

# **FUJITSU Software Systemwalker Software Configuration Manager Express**

## **User's Guide**

Windows/Linux

B1X1-0320-01ENZ0(00)  
August 2014

# Preface

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## Purpose of This Document

This document explains the overview, setup procedure, operation procedure, and management procedure of Systemwalker Software Configuration Manager Express V15.3.0.

## Intended Readers

This document is intended for the users of Systemwalker Software Configuration Manager Express.

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

- Basic knowledge of the operating system being used

In this document, Systemwalker Software Configuration Manager Express is abbreviated to "Systemwalker Software Configuration Manager".

## Structure of This Document

This document is structured as follows:

### Part 1 Overview

#### Chapter 1 Overview

This chapter provides an overview of Systemwalker Software Configuration Manager.

#### Chapter 2 Function Explanation

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

#### Chapter 3 Operating Environment

This chapter provides an overview of the operating environment of Systemwalker Software Configuration Manager.

### Part 2 Installation

#### Chapter 4 Operation Design

This chapter explains the operation design of Systemwalker Software Configuration Manager.

#### Chapter 5 Installation

This chapter explains the installation procedure for Systemwalker Software Configuration Manager.

#### Chapter 6 Setup

This chapter explains the setup procedure for Systemwalker Software Configuration Manager.

#### Chapter 7 Setup Cancellation

This chapter explains how to cancel the setup for Systemwalker Software Configuration Manager.

#### Chapter 8 Uninstallation

This chapter explains the uninstallation procedure for Systemwalker Software Configuration Manager.

### Part 3 Operation

#### Chapter 9 Operation Setup

This chapter explains how to set up Systemwalker Software Configuration Manager operations.

#### Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager

This chapter explains how to start and stop Systemwalker Software Configuration Manager.

#### Chapter 11 Maintenance

This chapter explains relevant maintenance information (such as log output and backup/restore).

## Part 4 Management

### Chapter 12 Management Console

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

### Chapter 13 Configuration Management

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

## Appendix A Port Number List

This section provides a list of the port numbers used with Systemwalker Software Configuration Manager.

## Appendix B Installing Operation Management Products on Admin Server

This appendix explains the installation procedure and notes regarding installation of operation management products on the admin server for Systemwalker Software Configuration Manager.

## Appendix C Creating Test Site Certificates

This appendix provides examples of creating test site certificates.

## 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	
Microsoft(R) Windows Server(R) 2003 R2, Standard Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Windows Server 2003 R2	
Red Hat(R) Enterprise Linux(R) (for x86)	RHEL (x86)	
Red Hat(R) Enterprise Linux(R) (for Intel64)	RHEL (Intel64)	
Oracle Solaris	Solaris Operating System Solaris OS	Solaris

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## Issue Date and Version

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# Part 1 Overview

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# Chapter 1 Overview

This chapter provides an overview of the Systemwalker Software Configuration Manager product.

## 1.1 What is Systemwalker Software Configuration Manager?

Systemwalker Software Configuration Manager is a software product that centrally manages the configuration information of an entire system including hardware, OS, and middleware.

In recent years there has been a growing trend for the ICT department of a company to use virtualization to consolidate corporate servers in data centers, in order to improve cost competitiveness. However, the workload on system administrators is increasing, as it is no longer possible to keep up with dynamic changes or increasing server resources (such as IP addresses, operating systems, and middleware).

Systemwalker Software Configuration Manager makes it possible to centrally manage the information of the hardware and the information of the resources that have been dynamically deployed via the cloud. Moreover, the ability to manage software parameters, as well as the status of patch applications to servers, enables the workload of system administrators to be reduced.

It is also possible to limit the range of which software configuration information is visible and which operations can be performed according to the tenancy that the administrator belongs to and the privileges of that administrator, thereby making it possible to prevent operation mistakes and reduce security risks.

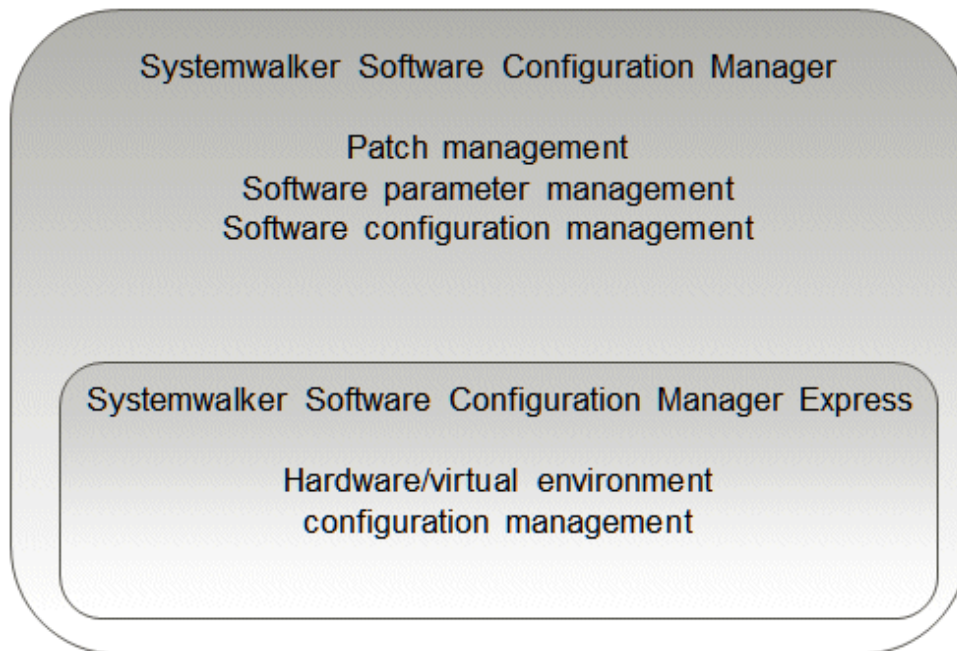
## 1.2 Product Road Map

As an edition of Systemwalker Software Configuration Manager, the following product provides only the configuration management function for hardware/virtual environments.

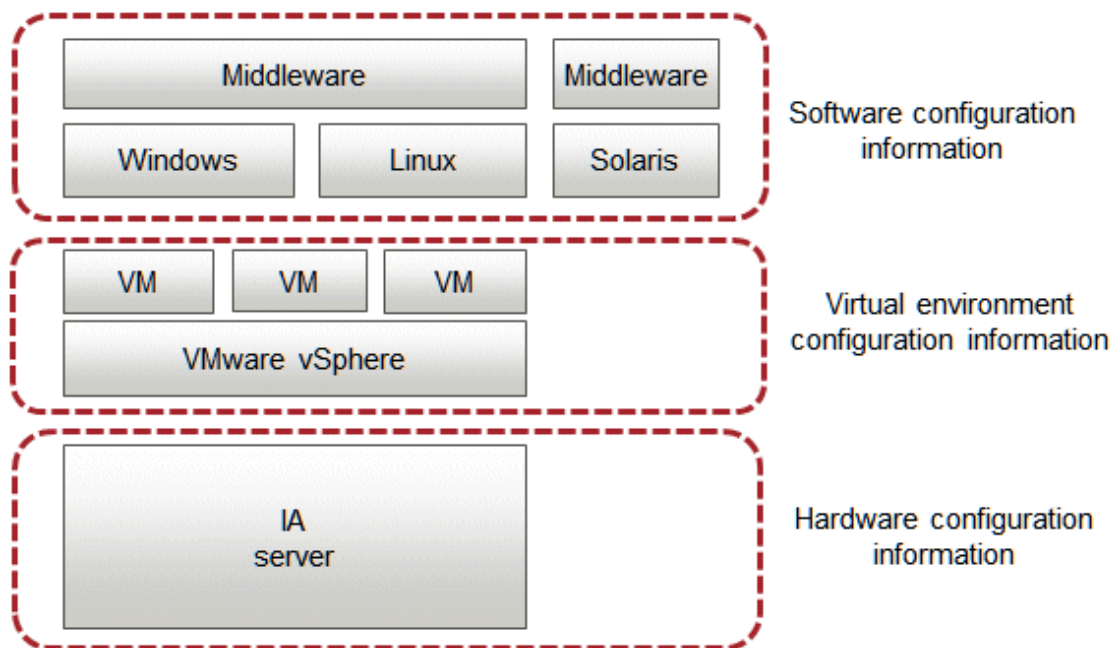
- Systemwalker Software Configuration Manager Express

Automatically collects configuration information of hardware (chassis/servers) and virtual environments (hypervisor/guest OS) and store it in the CMDB for management.

The functions provided by Systemwalker Software Configuration Manager Express are shown below.



Relationships between hardware configuration information, virtual environment configuration information, and software configuration information are shown below.



## 1.3 System Configuration

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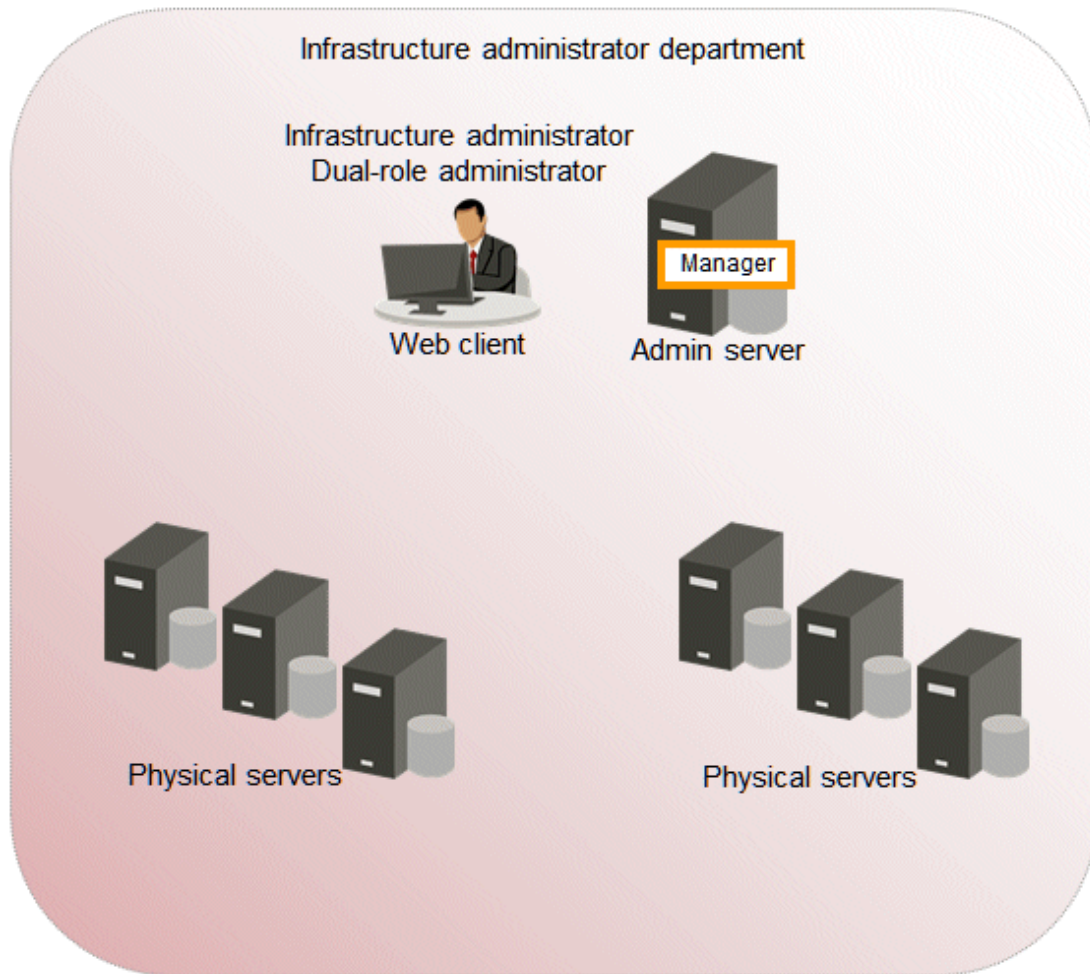
This section explains the system configuration for Systemwalker Software Configuration Manager.

### 1.3.1 System Configuration for Managing Hardware/Virtual Environment Configurations

---

The following diagram illustrates the system configuration for managing hardware and virtual environment configuration.

Figure 1.1 System Configuration for Managing Hardware/Virtual Environment Configurations



### **Admin server**

Admin server is the server that operates Systemwalker Software Configuration Manager. The admin server collects configuration information of physical server hardware and virtual environments.

The manager of Systemwalker Software Configuration Manager is installed on the admin server. The manager is a Systemwalker Software Configuration Manager program that runs on the admin server.

### **Physical server (business server)**

A physical server managed by Systemwalker Software Configuration Manager.

### **Web client**

This is a client for operating the Systemwalker Software Configuration Manager admin server. The management console is used in a web browser.

# Chapter 2 Function Explanation

This product provides the following functions:

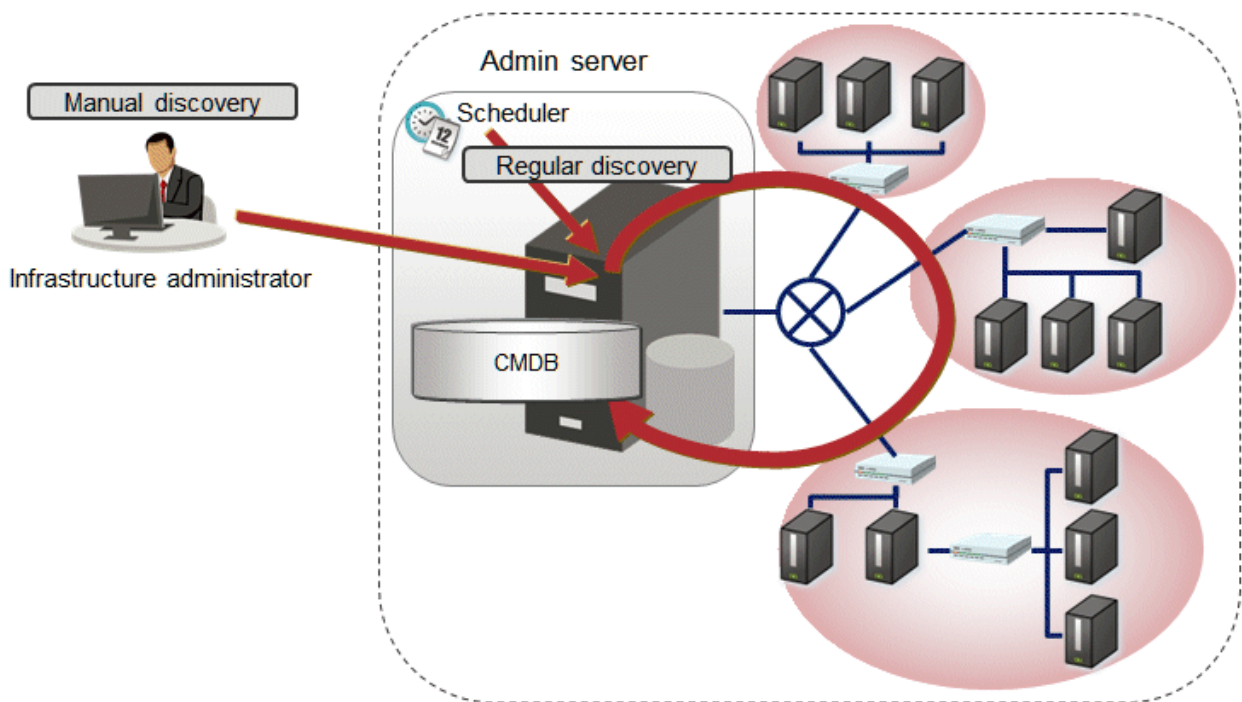
- Discovery
- Configuration management

## 2.1 Discovery

"Discovery" is a function that collects configuration information for business servers and registers it in the configuration management database (CMDB).

The configuration information collected by the discovery function is registered in the CMDB as configuration items (CI).

Figure 2.1 Overview of the discovery function



### Hardware/virtual environment configuration to be collected

The following hardware/virtual environment configuration information can be collected using the discovery function:

Table 2.1 Hardware configuration information collected by the discovery function (chassis, blade servers)

Device	Attribute name	Display example
Chassis body	Product name	BX900
	Serial number	AA1234567890
	Firmware version	5.32
Blade server	Slot number	1
	Product name	PRIMERGY BX920 S1
	Serial number	BB1234567890
	CPU Type	Xeon
	Frequency	1995

Device	Attribute name	Display example
	Quantity	2
	Memory size	4096
	Firmware version	551
	BIOS version	3D41
	OS name	VMware ESXi 5.1.0 build-1157734

Table 2.2 Hardware configuration information collected by the discovery function (rack mount servers)

Device	Attribute name	Display example
RX100/RX200/RX300 S6 series or later versions with a management controller mounted	Product name	PRIMERGY RX300 S7
	Serial number	CC1234567890
	CPU Type (*1)	Xeon
	Frequency	1995
	Quantity	2
	Memory size	4096
	OS name (*2)	VMware ESXi 5.1.0 build-1157734

\*1: In the S6 series the CPU type cannot be discovered.

\*2: Only when the version of the mounted hypervisor is VMware vSphere ESXi 5.1 or later can discovery be performed.

Table 2.3 Virtual environment configuration information collected by the discovery function

Hypervisor	Type	Item	Display example
VMware vSphere ESXi	VM host information	OS name	VMware ESXi 5.1.0 build-1021289
	VM guest information	Virtual machine name	VM001
		OS name	Microsoft Windows Server 2012 (64-bit)
		IP address	192.168.10.122

## The timing of discovery

Discovery is performed at the following times:

- Regular discovery

Discovery is executed periodically according to a schedule.

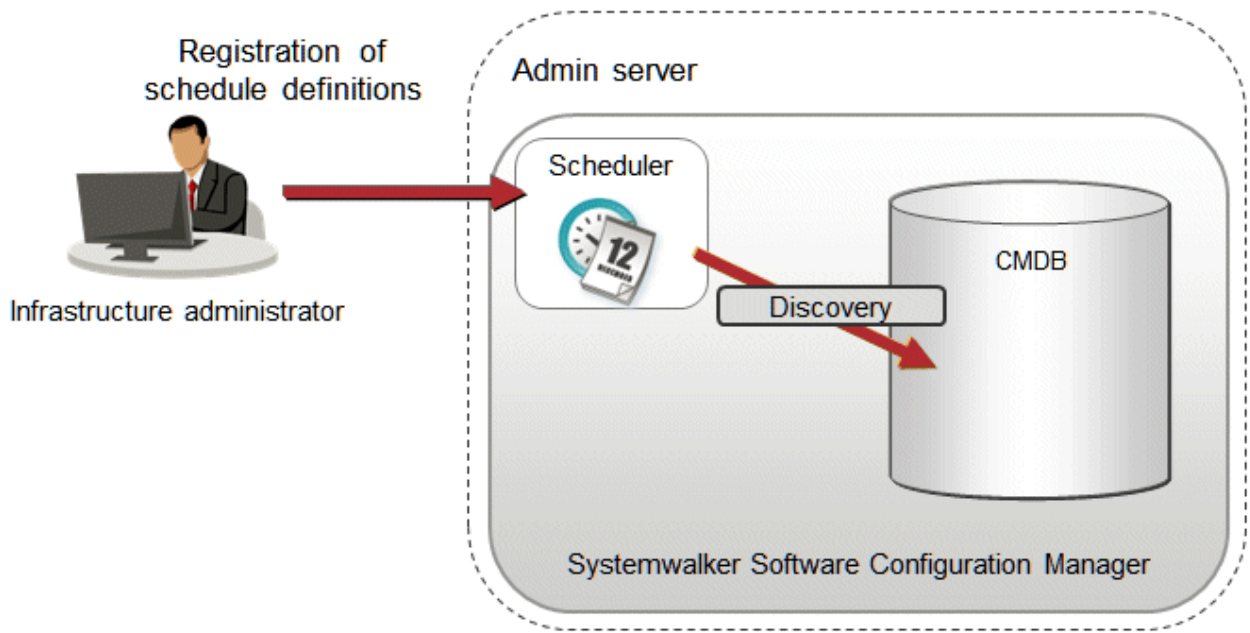
- Manual discovery

Discovery is manually performed by the infrastructure administrator executing a command.

### Regular discovery

With regular discovery, the latest configuration information is collected according to a schedule that the infrastructure administrator has defined in advance.

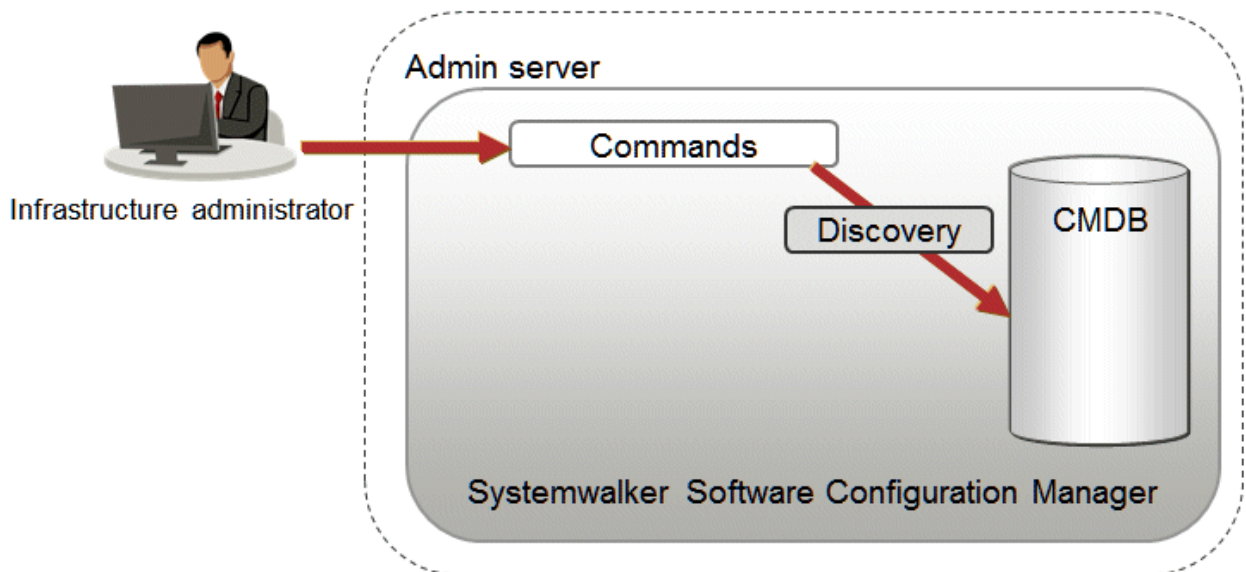
Figure 2.2 Regular discovery



### Manual discovery

The infrastructure administrator collects the latest configuration information by executing the command to perform discovery.

Figure 2.3 Manual discovery



## 2.2 Configuration Management

### 2.2.1 Hardware/Virtual Environment Configuration Management

Discovery of hardware configuration information collects serial numbers of chassis, blade servers, rack mount servers, firmware versions, and CPU/memory information.

Discovery of virtual environment configuration information collects the host OS version, guest OS type, IP address, and CPU/memory information in VMware vSphere environments.

To manage hardware/virtual environment configuration management, perform the following operations.

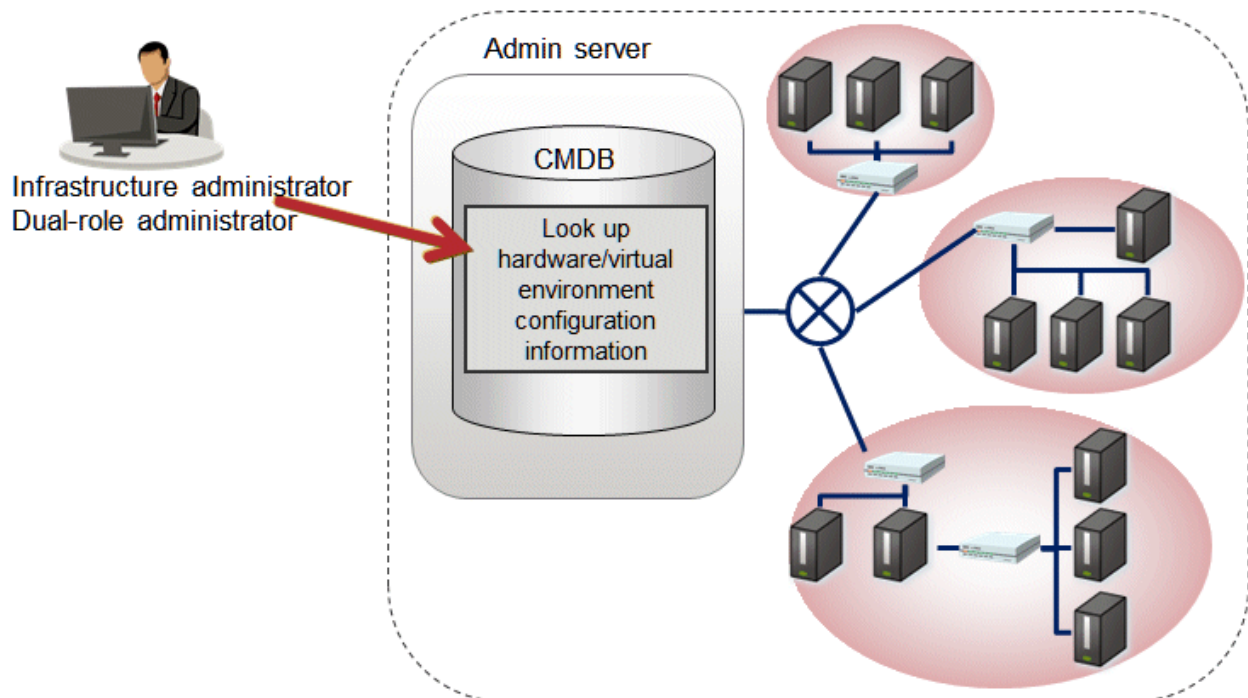
- Referencing the hardware/virtual configuration information

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

The following table shows the range within which each role can use hardware/virtual environment configuration management:

Role	Usage range of hardware/virtual environment configuration information
Infrastructure administrator	Can look up software configuration information for all servers.
Dual-role administrator	Can look up software configuration information for all servers.

Figure 2.4 Overview of hardware/virtual environment configuration management





# Chapter 3 Operating Environment

This chapter explains the operating environment for this product.

## 3.1 Required Hardware

### 3.1.1 Recommended Hardware Resources

#### Admin server

Type of hardware	Requirements
Supported model	PRIMERGY, PRIMEQUEST 1000/2000 series
CPU	Intel(R) Xeon(R) 3 GHz or higher
Number of CPUs	2 or more
Memory capacity (excluding the operating system)	8.0 GB or more

When linking to ServerView Resource Orchestrator

Type of hardware	Requirements
Supported model	PRIMERGY, PRIMEQUEST 1000/2000 series
CPU	Intel(R) Xeon(R) 3 GHz or higher
Memory capacity (excluding the operating system)	3.0 GB or more

### 3.1.2 Disk Capacity

#### Admin server

Static disk capacity[Windows]

Product name	Disk space required for installation
Systemwalker Software Configuration Manager	Installation directory: 13.3 GB

Note: In addition to the disk space requirements above, the following disk space is required to manage and uninstall the software.

- %SYSTEMDRIVE%\FujitsuF4CR: 150 MB

When linking to ServerView Resource Orchestrator

Product name	Disk space required for installation
Systemwalker Software Configuration Manager	Installation directory: 3 GB

Note: In addition to the disk space requirements above, the following disk space is required to manage and uninstall the software:

- %SYSTEMDRIVE%\FujitsuF4CR: 150 MB

Static disk capacity [Linux]

Product name	Area used	Disk space required for installation
Systemwalker Software Configuration Manager	/opt	3.2 GB or more
	/var	9.2 GB or more
	/etc	0.7 GB or more

Note: In addition to the disk space requirements above, the following disk space is required to manage and uninstall the software.

-/opt: 150 MB

When linking to ServerView Resource Orchestrator

Product name	Location	Disk space required for installation
Systemwalker Software Configuration Manager	/opt	1.0 GB or more
	/var	1.5 GB or more
	/etc	0.5 GB or more

Note: In addition to the disk space requirements above, the following disk space is required to manage and uninstall the software.

-/opt: 150 MB

Dynamic disk capacity

Database and memory space for the CMDB manager

Use the following list as a guide to estimate the database space and memory space.

Number of physical servers	Total amount of disk space used	Total amount of memory space used
500	1.0GB	1.5GB

## 3.2 Required Software

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This section explains the software resources that are required to install this product.

### 3.2.1 Operating Systems for Managing Hardware/Virtual Environment Configuration

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This section lists the operating systems supported for managing hardware and virtual environment configuration.

#### Admin server

- Windows Server 2012 (for x64) (\*1)
- Windows Server 2012 R2 (for x64) (\*1)
- Windows Server 2008 (for x86)
- Windows Server 2008 (for x64) (\*1)
- Windows Server 2008 R2 (\*1)
- Red Hat Enterprise Linux 5 (for x86)
- Red Hat Enterprise Linux 5 (for Intel64) (\*2)
- Red Hat Enterprise Linux 6 (for x86)
- Red Hat Enterprise Linux 6 (for Intel64) (\*2)

\*1: Runs as a 32-bit application on the WOW64 (Windows 32-bit On Windows 64-bit) subsystem

\*2: Runs in 32-bit compatibility mode

### 3.2.2 Mandatory Software

---

This section lists mandatory software.

## Admin server

- ServerView Operations Manager V5.30 or later (required for single sign-on)

## Web client

- Internet Explorer 9, 10, or 11
- Adobe Reader X or XI (required to view PDF manuals)
- 



### Note

The recommended display size (screen resolution) for the management console is 1024x768 pixels.

## Business server

- VMware Tools must be installed on the guest OS on ESXi (required for managing hardware and virtual environment configurations)

### 3.2.2.1 Mandatory Software for Linux

#### Admin server

The following software, which comes with the operating system, is required.

- elfutils package

Red Hat Enterprise Linux 5.2 or earlier

elfutils-libelf-0.125-3.el5.i386.rpm (\*1)

Red Hat Enterprise Linux 5.3 or later

elfutils-libelf-0.137-3.el5.i386.rpm (\*1)

Red Hat Enterprise Linux 6.0 or later

elfutils-libelf-0.148-1.el6.i686.rpm (\*1)

\*1: The 32-bit version is required even for 64-bit version of Linux.

Red Hat Enterprise Linux 5, in addition to the above, the following software, which comes with the operating system, is required.

Red Hat Enterprise Linux 5 (for x86)

- apr package (32-bit version)
- apr-util package (32-bit version)
- glibc package (32-bit version)
- libtermcap package (32-bit version)
- libxml2 package (32-bit version)
- libXp package (32-bit version)
- libxslt package (32-bit version)
- net-snmp package (32-bit version)
- net-snmp-utils package (32-bit version)
- postgresql-libs package (32-bit version)
- readline package (32-bit version)

- redhat-lsb package (32-bit version)
- sysstat package (32-bit version)
- zlib package (32-bit version)

#### Red Hat Enterprise Linux 5 (for Intel64)

- apr package (32-bit version)
- apr-util package (32-bit version)
- glibc package (32-bit version)
- libtermcap package (32-bit version)
- libxml2 package (32-bit version)
- libXp package (32-bit version)
- libxslt package (32-bit version)
- net-snmp package (64-bit version)
- net-snmp-utils package (64-bit version)
- postgresql-libs package (32-bit version)
- readline package (32-bit version)
- redhat-lsb package (64-bit version)
- sysstat package (64-bit version)
- zlib package (32-bit version)

Red Hat Enterprise Linux 6.0 or later, in addition to the above, the following software, which comes with the operating system, is required.

