays the target of the job.
Owner	Displays the administrator of the job.
Tenant	Displays the tenant 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.

Systemwalker Software Configuration Manager tokyouser

Home Configuration management Patch management **Job management**

Job list / Job details

Job name	Script execution request_000000002_Verification server (AP)(VR8M)
Job ID	000000002
Job type	Script execution
Status	Selecting (abnormal)
Target	192.168.99.62
Owner	tokyouser
Tenant	Tokyo Office (tokyo)
Start date	2014-06-16 21:54:50
End date	-

Progress status

Process name	Status	Executed action	Start date	End date
Acceptance	Normal terminat...	-	2014-06-16 21:54:...	2014-06-16 21:54:...
Server operation check	Normal terminat...	-	2014-06-16 21:54:...	2014-06-16 21:55:...
Script execution	Abnormal termi...	Selecting	2014-06-16 21:55:...	2014-06-16 21:56:...

Retry Continue Cancel

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. <ul style="list-style-type: none"> - Patch application - Patch distribution - Parameter settings - Script execution - Configuration Modification
Status	Displays the status of the job. <ul style="list-style-type: none"> - Running - Waiting - Selecting (abnormal) - Completed - Completed (abnormal)

Display item	Description
	- Canceled
Target	Displays the target of the job.
Owner	Displays the administrator of the job.
Tenant	Displays the tenant 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. <ul style="list-style-type: none"> - 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. <ul style="list-style-type: none"> - 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
<ul style="list-style-type: none"> - Retry - Retry all - Cancel 	Executes an action.

Operation buttons	Description
- 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.

Systemwalker Software Configuration Manager cfmgadmin **FUJITSU**

Home Configuration management Patch management **Job management**

Job list / Job details / Process details

Process name	Parameter setting
Process type	Parameter setting
Server ID	server-001
IP address	192.168.9.9

Setting order	Product name	Version	Parameter inform...
1	Product Name 0	1.0	memo 0
2	Product Name 1	1.1	memo 1
3	Product Name 2	1.2	memo 2

Process results

Status	✖ Abnormal termination
Executed action	Selecting

Retry Retry all Continue Cancel

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.
<i>Setting information</i>	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.

Process type	Display item	Description
Server operation check	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Monitoring time	The monitoring time.
Patch application (Windows patches)	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Patch ID	The patch ID.
	Class	The class level.
	Patch type	The patch type.
	Update program ID	An update program ID.
Patch application (Linux patches)	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Package name	The package name.
	Version	The version.
	Release	The release.
Patch distribution	Server name	Server name.
	Server ID	The server ID.
	IP address	The IP address.
	Patch ID	The patch ID.
	Importance	The importance.
	Update type	The update type.
Parameter setting	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Setting order	The setting order.
	Product name	The product name.
	Version	The version.
	Parameter information name	The name of the parameter information.
- Script execution - Script execution of configuration modification (when the scripts are uploaded from the browser)	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Script	The script name. Clicking the Download button downloads a script.
	Argument	An argument of the scripts.
	Normal return value	A normal return value.
	Single-user mode	Whether single-user mode is being used.

Process type	Display item	Description
Script execution of configuration modification (when the scripts are selected from the assets)	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Script	The script name.
	Argument	An argument of the scripts.
	Normal return value	A normal return value.
	Asset name	An asset name.
	Asset ID	An asset ID.
	Version number	A version.
- Pre-execution script - Post-execution script	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Script	The script name. Clicking the Download button downloads a script.
	Normal return value	A normal return value.
	Single-user mode	Whether single-user mode is being used.
OS restart	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
Command execution	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Command	A command.
	Argument	An argument of commands.
	Normal return value	A normal return value.
	Single-user mode	Whether single-user mode is being used.
File distribution	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Distribution file	A file to distribute.
	Distribution destination	A distribution destination of files.
	Asset name	An asset name.
	Asset ID	An asset ID.
	Version number	A version.
File collection	Server name	The server name.
	Server ID	The server ID.
	IP address	The IP address.
	Collection file	A file to collect.
	Storage location	The storage location of collection files.

Process results

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

Display item	Description
Status	<p>Displays the status of the process.</p> <p>When Running is displayed, the process is being executed.</p> <p>When Canceled is displayed, the process is not executed because the job was canceled using the Cancel action.</p> <ul style="list-style-type: none"> - 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	<p>The action which was executed.</p> <p>When Selecting is displayed, execution of the action by the user is being waited.</p> <ul style="list-style-type: none"> - 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.
<i>Message information</i>	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.
<i>Message text</i>	Displays the message text.
<i>Parameter information</i>	<p>When the message text contains the following variable items, parameter and index values are displayed. Multiple parameter information may be displayed.</p> <p>[Parameter: {Index}]</p>

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.

Operation button	Description
- Retry all - Cancel - Continue	