#### Red Hat Enterprise Linux 6.0 or later (for x86)

- alsa-lib package (32-bit version)
- apr package (32-bit version)
- apr-util package (32-bit version)
- cloog-ppl package (32-bit version)
- compat-expat1 package (32-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- compat-openldap package (32-bit version)
- cpp package (32-bit version)
- cyrus-sasl-lib package (32-bit version)
- db4 package (32-bit version)
- expat package (32-bit version)
- file package (32-bit version)
- gcc package (32-bit version)
- gcc-c++ package (32-bit version)
- gdb package (32-bit version)
- glibc-devel package (32-bit version)

- glibc-headers package (32-bit version)
- glibc package (32-bit version)
- kernel-headers package (32-bit version)
- keyutils-libs package (32-bit version)
- krb5-libs package (32-bit version)
- libattr package (32-bit version)
- libcap package (32-bit version)
- libcom\_err package (32-bit version)
- libgcc package (32-bit version)
- libICE package (32-bit version)
- libselinux package (32-bit version)
- libSM package (32-bit version)
- libX11 package (32-bit version)
- libX11-common package
- libXau package (32-bit version)
- libXext package (32-bit version)
- libXi package (32-bit version)
- libXp package (32-bit version)
- libXt package (32-bit version)
- libXtst package (32-bit version)
- libgomp package (32-bit version)
- libstdc++-devel package (32-bit version)
- libstdc++ package (32-bit version)
- libtool-ltdl package (32-bit version)
- libuuid package (32-bit version)
- libxcb package (32-bit version)
- make package (32-bit version)
- mpfr package (32-bit version)
- net-snmp package (32-bit version)
- net-snmp-utils package (32-bit version)
- nspr package (32-bit version)
- nss package (32-bit version)
- nss-softokn-freebl package (32-bit version)
- nss-util package (32-bit version)
- openssl package (32-bit version)
- openssl098e package (32-bit version)
- perl package (32-bit version)
- perl-Module-Pluggable package (32-bit version)

- perl-Pod-Escapes package (32-bit version)
- perl-Pod-Simple package (32-bit version)
- perl-libs package (32-bit version)
- perl-version package (32-bit version)
- ppl package (32-bit version)
- redhat-lsb package (32-bit version)
- sqlite package (32-bit version)
- strace package (32-bit version)
- sysstat package (32-bit version)
- tssh package (32-bit version)
- unixODBC package (32-bit version)
- zlib package (32-bit version)

**Red Hat Enterprise Linux 6.0 or later (for Intel64)**

- alsa-lib package (32-bit version)
- apr package (32-bit version)
- apr-util package (32-bit version)
- audit-libs package (32-bit version)
- cloog-ppl package (64-bit version)
- compat-expat1 package (32-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- compat-openldap package (32-bit version)
- cpp package (64-bit version)
- cracklib package (32-bit version)
- cyrus-sasl-lib package (32-bit version)
- db4 package (32-bit version)
- expat package (32-bit version)
- file package (64-bit version)
- gcc package (64-bit version)
- gcc-c++ package (64-bit version)
- glibc package (32-bit version)
- glibc-devel package (32-bit version)
- glibc-headers package (64-bit version)
- kernel-headers package (64-bit version)
- keyutils-libs package (32-bit version)
- krb5-libs package (32-bit version)
- libICE package (32-bit version)
- libSM package (32-bit version)

- libX11 package (32-bit version)
- libX11-common package
- libXau package (32-bit version)
- libXext package (32-bit version)
- libXi package (32-bit version)
- libXp package (32-bit version)
- libXt package (32-bit version)
- libXtst package (32-bit version)
- libattr package (32-bit version)
- libcap package (32-bit version)
- libcom\_err package (32-bit version)
- libgcc package (32-bit version)
- libgomp package (64-bit version)
- libselenium package (32-bit version)
- libstdc++ package (32-bit version)
- libstdc++-devel package (64-bit version)
- libtool-ltdl package (32-bit version)
- libuuid package (32-bit version)
- libxcb package (32-bit version)
- make package (64-bit version)
- mpfr package (64-bit version)
- ncurses-libs package (32-bit version)
- net-snmp package (64-bit version)
- net-snmp-utils package (64-bit version)
- nspr package (64-bit version)
- nss package (64-bit version)
- nss-softokn-freebl package (32-bit version)
- nss-util package (64-bit version)
- openssl package (32-bit version)
- openssl098e package (32-bit version)
- pam package (32-bit version)
- perl package (64-bit version)
- perl-Module-Pluggable package (64-bit version)
- perl-Pod-Escapes package (64-bit version)
- perl-Pod-Simple package (64-bit version)
- perl-libs package (64-bit version)
- perl-version package (64-bit version)
- ppl package (64-bit version)

- readline package (32-bit version)
- redhat-lsb package (64-bit version)
- sqlite package (32-bit version)
- sysstat package (64-bit version)
- tsh package (64-bit version)
- unixODBC package (32-bit version)
- zlib package (32-bit version)

### 3.2.3 Related Software

---

This section lists related software programs that are required for this product.

#### Admin server

- ServerView Resource Orchestrator V3.1.2 Cloud Edition

This software is required to manage business servers deployed by ServerView Resource Orchestrator.



If Systemwalker Software Configuration Manager is linked to ServerView Resource Orchestrator, uninstall Systemwalker Software Configuration Manager before performing the following tasks:

- Upgrading ServerView Resource Orchestrator
- Uninstalling ServerView Resource Orchestrator



For the authentication method for ServerView Resource Orchestrator, use ServerView Single Sign-On (SSO). If the internal authentication system is used for authentication, ServerView Resource Orchestrator cannot coordinate with Systemwalker Configuration Manager.

### 3.2.4 Conflicting Software

---

The following table lists software that conflicts with this product.

#### Admin server

The Systemwalker Software Configuration Manager admin server cannot coexist with the following software:

[Windows]

Product	V/L
<ul style="list-style-type: none"> <li>- INTERSTAGE               <ul style="list-style-type: none"> <li>- INTERSTAGE Standard Edition</li> <li>- INTERSTAGE Enterprise Edition</li> </ul> </li> </ul>	Cannot coexist with any version
<ul style="list-style-type: none"> <li>- Interstage Application Server               <ul style="list-style-type: none"> <li>- INTERSTAGE Application Server Standard Edition</li> <li>- INTERSTAGE Application Server Enterprise Edition</li> </ul> </li> </ul>	Cannot coexist with any version



Product	V/L
<ul style="list-style-type: none"> <li>- INTERSTAGE Application Server Web-J Edition</li> <li>- Interstage Application Server Standard Edition</li> <li>- Interstage Application Server Standard-J Edition</li> <li>- Interstage Application Server Enterprise Edition</li> <li>- Interstage Application Server Plus</li> <li>- Interstage Application Server Plus Developer</li> <li>- Interstage Application Server Web-J Edition</li> </ul>	
<ul style="list-style-type: none"> <li>- Interstage Application Framework Suite</li> <li>- Interstage Application Framework Suite Standard Edition</li> <li>- Interstage Application Framework Suite Enterprise Edition</li> <li>- Interstage Application Framework Suite Web Edition</li> </ul>	Cannot coexist with any version
<ul style="list-style-type: none"> <li>- Interstage Business Application Server</li> <li>- Interstage Business Application Server Standard Edition</li> <li>- Interstage Business Application Manager</li> </ul>	Cannot coexist with any version
Interstage Job Workload Server	Cannot coexist with any version
Interstage Apcoordinator	Cannot coexist with any version
INTERSTAGE WEBCOORDINATOR	Cannot coexist with any version
Interstage BPM Flow	Cannot coexist with any version
Interstage Business Process Manager	Cannot coexist with any version
Interstage Shunsaku Data Manager	Cannot coexist with any version
Interstage Traffic Director	Cannot coexist with any version
Interstage Apworks	Cannot coexist with any version
Interstage Studio	Cannot coexist with any version
Interstage Service Integrator	Cannot coexist with any version
Interstage Service Integrator Standard Edition	Cannot coexist with any version
Interstage Service Integrator Enterprise Edition	Cannot coexist with any version
Interstage Security Director (Interstage Proxy)	Cannot coexist with any version
Interstage Web Server	Cannot coexist with any version
Interstage Web Server Express	Cannot coexist with any version
ObjectDirector	Cannot coexist with any version
<ul style="list-style-type: none"> <li>- Systemwalker Centric Manager <ul style="list-style-type: none"> <li>- SystemWalker/CentricMGR</li> <li>- SystemWalker/CentricMGR-M</li> <li>- SystemWalker/CentricMGR EE</li> <li>- SystemWalker/CentricMGR SE</li> <li>- Systemwalker Centric Manager Enterprise Edition</li> <li>- Systemwalker Centric Manager Standard Edition</li> </ul> </li> </ul>	<p>Can coexist only with Systemwalker Centric Manager Enterprise Edition and Systemwalker Centric Manager Standard Edition V10.0L21 or later (x86 version) (*1)</p> <p>Cannot coexist with any other version</p>
Systemwalker PKI Manager	Cannot coexist with any version

Product	V/L
Systemwalker Runbook Automation (Management Server)	Can coexist only with Systemwalker Runbook Automation V15.1.3 (*2) Cannot coexist with any other version
Systemwalker Runbook Automation (Linked Server/Relay Server)	Cannot coexist with any version
Systemwalker Runbook Automation (Business Server)	Cannot coexist with any version
Systemwalker Software Configuration Manager (linkage server)	Cannot coexist with any version
Systemwalker Software Configuration Manager (business server)	Cannot coexist with any version
Securecrypto library	Cannot coexist with any version
TeamWARE Office Server	Cannot coexist with any version
TRADE MASTER	Cannot coexist with any version
Cloud infrastructure management software	Cannot coexist with any version

\*1:

For the installation procedure for coexisting with Systemwalker Centric Manager V10.0L21 or later, refer to "[B.1 Installing Systemwalker Centric Manager](#)".

\*2:

For the installation procedure for coexisting with Systemwalker Runbook Automation V15.1.3, refer to "[B.2 Installing Systemwalker Runbook Automation](#)".

[Linux]

Product	V/L
Systemwalker IT Process Master	Cannot coexist with any version
<ul style="list-style-type: none"> <li>- Interstage Application Server <ul style="list-style-type: none"> <li>- INTERSTAGE Application Server Standard Edition</li> <li>- INTERSTAGE Application Server Enterprise Edition</li> <li>- INTERSTAGE Application Server Web Edition</li> <li>- INTERSTAGE Application Server Web-J Edition</li> </ul> </li> <li>- Interstage Application Server Standard Edition</li> <li>- Interstage Application Server Standard-J Edition</li> <li>- Interstage Application Server Enterprise Edition</li> <li>- Interstage Application Server Plus</li> <li>- Interstage Application Server Plus Developer</li> <li>- Interstage Application Server Web-J Edition</li> </ul>	Cannot coexist with any version
<ul style="list-style-type: none"> <li>- Interstage Application Framework Suite <ul style="list-style-type: none"> <li>- Interstage Application Framework Suite Standard Edition</li> <li>- Interstage Application Framework Suite Enterprise Edition</li> <li>- Interstage Application Framework Suite Web Edition</li> </ul> </li> </ul>	Cannot coexist with any version

Product	V/L
Systemwalker IT Process Master	Cannot coexist with any version
- Interstage Business Application Server - Interstage Business Application Server Standard Edition - Interstage Business Application Server Enterprise Edition	Cannot coexist with any version
Interstage Job Workload Server	Cannot coexist with any version
Interstage BPM Flow	Cannot coexist with any version
Interstage Business Process Manager	Cannot coexist with any version
Interstage Shunsaku Data Manager	Cannot coexist with any version
Interstage Traffic Director	Cannot coexist with any version
Interstage Service Integrator	Cannot coexist with any version
Interstage Service Integrator Standard Edition	Cannot coexist with any version
Interstage Service Integrator Enterprise Edition	Cannot coexist with any version
Interstage Web Server	Cannot coexist with any version
- Systemwalker Centric Manager - Systemwalker Centric Manager Global Enterprise Edition - Systemwalker Centric Manager Enterprise Edition - Systemwalker Centric Manager Standard Edition	Can coexist only with Systemwalker Centric Manager Enterprise Edition and Systemwalker Centric Manager Standard Edition V10.0L21 or later (x86 version) (*1) Cannot coexist with any other version
Systemwalker Runbook Automation (Management Server)	Can coexist only with Systemwalker Runbook Automation V15.1.3 (*2) Cannot coexist with any other version
Systemwalker Runbook Automation (Linked Server/Relay Server)	Cannot coexist with any version
Systemwalker Runbook Automation (Business Server)	Cannot coexist with any version
Systemwalker Software Configuration Manager (linkage server)	Cannot coexist with any version
Systemwalker Software Configuration Manager (business server)	Cannot coexist with any version
Cloud infrastructure management software	Cannot coexist with any version

\*1:

For the installation procedure for coexisting with Systemwalker Centric Manager V10.0L21 or later, refer to "[B.1 Installing Systemwalker Centric Manager](#)".

\*2:

For the installation procedure for coexisting with Systemwalker Runbook Automation V15.1.3, refer to "[B.2 Installing Systemwalker Runbook Automation](#)".

### 3.3 Hardware and Hypervisor Supported for Configuration Management of Hardware/Virtual Environment

Hardware supported for hardware configuration management is as follows.

Table 3.1 Hardware supported for hardware configuration management (chassis, blade servers)

Device	Attribute name	Management blade			Server blade					
		BX600 S2/S3	BX900 S1	BX400 S1	BX620 S3/S4	BX620 S5/S6	BX920 S1 - S4	BX922 S2	BX924 S2 - S4	BX960 S1
Chassis body	Product name	Y	Y	Y	-	-	-	-	-	-
	Serial number	Y	Y	Y	-	-	-	-	-	-
	Firmware version	-	Y	-	-	-	-	-	-	-
Blade server	Slot number	-	-	-	Y	Y	Y	Y	Y	Y
	Product name	-	-	-	Y	Y	Y	Y	Y	Y
	Serial number	-	-	-	Y	Y	Y	Y	Y	Y
	CPU Type	-	-	-	Y	Y	Y	Y	Y	Y
	Frequency	-	-	-	Y	Y	Y	Y	Y	Y
	Quantity	-	-	-	Y	Y	Y	Y	Y	Y
	Memory size	-	-	-	Y	Y	Y	Y	Y	Y
	Firmware version	-	-	-	-	-	Y	Y	Y	Y
	BIOS version	-	-	-	-	-	Y	Y	Y	Y
	OS name	-	-	-	Y (*1)	Y (*1)	Y (*1)	Y (*1)	Y (*1)	Y (*1)

Y: Target of discovery.

-: Not target of discovery.

\*1: When the version of the mounted hypervisor is VMware vSphere ESXi 5.1 or later, discovery can be performed.

Table 3.2 Hardware supported for hardware configuration management (rack mount servers)

Device	Attribute name	Target of discovery
RX100/RX200/RX300 S6 series or later versions with a management controller mounted	Product name	Y
	Serial number	Y
	CPU Type (*1)	Y
	Frequency	Y
	Quantity	Y
	Memory size	Y
	OS name (*2)	Y (*1)

Y: Target of discovery.

\*1: In the S6 series the CPU type cannot be discovered.

\*2: Only when the version of the mounted hypervisor is VMware vSphere ESXi 5.1 or later can discovery be performed.

The following diagram illustrates the hypervisors for which virtual environment configuration can be managed.

Table 3.3 Hypervisor supported for virtual environment configuration management

Hypervisor	Type	Item	Target of discovery
VMware vSphere ESXi	VM host information	OS name	Y
	VM guest information	Virtual machine name	Y
		OS name	Y
		IP address	Y

Y: Target of discovery.

# Part 2 Installation

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# Chapter 4 Operation Design

This chapter explains how to design operations for Systemwalker Software Configuration Manager.

## 4.1 Authentication

This section explains how to authenticate users in Systemwalker Software Configuration Manager.

In Systemwalker Software Configuration Manager, authentication is performed using single sign-on. For users of this product, the users registered in the repository of the single sign-on environment are used for authentication. This method has the following features:

- User information can be shared between products that support the single sign-on environment. User information can be managed centrally in the repository of the single sign-on environment.
- When logged in to the management console of Systemwalker Software Configuration Manager, the user information can be used to seamlessly start up software products that use single sign-on, without having to display a new login screen.

Systemwalker Software Configuration Manager uses the ServerView Operations Manager single sign-on. OpenDS (\*1), which is provided by ServerView Operations Manager, is used as the repository of the ServerView Operations Manager single sign-on environment.

\*1: OpenDJ is bundled as a directory service in ServerView Operations Manager V6.1 and later. Therefore, where the explanation in this manual includes "OpenDS", read this as "OpenDJ" if applicable.

## 4.2 Managing User Information

This chapter explains how to manage the user information in Systemwalker Software Configuration Manager.

This product uses a directory service as the repository of user information. The directory service is also used for user authentication.

The content of user operations carried out by the User Information Management command is reflected to the directory service created at the following location:

```
ou=users,dc=fujitsu,dc=com
```

User information is stored in the inetOrgPerson class. The user information stored for each attribute is listed in the table below.

Attribute name	Value	Remarks
objectClass	inetOrgPerson	
cn	User ID	
sn	Surname	
initials	Middle name(s)	
givenName	Given name	
userPassword	Password	
uid	User ID	
ou	Tenant name	Stores the name of the tenant that the user belongs to.
o	Company or organization name	
telephoneNumber	Telephone number	
mail	Email address	
description	Role	One of the following values is set according to the user role: <ul style="list-style-type: none"><li>- Dual-role administrator: administrator</li><li>- Infrastructure administrator: infra_admin</li></ul>

Also, all users are registered as members of the IflowUsers group below.

Group name	Identifier (dn)	Object class
IflowUsers	cn=IflowUsers,ou=Group,dc=fujitsu,dc=com	organizationalUnit

## Information

### Requirements to use this product

In addition to users registered using the User Information Management command, directory service user entries that satisfy the following three conditions can be used as users of Systemwalker Software Configuration Manager:

- A value is stored in all the following attributes:
  - cn
  - uid
  - sn
  - givenName
  - mail
- The same value is stored in the following attributes:
  - cn
  - uid
- The value of the description attribute is one of the following:
  - administrator
  - infra\_admin

## Note

### Notes on sharing with another product the directory service used by this product

- Ensure that the cn and uid attributes in the directory service have unique values, otherwise you will not be able to log in to the management console.
- Users who have not been registered using the User Information Management command and users who do not satisfy the requirements to use this product cannot use the management console.
- You cannot perform operations using the User Information Management command for users who have not been registered using the User Information Management command or users who do not satisfy the requirements to use this product.
- Note the following when using users of this product on a different product:
  - Attribute values in the directory service are updated using the values you specified when updating, moving, or changing the password of user information with the User Information Management command.
  - Deleting a user with the User Information Management command also deletes the user entry from the directory service.

### Users and Groups used by this product

This product uses the following users and groups contained in the directory service, and therefore should not be deleted. Also, the following users cannot be used by the user of this product.



User name	Identifier (dn)	Object class	Remarks
User for process control	cn=<userForProcessControl>,ou=users,dc=fujitsu,dc=com	inetOrgPerson	The user for process control is specified during setup of this product.
User for schedule startup	cn=<userForScheduleStartup>,ou=users,dc=fujitsu,dc=com	inetOrgPerson	The user for schedule startup is specified during setup of this product.

Group name	Identifier (dn)	Object class
AdminRole	cn=AdminRole,ou=Group,dc=fujitsu,dc=com	organizationalUnit
swrba_Exe	cn=swrba_Exe,ou=Group,dc=fujitsu,dc=com	organizationalUnit
Role	cn=Role,ou=Group,dc=fujitsu,dc=com	organizationalUnit
IflowUsers	cn=IflowUsers,ou=Group,dc=fujitsu,dc=com	organizationalUnit
IflowGroups	cn=IflowGroups,ou=Group,dc=fujitsu,dc=com	organizationalUnit

Refer to the following manual for information on the users registered when building the ServerView Operations Manager single sign-on environment:

- "ServerView user management with OpenDJ" in *User Management in ServerView*

#### **If linked to ServerView Resource Orchestrator**

If linked to ServerView Resource Orchestrator, then use it to manage user information - refer to the following manual for details.

- "Defining User Accounts" in *ServerView Resource Orchestrator Cloud Edition Design Guide*.

# Chapter 5 Installation

This chapter explains how to install Systemwalker Software Configuration Manager.

## 5.1 Pre-installation Notes

Perform the following tasks before installing this product.

### 5.1.1 Checking the Port Numbers and Firewall Settings

Check whether the port numbers to be used by Systemwalker Software Configuration Manager are already being used. For the ports to be used, refer to "[Appendix A Port Number List](#)" and check each server to see that none of the required ports are being used.

When installing this product in an environment where a firewall function is being used, the firewall function must be set up to allow communications via the necessary ports. Refer to "[Appendix A Port Number List](#)" for information on the required ports, and set up the "port numbers for which communications from external servers must be allowed" for each server. Refer to the operating system manuals for information on how to set up the firewall function so as to allow communications via the necessary ports.

### 5.1.2 Checking the Settings in the Hosts File or the DNS Server

It must be possible to resolve the IP address correctly from the local host name. Check the hosts file or the DNS server settings before installing the product, also check that the host name can be resolved to the IP address correctly.

### 5.1.3 Building a Single Sign-On Environment

Before installing Systemwalker Software Configuration Manager, it is necessary to build the single sign-on environment using ServerView Operations Manager - refer to the relevant ServerView Operations Manager manual for information on how to install it (it is not necessary to perform a new installation if it is already installed).



- Install ServerView Operations Manager on the admin server for Systemwalker Software Configuration Manager.
- The password for the LDAP administrator used in ServerView Operations Manager single sign-on cannot contain halfwidth spaces, fullwidth characters, or \$ \ " = | [ ] : \* ; + , < > ? / .

### 5.1.4 Checking Linked Products (ServerView Resource Orchestrator)

If Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, ensure that the latter has been installed and configured on the admin server.



Use ServerView Single Sign-On (SSO) for the authentication method of ServerView Resource Orchestrator. When using internal authentication, coordination with Systemwalker Configuration Manager is not possible.

## 5.2 Installing on the Admin Server

This section explains how to install the product on the admin server.



- Check if any conflicting products have been installed.

- Refer to "[Appendix B Installing Operation Management Products on Admin Server](#)" for information on how to install other operation management products on the admin server.

---

## 5.2.1 Points to Note before Installing on the Admin Server

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### Checking linked products

If Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, check if the following software has been installed and is ready for use:

- ServerView Resource Orchestrator Cloud Edition V3.1.2

### Functions to be installed

The following functions must be installed in the admin server:

- The following functions are necessary for operating Systemwalker Software Configuration Manager:
  - Systemwalker Runbook Automation (\*1)
  - Interstage Application Server (\*1)
  - Interstage Business Process Manager (\*1)
  - Systemwalker Operation Manager (\*1)
  - PostgreSQL (\*1)
  - Fujitsu XML Processor (\*1)
  - CMDB Manager (\*1)
  - SMEE, Securecrypto library runtime (\*1)
  - File transfer infrastructure

\*1: This function will not be installed again if it has already been installed and either the admin server is to be linked to ServerView Resource Orchestrator or operating on the same admin server as the Systemwalker Runbook Automation Management Server.

### Checking the port numbers

Ensure that the port number specified when installing Systemwalker Software Configuration Manager is not being used:

```
netstat -a -n
```

Even if the port number specified is not being used, it may already have been assigned to other software - refer to "[Appendix A Port Number List](#)" for information on how to check if the port number is not in use.

### Checking the language setting for the operating system

#### [Windows]

If installing Systemwalker Software Configuration Manager, ensure that the operating system is not a Japanese environment.

#### [Linux]

Check the LANG item in `/etc/sysconfig/i18n`, and ensure that the value of the character code for the system is not "ja\_JP.UTF-8", "ja\_JP.SJIS" or "ja\_JP.WINDOWS-31J". These character codes are not supported.

### Checking the operating system users



Do not use this procedure if operating Systemwalker Software Configuration Manager under the following conditions:

- If linked to ServerView Resource Orchestrator

- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

When installing Systemwalker Software Configuration Manager, register the following users as operating system users (if they have already been registered in the operating system, delete them before proceeding):

**[Windows]**

- swrbadbuser
- swrbajobuser

**[Linux]**

- swrbadbuser

**Required software [Linux]**

Install the following software which attached operating system.

Install them referring to operating system manuals.

- elfutils package

Red Hat Enterprise Linux 5.2 or earlier

elfutils-libelf-0.125-3.el5.i386.rpm (\*1)

Red Hat Enterprise Linux 5.3 or later

elfutils-libelf-0.137-3.el5.i386.rpm (\*1)

Red Hat Enterprise Linux 6.0 or later

elfutils-libelf-0.148-1.el6.i686.rpm (\*1)

\*1: Install 32-bit version of elfutils package even if Linux operating system is 64-bit version.

For Red Hat Enterprise Linux 5, also install the software listed below, which is distributed with the operating system (refer to the operating system manual before installing).

Red Hat Enterprise Linux 5 (for x86)

- apr package (32-bit version)
- apr-util package (32-bit version)
- glibc package (32-bit version)
- libtermcap package (32-bit version)
- libxml2 package (32-bit version)
- libXp package (32-bit version)
- libxslt package (32-bit version)
- net-snmp package (32-bit version)
- net-snmp-utils package (32-bit version)
- postgresql-libs package (32-bit version)
- readline package (32-bit version)
- redhat-lsb package (32-bit version)
- sysstat package (32-bit version)
- zlib package (32-bit version)

#### Red Hat Enterprise Linux 5 (for Intel64)

- apr package (32-bit version)
- apr-util package (32-bit version)
- glibc package (32-bit version)
- libtermcap package (32-bit version)
- libxml2 package (32-bit version)
- libXp package (32-bit version)
- libxslt package (32-bit version)
- net-snmp package (64-bit version)
- net-snmp-utils package (64-bit version)
- postgresql-libs package (32-bit version)
- readline package (32-bit version)
- redhat-lsb package (64-bit version)
- sysstat package (64-bit version)
- zlib package (32-bit version)

For Red Hat Enterprise Linux 6.0 or later, also install the software listed below, which is distributed with the operating system (refer to the operating system manual before installing).

#### Red Hat Enterprise Linux 6.0 or later (for x86)

- alsa-lib package (32-bit version)
- apr package (32-bit version)
- apr-util package (32-bit version)
- cloog-ppl package (32-bit version)
- compat-expat1 package (32-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- compat-openldap package (32-bit version)
- cpp package (32-bit version)
- cyrus-sasl-lib package (32-bit version)
- db4 package (32-bit version)
- expat package (32-bit version)
- file package (32-bit version)
- gcc package (32-bit version)
- gcc-c++ package (32-bit version)
- gdb package (32-bit version)
- glibc-devel package (32-bit version)
- glibc-headers package (32-bit version)
- glibc package (32-bit version)

- kernel-headers package (32-bit version)
- keyutils-libs package (32-bit version)
- krb5-libs package (32-bit version)
- libattr package (32-bit version)
- libcap package (32-bit version)
- libcom\_err package (32-bit version)
- libgcc package (32-bit version)
- libICE package (32-bit version)
- libselenium package (32-bit version)
- libSM package (32-bit version)
- libX11 package (32-bit version)
- libX11-common package
- libXau package (32-bit version)
- libXext package (32-bit version)
- libXi package (32-bit version)
- libXp package (32-bit version)
- libXt package (32-bit version)
- libXtst package (32-bit version)
- libgomp package (32-bit version)
- libstdc++-devel package (32-bit version)
- libstdc++ package (32-bit version)
- libtool-ltdl package (32-bit version)
- libuuid package (32-bit version)
- libxcb package (32-bit version)
- make package (32-bit version)
- mpfr package (32-bit version)
- net-snmp package (32-bit version)
- net-snmp-utils package (32-bit version)
- nspr package (32-bit version)
- nss package (32-bit version)
- nss-softokn-freebl package (32-bit version)
- nss-util package (32-bit version)
- openssl package (32-bit version)
- openssl098e package (32-bit version)
- perl package (32-bit version)
- perl-Module-Pluggable package (32-bit version)
- perl-Pod-Escapes package (32-bit version)
- perl-Pod-Simple package (32-bit version)

- perl-libs package (32-bit version)
- perl-version package (32-bit version)
- ppl package (32-bit version)
- redhat-lsb package (32-bit version)
- sqlite package (32-bit version)
- strace package (32-bit version)
- sysstat package (32-bit version)
- tssh package (32-bit version)
- unixODBC package (32-bit version)
- zlib package (32-bit version)

**Red Hat Enterprise Linux 6.0 or later (for Intel64)**

- alsa-lib package (32-bit version)
- apr package (32-bit version)
- apr-util package (32-bit version)
- audit-libs package (32-bit version)
- cloog-ppl package (64-bit version)
- compat-expat1 package (32-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- compat-openldap package (32-bit version)
- cpp package (64-bit version)
- cracklib package (32-bit version)
- cyrus-sasl-lib package (32-bit version)
- db4 package (32-bit version)
- expat package (32-bit version)
- file package (64-bit version)
- gcc package (64-bit version)
- gcc-c++ package (64-bit version)
- glibc package (32-bit version)
- glibc-devel package (32-bit version)
- glibc-headers package (64-bit version)
- kernel-headers package (64-bit version)
- keyutils-libs package (32-bit version)
- krb5-libs package (32-bit version)
- libICE package (32-bit version)
- libSM package (32-bit version)
- libX11 package (32-bit version)
- libX11-common package

- libXau package (32-bit version)
- libXext package (32-bit version)
- libXi package (32-bit version)
- libXp package (32-bit version)
- libXt package (32-bit version)
- libXtst package (32-bit version)
- libattr package (32-bit version)
- libcap package (32-bit version)
- libcom\_err package (32-bit version)
- libgcc package (32-bit version)
- libgomp package (64-bit version)
- libseltlinux package (32-bit version)
- libstdc++ package (32-bit version)
- libstdc++-devel package (64-bit version)
- libtool-ltdl package (32-bit version)
- libuuid package (32-bit version)
- libxcb package (32-bit version)
- make package (64-bit version)
- mpfr package (64-bit version)
- ncurses-libs package (32-bit version)
- net-snmp package (64-bit version)
- net-snmp-utils package (64-bit version)
- nspr package (64-bit version)
- nss package (64-bit version)
- nss-softokn-freebl package (32-bit version)
- nss-util package (64-bit version)
- openssl package (32-bit version)
- openssl098e package (32-bit version)
- pam package (32-bit version)
- perl package (64-bit version)
- perl-Module-Pluggable package (64-bit version)
- perl-Pod-Escapes package (64-bit version)
- perl-Pod-Simple package (64-bit version)
- perl-libs package (64-bit version)
- perl-version package (64-bit version)
- ppl package (64-bit version)
- readline package (32-bit version)
- redhat-lsb package (64-bit version)



- sqlite package (32-bit version)
- sysstat package (64-bit version)
- tcsh package (64-bit version)
- unixODBC package (32-bit version)
- zlib package (32-bit version)

## 5.2.2 Tasks Required before Installing on the Admin Server

---

### 5.2.2.1 Stopping ServerView Resource Orchestrator (If Linking to ServerView Resource Orchestrator)

If ServerView Resource Orchestrator is running, then stop it:

**[Windows]**

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rxmgretlstop
```

**[Linux]**

```
/opt/FJSVrcvnr/bin/rxmgretl stop
```



**Note**

If installing Systemwalker Software Configuration Manager on the same admin server as another operation management product such as Systemwalker Runbook Automation Management Server, it is necessary to stop the functions for the other operation management product. Ensure that these functions are stopped before installing Systemwalker Software Configuration Manager. Refer to "[Appendix B Installing Operation Management Products on Admin Server](#)" for details.

### 5.2.2.2 Changing Terminal Services to Install Mode [Windows]

If a Terminal Server has been installed, then change the Terminal Services to Install mode:

```
CHANGE USER /INSTALL
```

### 5.2.2.3 Tuning System Parameters [Linux]

The system parameters must be tuned.

#### Settings dependent on the parameter type

Set the parameters as below, depending on the "Type" above.

- If the Type is "Maximum":

If the value that has already been set (either the initial value or the previous setting) is equal to or greater than the value in the table above, there is no need to change the parameter value. If the current value is smaller than the value in the table, change the parameter to the value in the table.

- If the Type is "Addition":

Add the value in the table to the value that has already been set (either the initial value or the previous setting). Check the upper limit for the system before setting the parameter to the result of the addition, and if the result of the addition is greater than the upper limit for the system, then set the parameter to the upper limit for the system.

Refer to the Linux manuals and other documents for details.

## Tuning values for system parameters

Refer to the following tables for information on the system parameters that require tuning and their values:

- Shared memory

Parameter	Description	Value	Type
kernel.shmmax	Maximum segment size in shared memory	2684354560	Maximum
kernel.shmall	Total amount of shared memory available	655360	Maximum
kernel.shmmni	Maximum number of shared memory segments	76	Addition

- Semaphores

For the semaphore settings, specify each parameter value using the following format:

```
kernel.sem = para1 para2 para3 para4
```

Parameter	Description	Value	Type
para1	Maximum number of semaphores per semaphore identifier	512	Maximum
para2	Number of semaphores for the entire system	9069	Addition
para3	Maximum number of operators per semaphore call	50	Maximum
para4	Number of semaphore operators for the entire system	1427	Addition

- Message queues

Parameter	Description	Value	Type
kernel.msgmax	Maximum size of messages	16384	Maximum
kernel.msgmnb	Maximum value for messages that can be held in one message queue	114432	Maximum
kernel.msgmni	Maximum number of message queue IDs	1565	Addition

## Settings dependent on the parameter type

Set the parameters as below, depending on the "Type" shown in the table above.

- If the Type is "Maximum":

If the value that has already been set (either the initial value or the previous setting) is equal to or greater than the value in the table above, there is no need to change the parameter value. If the current value is smaller than the value in the table, change the parameter to the value in the table.

- If the Type is "Addition":

Add the value in the table above to the value that has already been set (either the initial value or the previous setting). Check the upper limit for the system before setting the parameter to the result of the addition, and if the result of the addition is greater than the upper limit for the system, then set the parameter to the upper limit for the system.

Refer to the Linux manuals and other documents for details.

## Tuning procedure

Use the following procedure to perform tuning tasks:

1. Use the following command to check the current settings for the system parameters:

```
# /sbin/sysctl -a
```

### Example

```
# /sbin/sysctl -a
. . .
(omitted)
. . .
kernel.sem = 250 32000 32 128
. . .
kernel.msgmnb = 65536
kernel.msgmni = 16
kernel.msgmax = 8192
kernel.shmmni = 4096
kernel.shmall = 2097152
kernel.shmmax = 33554432
. . .
(omitted)
. . .
```

2. Refer to "[Tuning values for system parameters](#)", and compare the current settings to the values in the tables above. Calculate an appropriate value for each parameter, taking into account the parameter type ("Maximum" or "Addition").
3. Edit the /etc/sysctl.conf file. Edit the file as shown in the following example:

### Example

```
kernel.sem = 512 41069 50 1555
kernel.msgmnb = 114432
kernel.msgmni = 1581
kernel.msgmax = 16384
kernel.shmmax = 2684354560
kernel.shmall = 655360
kernel.shmmni = 4172
```

4. Use the following command to check that the changes have been applied to the /etc/sysctl.conf file:

```
# /bin/cat /etc/sysctl.conf
```

5. To enable the settings in Step 4 above, perform either of the following methods:

- Apply the settings by rebooting the system.

```
# /sbin/shutdown -r now
```

- Apply the settings by executing the "/sbin/sysctl -p" command.

```
# /sbin/sysctl -p /etc/sysctl.conf (*1)
```

\*1: There is no need to reboot the system if this command is used.

6. The output of the following command can be used to check that the changes made to the system parameter settings have been applied:

```
# /sbin/sysctl -a
```



## Example

```
# /sbin/sysctl -a
. . .
(omitted)
kernel.sem = 512 41069 50 1555
...
kernel.msgmnb = 114432
kernel.msgmni = 1581
kernel.msgmax = 16384
kernel.shmmax = 2684354560
kernel.shmall = 655360
kernel.shmmni = 4172
. . .
(omitted)
. . .
```

### 5.2.2.4 syslog Settings [Linux]

This product outputs logs to syslog. In order to output logs to syslog, check the following settings and adjust the settings if necessary.

#### Settings for syslog.conf or rsyslog.conf

It is recommended that the default settings for the operating system be used.

Systemwalker Software Configuration Manager outputs logs using local0 (facility). The following settings are required. If the following settings are missing even though syslog.conf or rsyslog.conf has already been edited, add the following settings to syslog.conf or rsyslog.conf.

Refer to the syslog.conf manuals for information on how to edit the syslog.conf file. Refer to the rsyslog.conf manuals for information on how to edit the rsyslog.conf file.

- "/etc/syslog.conf" (for RHEL5)

Selector field (facility.priority)	Action field
local0.info	/var/log/messages

- "/etc/rsyslog.conf" (for RHEL6)

<Rules>

Selector field (facility.priority)	Action field
local0.info	/var/log/messages



#### Point

There is no need to make modifications if "\*.info" has been set for the selector field (facility.priority).

#### Enabling remote reception for syslog

Remote reception must be enabled in order to output logs to the syslog on the admin server from Systemwalker Software Configuration Manager.

Configure settings so that syslog automatically starts in remote reception mode when the operating system starts.

Edit the following files:

- "/etc/sysconfig/syslog" (for RHEL5)

Add the "-r" option to SYSLOGD\_OPTIONS.

Example:

```
SYSLOGD_OPTIONS="-r -m 0"
```

- "/etc/rsyslog.conf" (for RHEL6)

Enable \$UDPServerRun.

```
$ModLoad imudp.so
```

```
$UDPServerRun 514
```

Note that the port used for remote reception is "514/udp". Refer to "[Appendix A Port Number List](#)" for a list of ports used by Systemwalker Software Configuration Manager.

## Restarting syslogd or rsyslogd

If the settings have been changed in "Settings for syslog.conf or rsyslog.conf" or "Enabling remote reception for syslog", restart syslogd or rsyslogd for the changes to take effect.

Refer to the syslogd manuals for information on syslogd. Refer to the rsyslogd manuals for information on rsyslogd.

- "syslogd" (for RHEL5)

```
>/etc/init.d/syslog stop
```

```
>/etc/init.d/syslog start
```

- "rsyslogd" (for RHEL6)

```
>/etc/init.d/rsyslog stop
```

```
>/etc/init.d/rsyslog start
```

## 5.2.3 Installing Systemwalker Software Configuration Manager

Use the following procedure to install the product on the admin server:

Install the product on a Windows or a Linux machine.

### 5.2.3.1 Installation in Windows

This section explains how to install Systemwalker Software Configuration Manager on a Windows admin server.

Standard and custom installations are available when installing Systemwalker Software Configuration Manager. If you want to use the default values for all settings, then perform a standard installation, otherwise perform a custom installation.

#### 5.2.3.1.1 Standard installation

If you want to use the default values for all settings during installation, then perform a standard installation.

The standard installation uses the following default values:

Setting value	Meaning of the setting value	Default value
Installation directory	Installation directory for Systemwalker Software Configuration Manager	C:\Program Files (x86)\Systemwalker
Web server port number of Systemwalker Software Configuration Manager	Port number for accessing the management console of Systemwalker Software Configuration Manager	31500
Interstage Management Console port number	Port number for accessing the Interstage management console	12000

Setting value	Meaning of the setting value	Default value
		(*1)
Web server (Interstage HTTP Server) port number of Systemwalker Runbook Automation	Port number for accessing the web console of Systemwalker Runbook Automation	80 (*1)
CORBA service port number	Port number used internally	8002 (*1)
HTTP listener port number	Port number used internally	28080 (*1)
Port number of the HTTP listener for operation management	Port number for accessing the Interstage Java EE management console	12001 (*1)
IIOp port number	Port number used internally	23600 (*1)
IIOp_SSL port number	Port number used internally	23601 (*1)
IIOp_MUTUALAUTH port number	Port number used internally	23602 (*1)
JMX_ADMIN port number	Port number used internally	8686 (*1)
Database storage directory for CMDB Manager	Database storage folder for CMDB Manager	C:\Program Files (x86)\Systemwalker\SWRBAM\CMDB (*1)
Subsystem-number	Subsystem number of Systemwalker Operation Manager	9 (*1)
Job scheduler port number of Systemwalker Runbook Automation	Port number used internally	9690 (*1)
Job execution control port number of Systemwalker Runbook Automation	Port number used internally	9691 (*1)

\*1: Use the values already set if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if operating on the same admin server as the Systemwalker Runbook Automation Management Server.



## Information

5.2.3.1.2 Custom installation" for information on the setting values.

1. Log in with administrator privileges.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Servers Program)" in the DVD-ROM drive.

The following window will be displayed:

Select **Install on admin server**.

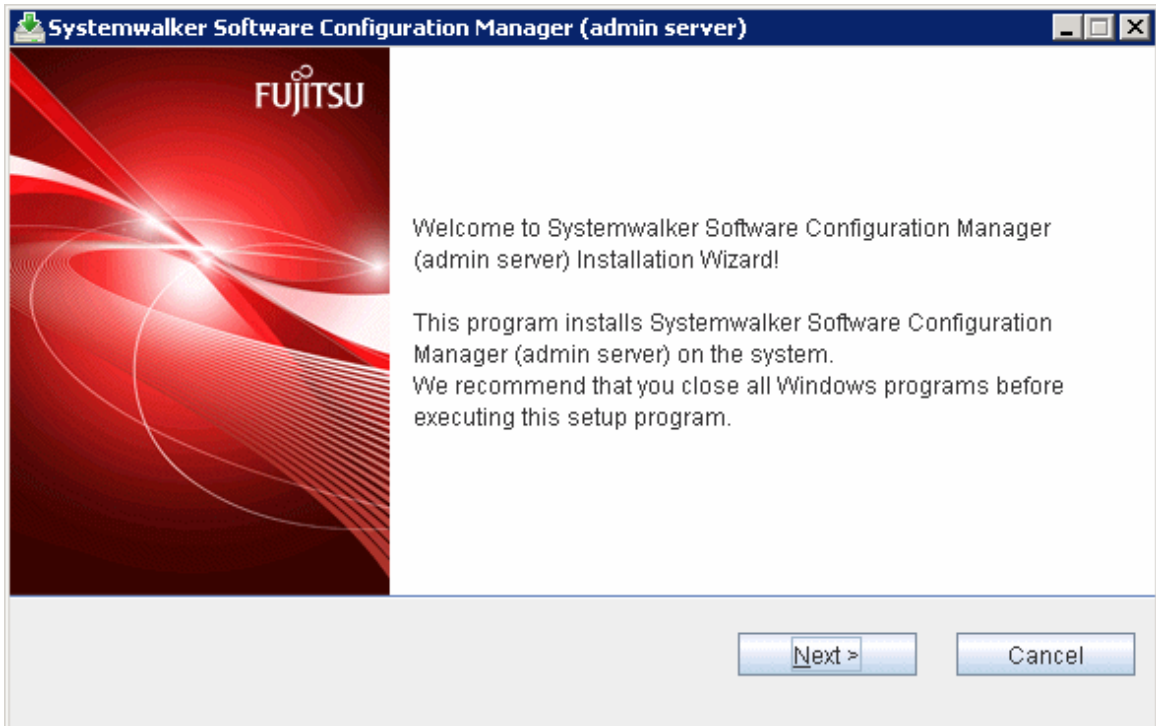


#### Note

- If this window is not displayed automatically, start the installer manually by executing "swsetup.exe" on the DVD-ROM.
- When using Windows Server 2008 or later, run this command as an administrator.

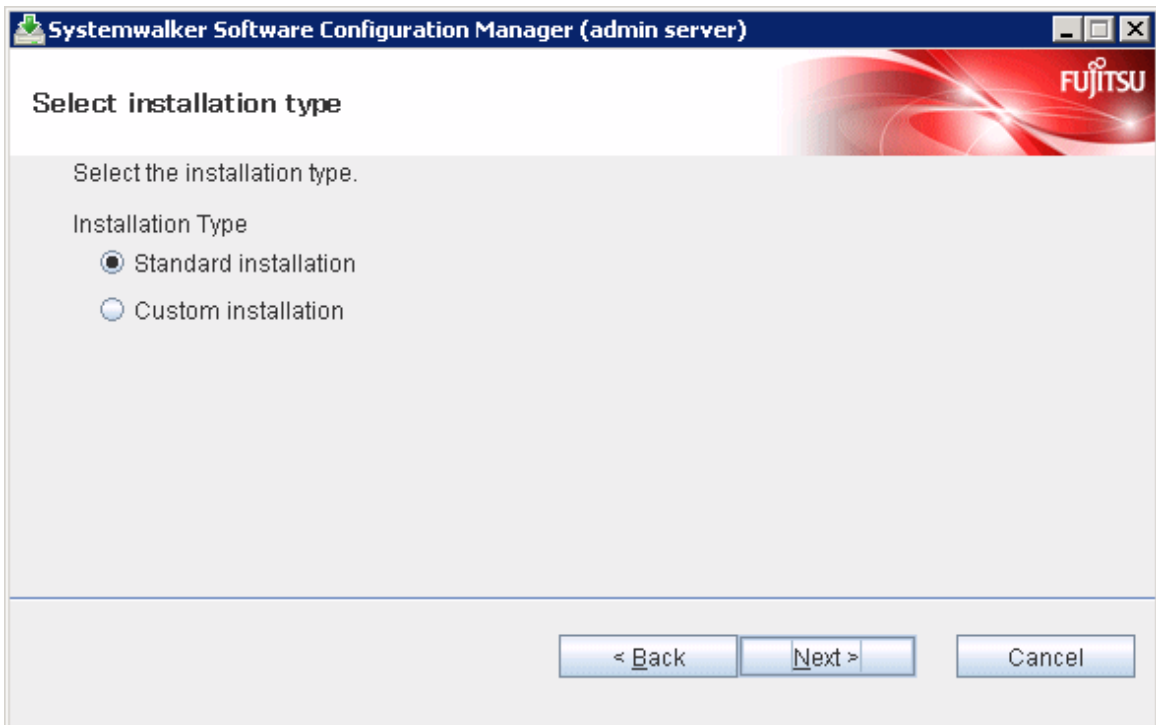
3. A welcome window will be displayed.

Click the **Next** button.



4. The **Select Installation Type** window will be displayed.

Select **Standard Installation**, and then click the **Next** button.





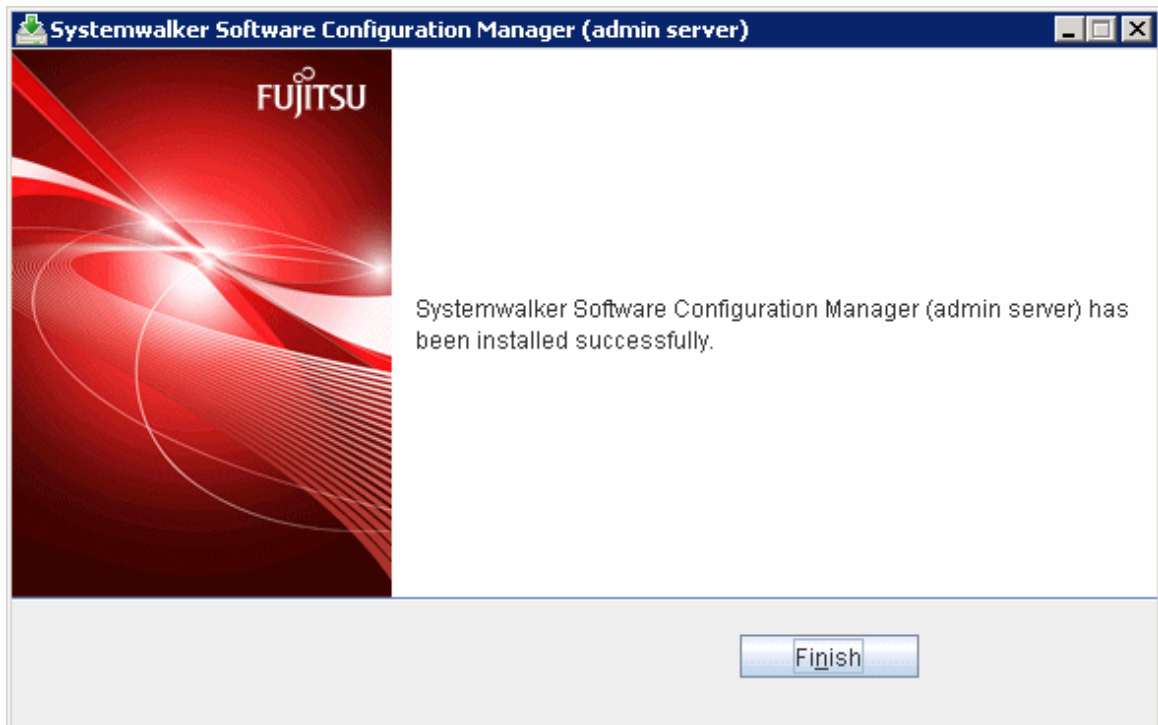
5. The **Confirm the installation settings** window will be displayed.

Check the settings, and then click the **Confirm** button to start the installation.



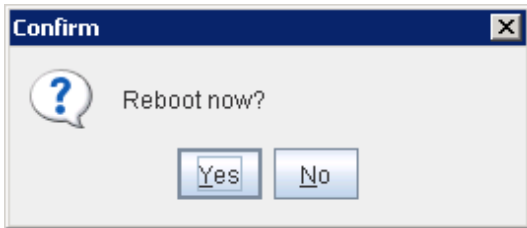
6. Upon successful completion, the following window will be displayed.

Click the **Finish** button.



7. The **Confirm** window (prompting for system restart confirmation) will be displayed.

Click the **Yes** button to restart the system.



### Note

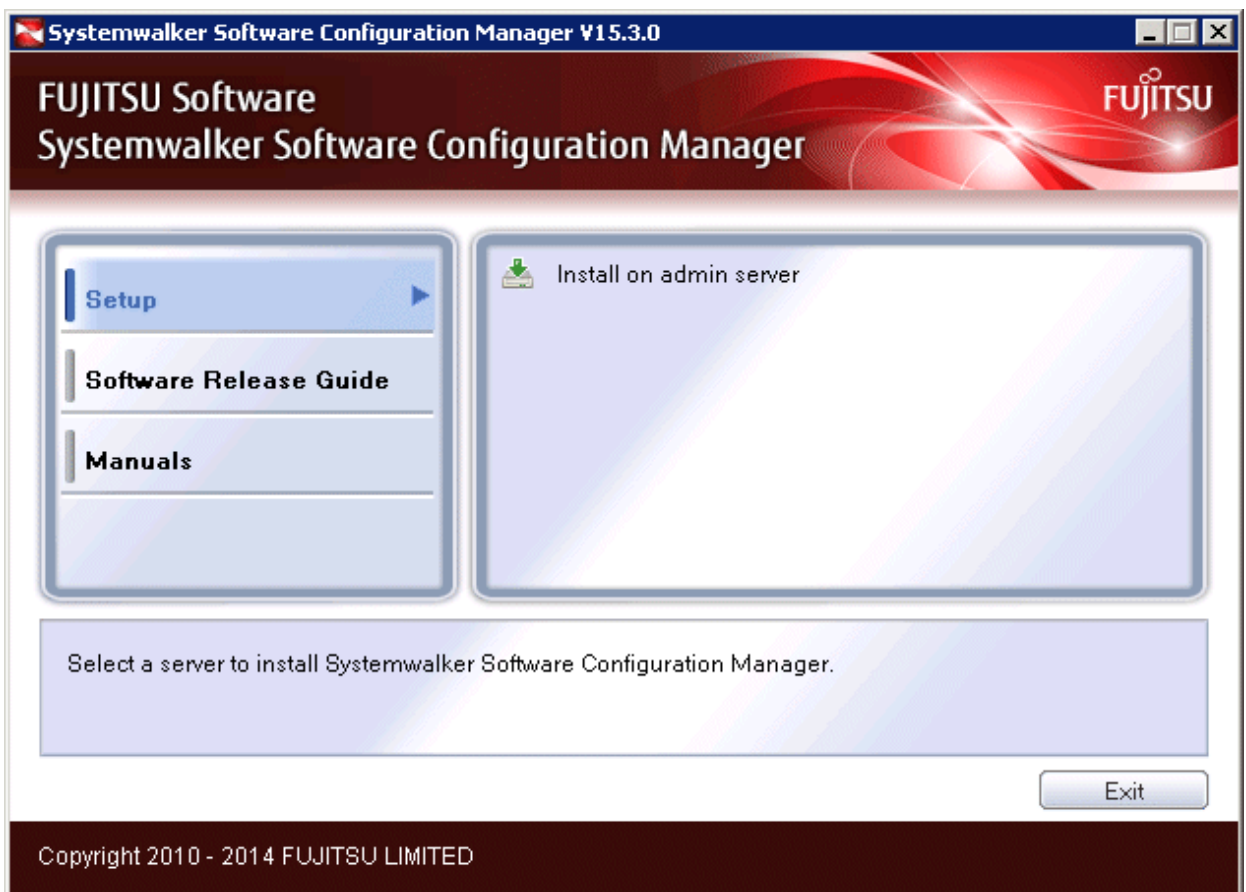
It is not necessary to restart the system if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if operating on the same admin server as the Systemwalker Runbook Automation Management Server - the **Confirm** window (prompting for restart confirmation) will not be displayed.

## 5.2.3.1.2 Custom installation

1. Log in with Administrator privileges.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Servers Program)" in the DVD-ROM drive.

The following window will be displayed.

Select **Install on admin server**.

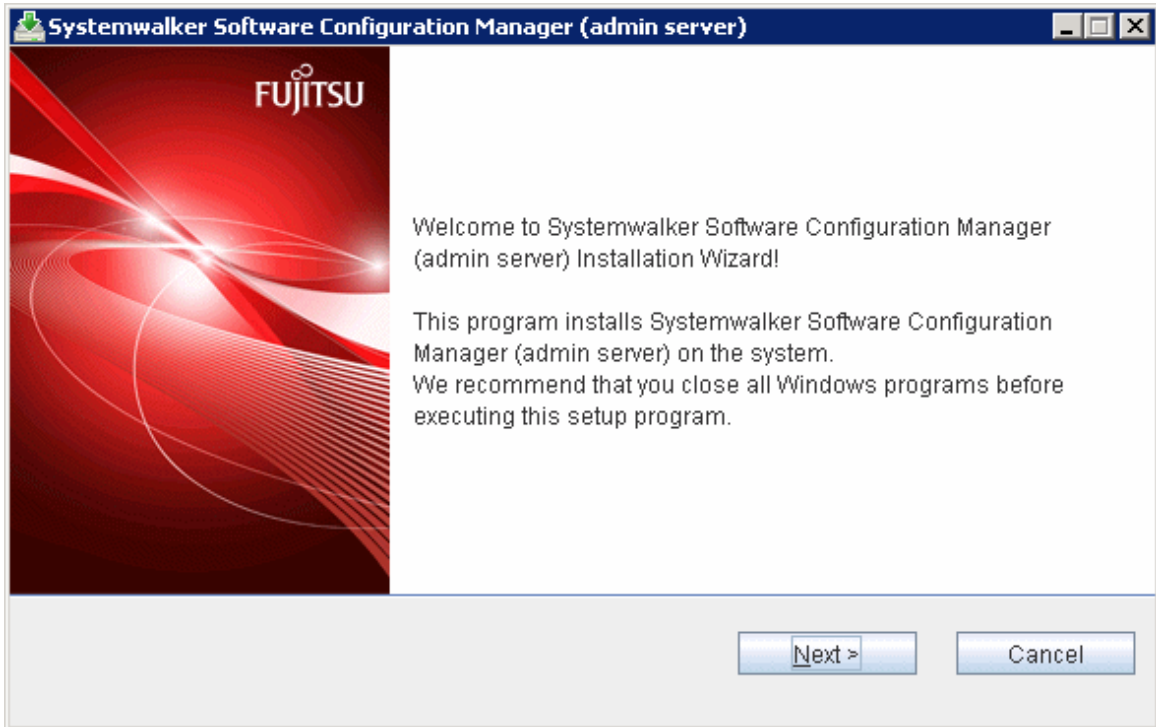


## Note

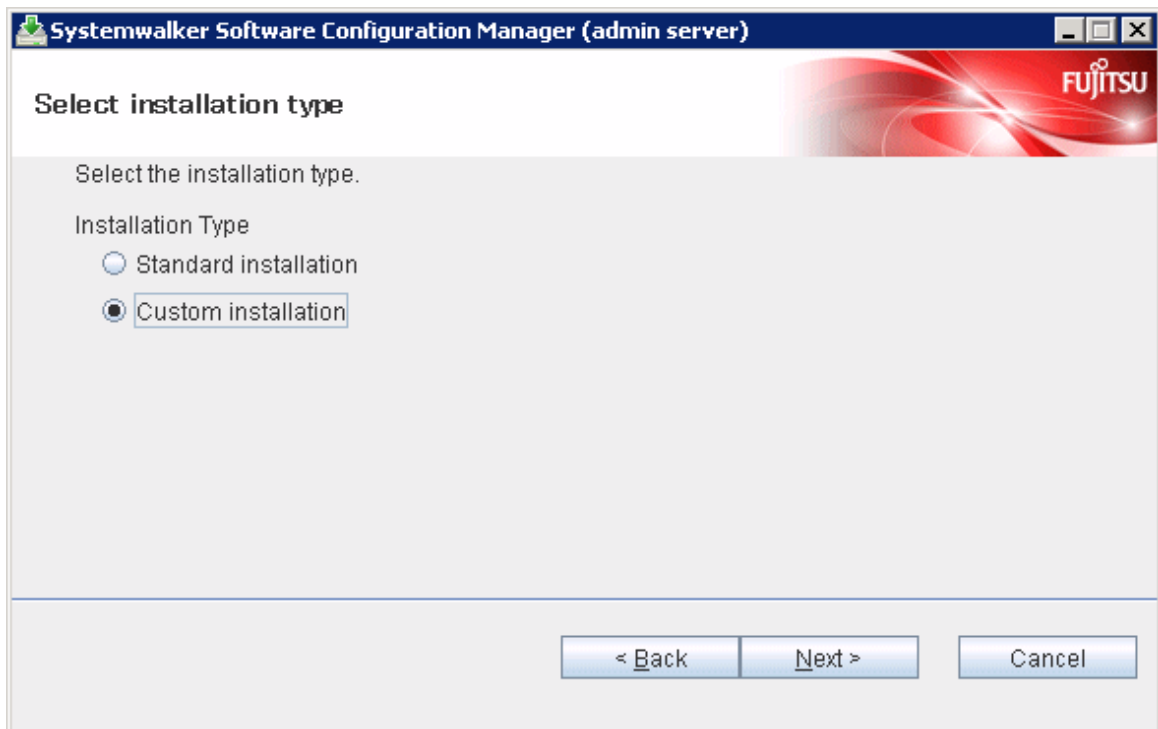
- If the window is not displayed automatically, start the installer manually by executing "swsetup.exe" on the DVD-ROM.
- When using Windows Server 2008 or later, run this command as an administrator.

3. A welcome window will be displayed.

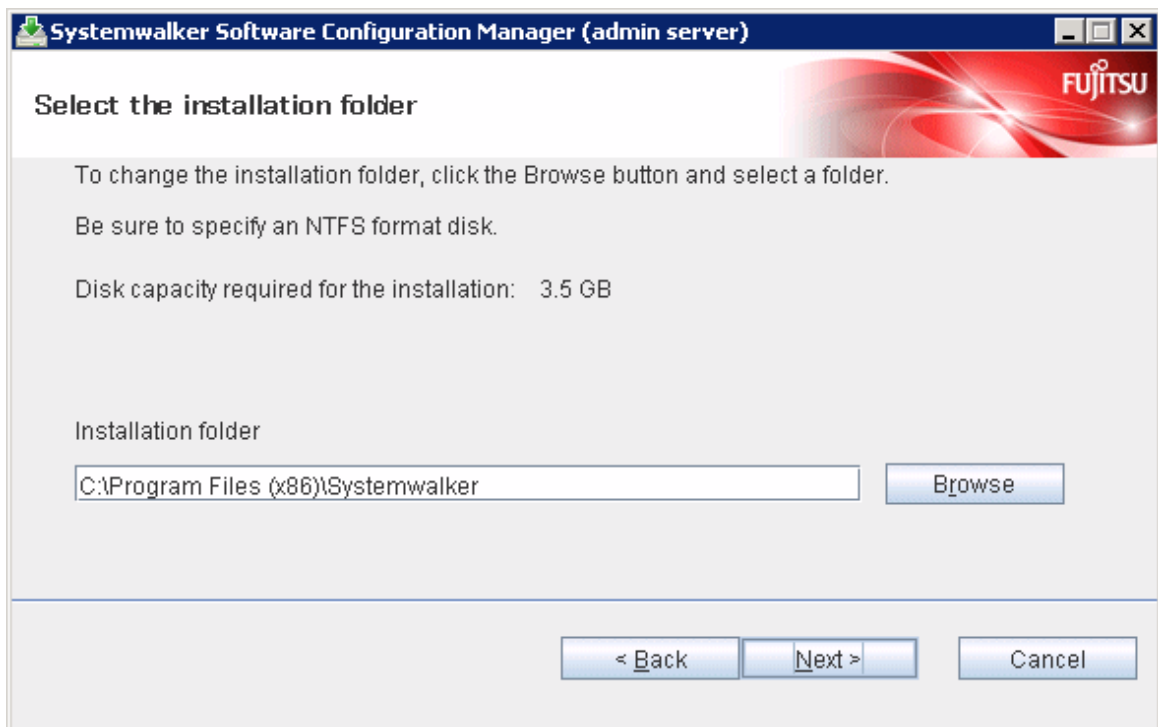
Click the **Next** button.



4. The **Select the installation type** window will be displayed.  
Select **Custom Installation**, and then click the **Next** button.



5. The **Select the installation folder** window will be displayed.  
Specify the installation folder, and then click the **Next** button.



 **Note**

- Specify an NTFS format disk.

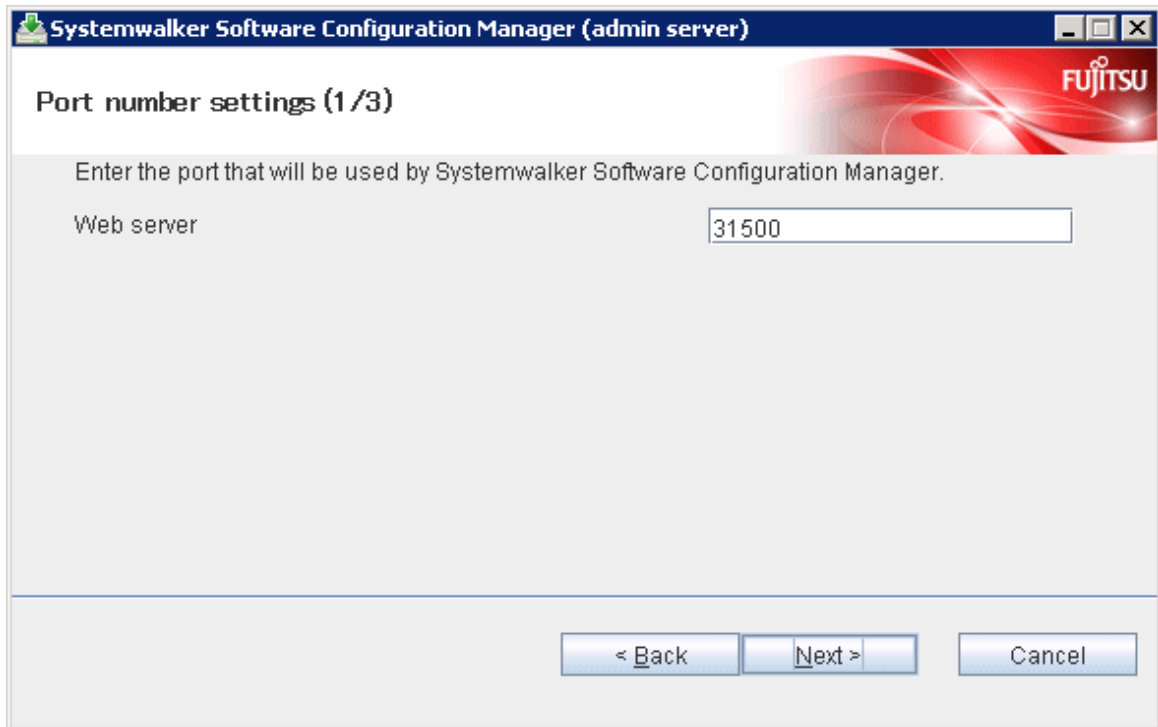
- Specify a path up to 40 bytes long.
  - Specify a new folder.
  - Do not specify relative paths or paths that start with "\\".
  - Specify only alphanumeric characters, spaces, hyphens ("-"), and underscores ("\_").
- You can specify a directory under <system drive>\Program Files or <system drive>\Program Files (x86).
- The required packages for operating Systemwalker Software Configuration Manager are installed in the following directories:
    - Systemwalker Software Configuration Manager installation directory
      - <specified installation directory>\SWCFMGA
      - <specified installation directory>\SWCFMGM
    - Systemwalker Runbook Automation installation directory
      - <specified installation directory>\SWRBAM
    - Interstage BPM installation directory
      - <specified installation directory>\IBPM
    - Interstage Application Server installation directory
      - <specified installation directory>\IAPS
    - J2EE common directory for Interstage Application Server
      - <specified installation directory>\J2EE
    - Java EE common directory for Interstage Application Server
      - <specified installation directory>\IJEE
    - Systemwalker Operation Manager installation directory
      - <specified installation directory>\SWOMGR
  - The installation directory for the following package is fixed, and cannot be changed.
    - PostgreSQL installation directory
      - %ProgramFiles%\fjsvpgs83

6. The **Port number settings (1/3)** window will be displayed.

Specify the port number for accessing the management console of Systemwalker Software Configuration Manager, and then click the **Next** button.

## Note

If Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, then the setting window will not be displayed when performing the settings in this and subsequent steps (since their values have already been set), therefore you can proceed to the **Confirm the installation settings** window in step 11.

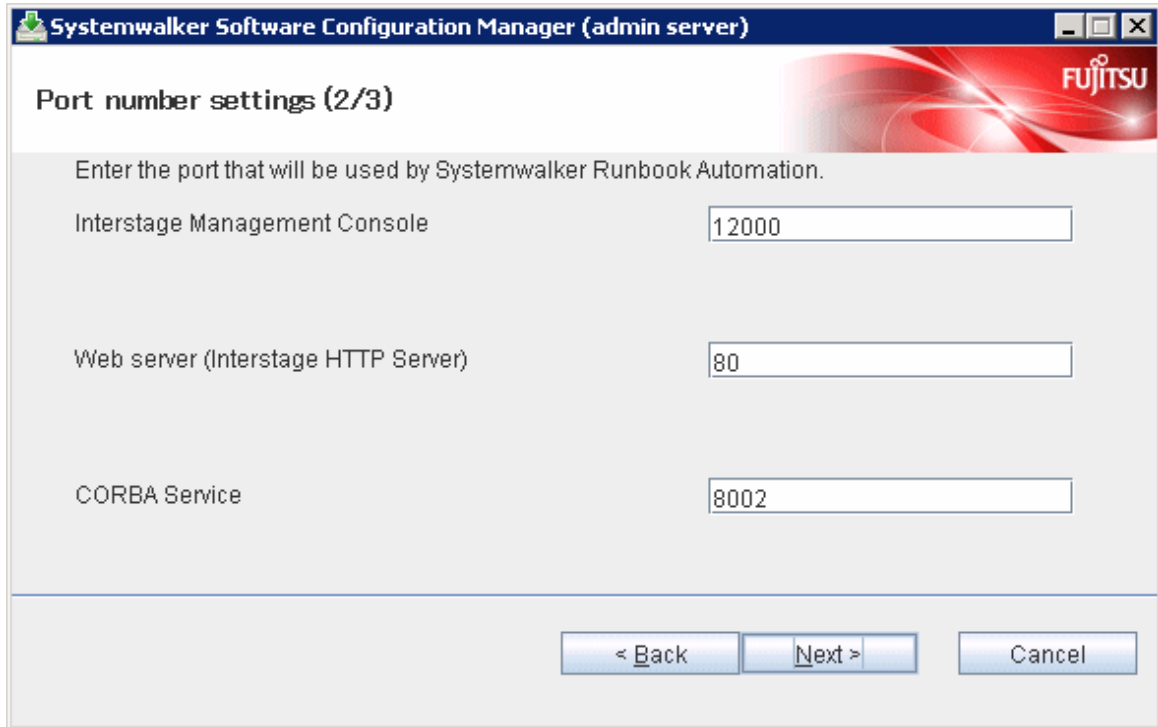


7. The **Port number settings (2/3)** window will be displayed.

Specify the port number to be used by Systemwalker Runbook Automation, and then click the **Next** button.

 Note

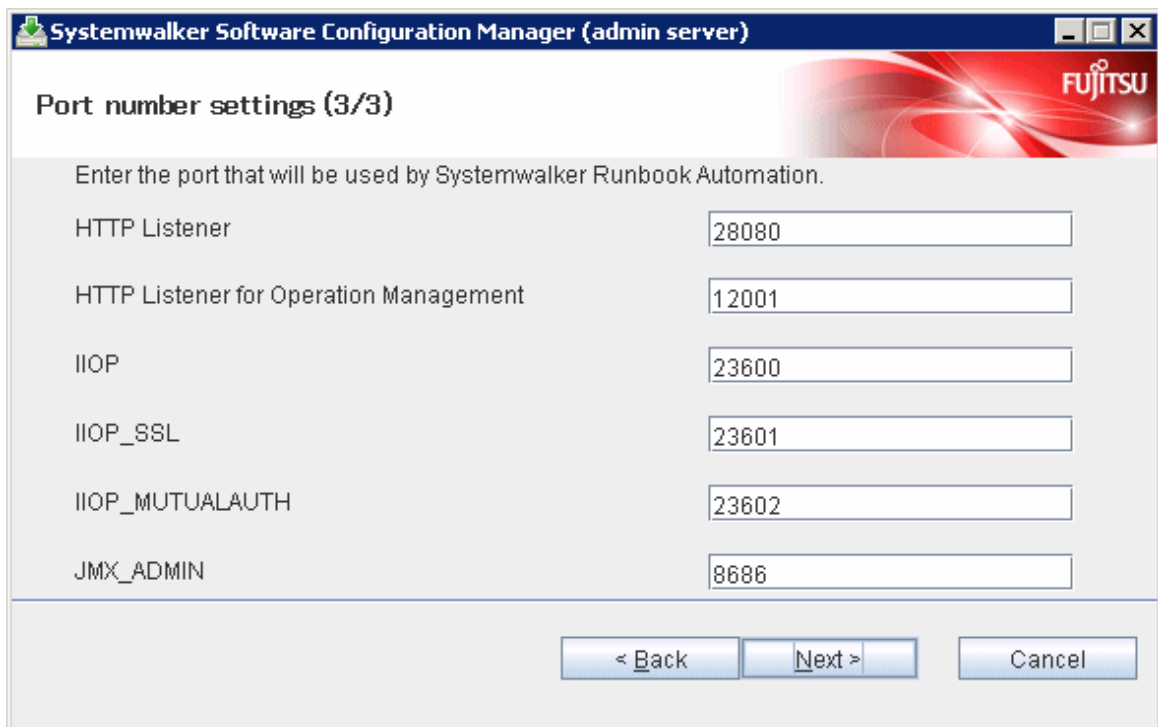
If operating on the same admin server as the Systemwalker Runbook Automation Management Server, then the setting window will not be displayed for this and subsequent steps (since their values have already been set), therefore you can proceed to the **Confirm the installation settings** window in step 11.



Service	Port Number
Interstage Management Console	12000
Web server (Interstage HTTP Server)	80
CORBA Service	8002

8. The **Port number settings (3/3)** window will be displayed.

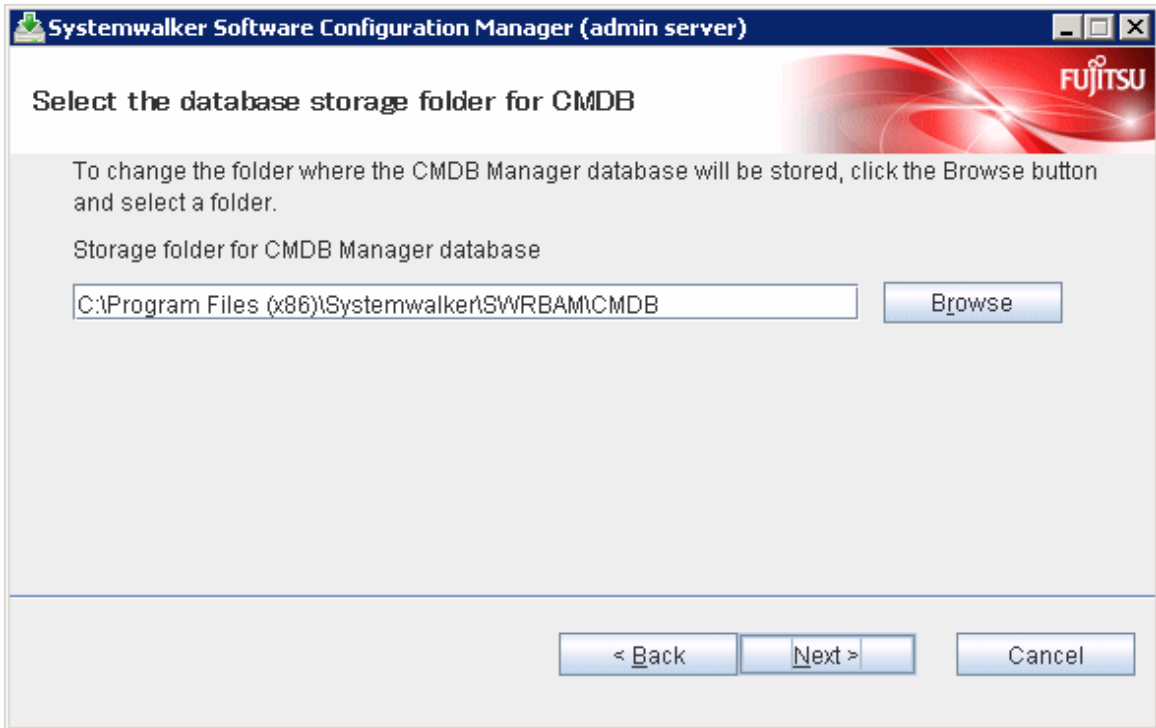
Specify the port number to be used by Systemwalker Runbook Automation, and then click the **Next** button.



Service	Port Number
HTTP Listener	28080
HTTP Listener for Operation Management	12001
IIOP	23600
IIOP_SSL	23601
IIOP_MUTUALAUTH	23602
JMX_ADMIN	8686

9. The **Select the database storage folder for CMDB** window will be displayed.

Specify the database storage folder for the CMDB manager, and then click the **Next** button.



#### Note

- Specify an NTFS format disk for the installation folder.
- Specify a path up to 64 bytes long.
- Specify a new folder.
- Do not specify relative paths or paths that start with "\\".
- Only the following characters can be used for the folder name: alphanumeric characters, halfwidth whitespace characters, hyphens ("-"), and underscores ("\_").
- You can specify a directory under <system drive>\Program Files or <system drive>\Program Files (x86).

10. The **Setup for scheduling** window will be displayed.

If not operating Systemwalker Operation Manager on the same admin server, or if not using the default port number, click the **Next** button without changing the default values.

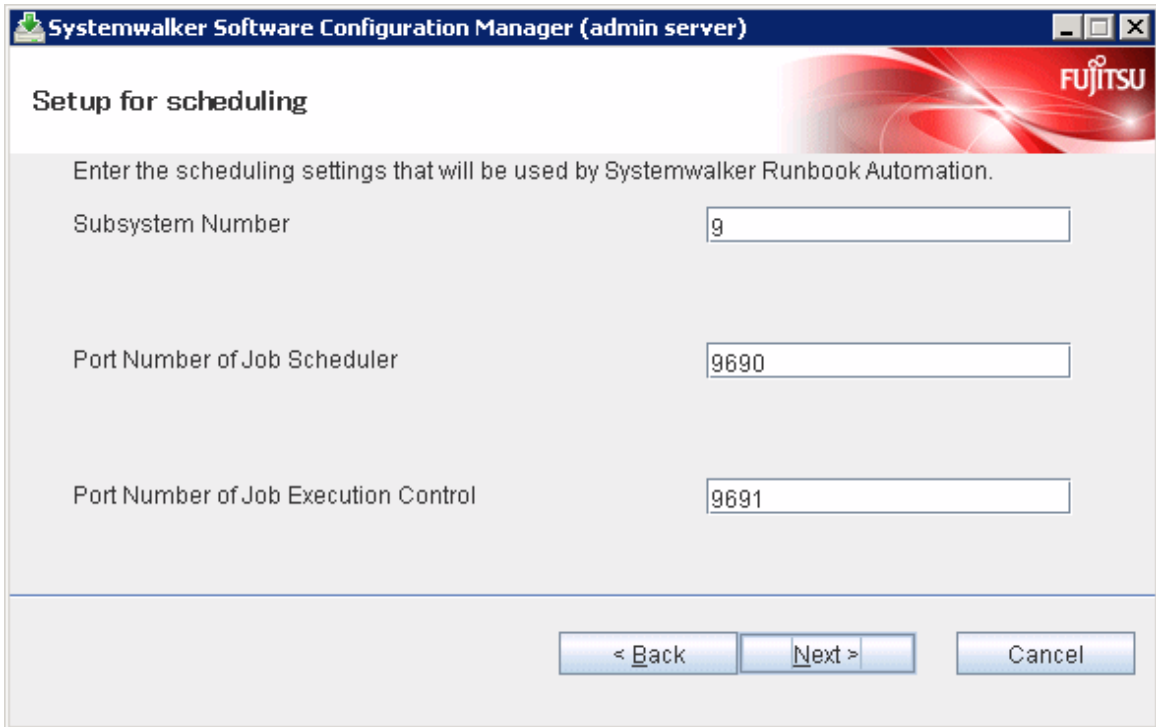
#### Note

Only change the displayed default values in the following cases:



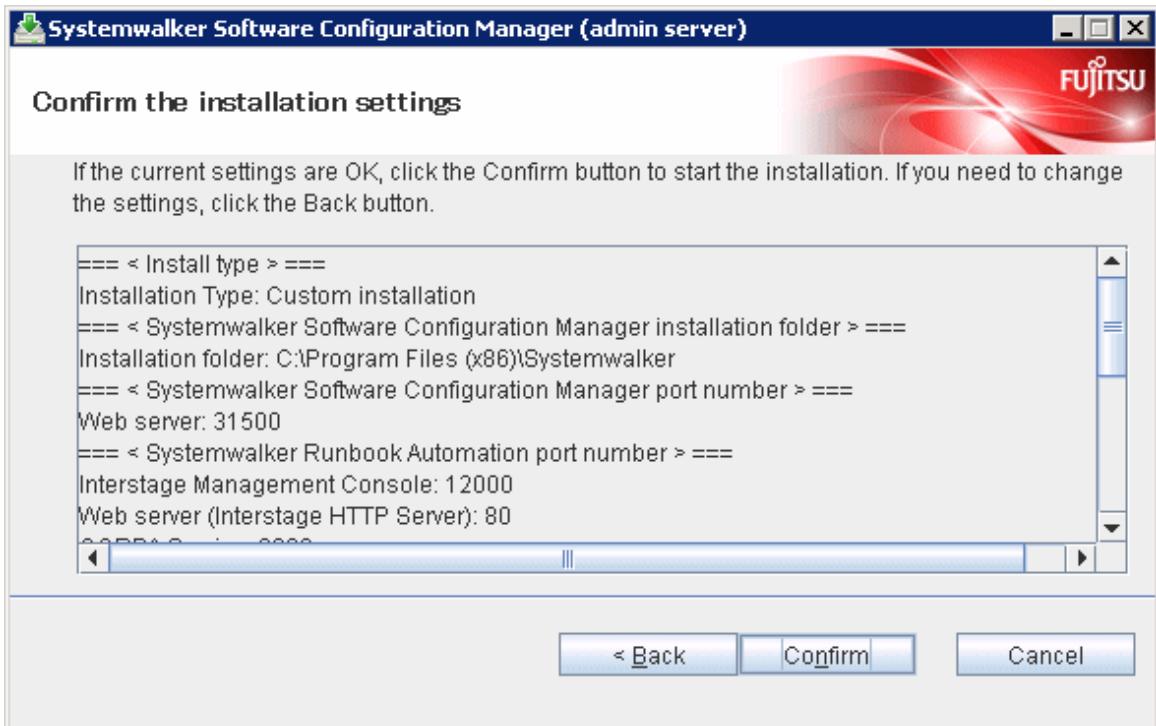
- Port number

If the default port number is already being used by other software, specify a different port number.



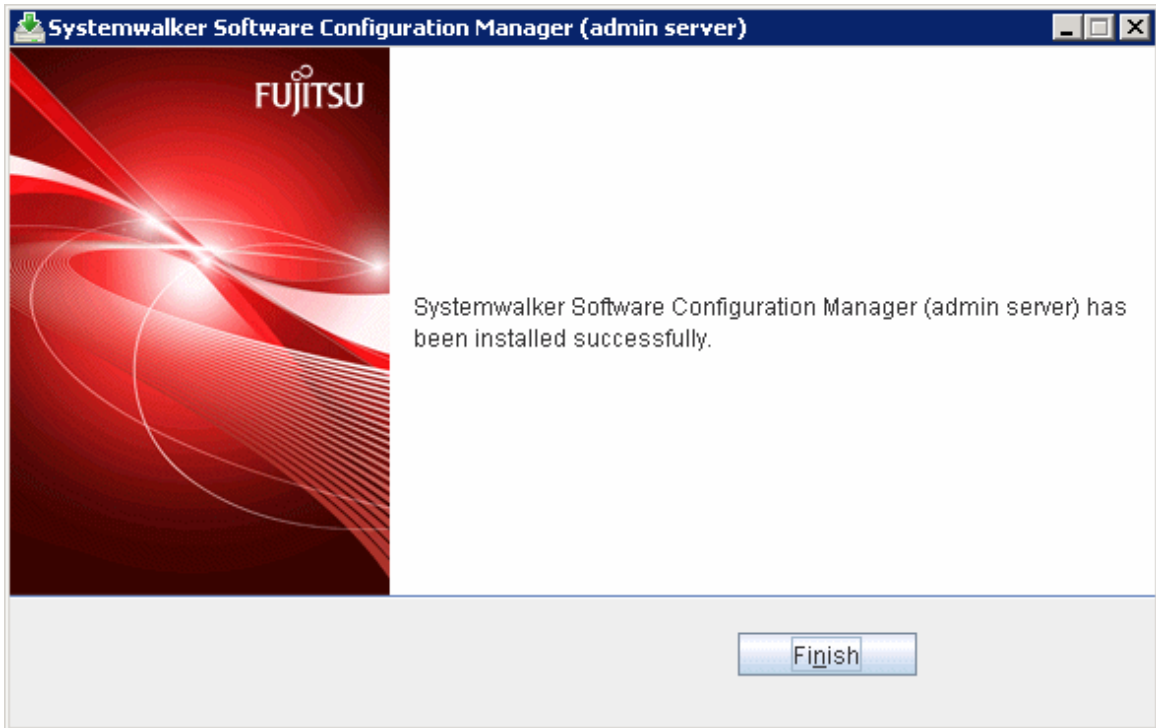
11. The **Confirm the installation settings** window will be displayed.

Check the settings, and then click the **Confirm** button to start the installation.



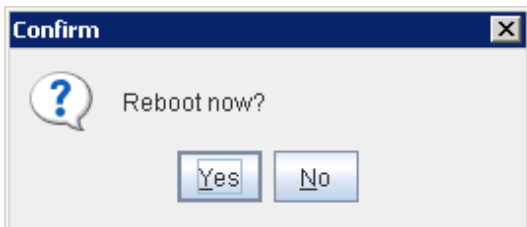
12. Upon completion, the window below will be displayed.

Click the **Finish** button.



13. The **Confirm** window (prompting for system restart confirmation) will be displayed.

Click the **Yes** button to restart the system.



### Note

It is not necessary to restart the system if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, or if operating on the same admin server as the Systemwalker Runbook Automation Management Server - the **Confirm** window (prompting for a restart confirmation) will not be displayed.

## 5.2.3.2 Installation in Linux

This section explains how to install Systemwalker Software Configuration Manager on a Linux admin server.

Standard and custom installations are available when installing Systemwalker Software Configuration Manager. If you want to use the default values for all settings, then perform a standard installation, otherwise perform a custom installation.

### 5.2.3.2.1 Standard installation

If you want to use the default values for all settings during installation, then perform a standard installation.

The standard installation uses the following default values:

Setting value	Meaning of the setting value	Default value
---------------	------------------------------	---------------

Web server port number of Systemwalker Software Configuration Manager	Port number for accessing the management console of Systemwalker Software Configuration Manager	31500
Interstage Management Console port number	Port number for accessing the Interstage Management Console	12000 (*1)
Web server (Interstage HTTP Server) port number of Systemwalker Runbook Automation	Port number for accessing the web console of Systemwalker Runbook Automation	80 (*1)
CORBA Service port number	Port number used internally	8002 (*1)
HTTP listener port number	Port number used internally	28080 (*1)
Port number of the HTTP listener for operation management	Port number for accessing the Interstage Java EE management console	12001 (*1)
IIOp port number	Port number used internally	23600 (*1)
IIOp_SSL port number	Port number used internally	23601 (*1)
IIOp_MUTUALAUTH port number	Port number used internally	23602 (*1)
JMX_ADMIN port number	Port number used internally	8686 (*1)
Database storage directory for CMDB Manager	Database storage folder for CMDB Manager	/var/opt (*1)
Subsystem-number	Subsystem number of Systemwalker Operation Manager	9 (*1)
Job scheduler port number of Systemwalker Runbook Automation	Port number used internally	9690 (*1)
Job execution control port number of Systemwalker Runbook Automation	Port number used internally	9691 (*1)

\*1: Use the values already set if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if operating on the same admin server as the Systemwalker Runbook Automation Management Server.

## Information

Refer to "[5.2.3.2.2 Custom installation](#)" for information on the setting values.

1. Login to the system as a superuser.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Servers Program)" in the DVD-ROM drive.

If the DVD-ROM has not been mounted, then mount it:

```
# mount -t iso9660 -r /dev/mnt <Mount point for the DVD-ROM>
```

3. Start the common installer.

Run the installation command (swsetup).

```
# cd <Mount point for the DVD-ROM>
# ./swsetup
```

### Note

If the DVD-ROM has been mounted automatically by the automatic mounting daemon (autofs), the swsetup command will fail to execute because the mount options will be set to "noexec".

In this case, use the "mount" command to remount the DVD-ROM appropriately before executing the installation.

The mount options for the DVD-ROM that has been mounted can be checked by executing the "mount" command without any parameters.

4. Start installation.

A welcome window will be displayed. Press the **Enter** key.

```
=====
                Systemwalker Software Configuration Manager Setup
                        V15.3.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

Welcome to Systemwalker Setup!
The setup will install Systemwalker Software Configuration Manager.

Press ENTER.
```

5. The **Select the installation target** window will be displayed.

Select **Install on admin server**. Enter "1".

```
=====
                Systemwalker Software Configuration Manager Setup
                        V15.3.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

<< Select the installation target >>

1. Install on admin server

=====

Select one of the items above.
[q,number]
=>
```

6. The installation for the admin server will start. To start the installation process, press "y".

```
Systemwalker Software Configuration Manager (admin server)
Do you want to start install?
[y,n]
=>
```

7. Select the installation type. Enter "1" for standard installation.

```
=== < Install type > ===
Input Installation Type
[1:Standard installation,2:Custom installation][ENTER:1]
=>
```

8. Confirm the installation.

In the confirm the installation settings window, check the entered values. If they are correct, enter "y" - the installation will start.

To correct the installation information, enter the number of the item you want to correct.

```
=== < Install type > ===
1.Installation Type: Standard installation
=== < Systemwalker Software Configuration Manager installation folder > ===
Program location(Can't Change): /opt
Configuration file location(Can't Change): /etc/opt
Work file location(Can't Change): /var/opt
=== < Systemwalker Software Configuration Manager port number > ===
Port Number of Web server(Can't Change): 31500
=== < Systemwalker Runbook Automation port number > ===
Port Number of Interstage Management Console(Can't Change): 12000
Port Number of Web server (Interstage HTTP Server)(Can't Change): 80
Port Number of CORBA Service(Can't Change): 8002
Port Number of HTTP Listener(Can't Change): 28080
Port Number of HTTP Listener for Operation Management(Can't Change): 12001
Port Number of IIOP(Can't Change): 23600
Port Number of IIOP_SSL(Can't Change): 23601
Port Number of IIOP_MUTUALAUTH(Can't Change): 23602
Port Number of JMX_ADMIN(Can't Change): 8686
=== < Database storage folder for CMDB > ===
Database storage directory for CMDB(Can't Change): /var/opt
=== < Detailed scheduling settings > ===
Subsystem Number(Can't Change): 9
Port Number of Job Scheduler(Can't Change): 9690
Port Number of Job Execution Control(Can't Change): 9691

Install the product using these settings?
[y,q,number]
=> y
```

9. The installation will start.

Once the preparations for the installation are complete, the following message will be displayed, and the installation will start:

```
installing...
```

10. The installation will complete.

Upon successful completion, the following message will be displayed. Enter "y" to restart the system.

```
Systemwalker Software Configuration Manager (admin server) install completed.
Reboot now?
[y,n]
=>
```



It is not necessary to restart the system if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if operating on the same admin server as the Systemwalker Runbook Automation Management Server - the confirm window (prompting for restart confirmation) will not be displayed.

### 5.2.3.2.2 Custom installation

1. Log in to the system as a superuser.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Server Program)" in the DVD-ROM drive.

If the DVD-ROM has not been mounted, then mount it by executing the following command:

```
# mount -t iso9660 -r /dev/mnt <Mount point for the DVD-ROM>
```

3. Start the common installer.

Run the installation command (swsetup).

```
# cd <Mount point for the DVD-ROM>
# ./swsetup
```

### Note

If the DVD-ROM has been mounted automatically by the automatic mounting daemon (autofs), the swsetup command will fail to execute because the mount options will be set to "noexec".

In this case, use the "mount" command to remount the DVD-ROM appropriately before executing the installation.

The mount options for the DVD-ROM that has been mounted can be checked by executing the "mount" command without any parameters.

4. Start installation.

A welcome window will be displayed. Press the Enter key.

```
=====
                Systemwalker Software Configuration Manager Setup
                        V15.3.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

Welcome to Systemwalker Setup!
The setup will install Systemwalker Software Configuration Manager.

Press ENTER.
```

5. The **Select the installation target** window will be displayed.

Select **Install on admin server**. Enter "1".

```
=====
                Systemwalker Software Configuration Manager Setup
                        V15.3.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

<< Select the installation target >>

1. Install on admin server

=====
Select one of the items above.
[q,number]
=>
```

6. The installation for the admin server will start. To start the installation process, press "y".

```
Systemwalker Software Configuration Manager (admin server)
Do you want to start install?
[y,n]
=>
```

7. Select the installation type. Enter "2" for custom installation.

```
=== < Install type > ===
Input Installation Type
```

```
[1:Standard installation,2:Custom installation][ENTER:1]
=>
```

- Specify the port number for accessing the management console of Systemwalker Software Configuration Manager.

### Note

If Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, then the setting window will not be displayed for this and subsequent steps (since their values have already been set), therefore, you can proceed to the **Confirm the installation settings** window in step 12.

```
=== < Systemwalker Software Configuration Manager port number > ===
Input Port Number of Web server
[ENTER:31500]
=>
```

- Set the port numbers used by Systemwalker Runbook Automation.

### Note

If operating on the same admin server as the Systemwalker Runbook Automation Management Server, then the setting window will not be displayed for this and subsequent steps (since their values have already been set), therefore, you can proceed to the **Confirm the installation settings** window in step 12.

- Interstage Management Console port number
- Web server (Interstage HTTP Server) port number
- CORBA service port number
- HTTP listener port number
- Port number of the HTTP listener for operation management
- IIOP port number
- IIOP\_SSL port number
- IIOP\_MUTUALAUTH port number
- JMX\_ADMIN port number

```
=== < Systemwalker Runbook Automation port number > ===
Input Port Number of Interstage Management Console
[ENTER:12000]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of Web server (Interstage HTTP Server)
[ENTER:80]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of CORBA Service
[ENTER:8002]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of HTTP Listener
[ENTER:28080]
=>
```

```

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of HTTP Listener for Operation Management
[ENTER:12001]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of IIOP
[ENTER:23600]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of IIOP_SSL
[ENTER:23601]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of IIOP_MUTUALAUTH
[ENTER:23602]
=>

=== < Systemwalker Runbook Automation port number > ===
Input Port Number of JMX_ADMIN
[ENTER:8686]
=>

```

10. Specify the CMDB database installation folder.

```

=== < Database storage folder for CMDB > ===
Input Database storage directory for CMDB
[ENTER:/var/opt]
=>

```

11. Set the subsystem number and port number to be used by the schedule function.

If not operating Systemwalker Operation Manager on the same admin server, or if not using the default port number, press the Enter key without changing the default values.

 **Note**

Only change the displayed default values in the following cases:

- Port number

If the default port number is already being used by other software, specify a different port number.

```

=== < Detailed scheduling settings > ===
Input Subsystem Number
[ENTER:9]
=>

=== < Detailed scheduling settings > ===
Input Port Number of Job Scheduler
[ENTER:9690]
=>

=== < Detailed scheduling settings > ===
Input Port Number of Job Execution Control
[ENTER:9691]
=>

```

12. Confirm the installation.

In the confirm the installation settings window, check the entered values. If they are correct, enter "y" - the installation will start.



To correct the installation information, enter the number of the item you want to correct.

```
=== < Install type > ===
1.Installation Type: Custom installation
=== < Systemwalker Software Configuration Manager installation folder > ===
Program location(Can't Change): /opt
Configuration file location(Can't Change): /etc/opt
Work file location(Can't Change): /var/opt
=== < Systemwalker Software Configuration Manager port number > ===
2.Port Number of Web server: 31500
=== < Systemwalker Runbook Automation port number > ===
3.Port Number of Interstage Management Console: 12000
4.Port Number of Web server (Interstage HTTP Server): 80
5.Port Number of CORBA Service: 8002
6.Port Number of HTTP Listener: 28080
7.Port Number of HTTP Listener for Operation Management: 12001
8.Port Number of IIOP: 23600
9.Port Number of IIOP_SSL: 23601
10.Port Number of IIOP_MUTUALAUTH: 23602
11.Port Number of JMX_ADMIN: 8686
=== < Database storage folder for CMDB > ===
12.Database storage directory for CMDB: /var/opt
=== < Detailed scheduling settings > ===
13.Subsystem Number: 9
14.Port Number of Job Scheduler: 9690
15.Port Number of Job Execution Control: 9691

Install the product using these settings?
[y,q,number]
=>
```

- 13. The installation will start.

Once the preparations for the installation are complete, the following message will be displayed, and the installation will start:

```
installing...
```

- 14. The installation will complete.

Upon successful completion, the following message will be displayed. Enter "y" to restart the system.

```
Systemwalker Software Configuration Manager (admin server) install completed.
Reboot now?
[y,n]
=>
```



It is not necessary to restart the system if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if operating on the same admin server as the Systemwalker Runbook Automation Management Server - the confirm window (prompting for restart confirmation) will not be displayed.

## 5.2.4 Points to Note after Installing on the Admin Server

This section explains points to note after installing the product on the admin server.

[Windows]

- If a Terminal Server has been installed, then change the Terminal Services to Execute mode:

```
CHANGE USER /EXECUTE
```

- Apply the update below to products bundled with Systemwalker Software Configuration Manager.

For the procedure to apply patches, refer to "[11.4 Installing Updates on Systemwalker Software Configuration Manager](#)".

Product name	Version	Update number
Interstage Application Server Enterprise Edition	V11.0.0	T006230WP-01

### Note

The update above may already have been applied if you are operating Systemwalker Software Configuration Manager under the following conditions:

- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

- The following users are added:

User name	swrbadbuser
-----------	-------------

The user name "swrbadbuser" is used as an OS account for starting the process management database service. Do not delete this account while Systemwalker Software Configuration Manager is installed.

User name	swrbajobuser
-----------	--------------

The user name "swrbajobuser" is used as an OS account for starting the job execution control service of Systemwalker Runbook Automation. Do not delete this account while Systemwalker Software Configuration Manager is installed.

### Information

The users above will already exist if you are operating Systemwalker Software Configuration Manager under the following conditions:

- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

#### [Linux]

- Character encoding

Do not change the system character encoding after installing Systemwalker Software Configuration Manager.

- The following user is added:

User name	swrbadbuser
-----------	-------------

The user name "swrbadbuser" is used as an OS account for starting the process management database service.

Do not delete this account while Systemwalker Software Configuration Manager is installed.

### Information

The user above will already exist if you are operating Systemwalker Software Configuration Manager under the following conditions:

- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

## 5.3 If the Installation Fails

---

If the installation fails, restart the system and then log in again as the same user that performed the installation. Remove the cause of the problem based on the message that has been output, and then perform the installation again.

# Chapter 6 Setup

This chapter explains how to set up Systemwalker Software Configuration Manager.

## 6.1 Setting up the Admin Server

This section explains how to set up the admin server.

### 6.1.1 Pre-setup Tasks for the Admin Server

This section explains the tasks required before setup for the admin server.

#### 6.1.1.1 Stopping ServerView Resource Orchestrator (If Linking to ServerView Resource Orchestrator)

Stop ServerView Resource Orchestrator if linking to it to operate the admin server:

[Windows]

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rxmgctl stop
```

[Linux]

```
/opt/FJSVrcvnr/bin/rxmgctl stop
```



Note

If installing Systemwalker Software Configuration Manager on the same admin server as another operation management product such as Systemwalker Runbook Automation Management Server, it is necessary to stop the functions for the other operation management product. Ensure that these functions are stopped before setting up Systemwalker Software Configuration Manager (refer to "[Appendix B Installing Operation Management Products on Admin Server](#)" for details).

#### 6.1.1.2 Building the SSL Communication Environment for Management Console

Use SSL communication to access the management console of Systemwalker Software Configuration Manager from a browser.



Note

It is not necessary to perform steps 1. to 3 of the following the procedure, if Systemwalker Software Configuration Manager is linked to ServerView Resource Orchestrator, or if the SSL communication environment has already been built. Start the procedure from step 4.

Build the SSL communication environment using the following procedure:

- Setting the Interstage Certificate Environment Access Permissions[Linux]
- Creating the Interstage Certificate Environment and the Application to Obtain the Certificate that is used for SSL Communication
- Registering Certificates used in SSL Communication
- Settings for SSL Communication



See

Refer to "Setting and Use of the Interstage Certificate Environment" in the *Interstage Application Server Security System Guide* for information on how to build the SSL environment.

### 6.1.1.2.1 Setting the Interstage Certificate Environment Access Permissions [Linux]

Create an owner group that has permissions to access the Interstage certificate environment.  
An example of creating the owner group using the command is shown below:

1. Create the Interstage certificate environment owner group.

In the following example, the owner group is created as "iscertg".

```
# groupadd iscertg
```

#### Note

The owner group that was created at the time of the Interstage certificate environment build must be specified in the -g option of the Certificate Signing Request (CSR) creation command (scsmakeenv). Refer to "[6.1.1.2.2 Creating the Interstage Certificate Environment and the Application to Obtain the Certificate that is used for SSL Communication](#)" for information on the CSR creation command.

2. Register the executing user in the "iscertg" group.

In the following example, the executing user is created as "nobody".

```
# usermod -G iscertg nobody
```

#### Note

The executing user that is registered in the Interstage certificate environment owner group must have been set in the User directive of the Interstage HTTP Server environment configuration file (httpd.conf).

### 6.1.1.2.2 Creating the Interstage Certificate Environment and the Application to Obtain the Certificate that is used for SSL Communication

The CSR creation command (from now on, this is referred to as the "scsmakeenv command") is used to create the CSR that will create the Interstage certificate environment and apply for the certificate that is used for SSL communication.  
The creation procedure and execution example are shown below:

#### Creation procedure

1. Set the JDK or JRE installation path in the JAVA\_HOME environment variable.

This procedure is only required for Linux. Setting of the environment variable JAVA\_HOME is unnecessary for Windows.

2. Execute the scsmakeenv command.

[Windows]

```
scsmakeenv -n <private key nickname> -f <output destination file name for the CSR>
```

[Linux]

```
scsmakeenv -n <private key nickname> -f <output destination file name for the CSR> -g <Group that has permissions to access the Interstage certificate environment>
```

Change the CSR output destination file name if necessary.

#### Note

The private key nickname specified in the scsmakeenv command will be required when the site certificate obtained from the CA is registered.

## Information

Refer to "SSL Environment Setting Commands" in the *Interstage Application Server Reference Manual (Command Edition)* for information on the `scsmakeenv` command.

3. Enter a password to access the Interstage certificate environment.

The password will be required to access the Interstage certificate environment.

4. Enter an identifier.

When the "What is your first and last name?" (alphanumeric name) enquiry is made, specify the FQDN of the server used to apply for the certificate as the Web server host name.

5. As with above step, enter the following items:

- Name of organizational unit
- Name of organization
- Name of City or Locality
- Name of State or Province
- Two-letter country code

6. Check the values that were entered.

To create the CSR using the values that were entered, enter **yes**. To change the values that were entered, enter **no**.

7. Send the CSR to the CA to request that a certificate be issued.

If the `scsmakeenv` command has terminated normally, the CSR will be output to the certificate output destination file name that was specified in the `-f` option of the `scsmakeenv` command. Send that file to the CA and request that a certificate be issued. Follow the request method used by the CA.

## Execution example

[Windows]

The command execution examples shown below use the following values:

```
- Site certificate nickname: SERVERCERT
- Applicant output destination file name: C:\temp\ssocert.txt
- Group that has permissions to access the Interstage certificate environment: iscertg
- First and last name: ssoserver.example.com
- Name of organizational unit: FUJITSU TOKYO
- Name of organization: FUJITSU
- Name of City or Locality: Shinjuku
- Name of State or Province: Tokyo
- Two-letter country code for this unit:jp
```

In the example, the applicant output file name is "C:\temp\ssocert.txt". Change the applicant output file name if necessary.

At the password prompt, enter the password that will be used to access the Interstage certificate environment. (it will not be displayed).

```
C:\>scsmakeenv -n SERVERCERT -f C:\temp\ssocert.txt
New Password:
Retype:

Input X.500 distinguished names.
What is your first and last name?
[Unknown]: ssoserver.example.com
What is the name of your organizational unit?
[Unknown]: FUJITSU TOKYO
What is the name of your organization?
[Unknown]: FUJITSU
```

```

What is the name of your City or Locality?
  [Unknown]: Shinjuku
What is the name of your State or Province?
  [Unknown]: Tokyo
What is the two-letter country code for this unit?
  [Un]: jp

Is <CN=ssoserver.example.com, OU=FUJITSU TOKYO, O=FUJITSU, L=Shinjuku, ST=Tokyo,C=jp> correct?
  [no]: yes
<SCS: INFO: scs0101: CSR was issued <C:\temp\ssocert.txt>
C:\>

```

## [Linux]

The command execution examples shown below use the following values:

```

- Site certificate nickname: SERVERCERT
- Applicant output destination file name: /tmp/ssocert.txt
- Group that has permissions to access the Interstage certificate environment: iscertg
- First and last name: ssoserver.example.com
- Name of organizational unit: FUJITSU TOKYO
- Name of organization: FUJITSU
- Name of City or Locality: Shinjuku
- Name of State or Province: Tokyo
- Two-letter country code for this unit:jp

```

In the execution example, a new Interstage certificate environment is created for which "iscertg" access permissions are set, and the CSR is also created. If an Interstage certificate environment has already been created, then set access permissions to it if necessary.

The Bourne shell has been used in the execution example.

```

# JAVA_HOME=/opt/FJJSVawjkb/jdk6;export JAVA_HOME
# scsmakeenv -n SERVERCERT -f /tmp/ssocert.txt -g iscertg
New Password:
Retype:

Input X.500 distinguished names.
What is your first and last name?
  [Unknown]: ssoserver.example.com
What is the name of your organizational unit?
  [Unknown]: FUJITSU TOKYO
What is the name of your organization?
  [Unknown]: FUJITSU
What is the name of your City or Locality?
  [Unknown]: Shinjuku
What is the name of your State or Province?
  [Unknown]: Tokyo
What is the two-letter country code for this unit?
  [Un]: jp

Is <CN=ssoserver.example.com, OU=FUJITSU TOKYO, O=FUJITSU, L=Shinjuku, ST=Tokyo,C=jp> correct?
  [no]: yes
UX:SCS: INFO: scs0101: CSR was issued </tmp/ssocert.txt>
UX:SCS: INFO: scs0180: The owners group of Interstage certificate environment was set.
#

```



## Note

You will be prompted to input password for Interstage certificate environment if Interstage certificate environment is already configured. In this case, input the password that was set when you configured Interstage certificate environment.

## Information

Test site certificates can be used in the test environment. Note that these test site certificates are only for test environments, and so should not be used for actual operations.

Refer to [Appendix C Creating Test Site Certificates](#) for information on creating test site certificates.

### 6.1.1.2.3 Registering Certificates used in SSL Communication

Obtain the site certificate that was issued by the CA, and the CA certificate of the issuer of that certificate, and register them using the certificate/CRL registration command (from now on, this is referred to as the "scscenter command").

## Information

- Depending on the CA, it might be necessary to register an intermediate CA certificate. Refer to "Registering Certificates and CRLs" in "Setting and Use of the Interstage Certificate Environment" in the *Interstage Application Server Security System Guide* for details.
- This work is unnecessary if you created a test site certificate.

### Creation procedure

1. Set the JDK or JRE installation path in the JAVA\_HOME environment variable.

This is necessary procedure for Linux. For Windows, it is not necessary.

2. Register the CA certificate using the scscenter command.

```
scscenter -n <CA certificate nickname> -f <CA certificate>
```

## See

Refer to "SSL Environment Setting Commands" in the *Interstage Application Server Reference Manual (Command Edition)* for information on the scscenter command.

3. Enter a password to access the Interstage certificate environment.

Enter the password that was specified in the scsmakeenv command to access the Interstage certificate environment.

4. Register the site certificate using the scscenter command.

```
scscenter -n <Site certificate nickname> -f <Site certificate> -o
```

To register the site certificate that was obtained from the CA, specify the nickname that was specified in the private key in the scsmakeenv command. Note that the -o option must be specified to register the site certificate.

5. Enter a password to access the Interstage certificate environment.

Enter the password that was specified in the scsmakeenv command to access the Interstage certificate environment.

### Execution example

[Windows]

The command execution examples shown below use the following values:

```
- CA certificate: C:\temp\ca-cert.cer  
- CA certificate nickname: CACERT  
- Site certificate: C:\temp\server-cert.cer  
- Site certificate nickname: SERVERCERT
```

In the examples, the CA and site certificates obtained are "C:\temp\ca-cert.cer" and "C:\temp\server-cert.cer". Change the file path name of each certificate if necessary.



At the password prompt, enter the password that will be used to access the Interstage certificate environment (it will not be displayed).

```
C:\>scsenter -n CACERT -f C:\temp\ca-cert.cer
Password:
Certificate was added to keystore
SCS: INFO: scs0104: Certificate was imported.
C:\>scsenter -n SERVERCERT -f C:\temp\server-cert.cer -o
Password:
Certificate reply was installed in keystore
SCS: INFO: scs0104: Certificate was imported.
C:\>
```

#### [Linux]

The command execution examples shown below use the following values:

```
- CA certificate: /tmp/ca-cert.cer
- CA certificate nickname: CACERT
- Site certificate: /tmp/server-cert.cer
- Site certificate nickname: SERVERCERT
```

Change the file names of the CA and site certificates that were obtained if necessary.  
The Bourne shell has been used in the execution example.

```
# JAVA_HOME=/opt/FJJSVawjkb/jdk6;export JAVA_HOME
# scsenter -n CACERT -f /tmp/ca-cert.cer
Password:
Certificate was added to keystore
UX:SCS: INFO: scs0104: Certificate was imported.
# scsenter -n SERVERCERT -f /tmp/server-cert.cer -o
Password:
Certificate reply was installed in keystore
UX:SCS: INFO: scs0104: Certificate was imported.
#
```

### 6.1.1.2.4 Settings for SSL Communication

Using the Interstage Management Console, create the SSL definition.

1. Start the Interstage Management Console.

Follow the procedure below to start the Interstage Management Console:

- a. Start the Web browser.
- b. Specify the Interstage Management Console URL.

```
http://[host name of the Admin Server]:[port number for the Interstage Management Console]/
IsAdmin/
```

The default port number is "12000".

- c. Log in to the Interstage Management Console.

The user should log in as a user of the admin server with Administrators privileges.

2. Create the SSL definition.

Select the **System >> Security >> SSL >> Create a new SSL Configuration** tabs to show **General Settings**, then select the registered site certificate nickname, then create the SSL definition.

Specify the following items, then push **Create** button.

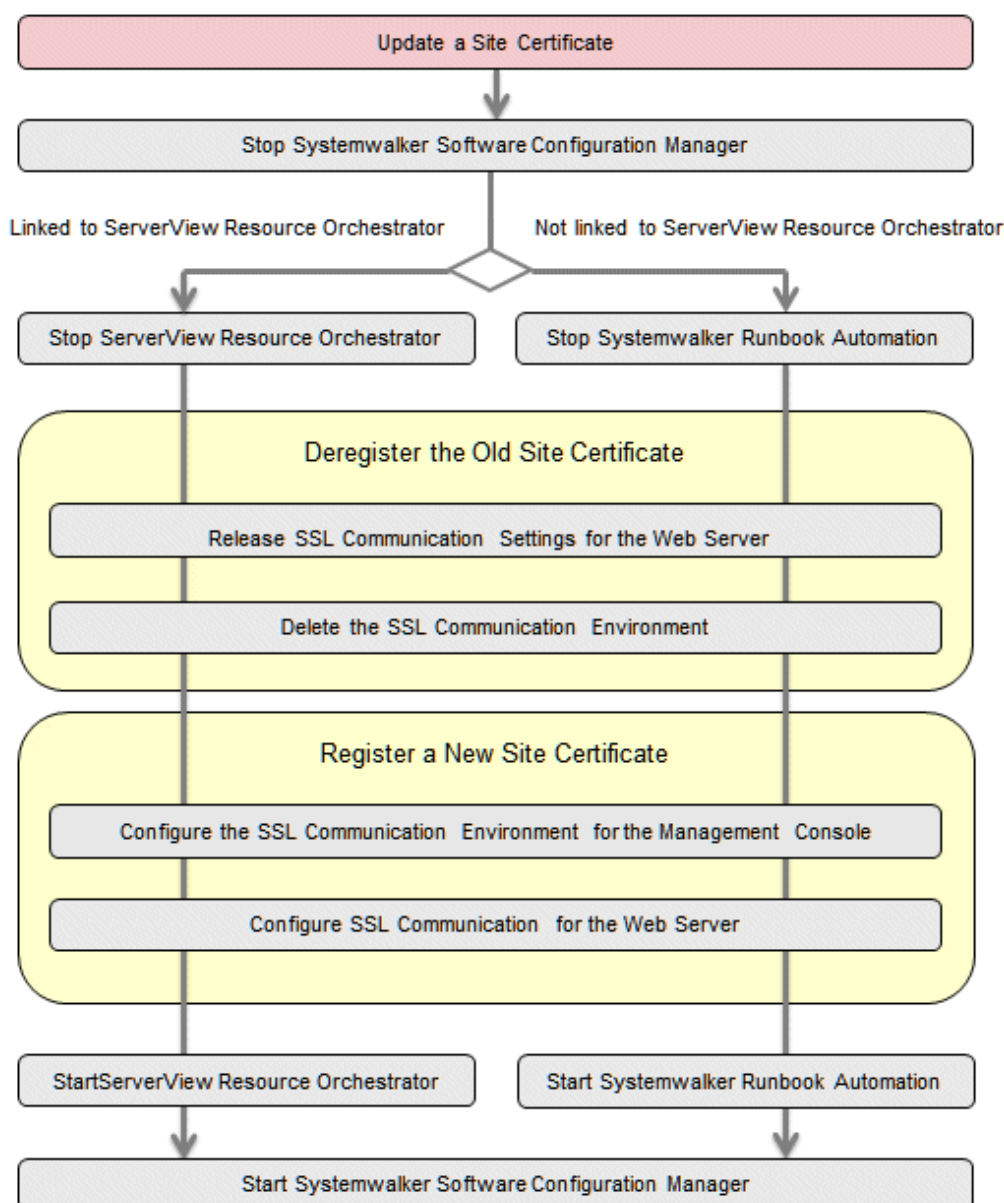
Settings item	Settings value
Configuration name	Set the name that will identify the SSL definition. CFMG-SSL

Settings item	Settings value
	[Fixed]
Site Certificate Nickname	Set the nickname that was specified when the site certificate was registered in the Interstage certificate environment, in " <a href="#">6.1.1.2.3 Registering Certificates used in SSL Communication</a> ". Otherwise, select the site certificate nickname that has been registered. The site certificate that was selected can be checked in the <b>System &gt;&gt; Security &gt;&gt; Certificates &gt;&gt; Site Certificates</b> window of the Interstage Management Console.
Protocol Version	Select "SSL 3.0" and "TLS 1.0".
Verify Client Certificate?	Select " <b>No</b> ".
Encryption Method	Refer to the Interstage Management Console Help, and change this if necessary.
CA Certificate Nickname	Refer to the Interstage Management Console Help, and change this if necessary.

#### 6.1.1.2.5 Corrective Actions If the Site Certificate has Expired

If the registered site certificate has expired, you will no longer be able to log in to Systemwalker Software Configuration Manager. Follow the procedure to renew an expired site certificate:

Perform this procedure after ServerView Resource Orchestrator environment settings are completed, if operating Systemwalker Software Configuration Manager with ServerView Resource Orchestrator linked.



1. Stop Systemwalker Software Configuration Manager.

Execute the following command:

**[Windows]**

```
<Systemwalker Software Configuration Manger installation directory>\SWCFMGM\bin\swcfmg_stop
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_stop
```

2. Stop either one of the following depending on the operation environment.

- a. Stop Systemwalker Runbook Automation.

Execute the following command:

**[Windows]**

```
%SWRBA_HOME%\bin\swrba_stop
```

[Linux]

```
/opt/FJSVswrbam/bin/swrba_stop
```

b. Stop ServerView Resource Orchestrator **[If Linking to ServerView Resource Orchestrator]**

Use the following command to stop ServerView Resource Orchestrator.

[Windows]

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rxmgrctl stop
```

[Linux]

```
/opt/FJSVrcvmr/bin/rxmgrctl stop
```

3. Deregister the old site certificate.

1. Release the SSL communication settings of the Web server.

a. Start the Interstage Management Console.

- Start the Web browser
- Specify the Interstage Management Console URL.

```
http://<Host name of the Admin Server>:<Port number for the Interstage Management Console>/IsAdmin/
```

Note that the default port number is "12000".

- Log in to the Interstage Management Console.

Users must log in as an admin server user with Administrator privileges.

b. Stop the Web server (CFMG-ext).

Click System >> Services >> Web Server >> CFMG-ext, and then open the status tab. If the Web server is not stopped, then click the Stop button.

c. Change the Web server (CFMG-ext) settings.

Select the Web server name (CFMG-ext), click the environment settings tab, click Detailed Settings >> Show, change the environment settings as shown below, and then click the Update button.

Settings item	Settings value
Enable SSL Encryption	Do not use
SSL definition	Select the SSL definition created at "Building the SSL Communication Environment for Management Console".  - CFMG-SSL

2. Remove the registration of the registered site certificate.

Refer to "[7.2.4.1 Deleting the SSL Communication Environment](#)" for details.

4. Register the new site certificate.

1. Register the new site certificate.

Refer to "[6.1.1.2 Building the SSL Communication Environment for Management Console](#)" for details.

2. Configure the SSL communication settings of the Web server.

a. Start the Interstage Management Console.

- Start the Web browser.

- Specify the Interstage Management Console URL.

```
http://<Host name of the Admin Server>:<Port number for the Interstage Management Console>/IsAdmin/
```

Note that the default port number is "12000".

- Log in to the Interstage Management Console.

Users must log in as an admin server user with Administrator privileges.

b. Change the Web server (CFMG-ext) settings.

Open the environment settings tab from System >> Services >> Web Server >> CFMG-ext, click Detailed Settings >> Show, change the environment settings as shown below, and then click the Update button.

Settings item	Settings value
Enable SSL Encryption	Use
SSL definition	Select the SSL definition created at "Building the SSL Communication Environment for Management Console". - CFMG-SSL

c. Start the Web server (CFMG-ext).

Click the Status tab, and then click the Start button to start the Web server.

5. Start either one of the following, depending on the operation environment.

a. Start Systemwalker Runbook Automation

Execute the following command to start Systemwalker Runbook Automation:

**[Windows]**

```
%SWRBA_HOME%\bin\swrba_start
```

**[Linux]**

```
/opt/FJSVswrbam/bin/swrba_start
```

a. Start ServerView Resource Orchestrator **[If Linking to ServerView Resource Orchestrator]**

Use the following command to start ServerView Resource Orchestrator.

**[Windows]**

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rcxmgrctl start
```

**[Linux]**

```
/opt/FJSVrcvmr/bin/rcxmgrctl start
```

6. Start Systemwalker Software Configuration Manager.

Execute the following command to start Systemwalker Software Configuration Manager:

**[Windows]**

```
<Systemwalker Software Configuration Manger installation directory>\SWCFMGM\bin\swcfmg_start
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_start
```

## 6.1.1.2.6 Create Apache Certificates

1. Create a certificate
  - a. Open the command prompt on the admin server.
  - b. Execute the following command to move to the installation folder.

[Windows]

```
>cd "%SWCFMGM_HOME%\SWCFMGX\Manager\sys\apache\conf" <RETURN>
```

[Linux]

```
# cd /etc/opt/FJSVcfmgm/SWCFMGX/sys/apache/conf <RETURN>
```

2. Back up the current certificate and then execute the certificate creation command (openssl.exe) which comes with this product.

### Example

[Windows]

```
>cd "%SWCFMGM_HOME%\SWCFMGX\Manager\sys\apache\conf" <RETURN>
>copy ssl.crt\server.crt ssl.crt\server.crt.org <RETURN>
>copy ssl.key\server.key ssl.key\server.key.org <RETURN>
>..\bin\openssl.exe req -new -x509 -nodes -out ssl.crt\server.crt -keyout ssl.key\server.key -
days 5479 -config openssl.cnf <RETURN>
Loading 'screen' into random state - done
Generating a 1024 bit RSA private key
.....++++++
.....++++++
writing new private key to 'ssl.key\server.key'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) []: <RETURN>
State or Province Name (full name) []: <RETURN>
Locality Name (eg, city) [Kawasaki]: <RETURN>
Organization Name (eg, company) []: <RETURN>
Organizational Unit Name (eg, section) []: <RETURN>
Common Name (eg, YOUR name) [localhost]: <Host name of the Admin Server (FQDN)> (*1) <RETURN>
Email Address []: <RETURN>
```

[Linux]

```
# cd /etc/opt/FJSVcfmgm/SWCFMGX/sys/apache/conf <RETURN>
# cp ssl.crt/server.crt ssl.crt/server.crt.org <RETURN>
# cp ssl.key/server.key ssl.key/server.key.org <RETURN>
# /opt/FJSVcfmgm/SWCFMGX/sys/apache/bin/openssl req -new -x509 -nodes -out ssl.crt/server.crt -
keyout ssl.key/server.key -days 5479 -config /opt/FJSVcfmgm/SWCFMGX/sys/apache/ssl/openssl.cnf
<RETURN>
Generating a 1024 bit RSA private key
.....++++++
.....++++++
writing new private key to 'ssl.key/server.key'
-----
You are about to be asked to enter information that will be incorporated
into your certificate request.
```

```

What you are about to enter is what is called a Distinguished Name or a DN.
There are quite a few fields but you can leave some blank
For some fields there will be a default value,
If you enter '.', the field will be left blank.
-----
Country Name (2 letter code) []: <RETURN>
State or Province Name (full name) []: <RETURN>
Locality Name (eg, city) [Kawasaki]: <RETURN>
Organization Name (eg, company) []: <RETURN>
Organizational Unit Name (eg, section) []: <RETURN>
Common Name (eg, YOUR name) [localhost]: <Host name (FQDN)> (*1) <RETURN>
Email Address []: <RETURN>

```

\*1: Enter the host name (FQDN) to be entered on the Web browser.

Example:

Host name: myhost.company.com

## 6.1.2 Setting up Systemwalker Runbook Automation



### Note

Do not use this procedure if operating Systemwalker Software Configuration Manager under the following conditions:

- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

### 6.1.2.1 Pre-setup Notes

- Check whether Systemwalker Software Configuration Manager has been installed, and whether the system was restarted after the installation.
- Ensure that you are logged in as a user with administrator privileges.
- To cancel the setup, the login ID used for the setup will be required.
- Use either the `isstat` command or the Interstage Management Console to check whether Interstage is running. Refer to the *Interstage Application Server Reference Manual (Command Edition)* for details on the command. Refer to Interstage Management Console Help for details on the Interstage Management Console.

### 6.1.2.2 Setup Preparation

1. Refer to *Technical Guide*, estimate database for Systemwalker Runbook Automation operation, and prepare enough size of file system.

[Linux]

Prepared file system is not mounted on operating system, mount file system on operating system. For details on how to mount, refer to the operating system manuals.

2. Decide directory for registering process management database. Decide the directory so as to become directory on file system as prepared in 1. above.
3. Add access authority to directory.

Without creating directory for registering process management database (when specified directory does not exist, Setup command will create it with adding appropriate access authority), from root directory to registering real database directory for process management, if one of them are already created, add the following access authority to directory.

[Windows]

Add changeable authority to User group which belong to operating system user "swrbadbuser".

Also do not add changeable authority to only operating system user "swrbadbuser". Add changeable authority to User group. If you add changeable authority to only operating system user "swrbadbuser", setup will be aborted with error.

[Linux]

Add authority so that the "swrbadbuser" operating system user can read from and write to the file system (or directory).

## Point

The "swrbadbuser" operating system user is created when this product is installed.

### 6.1.2.3 Registering Users, Groups and Organizational Units

To use ServerView Operations Manager Single Sign-On authentication, register user information with OpenDJ/OpenDS.

This section explains the procedure for registering users with OpenDJ/OpenDS.

This section explains how to register user information using LDIF files, which is one of the methods for registering users.

#### How to Register User Information Using Sample LDIF File

This section explains how to register the user information required to create an environment of Systemwalker Runbook Automation built into Systemwalker Software Configuration Manager by using a sample LDIF file that defines the user information.

Register location for sample LDIF file

Register LDIF sample on as below.

[Windows]

```
%SWRBA_HOME%\etc\sample\ldif
```

[Linux]

```
/etc/opt/FJSVswrbam/sample/ldif/
```

LDIF file	Description
swrba_svssso_sample.ldif	This is an LDIF file for creating users, groups and organizational units, and for adding users to groups. To use the authentication infrastructure for ServerView Operations Manager Single Sign-On, use this sample file.

The definitions in the sample file and how to edit them

This sample file assumes the following LDAP configuration.

Edit the file according to the LDAP environment being used.

## Note

Only user name and password for "Process control user" and "Schedule startup user" can be changed.

Do not change "Public directory", "Organizational unit that contains users" and "Organizational unit that contains groups".

Public directory	dc=fujitsu,dc=com(*1)
Organizational unit that contains users	ou=users(*1)
Organizational unit that contains groups	ou=Group(*1)
Process control user	swrbaadmin(*2)
Process control user password	systemwalker#1(*3)



Schedule startup user	swrbasch(*2)
Schedule startup user password	systemwalker#2(*3)

\*1: The specified value is fixed. Do not change.

\*2: Although it is suggested user name, it is possible to specify any name.

\*3: This is the default. The password cannot contain halfwidth spaces, fullwidth characters, or \$ \ " = | [ ] : \* ; + , < > ? / .

#### How to register sample

Use the ldapmodify command to register the definition information contained in the LDIF file with the LDAP directory:

##### [Windows]

```
<OpenDJ/OpenDS installation directory>\bat\ldapmodify.bat -p <port number> -Z -D <administrator DN> -w <password for the administrator DN> -f <name of the edited LDIF file>
```

##### [Linux]

```
<OpenDJ/OpenDS installation directory>/bin/ldapmodify -p <port number> -Z -D <administrator DN> -w <password for the administrator DN> -f <name of the edited LDIF file>
```

\*4: Specify "cn=Directory Manager,cn=Root DNs,cn=config".

\*5: Specify the Administrator DN password for OpenDJ/OpenDS. Default is "Admin".

\*6: When the content of the sample set is not changed, the sample can be specified directly.

#### Example

Port number: 1474

Administrator DN: cn=Directory Manager,cn=Root DNs,cn=config

Administrator DN password: admin

Name of the LDIF file that was edited: cfmguser.ldif

##### [Windows]

```
ldapmodify.bat -p 1474 -Z -D "cn=Directory Manager,cn=Root DNs,cn=config" -w admin -f cfmguser.ldif
```

##### [Linux]

```
ldapmodify -p 1474 -Z -D "cn=Directory Manager,cn=Root DNs,cn=config" -w admin -f cfmguser.ldif
```

### 6.1.2.4 Setting up Systemwalker Runbook Automation [Windows]

Set up Systemwalker Runbook Automation.

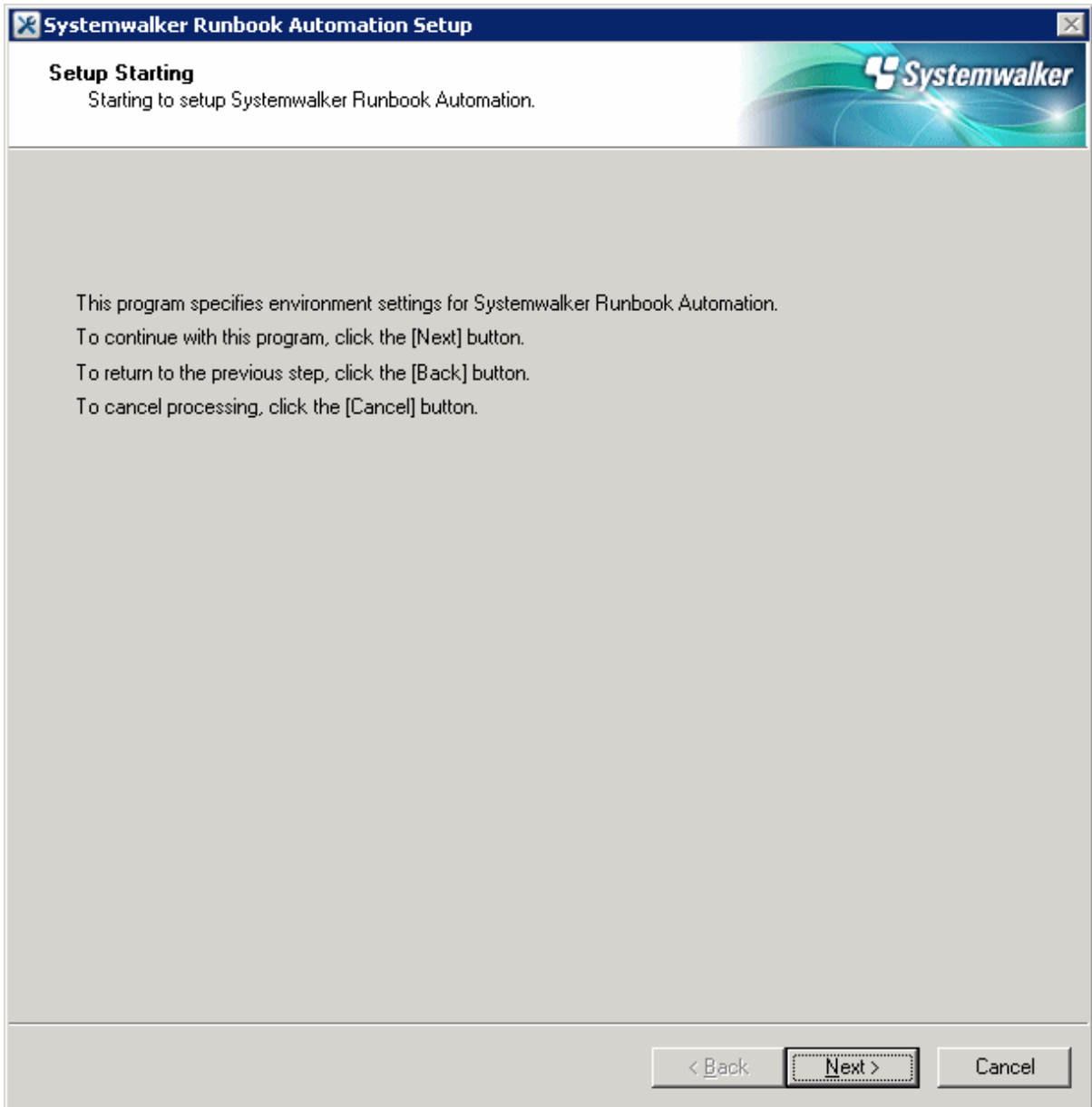
1. Log in to the Admin Server as a user with administrator privileges.
2. Start the setup:

```
%SWRBA_HOME%\bin\swrba_setup -s
```

#### Note

If the operating system being used is Windows Server 2008 or a subsequent version, execute the command above as an administrator.

3. The Systemwalker Runbook Automation Setup Tool will start.  
Check the settings displayed, and then click the **Next** button.



4. Specify the server type settings.

Enter each setting, and then click the **Next** button.

Item name		Input value
<b>Select the build server type:</b>		Select the operating type of the Admin Server from the following options: - <b>Standalone Server (Normal operations)</b>
<b>High-Reliability Environment Settings</b>	<b>Inherit File Storage Directory</b>	This field is disabled if you selected <b>Standalone Server (Normal operations)</b> .
	<b>Primary Node Host Name</b>	This field is disabled if you selected <b>Standalone Server (Normal operations)</b> .
	<b>Secondary Node Host Name</b>	This field is disabled if you selected <b>Standalone Server (Normal operations)</b> .

5. Set up the Process Management Database.

Enter each setting, and then click the **Next** button.

Item name	Input value
<b>Port number for Process Management Database</b>	Specify the port number for accessing the Process Management Database to be used by Systemwalker Runbook Automation.
<b>Process Management Database Storage Directory</b>	Specify the directory for storing the database. The value can be up to 100 characters long, and can contain halfwidth numeric characters, hyphens ("-"), underscores ("_") and halfwidth spaces. Directories in "C:\Program Files" or "C:\Program Files (x86)" can also be specified.  Paths or relative paths that begin with \\ cannot be specified.  Note that read and write permissions for the directory specified in this step must be granted to the "Users" group.
<b>Account for Process Management Database</b>	Register a new account, which will be required for Systemwalker Runbook Automation to access the Process Management Database.

Item name	Input value
	<p>The value can contain up to 18 initial alphanumeric characters.</p> <p>Note that the value specified for this item is required to directly manipulate the Process Management Database.</p>
<p><b>Account Password for Process Management Database</b></p>	<p>Specify the password for the account for accessing the Process Management Database.</p> <p>The value can contain up to 18 alphanumeric characters and symbols (*1).</p> <p>Note that the value specified for this item is required to directly manipulate the Process Management Database.</p> <p>*1: The following symbols can be used: !#%=~:;_</p>
<p><b>Re-enter Password</b></p>	<p>Re-enter the password for the account for accessing the Process Management Database.</p>

6. Set up the environment for the authentication server.

Enter each setting, and then click the **Next** button.

Item name	Input value
The authentication server type to be used	Select the type of the authentication server to be used from the following options: <ul style="list-style-type: none"> <li>- ServerView Operations Manager Single Sign-On Authentication Server</li> </ul>
<b>LDAP Used</b>	Select the LDAP to be used, depending on the authentication server type. Interstage Single Sign-On Authentication Server <ul style="list-style-type: none"> <li>- OpenDJ/OpenDS</li> </ul>
<b>Interstage Single Sign-on Environment Settings</b> <b>Business System Name</b>	This field is disabled if you selected <b>ServerView Operations Manager Single Sign-On Authentication Server</b> as the type of authentication server to be used.


7. Set up the environment for user authentication.

Enter each setting, and then click the **Next** button.

The screenshot shows a window titled "Systemwalker Runbook Automation Setup" with a sub-header "Environment settings for user authentication". Below the sub-header is the instruction "Specify the following to configure the environment." The window contains several input fields:

- Host Name or IP Address:** A text box containing "manager".
- Port Number:** A text box containing "1474".
- Key Name:** A text box containing "dc=fujitsu,dc=com". Above it is the instruction "format: directory name" and an example "< example >: ou=interstage,o=fujitsu,dc=com".
- Unit of Organization:** A text box containing "ou=Group". Above it is the instruction "format: ou = organization unit name" and an example "< example >: ou=Group when organization unit name is Group".
- Unit of Account Storage:** A text box containing "ou=users". Above it is the instruction "format: ou = account storage unit name" and an example "< example >: ou=User when storage unit name is User".
- Administrator DN:** A text box containing "cn=Directory Manager,cn=Root DNs,cn=config". Above it is the instruction "format: cn=administrator DN name" and an example "< example >: cn=manager when the administrator DN name is manager".
- Password for Administrator DN:** A password field with masked characters "xxxxxx".

At the bottom right of the window are three buttons: "< Back", "Next >", and "Cancel".

Item name	Input value
<b>Host Name or IP address</b>	<p>Specify the host name or IP address for the LDAP server.</p> <p>The value can contain up to 64 characters.</p> <p> <b>Note</b></p> <p>.....</p> <p>If an LDAP environment has been created on the Admin Server, an IP address in the IPv6 format cannot be specified for this item. In this case, specify a host name or an IP address in the IPv4 format.</p> <p>.....</p>
<b>Port Number</b>	<p>Specify the port number for the LDAP server.</p> <p>The value must be between 1 and 65535.</p>

Item name	Input value
	Default: 1474
<b>Key Name</b>	Set up the public directory: dc=fujitsu,dc=com
<b>Organizational Unit</b>	Specify the name of the organizational unit: ou=Group
<b>Account Storage Unit</b>	Specify the name of the account storage unit: ou=User
<b>Administrator DN</b>	Specify the distinguished name (DN) for the administrator of the LDAP repository: cn=Directory Manager,cn=Root DNs,cn=config
<b>Password for Administrator DN</b>	Specify the password for the LDAP repository administrator. Note that \$, \, ", and spaces cannot be used.  The password cannot contain halfwidth spaces, fullwidth characters, or \$ \ " =   [ ] : * ; + , < > ? / .  Default: admin

 **Note**

To click the **Next** button, Confirm authentication to LDAP Server.

Failed to confirm authentication to LDAP Server, Review the setting value with displayed error messages.



8. Specify user information.

Enter each setting, and then click the **Next** button.

Item name	Input value
<b>User for Process Control</b>	Specify the name of the user for process control that you registered (refer to " <a href="#">6.1.2.3 Registering Users, Groups and Organizational Units</a> " for details).
<b>Password for the User for Process Control</b>	Specify the password for the user for process control that you registered (refer to " <a href="#">6.1.2.3 Registering Users, Groups and Organizational Units</a> " for details).
<b>User for Schedule Startup</b>	Specify the user for schedule startup that you registered (refer to " <a href="#">6.1.2.3 Registering Users, Groups and Organizational Units</a> " for details).
<b>Password of User for Schedule Startup</b>	Specify the password of the user for schedule startup that you registered (refer to " <a href="#">6.1.2.3 Registering Users, Groups and Organizational Units</a> " for details).

## Note

To click the **Next** button, Confirm authentication to LDAP Server.

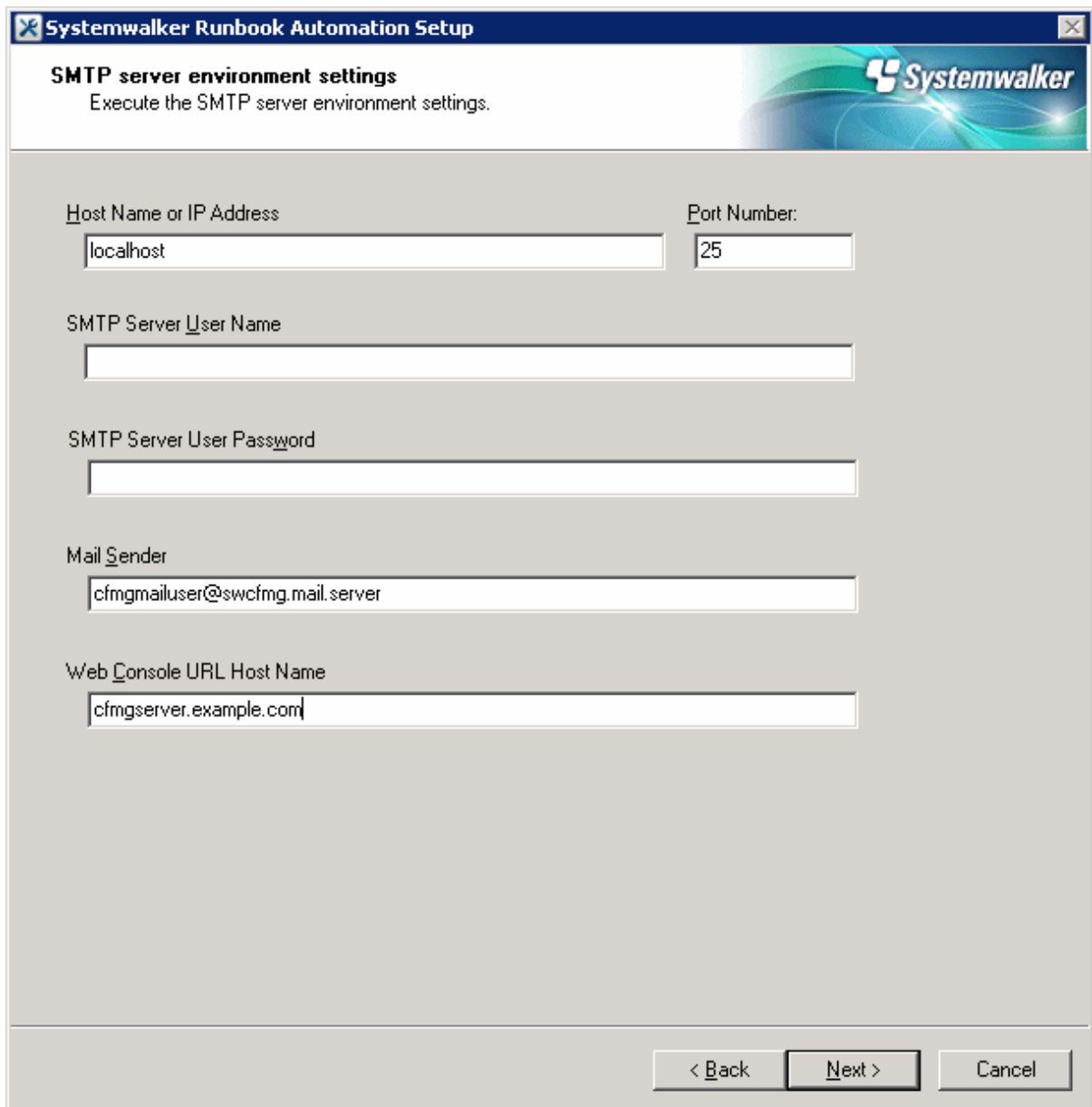
Failed to confirm authentication to LDAP Server, Review the setting value with displayed error messages.

And confirm as below.

- Because there may be error on setting LDAP Server, get back to previous window, and confirm if the information is set normally or not.
- Confirm if user information registered on LDAP server and group information are correct or not.

### 9. Set up an environment for the SMTP server.

Enter each setting, and then click the **Next** button.



The screenshot shows a dialog box titled "Systemwalker Runbook Automation Setup" with a sub-header "SMTP server environment settings" and the instruction "Execute the SMTP server environment settings." The dialog contains several input fields:

- Host Name or IP Address:** localhost
- Port Number:** 25
- SMTP Server User Name:** (empty field)
- SMTP Server User Password:** (empty field)
- Mail Sender:** cfmgmailuser@swcfmg.mail.server
- Web Console URL Host Name:** cfmgserver.example.com

At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

Item name	Input value
<b>Host Name or IP Address</b>	Specify the host name or IP address for the SMTP server for sending emails. It is not necessary to change the value from the default. Default value: localhost [Mandatory]
<b>Port Number</b>	Specify the port number for the SMTP server for sending emails. It is not necessary to change the value from the default. Default value: 25 [Mandatory]
<b>SMTP server user name</b>	Not required.
<b>SMTP server user password</b>	Not required.
<b>Mail sender</b>	Specify the email address of the infrastructure administrator. [Mandatory]
<b>Web console URL host name</b>	Specify the host name of the Admin Server in FQDN format [Mandatory]

### Information

Systemwalker Software Configuration Manager does not use the email function of Systemwalker Runbook Automation. However, you must set values for the following items in accordance with the table above, because they are required for Systemwalker Runbook Automation setup.

- **Host Name or IP Address**
- **Port Number**
- **Mail sender**
- **Web console URL host name**

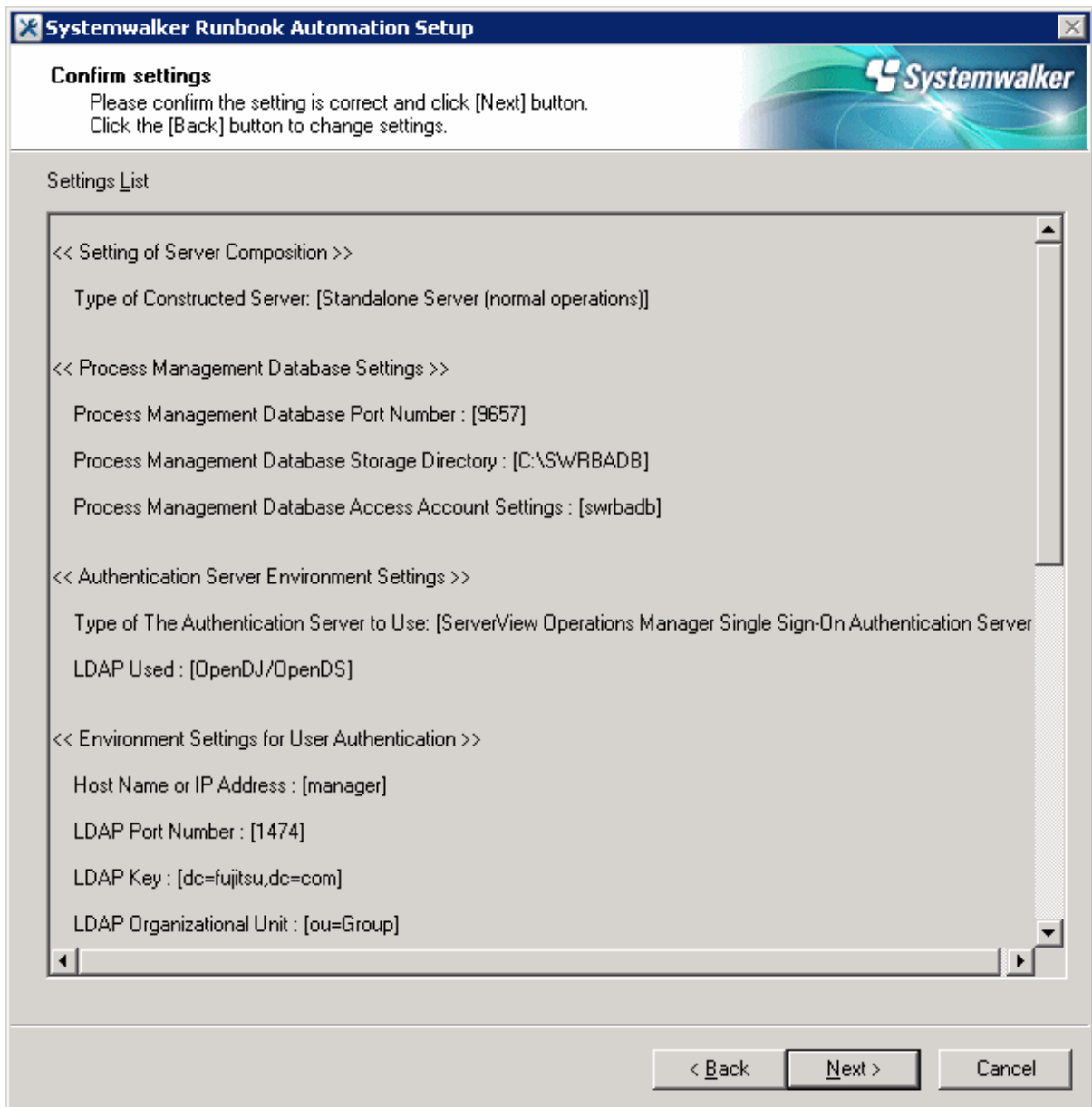
10. Configure the port number to be used by Systemwalker Runbook Automation.

Enter relevant values, and click **Next**.

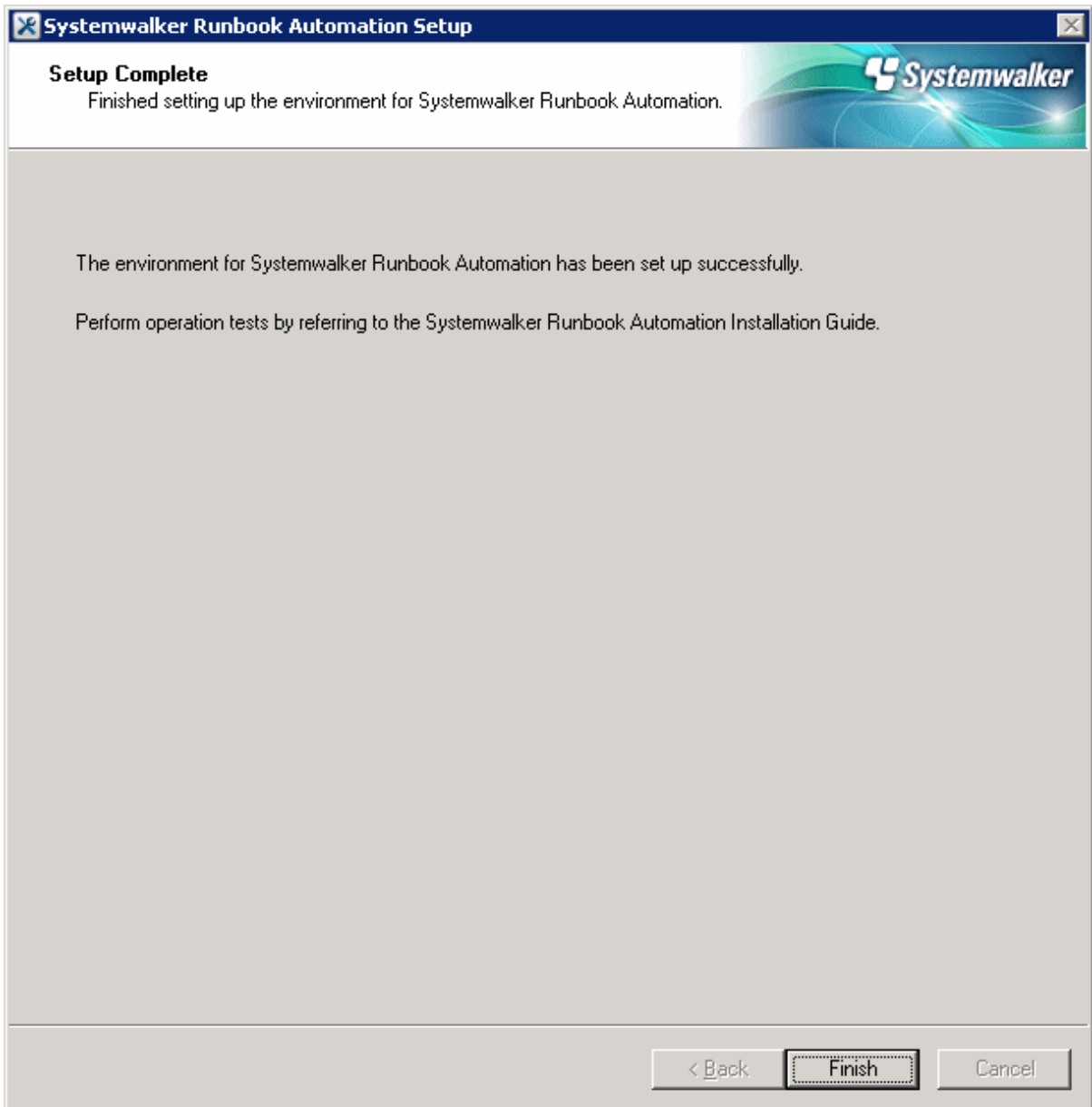
Item name	Input value
<b>Port Number for Message broker</b>	Specify the port number required by Systemwalker Runbook Automation to use the Java EE feature. Default value: 7676
<b>Port Number for Server Function</b>	Specify the port number required to run the Systemwalker Runbook Automation server feature. Default value: 23700

11. The settings will be displayed.

Check the displayed values are correct, and then click the **Next** button. The setup will commence.



12. If the setup completes normally, the settings will be displayed. Check the settings that are displayed, and then click the **Finish** button.



### Note

If the setup fails for any reason, be sure to cancel the setup.

## 6.1.2.5 Setting up Systemwalker Runbook Automation [Linux]

Set up Systemwalker Runbook Automation.

### Information

Input [!!] after ENTER=> to stop, except entering password and confirming setting up information. Setting up command is abort

1. Log in to the Admin Server as a superuser.

2. Start Systemwalker Runbook Automation setup:

```
# /opt/FJSVswrbam/bin/swrba_setup -s
```

3. A message will be displayed indicating that the setup is about to start.

```
=====
Systemwalker Runbook Automation Setup Tool
                        V15.1.3
                        Copyright FUJITSU LIMITED 2010-2014
=====
Starting to set up Systemwalker Runbook Automation.
Please input [!] after ENTER==> to stop the setup.
```

4. Specify the full path of the Process Management Database directory.

After "ENTER==>" will be displayed, input specified directory within 100-byte absolute path.

Specify directory name with one byte alphanumeric characters. Not specify it with relative path.

If only enter key is input, set default value "/var/opt/FJSVswrbam/SWRBADB".

```
[Settings for the Process Management Database directory]
Specify the Process Management Database directory.
Note 1: The maximum length of the path that can be specified is 100 bytes.
If Enter is pressed, the default value will be used.
( default : /var/opt/FJSVswrbam/SWRBADB )
ENTER==>
```

5. Enter the port number that the Process Management Database will use.

```
[Settings for the communication port for Process Management Database]
Enter the port number used by the Process Management Database.
If Enter is pressed, the default value will be used.
( default : 9657 )
ENTER==>
```

6. Enter the account name and password for accessing the Process Management Database.

```
[Enter the account for accessing the Process Management Database]
Register a new account,
which will be required for Systemwalker Runbook Automation
to access the Process Management Database.
The value can contain up to 18 alphanumeric characters.
If Enter is pressed, the default value will be used.
( default : swrbadb )
ENTER==>

[Enter the account password]
The value can contain up to 18 alphanumeric characters,
spaces and symbols (!#%=-:,_ )
Account will be registered with the specified password.
ENTER==>
Re-enter the password.
ENTER==>
```

7. Specify "3" to select "ServerView Operations Manager Single Sign-On Authentication Server" as the type of authentication server to be used by the admin server.

```
[Authentication server type settings]
Select the type of the authentication server to be used:
1. Authentication server for Interstage Single Sign-On
2. LDAP server
3. ServerView Operations Manager Single Sign-On Authentication Server
If Enter is pressed, the default value will be used.
```

```
( default : 1 )  
ENTER==>
```

8. Specify the type of LDAP directory to be used.

Specify "1" to select "OpenDJ/OpenDS" as the type of LDAP directory to be used.

```
[Settings for the LDAP used]  
Select the LDAP that is used:  
1. OpenDJ/OpenDS  
2. Active Directory  
If Enter is pressed, the default value will be used.  
( default : 1 )  
ENTER==>
```

9. Specify the host name or IP address for the LDAP directory.

```
[Settings for the host name]  
Enter the host name or IP address of LDAP server.  
ENTER==>
```



If an LDAP environment has been created on the Admin Server, an IP address in the IPv6 format cannot be specified for this item. In this case, specify a host name or an IP address in the IPv4 format.

10. Specify the port number for the LDAP directory.

```
[Settings for the port]  
Enter the LDAP port number.  
If Enter is pressed, the default value will be used.  
( default : 1474 )  
ENTER==>
```

11. Specify the key name for the LDAP directory.

Specify "dc=fujitsu,dc=com".

```
[Settings for the key]  
Enter a public directory.  
If Enter is pressed, the default value will be used.  
( default : dc=fujitsu,dc=com )  
ENTER==>
```

12. Specify the organizational unit name for the LDAP directory.

Specify "ou=Group".

```
[Settings for the organizational unit]  
Enter the organizational unit name.  
(Format : ou=organizational unit name)  
(Example: If the organizational unit name is Group, [ou=Group])  
If Enter is pressed, the default value will be used.  
( default : ou=Group )  
ENTER==>
```

13. Specify the account storage unit name for the LDAP directory.

Specify "ou=users".

```
[Settings for the account storage unit]  
Enter the account storage unit name.  
(Format : ou=account storage unit name)  
(Example: If the organizational unit name is User, [ou=User])
```



```
If Enter is pressed, the default value will be used.
( default : ou=users )
ENTER==>
```

14. Specify the administrator DN for the LDAP directory.

Specify "cn=Directory Manager,cn=Root DNs,cn=config".

```
[Enter administrator DN]
Enter the administrator DN.
(Example: cn=manager,ou=interstage,o=fujitsu,dc=com)
If Enter is pressed, the default value will be used.
( default : cn=Directory Manager,cn=Root DNs,cn=config )
ENTER==>
```

15. Enter the password for the LDAP administrator DN.

The password cannot contain halfwidth spaces, fullwidth characters, or \$ \ " = | [ ] : \* ; + , < > ? /. The default value is "admin".

```
[Enter password for administrator DN]
Enter the password for administrator DN.
ENTER==>
```

16. The system will then check with the LDAP server whether the administrator DN exists.

```
Checking LDAP server authentication...
```

If LDAP server authentication has been confirmed normally, the following message will be displayed.

```
Authentication the information on LDAP server completed.
```

If LDAP server authentication has not been confirmed, the following message will be displayed.

```
Error:Failure in authentication to the LDAP server. Administrator DN information does not match
the information on the LDAP server.
```

Re-enter the user name and password for the administrator DN.

If authentication has failed because the LDAP information is incorrect, enter "\*" to change the information on the LDAP server.

```
[Enter administrator DN]
Enter the administrator DN.
(Example: cn=manager,ou=interstage,o=fujitsu,dc=com)
If Enter is pressed, the default value will be used.
Or enter "*" to change the information on the LDAP server.
( default : cn=Directory Manager,cn=Root DNs,cn=config )
ENTER==>

[Enter password for administrator DN]
Enter the password for administrator DN.
ENTER==>
```

If administrator DN and password are not incorrect, Review them with the following viewpoint.

- Confirm if the connection information is correct.
- Confirm if the LDAP server has been started.
- Review user and group definition information registered on LDAP are correct.
- Confirm if the network to LDAP is down,

17. Enter the account name for the user for process control that has been registered with the LDAP directory.

Specify the account name for the user for process control that you registered (refer to "6.1.2.3 Registering Users, Groups and Organizational Units" for details).

```
[Enter account for the user for process control]
Enter the account for the user for process control.
If Enter is pressed, the default value will be used.
( default : swrbaadmin )
ENTER==>
```

18. Enter the password for the user for process control.

Specify the password for the user for process control that you registered (refer to "[6.1.2.3 Registering Users, Groups and Organizational Units](#)" for details).

```
[Enter password for the user for process control]
Enter the password for the user for process control.
ENTER==>
```

19. The system will then check with the LDAP server whether the user for process control exists.

```
Checking LDAP server authentication...
```

If LDAP server authentication has been confirmed normally, the following message will be displayed.

```
Authentication the information on LDAP server completed.
```

If LDAP server authentication has not been confirmed, the following message will be displayed.

```
Error:Failure in authentication to the LDAP server. Process control user information does not
match the information on the LDAP server.
```

Re-enter the user name and password for the user for process control.

If authentication has failed because the LDAP information is incorrect, enter "\*" to change the information on the LDAP server.

```
[Enter account for the user for process control]
Enter the account for the user for process control.
If Enter is pressed, the default value will be used.
Or enter "*" to change the information on the LDAP server.
( default : swrbaadmin )
ENTER==>

[Enter password for the user for process control]
Enter the password for the user for process control.
ENTER==>
```

If the user and password for process control are not incorrect, Review them with the following viewpoint.

- Confirm if the connection information is correct.
- Confirm if the LDAP server has been started.
- Review user and group definition information registered on LDAP are correct.
- Confirm if the network to LDAP is down,

20. Enter the account name for the user for schedule startup that has been registered with the LDAP directory.

Specify the account name for the user for schedule startup that you registered (refer to "[6.1.2.3 Registering Users, Groups and Organizational Units](#)" for details).

```
[Enter account for the user for schedule startup]
Enter the account for the user for schedule startup.
If Enter is pressed, the default value will be used.
( default : swrbasch )
ENTER==>
```

21. Enter the password for the user for schedule startup.

Specify the password of the user for schedule startup that you registered (refer to "[6.1.2.3 Registering Users, Groups and Organizational Units](#)" for details).

```
[Enter password for the user for schedule startup]
Enter the password for the user for schedule startup.
ENTER==>
```

22. The system will then check with the LDAP server whether the user for process control exists.

```
Checking LDAP server authentication...
```

If LDAP server authentication has been confirmed normally, the following message will be displayed.

```
Authentication the information on LDAP server completed.
```

If LDAP server authentication has not been confirmed, the following message will be displayed.

```
Error:Failed to authenticate with the LDAP server. There is an error with either the user for
starting schedules or the information on the LDAP server.
```

Re-enter the user name and password for schedule startup.

If authentication has failed because the LDAP information is incorrect, enter "\*" to change the information on the LDAP server.

```
[Enter account for the user for schedule startup]
Enter the account for the user for schedule startup.
If Enter is pressed, the default value will be used.
Or enter "*" to change the information on the LDAP server.
( default : swrbasch )
ENTER==>

[Enter password for the user for schedule startup]
Enter the password for the user for schedule startup.
ENTER==>
```

If the user and password for schedule startup are not incorrect, Review them with the following viewpoint.

- Confirm if the connection information is correct.
- Confirm if the LDAP server has been started.
- Review user and group definition information registered on LDAP are correct.
- Confirm if the network to LDAP is down,

23. Set either the host name or IP address of the SMTP server.

Specify the host name or IP address for the SMTP server for sending emails.

It is not necessary to change the value from the default. Press **Enter**.

```
[SMTP server host name settings]
Enter the SMTP server host name or IP address.
If Enter is pressed, the default value will be used.
( default : localhost )
ENTER==>
```

### Note

Systemwalker Software Configuration Manager does not use the email function of Systemwalker Runbook Automation. However, you must set values for the following items in accordance with the table above, because item are required for Systemwalker Runbook Automation setup.

- **Host Name or IP Address**

- **Port Number**
  - **Mail sender**
  - **Web console URL host name**
- 

24. Specify the port number for the SMTP server.

It is not necessary to change the value from the default. Press **Enter**.

```
[SMTP server port settings]
Enter the SMTP server port number.
If Enter is pressed, the default value will be used.
( default : 25 )
ENTER==>
```

25. Enter the user name for the SMTP server.

Specify the name of the user that is used to authenticate with the SMTP server when emails are sent.

It is not necessary to set a value. Press **Enter**.

```
[Enter SMTP server user name]
Enter the SMTP server user name.
If only the Enter key is pressed, the value will not be set.
ENTER==>
```

26. Enter the sender for emails.

Specify the sender (the "from" address) that will be assigned to the emails that are sent, using email address format.

Specify the email address of the infrastructure administrator.

```
[Enter mail sender]
Enter the mail sender.
ENTER==>
```

27. Specify the host name of the Admin Server, which will be embedded into the URL for the Web console.

Specify the host name of the admin server in FQDN format.

```
[Enter Web console URL host name]
Enter the Web console URL host name.
ENTER==>
```

28. Type the message broker port number.

Specify the port number required by Systemwalker Runbook Automation to use the Java EE feature.

```
[Port number for message broker settings]
Enter the port number for the message broker.
If Enter is pressed, the default value will be used.
( default : 7676 )
ENTER==>
```

29. Type the port number used by the server feature.

Specify the port number required to run the Systemwalker Runbook Automation server feature.

```
[Port number for server function]
Enter the port number for the server function.
If Enter is pressed, the default value will be used.
( default : 23700 )
ENTER==>
```

30. Check the setup information.

Check the information entered in the settings window, and then enter "y" to start the setup processing.

If "n" is entered, the setup processing will be terminated and the display will return to the prompt.

If "r" is entered, the setup processing will be executed again from step 3.

```
[Confirm setup information]
Check the specified values.
=====
Systemwalker Runbook Automation operation model
Process Management Database directory      : /var/opt/FJSVswrbam/SWRBADB
Port number for Process Management Database : 9657
Account for Process Management Database    : swrbadb
Authentication server kind                 : ServerView Operations Manager Single Sign-
On Authentication Server
LDAP used                                  : OpenDJ/OpenDS
LDAP Host Name                             : swrba
LDAP Port                                   : 1474
LDAP public directory                      : dc=fujitsu,dc=com
LDAP organizational unit name              : ou=Group
LDAP account storage unit name             : ou=users
LDAP administrator DN                     : cn=Directory Manager,cn=Root DNs,cn=config
Account for the user for process control    : swrbaadmin
Account for the user for schedule startup   : swrbasch
SMTP server host name                     : localhost
SMTP server port                           : 25
SMTP server user name                     : Do not use SMTP server authentication.
Mail sender                                : cfmgmailuser@swrba.mail.server
Web console URL host name                  : cfmgserver.example.com
Message broker port                       : 7676
Server function port                      : 23700
=====
OK? [Start (y), Cancel (n), Rectify (r)]
ENTER==>
```

31. The setup will start.

Messages about the setup processing will be displayed, with a message indicating the completion of the setup being displayed at the end.

```
Starting to create an environment for Systemwalker Runbook Automation on the management server.
Starting the Process Management Database build...
Creating the Process Management Database has completed.
Starting to set up the environment for Systemwalker Runbook Automation.
Setting up the environment for Systemwalker Runbook Automation has completed.
Starting the CMDB environment setup...
The CMDB environment setup is now complete.
Creating an environment for Systemwalker Runbook Automation on the management server has
completed.
```



Note

If an error occurs during the Systemwalker Runbook Automation setup process, check the following items.

- If the setup processing terminates abnormally, execute the processing for canceling the setup, and then execute the setup processing again.
- If the setup processing terminates abnormally and then the processing for canceling the setup also produces an error, restart the system. If the error still persists, contact Fujitsu technical support.

## 6.1.3 Setting up Systemwalker Software Configuration Manager

If necessary, set up the product on a Windows or a Linux machine.



Before performing this procedure, ensure that the following operations have been completed.

If the operations have not been completed, setup of Systemwalker Software Configuration Manager will fail.

"6.1.1 Pre-setup Tasks for the Admin Server"

"6.1.2 Setting up Systemwalker Runbook Automation"

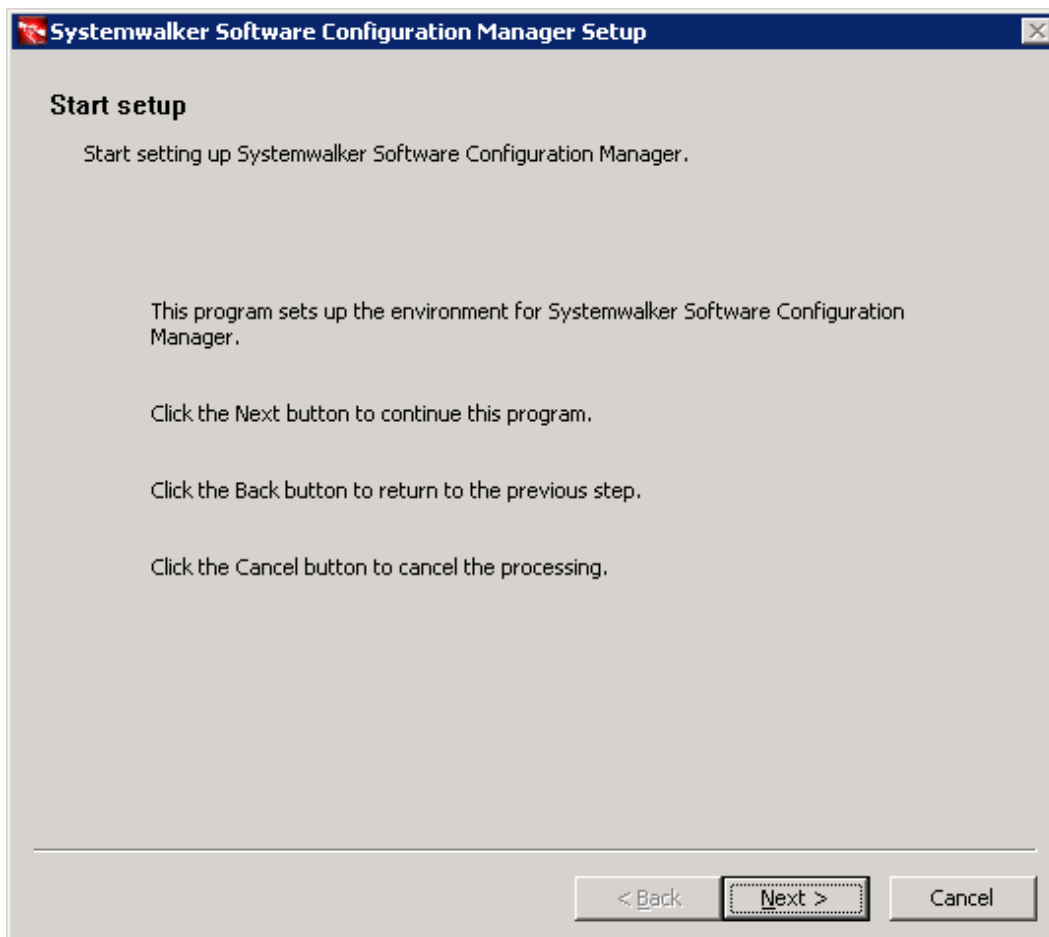
### 6.1.3.1 Execution of Setup

Perform the setup by opening a new command prompt and executing the following command:

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_setup_express -s
```

1. The setup start window will be displayed.

Click the **Next** button.



2. The **User settings for the operating environment** window will be displayed.

Specify the following items, and then click the **Next** button.

**Systemwalker Software Configuration Manager Setup**

**User settings for the operating environment**

Set the password for the LDAP repository administrator and the process control user registered in LDAP.

Environment settings for user authentication

Administrator DN password for LDAP (OpenDJ/OpenDS)

Settings for the process control user registered in LDAP (OpenDJ/OpenDS)

User name (default: swrbaadmin)

Password

< Back    Next >    Cancel

Input parameter	Input value (default)
Manager DN password	Password of the LDAP (OpenDJ/OpenDS) repository administrator. If this parameter is not changed, the following default value is set: admin (*1)
Name of the process control user	Name of the process control user registered in LDAP. If the sample LDIF is not changed, the following default value is set: swrbaadmin (*1)
Password of the process control user	Password of the process control user registered in LDAP. If the sample LDIF is not changed, the following default value is set: systemwalker#1 (*1)

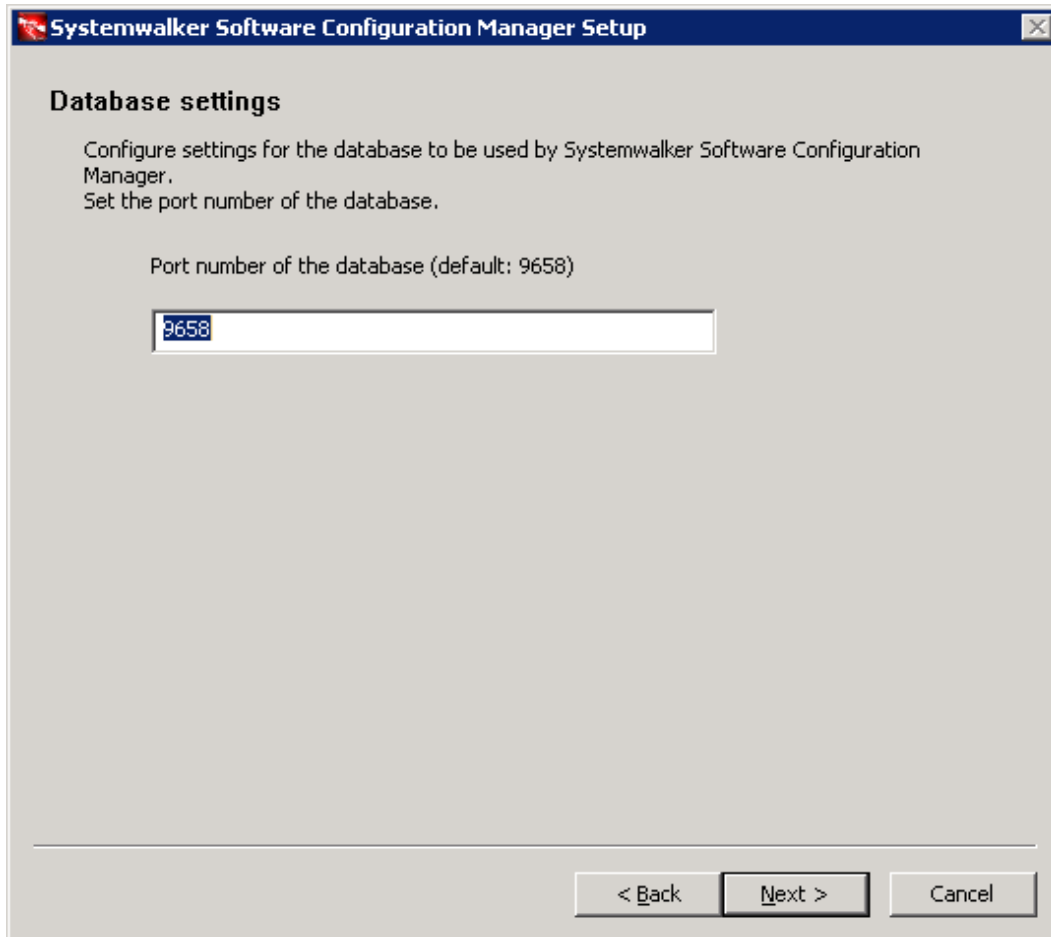
\*1: Specify the value set during Systemwalker Runbook Automation setup.

 **Point**

.....  
The input window is not displayed if Systemwalker Software Configuration Manager is linked to ServerView Resource Orchestrator.  
.....

3. The **Database settings** window will be displayed.

Specify the following items, and then click the **Next** button.



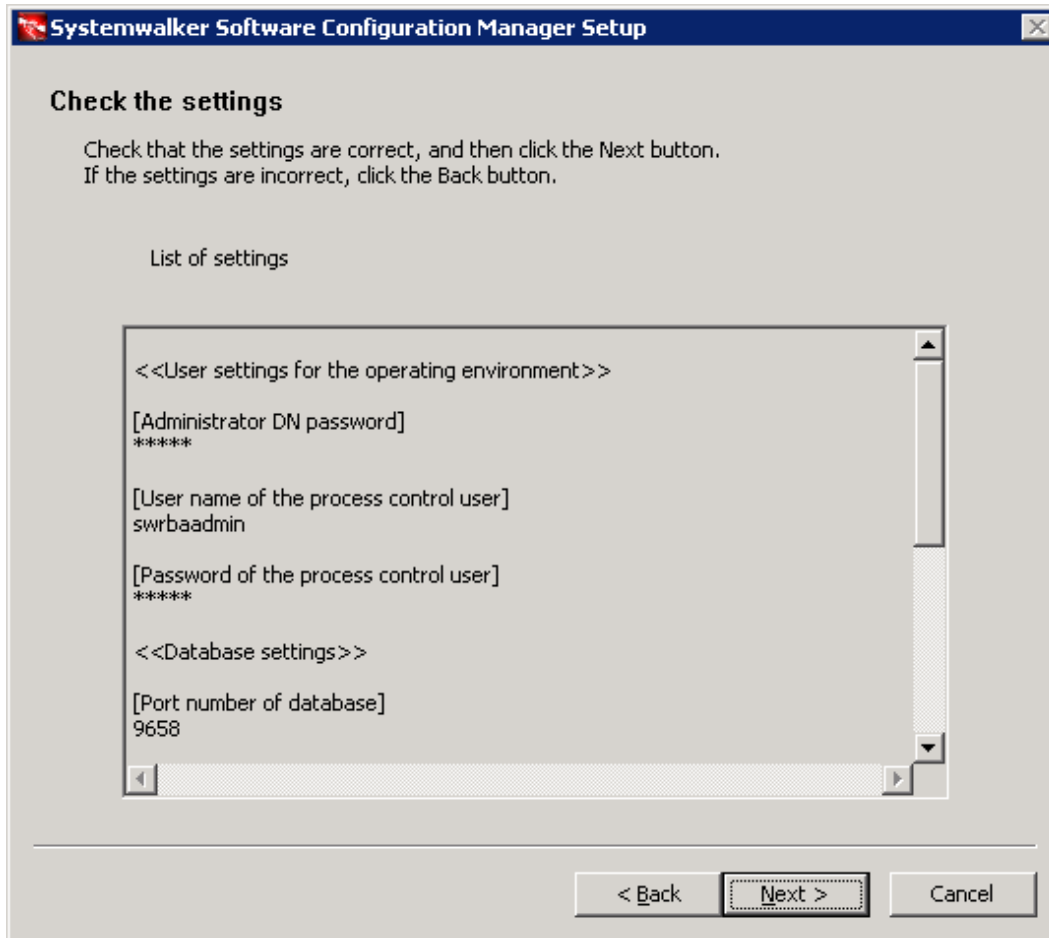
Perform the database settings that will be used by Systemwalker Software Configuration Manager:

Input parameter	Default value
Database port number	9658



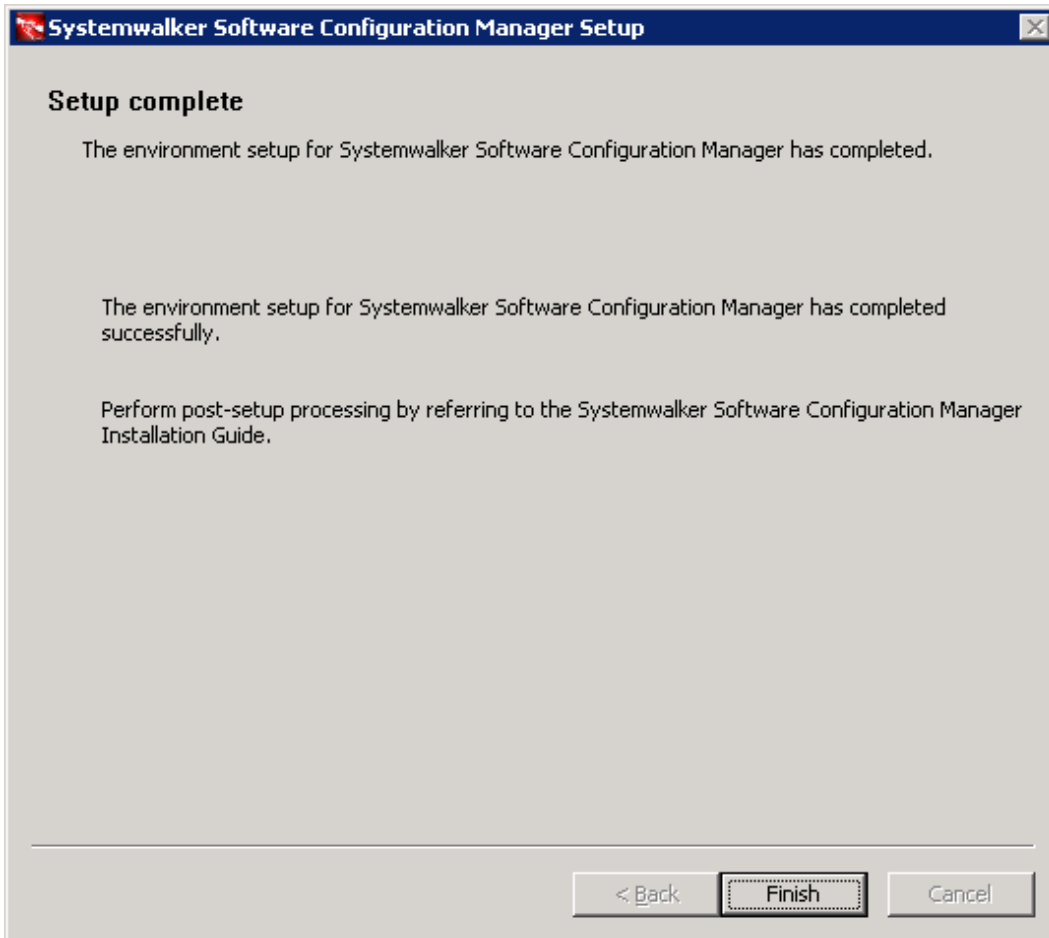
1. The **Check the settings** window will be displayed.

Check the settings, and then click the **Next** button to start the setup.



2. Upon successful completion, the following window will be displayed.

Click the **Finish** button.



.....  
For the processes for after setup, refer to [6.1.4 Post-setup Tasks](#).  
.....

**[Linux]**

Perform the setup by opening a new command prompt and executing the following command:

```
/opt/FJSVcfmgm/bin/swcfmg_setup_express -s
```

1. A welcome window will be displayed. Press the **Enter** key.

```
=====
                        Systemwalker Software Configuration Manager Setup
                               V15.3.0
                        Copyright 2010-2014 FUJITSU LIMITED
=====

Welcome to Systemwalker Setup!
Set up Systemwalker Software Configuration Manager.

Press ENTER.
```

2. The setup start window will be displayed. Enter "y".

```

=====
                Systemwalker Software Configuration Manager Setup
                    V15.3.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

Systemwalker Software Configuration Manager (admin server)

Start the setup?
[y,n]
=>

```

3. The **User settings for the operating environment** window will be displayed.

- a. Specify the password for the LDAP repository administrator.

Specify the value set during Systemwalker Runbook Automation setup. (The default value is "admin".)

```

<< User settings for the operating environment >>
Set the password for the LDAP repository administrator.
=====

Enter the administrator DN password for LDAP (OpenDJ/OpenDS).
=>

```

- b. Specify the name of the user for process control registered in LDAP.

Specify the value set during Systemwalker Runbook Automation setup. (The default value assumed when you do not change the sample LDIF is "swrbaadmin".)

```

<< User settings for the operating environment >>
Set the process control user registered in LDAP.
=====

Enter the user name of a process control user already registered in LDAP (OpenDJ/OpenDS).
If the return key is pressed without any input, [default: swrbaadmin] will be set.
=>

```

- c. Specify the password for the user for process control registered in LDAP.

Specify the value set during Systemwalker Runbook Automation setup. (The default value assumed when you do not change the sample LDIF is "systemwalker#1".)

```

<< User settings for the operating environment >>
Set the process control user registered in LDAP.
=====

Enter the password of a process control user already registered in LDAP (OpenDJ/OpenDS).
=>

```



.....  
The input window is not displayed if Systemwalker Software Configuration Manager is linked to ServerView Resource Orchestrator.  
.....

4. The **Database settings** window will be displayed.

Enter the port number of the database.

```

<< Database settings >>
Configure settings for the database to be used by Systemwalker Software Configuration Manager.
Set the port number of the database.
=====

```

```
Enter the database port number.  
If the return key is pressed without any input, [default: 9658] will be set.  
=>
```

5. The **Check the settings** window will be displayed.

Check the settings, and then enter "y" to start the setup.

```
<< Check the settings >>  
Ensure the settings are correct, and then start setup.  
=====
```

```
[User settings for the operating environment]  
Manager DN password: *****  
User's for process control name of user: swrbaadmin: swrbaadmin  
Password of the process control user: *****
```

```
[Database settings]  
Port number for the Data base:9658
```

```
Start the setup with the above settings?  
[y,q]  
=>
```

6. When the setup completes, the following message will be displayed:

```
The environment setup for Systemwalker Software Configuration Manager has completed successfully.  
Perform post-setup processing by referring to the Systemwalker Software Configuration Manager  
Installation Guide.
```



See

.....  
For the processes for after setup, refer to [6.1.4 Post-setup Tasks](#).  
.....

## 6.1.4 Post-setup Tasks

---

This section explains the tasks required after setup for the admin server.

### 6.1.4.1 Starting the Products

#### 6.1.4.1.1 Starting ServerView Resource Orchestrator (If Linking to ServerView Resource Orchestrator)

Start ServerView Resource Orchestrator if linking to it to operate the admin server:

**[Windows]**

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rcxmgrctl start
```

**[Linux]**

```
/opt/FJSVrcvnr/bin/rcxmgrctl start
```

#### 6.1.4.1.2 Starting Systemwalker Runbook Automation



Note

.....  
Do not use this procedure if linking to ServerView Resource Orchestrator to operate Systemwalker Software Configuration Manager.  
.....

Start Systemwalker Runbook Automation.

[Windows]

```
%SWRBA_HOME%\bin\swrba_start
```

[Linux]

```
/opt/FJSVswrbam/bin/swrba_start
```

### 6.1.4.1.3 Starting Systemwalker Software Configuration Manager

Start Systemwalker Software Configuration Manager:

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_start
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_start
```

## 6.2 Registering an Infrastructure Administrator

---

An infrastructure administrator is a user who operates and maintains Systemwalker Software Configuration Manager. Create an infrastructure administrator before starting operation of Systemwalker Software Configuration Manager.

Refer to "[9.1 User Management](#)" for information on how to create an infrastructure administrator.

### If linking to ServerView Resource Orchestrator

If linking to ServerView Resource Orchestrator, create an infrastructure administrator in ServerView Resource Orchestrator - refer to "Registering User Accounts" in the *ServerView Resource Orchestrator Cloud Edition User's Guide for Infrastructure Administrators (Resource Management)* for details.

An infrastructure administrator who is already operating ServerView Resource Orchestrator can also operate Systemwalker Software Configuration Manager. In that situation, it is not necessary to register a new infrastructure administrator.

## 6.3 Registering Hardware Information

---

To collect the configuration information of the hardware and virtual environments, it is necessary to register the blade chassis, blade servers, rack mount servers, and the virtual environments of the discovery targets.

For details on the hardware information management commands, refer to the Reference Guide.

## 6.4 Executing the Initial Discovery

---

The first discovery performed after installation is called the initial discovery. Establish the following environment before performing the initial discovery:

- Discovering the hardware information
- Discovering the hardware configuration information

Register the hardware information of the discovery target using the hardware information management command.

Confirm that the manager of this product can communicate with the hardware to be discovered.

## Information

In order to collect CPU information and memory information of a blade server, the target blade server must have been powered on at least one time.

- When collecting chassis and blade server information, confirm that the chassis is powered on.
- Discovering the virtual environment configuration information
  - Register the hardware information and the VM host information of the discovery target using the hardware information management command.
  - Install VMware Tools on the VM guest.
  - Confirm that the VM host and the VM guest are powered on.
  - Specify the admin LAN subnet address in the "Hardware discovery definition file". For details on the "Hardware discovery definition file", refer to the *Reference Guide*.

## Hardware Information

Perform the initial discovery for hardware information by executing the following command:

### [Windows]

```
%SWCMDB_INSTALL_PATH%\FJSVcndbm\bin\cmdbrefresh.exe -q type=AGT_CFMGSRV
```

### [Linux]

```
/opt/FJSVcndbm/bin/cmdbrefresh.sh -q type=AGT_CFMGSRV
```

## Point

### Guide to the time required for the initial discovery

It is recommended that the initial discovery be executed before operations commence.

The following tables show an approximate indication of the time required for the initial discovery:

- Hardware configuration information

#### - Blade server

Number of physical servers	Time required for the initial discovery
500	100 minutes or more

#### - Rack mount server

Number of physical servers	Time required for the initial discovery
500	170 minutes or more

- Virtual environment configuration information

Number of Virtual guests	Time required for the initial discovery
500	10 minutes or more
1,000	20 minutes or more
1,500	30 minutes or more

## 6.5 Registering Discovery Schedules

---

Register schedules for regular discoveries.

### Hardware Information

Discovery of hardware information is performed every day at the following time by default:

- 2:00 AM

When modifying the discovery schedule, edit the configuration information collection schedule definition file, and modify it to the arbitrary date for collection. For details on configuration information collection schedule definition files, refer to the Reference Guide.

When it is not necessary to schedule automatic collection, add "#" to the top of the following line of the "configuration information collection schedule definition file".

```
AGT_CFMGSRV 0 2 * * *
```

If the schedule is modified or disabled, restart this product. If linked to ServerView Resource Orchestrator, restart ServerView Resource Orchestrator



---

### Guide to the execution interval for regular discovery

It is recommended that regular discovery be executed once a day, outside business hours (such as late at night).

Take the following guide into account when setting an execution interval:

- Hardware configuration information
  - **Blade server**

Number of physical servers	Execution interval
500	100 minutes or more

- **Rack mount server**

Number of physical servers	Execution interval
500	170 minutes or more

- Virtual environment configuration information

Number of Virtual guests	Execution interval
500	10 minutes or more
1,000	20 minutes or more
1,500	30 minutes or more

---

# Chapter 7 Setup Cancellation

This chapter explains how to cancel the setup for Systemwalker Software Configuration Manager.

## 7.1 Points to Note before Canceling the Setup

Note the following points when canceling the setup.

### 7.1.1 Backing up the Resources

If setup is canceled, all files and settings information including user assets will be deleted. For this reason, back up any necessary assets before canceling the setup.

Refer to "[11.2.2 Backing Up the Admin Server](#)" for information on the various assets to back up.

## 7.2 Canceling the Setup for the Admin Server

This section explains how to cancel the setup for the admin server.

### 7.2.1 Tasks Required before Setup Cancellation

This section explains the tasks required before setup cancellation for the admin server.

#### 7.2.1.1 Stopping ServerView Resource Orchestrator (If Linking to ServerView Resource Orchestrator)

If operating the admin server with ServerView Resource Orchestrator linked, run the following command to stop ServerView Resource Orchestrator.

[Windows]

```
<ServerView Resource Orchestrator installation directory>\SVROR\Manager\bin\rxmgctl stop
```

[Linux]

```
/opt/FJSVrcvnr/bin/rxmgctl stop
```

#### 7.2.1.2 Stopping Systemwalker Runbook Automation



Do not use this procedure if operating Systemwalker Software Configuration Manager with ServerView Resource Orchestrator linked.

Run the following command to stop Systemwalker Runbook Automation.

[Windows]

```
%SWRBA_HOME%\bin\swrba_stop
```

[Linux]

```
/opt/FJSVswrbam/bin/swrba_stop
```



## 7.2.2 Canceling the Setup for Systemwalker Software Configuration Manager

---

Cancel the setup for Systemwalker Software Configuration Manager by executing the following command:

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_setup_express -u
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_setup_express -u
```

## 7.2.3 Canceling the Setup for Systemwalker Runbook Automation

---



Do not perform this procedure if operating Systemwalker Software Configuration Manager under the following conditions:

- Operations in linkage with ServerView Resource Orchestrator
- Operations on the same admin server as the Systemwalker Runbook Automation Management Server

### 7.2.3.1 Points to Note before Canceling the Setup

Note the following points before canceling setups.

#### Deleting directories

If a directory was specified during setup, it will still exist after the setup is canceled, and must be manually deleted after canceling the setup:

- Process Management Database directory



When canceling the setup for Systemwalker Runbook Automation:

- Execute the "isstat" command and ensure that Interstage is running.

### 7.2.3.2 Stopping Systemwalker Runbook Automation

Follow the steps below to stop Systemwalker Runbook Automation:

1. Log in to the Admin Server as a user with administrator privileges.
2. Stop Systemwalker Runbook Automation:

[Windows]

```
%SWRBA_HOME%\bin\swrba_stop
```

[Linux]

```
/opt/FJSVswrbam/bin/swrba_stop
```

## Note

If the operating system being used is Windows Server 2008 or later, execute the command above as an administrator.

### 7.2.3.3 Deleting the Environment for Systemwalker Runbook Automation [Windows]

Follow the steps below to delete the Systemwalker Runbook Automation environment:

## Note

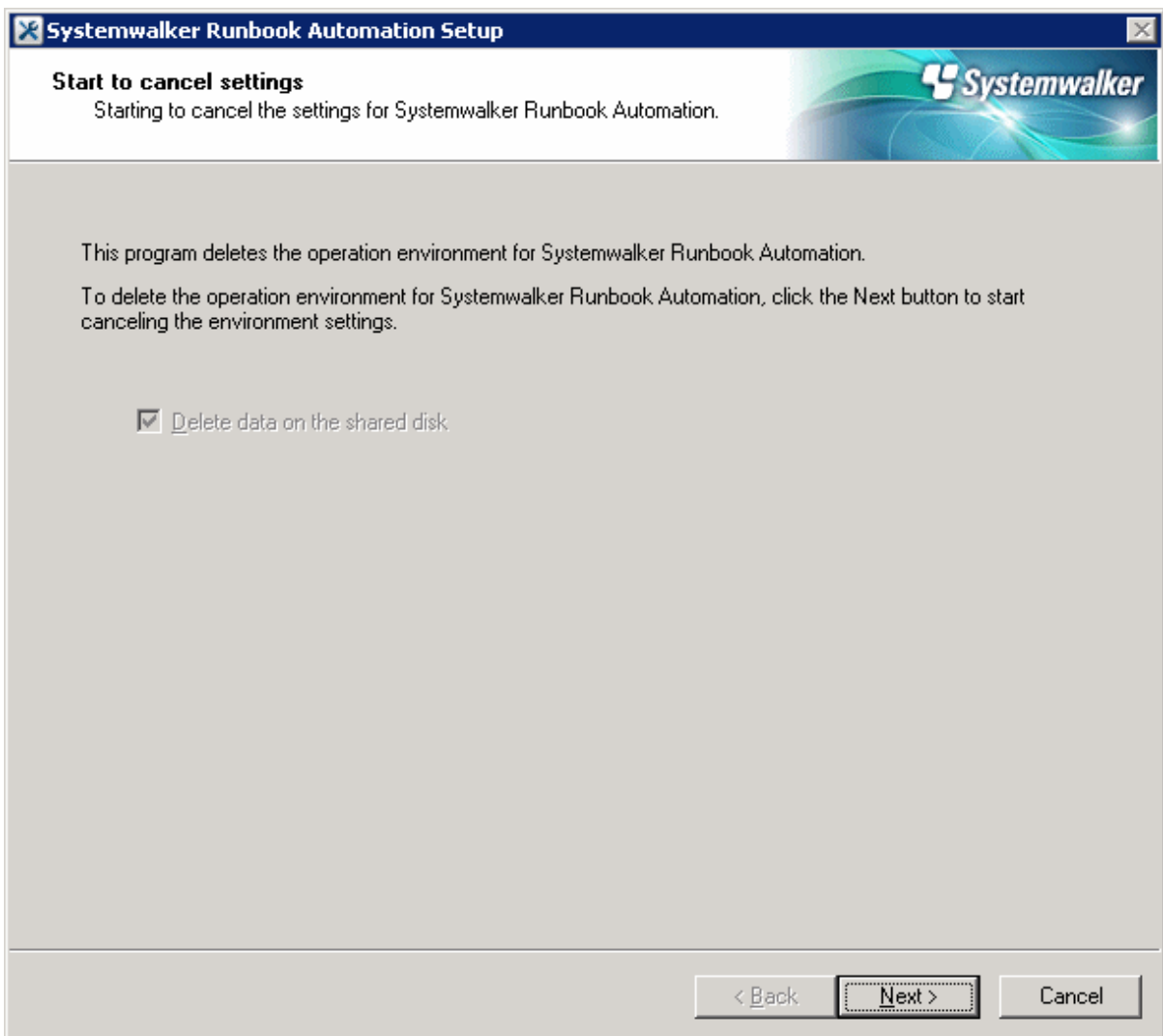
To cancel the setup, log in as the same user that executed the setup.

1. Log in to the Admin Server as a user with administrator privileges.
2. Execute the following command to start the Systemwalker Runbook Automation Setup Cancellation Tool:

```
%SWRBA_HOME%\bin\swrba_setup -u
```

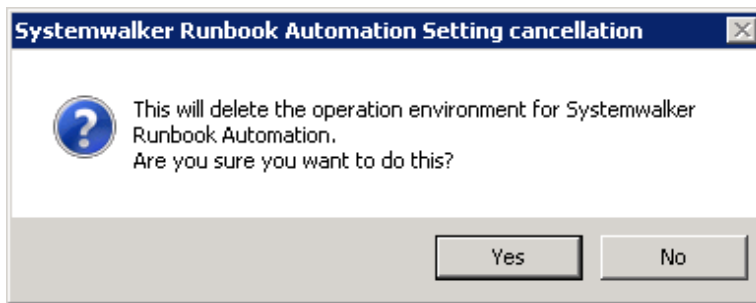
3. Click the **Next** button.

It is recommended to backup resources such as ticket histories, because they will be deleted.



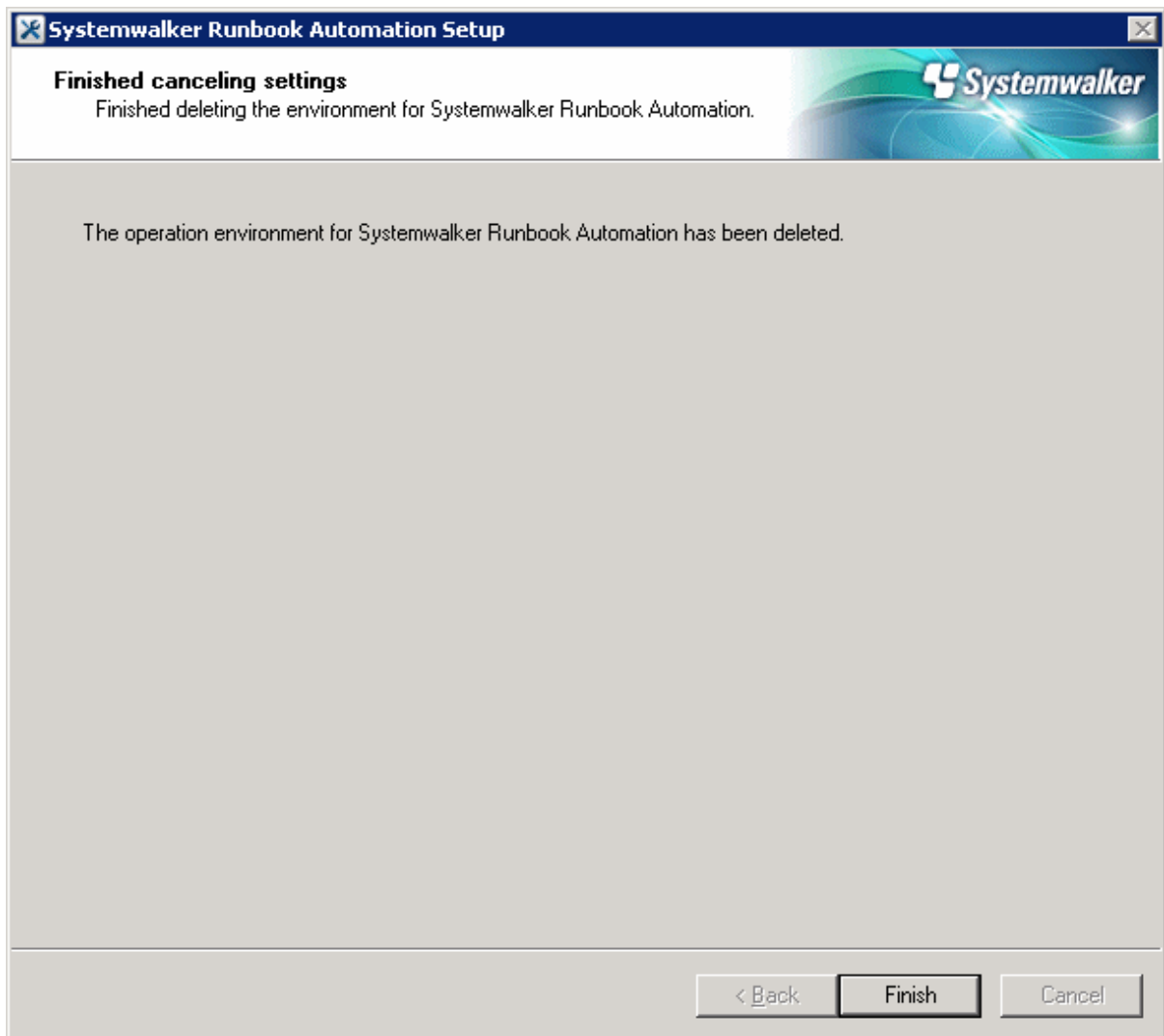
4. Click the **Yes** button.

Setup cancellation will start.



5. Setup cancellation will complete.

Click the **Finish** button.



### Note

---

#### **If an error occurs during the cancellation of the setup**

Take the appropriate action based on the message displayed, and then cancel the setup again.

If it still fails, then follow the steps below to uninstall each product:

1. Cancel the setup for the CMDB.

[Windows]

Depending on the error status, an error may occur at this step because the setup cancellation has already completed, but it can be ignored.

```
"%SWCMDB_INSTALL_PATH%\FJSVcmdbm\bin\cmdbunsetupenv.bat" -k ALL
```

```
"%SWCMDB_INSTALL_PATH%\FJSVcmdbm\bin\cmdbunsetupenv.bat" -k MGR
```

2. Uninstall Systemwalker Software Configuration Manager.

Refer to "8.2.2 Uninstalling Systemwalker Software Configuration Manager" for details.

### 7.2.3.4 Deleting the Environment for Systemwalker Runbook Automation [Linux]

Follow the steps below to delete the Systemwalker Runbook Automation environment:

1. Execute the following command to start Systemwalker Runbook Automation setup:

```
/opt/FJSVswrbam/bin/swrba_setup -u
```

2. At the prompt for setup cancellation confirmation, enter "y":

```
=====
Systemwalker Runbook Automation Setup Tool
                          V15.1.1.3
                          Copyright FUJITSU LIMITED 2010-2014
=====
Starting to cancel settings for Systemwalker Runbook Automation.

Do you want to start the unsetup? [y:yes/n:no]
ENTER==>
```

3. Setup cancellation will start.

The message below will be displayed:

```
Deleting the environment for Systemwalker Runbook Automation from the management server.
Starting to delete the CMDB environment.
Deletion of the CMDB environment is now complete.
Canceling the environment settings for Systemwalker Runbook Automation.
The environment settings for Systemwalker Runbook Automation have been canceled.
Deletion of the Process Management Database is about to start.
Deletion of the Process Management Database is now complete.
The environment for Systemwalker Runbook Automation has been deleted from the management server.
```

4. Setup cancellation will complete.



#### Note

#### If an error occurs during the cancellation of the setup

Take the appropriate action based on the message displayed, and then cancel the setup again.

If it still fails, then follow the steps below to uninstall each product:

1. Cancel the setup for the CMDB.

[Linux]

Depending on the error status, an error may occur at this step because the setup cancellation has already completed, but it can be ignored.

```
/opt/FJSCvcmdbm/bin/cmdbunsetupenv.sh -k ALL
```

```
/opt/FJSCvcmdbm/bin/cmdbunsetupenv.sh -k MGR
```

2. Uninstall Systemwalker Software Configuration Manager.

Refer to "[8.2.2 Uninstalling Systemwalker Software Configuration Manager](#)" for details.

---

### 7.2.3.5 Deleting the Users, Groups and Organizational Units

The resources in the LDAP directory listed in the table below will be no longer required after setup cancellation, and can therefore be deleted.

The table lists the default values - if other values were specified during setup, then delete the corresponding users.

Type	Name
User	swrbaadmin
User	swrbasch
Group	AdminRole
Group	IflowUsers
Group	IflowGroups
Group	Role
Group	swrba_Exe
Organizational unit (*1)	Group
Organizational unit (*1)	USER

**\*1:** Ensure that there are no users or groups on the organizational unit before deleting it

---

## 7.2.4 Tasks Required after Setup Cancellation

### 7.2.4.1 Deleting the SSL Communication Environment

This section explains the deletion of the SSL communication environment.

#### Clearing the Settings for SSL Communication

Using the Interstage Management Console, delete the SSL definition.

1. Start the Interstage Management Console.
  - a. Start the Web browser.
  - b. Specify the Interstage Management Console URL.

```
http://[host name of the Admin Server]:[port number for the Interstage Management Console]/IsAdmin/
```

Note that the default port number is "12000".

- c. Login to the Interstage Management Console.
2. Delete the SSL definition.

Select **System** >> **Security** >> **SSL** to display the list of SSL definitions. Select the desired SSL definition, then click the **Delete** button.

## Deleting Certificates used in SSL Communication

Delete the site certificate used in SSL communication, and the private key or CA certificate for that site certificate, from the Interstage certificate environment.

### Note

- Do not perform this procedure if operating Systemwalker Software Configuration Manager while linked to ServerView Resource Orchestrator, or if using SSL communication for which the environment has already been developed.
- When the site certificate is deleted, the private key for that site certificate will also be deleted. Once a private key has been deleted, it cannot be registered again as a site certificate. Also, when a CA certificate is deleted, CA certificates and site certificates issued by that CA cannot be used. For this reason, take care when deleting certificates.
- It will not cause any problems if expired certificates that cannot be used any more are not deleted.

## Deletion procedure

The command execution examples shown below use the following settings values:

```
Site certificate nickname:SERVERCERT
```

[Windows]

```
C:\> scsdelete -n SERVERCERT
Password:
SCS: INFO: scs0103: The certificate was deleted.
```

[Linux]

```
# scsdelete -n SERVERCERT
Password:
SCS: INFO: scs0103: The certificate was deleted.
```

# Chapter 8 Uninstallation

This chapter explains how to uninstall Systemwalker Software Configuration Manager.

## 8.1 Pre-uninstallation Notes

Before uninstalling Systemwalker Software Configuration Manager, the environment settings for Systemwalker Software Configuration Manager must be canceled. Refer to "[Chapter 7 Setup Cancellation](#)" for information on setup cancellation.

## 8.2 Uninstalling from the Admin Server

### 8.2.1 Points to Note before Uninstalling from the Admin Server

#### Deleting the environment

- Before uninstalling Systemwalker Software Configuration Manager, the setup for the environment of Systemwalker Software Configuration Manager must be canceled - refer to "[Chapter 7 Setup Cancellation](#)" for details.
- If Systemwalker Centric Manager is installed, all functions of Systemwalker Centric Manager must be stopped - refer to the relevant Systemwalker Centric Manager manual for details on how to stop the functions.

### 8.2.2 Uninstalling Systemwalker Software Configuration Manager

This section explains the procedure for uninstalling the manager of Systemwalker Software Configuration Manager from the admin server. Uninstall the product from a Windows or a Linux machine.

#### [Windows]

1. Log in with administrator privileges.
2. Stop the agent.



If operating System Software Configuration Manager under the following conditions, then proceed to step 3:

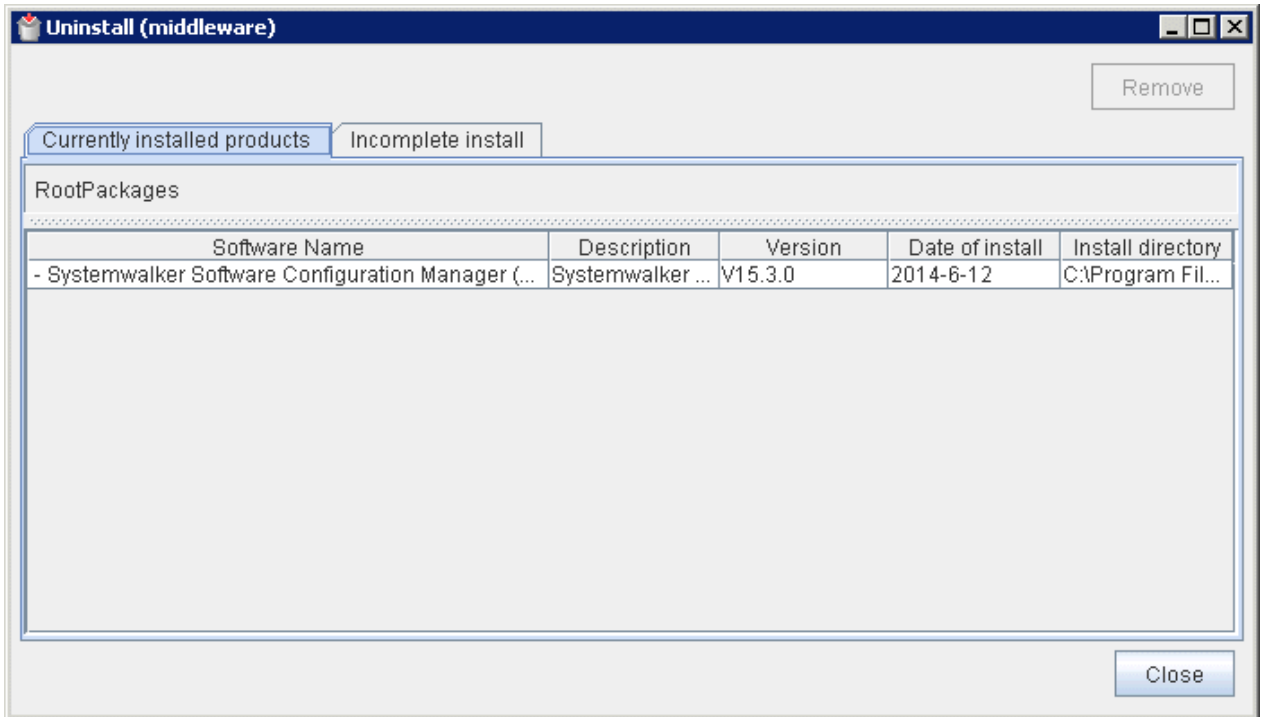
- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

```
%F4AN_INSTALL_PATH%\F4ANswnc\bin\swncctrl stop
```

3. Select **Start >> All Programs** or **All apps >> Fujitsu >> Uninstall (middleware)**.

The uninstaller will start.

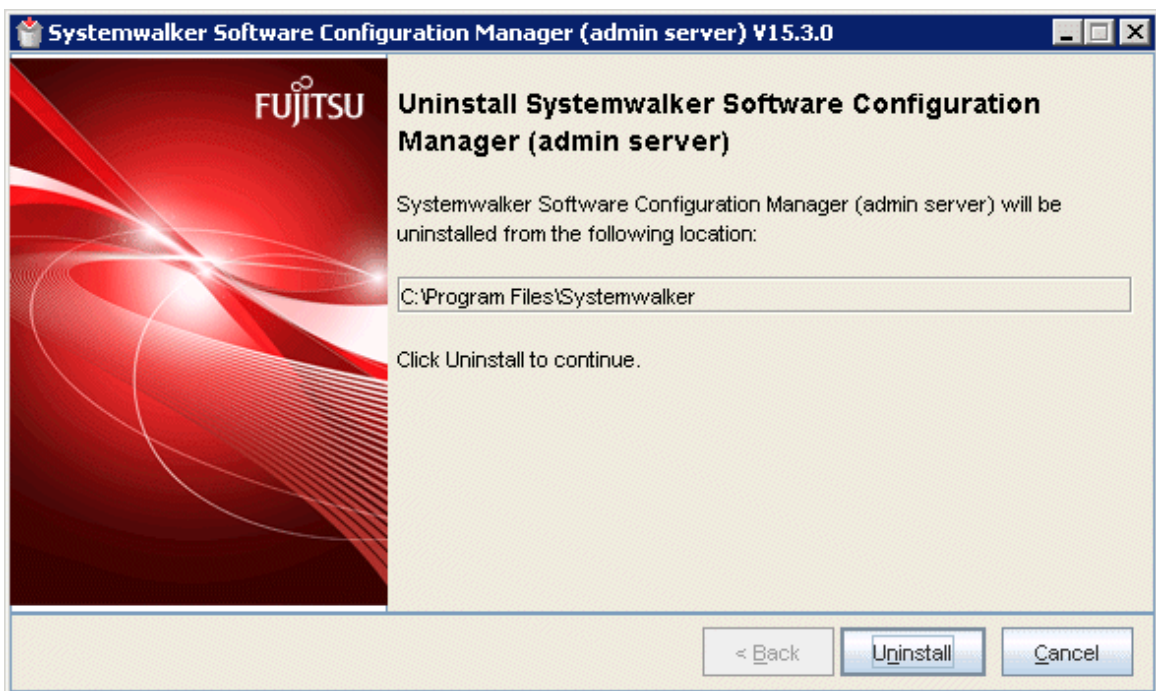
Select **Systemwalker Software Configuration Manager (admin server)**, and then click the **Delete** button.



When uninstalling Systemwalker Software Configuration Manager because of installation failure or for some other reason, Systemwalker Software Configuration Manager may be displayed in the **Incomplete install** tab. If Systemwalker Software Configuration Manager is not displayed in the **Currently installed products** tab, click the **Incomplete install** tab to check that Systemwalker Software Configuration Manager is displayed there. The subsequent uninstallation procedure is the same even if Systemwalker Software Configuration Manager is displayed in the **Incomplete install** tab.

4. The **Uninstall Systemwalker Software Configuration Manager (admin server)** window will be displayed.

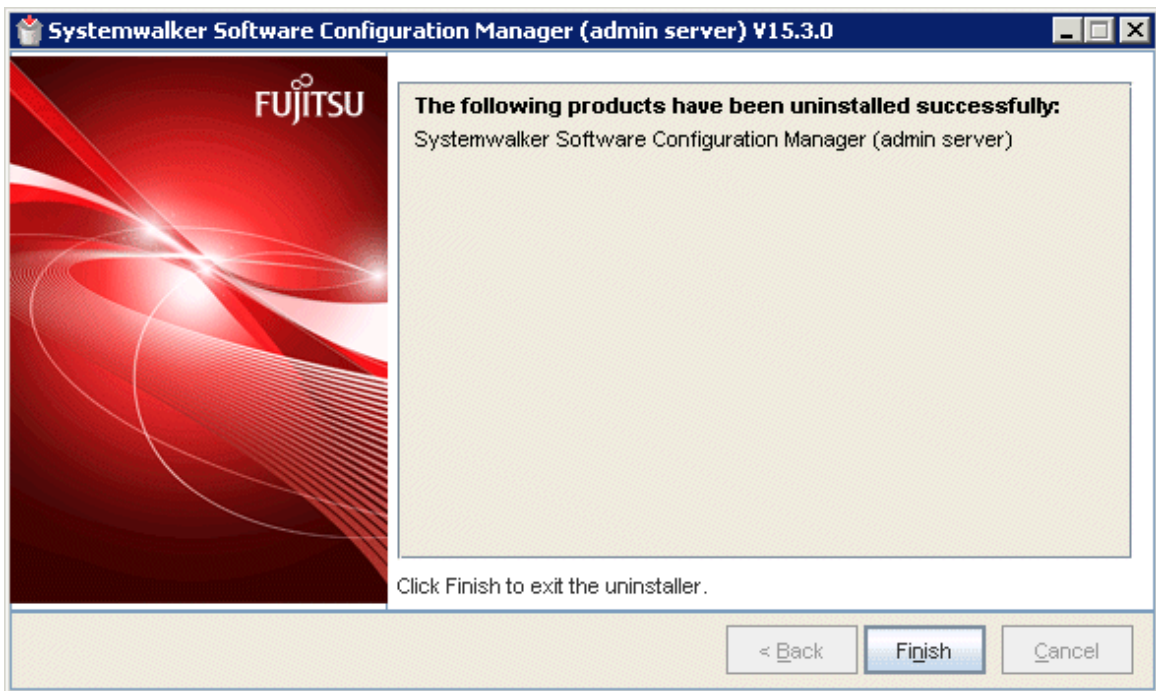
If the software can be removed, click the **Uninstall** button.





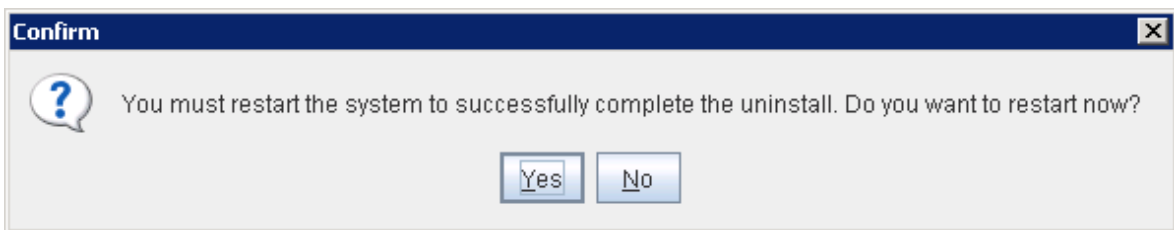
5. Upon successful completion, the following window will be displayed.

Click the **Finish** button.



6. The **Confirm** window (prompting for system restart confirmation) will be displayed.

Click the **Yes** button to restart the system.



#### [Linux]

1. Log in as a superuser on the system.
2. Stop the agent.

#### Note

.....  
If operating System Software Configuration Manager under the following conditions, then proceed to step 8:

- If linked to ServerView Resource Orchestrator
  - If operating on the same admin server as the Systemwalker Runbook Automation Management Server
- .....

```
/opt/FJSVswnc/bin/swncctrl stop
```

3. If the CORBA service is running, then stop the application server:

```
isstop -f
```

4. If the service for using the Interstage Management Console is running, then stop it:

```
ismngconsolestop
```

5. If the Interstage HTTP Server service is running, then stop it:

```
/opt/FJSVihs/bin/ihsstop -all
```

6. If the Interstage Java EE DAS service is running, then stop it:

```
/opt/FJSVisjee/bin/ijdasstop
```

7. If the Interstage Java EE Note Agent Service is running, then stop it:

```
/opt/FJSVisjee/bin/ijnastop
```

8. Start the uninstaller.

```
# /opt/FJSVcir/cimanager.sh -c
```

9. The window for selecting the product to uninstall will be displayed.

Select **Systemwalker Software Configuration Manager (admin server)**.

Entering "q" closes the uninstaller.

```
Loading Uninstaller...

Currently installed products
1. Systemwalker Software Configuration Manager (admin server) V15.3.0

Type [number] to select the software you want to uninstall.
[number,q]
=>
```

10. Execute the uninstallation.

Enter "y" (Entering "b" returns to the previous window, and entering "q" closes the uninstaller).

```
Systemwalker Software Configuration Manager (admin server)
  Description: Systemwalker Software Configuration Manager (admin server)
  Version: V15.3.0
  Manufacturer: Fujitsu Limited
  Install directory: /opt
  Date of install: 2014-07-10

Starting the uninstall of the software. Are you sure you want to continue?
[y,b,q]
=>
```

11. Start the uninstallation.

When the uninstallation completes, the following window will be displayed:

```
Uninstalling...

The following products have been uninstalled successfully:
  Systemwalker Software Configuration Manager (admin server)

Exiting Uninstaller.
```

## 8.2.3 Uninstalling the Fujitsu XML Processor [Windows]

---

This section describes how to uninstall the Fujitsu XML Processor.



Ensure that no other products are using the Fujitsu XML Processor before uninstalling it.

The old version of the Fujitsu XML Processor may be displayed in the **Add or Remove Programs** dialog box (for Windows Server 2008 or later, this is the **Programs and Features** dialog box). If this application is not required, uninstall it as well.



Refer to the Fujitsu XML Processor Software Release Note for details. The Software Release Note can be viewed by the following storage location.

- %ProgramFiles%\FujitsuXML\Readme.txt (For 32-bit OS)
- %ProgramFiles(x86)%\FujitsuXML\Readme.txt (For 64-bit OS)

1. Log in using an account that belongs to the Administrators group.
2. Start the uninstaller.

Click **Start >> Control Panel >> Program and Features**.

Select **Fujitsu XML Processor V5.2.4**, and click the **Uninstall** button.



If the operating system is Windows Server 2008 or later, click **Control Panel >> Uninstall or change a program**, select "Fujitsu XML Processor V5.2.4", then click the **Uninstall** button.

3. Click the **OK** button.
4. Uninstallation will start.

The program removal window will be displayed, and the program will be deleted, together with its information in the registry.

## 8.2.4 Uninstalling SMEE [Linux]

---

This section describes how to uninstall SMEE.



Ensure that no other products are using SMEE before uninstalling it.

1. Log in as a superuser on the system.
2. Remove the FJSVsmee package:

```
rpm -e FJSVsmee
```

## 8.2.5 Uninstalling Securecrypto Library RunTime [Linux]

---

This section describes how to uninstall Securecrypto Library RunTime.

## Note

Ensure that no other products are using Securecrypto Library RunTime before uninstalling it.

1. Log in as a superuser on the system.
2. Remove the FJSVslcr package:

```
rpm -e FJSVslcr
```

## 8.3 Post-uninstallation Notes

---

### 8.3.1 Points to Note after Uninstalling from the Admin Server

---

This section provides points to note after uninstalling System Software Configuration Manager from the admin server.

#### Files and directories that remain after uninstalling Systemwalker Software Configuration Manager

## Note

- If Systemwalker Software Configuration Manager has been operated on the same admin server as the following products, do not delete the remaining directories and files until these products are uninstalled:
  - Systemwalker Runbook Automation (Management Server)
  - Systemwalker Centric Manager
  - ServerView Resource Orchestrator
- Deletion may fail if these files are locked. If that is the case, restart the operating system and then delete the files.

The following files and directories may still remain after the uninstallation - if this happens, manually delete any unnecessary directories or files.

#### [Windows]

- Systemwalker Software Configuration Manager installation directory
- Systemwalker Runbook Automation installation directory
- Interstage Application Server installation directory
- Interstage Business Process Manager installation directory
- J2EE common directory for Interstage Application Server
- Java EE common directory for Interstage Application Server
- Systemwalker Operation Manager installation directory
- Database storage directory for CMDB Manager

#### [Linux]

- *<home directory of root account>/InstallShield*
- */etc/opt/FJSVawjbc*
- */etc/opt/FJSVcfmgb*
- */etc/opt/FJSVcfmgm*
- */etc/opt/FJSVcmdba*
- */etc/opt/FJSVcmdbm*

- /etc/opt/FJSVejb
- /etc/opt/FJSVextp
- /etc/opt/FJSVihs
- /etc/opt/FJSVirep
- /etc/opt/FJSVisas
- /etc/opt/FJSVisgui
- /etc/opt/FJSVisjee
- /etc/opt/FJSVispw
- /etc/opt/FJSVisscs
- /etc/opt/FJSVj2ee
- /etc/opt/FJSVjms
- /etc/opt/FJSVjs2su
- /etc/opt/FJSVlnkbs
- /etc/opt/FJSVlnkcf
- /etc/opt/FJSVod
- /etc/opt/FJSVsoap
- /etc/opt/FJSVsoac
- /etc/opt/FJSVsoaz
- /etc/opt/FJSVsofs
- /etc/opt/FJSVssosv
- /etc/opt/FJSVtd
- /opt/FJSVawjkb
- /opt/FJSVcfmgb
- /opt/FJSVcfmgm
- /opt/FJSVcmdba
- /opt/FJSVcmdbm
- /opt/FJSVejb
- /opt/FJSVena
- /opt/FJSVextp
- /opt/FJSVibpm
- /opt/FJSVihs
- /opt/FJSVirep
- /opt/FJSVirepc
- /opt/FJSVisas
- /opt/FJSVisgui
- /opt/FJSVisjee
- /opt/FJSVispw
- /opt/FJSVj2ee

- /opt/FJSVjms
- /opt/FJSVjs2su
- /opt/FJSVlnkbs
- /opt/FJSVmqd
- /opt/FJSVod
- /opt/FJSVsoap
- /opt/FJSVsoac
- /opt/FJSVsoaz
- /opt/FJSVssocm
- /opt/FJSVssofs
- /opt/FJSVssosv
- /opt/FJSVtd (\*1)
- /var/opt/FJSVawjbk
- /var/opt/FJSVcfmgb
- /var/opt/FJSVcfmgm
- /var/opt/FJSVcmdba
- /var/opt/FJSVcmdbm
- /var/opt/FJSVejb
- /var/opt/FJSVena
- /var/opt/FJSVextp
- /var/opt/FJSVihs
- /var/opt/FJSVirep
- /var/opt/FJSVirepc
- /var/opt/FJSVisas
- /var/opt/FJSVisgui
- /var/opt/FJSVisjee
- /var/opt/FJSVisjmx
- /var/opt/FJSVispw
- /var/opt/FJSVj2ee
- /var/opt/FJSVjms
- /var/opt/FJSVjs2su
- /var/opt/FJSVlnkbs
- /var/opt/FJSVod
- /var/opt/FJSVsoap
- /var/opt/FJSVsoac
- /var/opt/FJSVsoaz
- /var/opt/FJSVssocm
- /var/opt/FJSVssofs

- /var/opt/FJSVssosv
- /var/opt/FJSVswrbam
- /etc/opt/FJSVswrbac
- /var/opt/FJSVswrbac
- /var/opt/FJSVtd

\*1: If the Systemwalker Centric Manager Operation Management Server has not been installed, then this can be deleted, otherwise /opt/FJSVtd/var/IRDB should not be deleted.

### Files and directories that remain after uninstalling SMEE and Securecrypto Library RunTime [Linux]

The following directories remain after uninstalling SMEE and Securecrypto Library RunTime. Check that these folders are not being used by other products, and delete them manually if they are not required.

Note that files or directories under these directories may also still remain, so delete them as well.

- /opt/FJSVsmee
- /etc/opt/FJSVsclr

## 8.3.2 Uninstalling the "Uninstall (middleware)"

---

The "Uninstall (middleware)" is a common tool for Fujitsu middleware products.

This tool manages information about the Fujitsu middleware products that have been installed, as well as launching the product uninstallers.

This product supports the Uninstall (middleware).

When this product is installed, the "Uninstall (middleware)" is installed first, after which the installation and uninstallation of Fujitsu middleware products is controlled by this tool. The installation processing for the "Uninstall (middleware)" tool will not be performed if it has already been installed.

This section explains how to uninstall the "Uninstall (middleware)". It also presents points to note during uninstallation.



#### Note

- Be sure to use the "Uninstall (middleware)" tool when uninstalling this product.
- This tool also manages information for Fujitsu middleware products other than this product. Do not uninstall this tool unless absolutely necessary.

If this tool is uninstalled by mistake, use the following procedure to reinstall it:

#### [Windows]

1. Log in to the target machine (where the tool is to be installed) using an account with administrator privileges.
2. Insert the DVD-ROM.
 

Insert the "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Servers Program)" or "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC2 (Linkage Servers/Business Servers Program)" DVD-ROM into the DVD-ROM drive.
3. Execute the installation command.

```
<DVD-ROM mount point>\<CIR installer root directory>\cirinst.exe
```

#### [Linux]

1. Log in as a superuser on the system.

2. Insert the DVD-ROM.

Insert the "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC1 (Admin Servers Program)" or "Systemwalker Software Configuration Manager Media Pack V15.3.0 DISC2 (Linkage Servers/Business Servers Program)" DVD-ROM into the DVD-ROM drive.

If the DVD-ROM has not been mounted, mount the DVD-ROM by executing the following command:

```
# mount -t iso9660 -r /dev/mnt <DVD-ROM mount point>
```

3. Execute the installation command.

```
# <DVD-ROM mount point>/<CIR installer root directory>/cirinst.sh
```

Use the following procedure to uninstall the Uninstall (middleware):

1. Start the "Uninstall (middleware)" to check whether there are any other Fujitsu middleware products left on the system. The method for starting this tool is as below.

**[Windows]**

Select **Start >> All Programs** or **All apps >> Fujitsu >> Uninstall (middleware)**.

**[Linux]**

```
/opt/FJSVcir/cimanager.sh [-c]
```

-c: Command interface

 **Information**

To run the tool in command mode, specify "-c". If "-c" is not specified, the tool will run in GUI mode if there is a GUI environment, or in command mode if there is no GUI environment.

2. If no Fujitsu middleware products have been installed, execute the following uninstallation command:

**[Windows]**

```
%SystemDrive%\FujitsuF4CR\bin\cirremove.exe
```

**[Linux]**

```
# /opt/FJSVcir/bin/cirremove.sh
```

3. When "This software is a tool that is shared with other Fujitsu products. Are you sure you want to remove this software? [y/n]" is displayed, enter "y" to continue with the uninstallation process.

The uninstallation process will finish in a few seconds.

4. After the uninstallation completes, the following directory and the files that it contains will still remain, so delete them:

**[Windows]**

%SystemDrive%\FujitsuF4CR

%ProgramData%\Fujitsu\FujitsuF4CR (Other than Windows Server 2003)

%ALLUSERSPROFILE%\Application Data\Fujitsu\FujitsuF4CR (For Windows Server 2003)

**[Linux]**

/var/opt/FJSVcir/



# Part 3 Operation

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# Chapter 9 Operation Setup

This chapter explains how to set up Systemwalker Software Configuration Manager operations.

## 9.1 User Management

This section explains the following items with regard to managing users:

- Registering a user
- Changing the password
- Updating a user
- Moving a user
- Deleting a user

### When linked to ServerView Resource Orchestrator

When linked to ServerView Resource Orchestrator, tasks such as registering a user or changing the password, as well as updating, moving, or deleting a user, should be performed from ServerView Resource Orchestrator. Refer to the following manuals for information on how to perform these tasks using ServerView Resource Orchestrator:

- "Tenant" in the *ServerView Resource Orchestrator Cloud Edition User's Guide for Infrastructure Administrators*
- "Tenant" in the *ServerView Resource Orchestrator Cloud Edition User's Guide for Tenant Administrators*

Refer to "Login Users" for information on the correspondences between the roles of users registered with ServerView Resource Orchestrator and the roles for Systemwalker Software Configuration Manager.

### 9.1.1 Registering a User

The following kinds of information can be specified when registering a user with the `swcfmg_account` command (refer to "`swcfmg_account` (User Information Management Command)" in the *Reference Guide* for details):

Information	Description
User ID	An ID that uniquely identifies the user.
Password	User password.
Tenant	Tenant to whom the user belongs.
Role	Role of the user.
Email address	Email address of the user.
Surname	Name of the user. Registration of middle names is optional.
Middle name(s)	
Given name	
Telephone number	Registration of the user's telephone number is optional.
Company or organization name	Name of the company or organization to which the user belongs. Registration is optional.

### 9.1.2 Changing the Password

Use `swcfmg_account` to change the user password (refer to "`swcfmg_account` (User Information Management Command)" in the *Reference Guide* for details).

### 9.1.3 Updating a User

---

Use `swcfmg_account` to update user information (refer to "`swcfmg_account` (User Information Management Command)" in the *Reference Guide* for details).

### 9.1.4 Moving a User

---

The tenant to which the user belongs can be changed by moving the user with `swcfmg_account` (refer to "`swcfmg_account` (User Information Management Command)" in the *Reference Guide* for details).

If the user is an L-Platform owner, the tenants that belong to that L-Platform will not change. One of the actions below must be performed when moving a user:

- Before moving the user, change the ownership of their L-Platform to one of the current tenants.  
Refer to "Changing an L-Platform Owner" for details.
- After moving the user, move the L-Platform owned by that user to a tenant at the destination.  
Refer to "Moving an L-Platform" for details.



When moving a tenant user, ensure that none of the jobs managed by that user are in the "Running", "Selecting (abnormal)", or "Waiting" state. Once the user is moved, that user will not be able to operate those jobs. To check if a job is in the "Running", "Selecting (abnormal)", or "Waiting" state, use the **Job Management** window or the list display option of the job information management command. If the user is moved leaving the jobs managed by that user in the above states, those jobs should be operated by the tenant administrator.

### 9.1.5 Deleting a User

---

Use `swcfmg_account` to delete a user (refer to "`swcfmg_account` (User Information Management Command)" in the *Reference Guide* for details).

Before deleting a user, use `swcfmg_lplatform` (L-Platform Information Management command) to check if it is an L-Platform owner - if it is, perform one of the steps below before deleting the user:

- Change ownership of the L-Platform to one of the current tenants.  
Refer to "Changing an L-Platform Owner" for details.
- Delete the L-Platform.  
Refer to "Deleting an L-Platform" for details.

## 9.2 Hardware/Virtual Environment Management

---

The following hardware can be managed using this product.

- Blade server chassis
- Blade server server blades
- Single servers (rack mount or tower)
- The following virtual environments can be managed:
- VMware vSphere 5.1 or later

This section describes the following operations for managing hardware:

- Registering hardware

- Updating hardware
- Deleting hardware

### Note

Ensure that the IP addresses of physical servers, hypervisors, and OSs managed using Systemwalker Software Configuration Manager are unique.

## 9.2.1 Registering Hardware/Virtual Environment

Register hardware to enable chassis, server blades, and single servers to be managed by Systemwalker Software Configuration Manager. VMware vSphere can also be managed.

The following kinds of information can be registered when registering hardware. Use the hardware information management command to register hardware. For details, refer to "swcfmg hardware (Hardware Information Management Command)" in the Reference Guide.

To manage a server blade as the management target, it is also necessary to register the chassis on which the server blade is mounted as a management target.

Item	Description
ipaddress	The admin IP address.
serial-number	The serial number.
hardware-type	The hardware type.
hardware-name	The hardware name. A name can be assigned to the hardware for management purposes.
asset-number	The asset number.
description	A memo about the hardware.
snmp-community-name	The SNMP community name of the chassis.
hardware-user-id	A user ID used for iRMC connections.
hardware-password	A user password used for iRMC connections.
os-ipaddress	The OS IP address.
hypervisor-type	Type of Hypervisor. When managing VMware vSphere, specify VMware.
hypervisor-user-id	The user ID for the user for connection to the hypervisor.
hypervisor-password	The password for the user for connection to the hypervisor.

## 9.2.2 Updating Hardware

Use the hardware information management command to update the hardware information. For details, refer to "swcfmg hardware (Hardware Information Management Command)" in the Reference Guide.

## 9.2.3 Deleting Hardware

To stop hardware from being managed by Systemwalker Software Configuration Manager, delete it.

Use the hardware information management command to delete the hardware. For details, refer to "swcfmg hardware (Hardware Information Management Command)" in the Reference Guide.

## 9.2.4 Managing a Server Managed by Systemwalker Runbook Automation

This section explains how a server managed by Systemwalker Runbook Automation can be managed using the "swcfmg hardware(hardware information management command)" in environments in which both the Systemwalker Runbook Automation admin server and the Systemwalker Software Configuration Manager admin server exist together. A server managed by

Systemwalker Runbook Automation can be managed as the configuration item of LogicalServer as an OS on CMDB. A server managed by Systemwalker Runbook Automation can be registered as the OS of hardware managed by this product by using the server information management command

### Notes on updating server information using Systemwalker Runbook Automation

Notes on updating server information using Systemwalker Runbook Automation are shown below.



Do not change the values of the following LogicalServer configuration items using Systemwalker Runbook Automation, because they are used by this product. The following attributes are used in this product:

Element Name	Parent Element	Element Description	Component Name	Component Type	Component Description	Value
LogicalServer		Server node information	ip address	Attribute	IP address	IP address

## 9.3 Notification Settings in the Management Console

When a user logs in to the management console, the **Home** window is displayed. Notifications (such as maintenance information) can be sent from the system to tenant administrators and tenant users.

### How to edit notifications

This section explains how to edit the notifications that are displayed in the bottom part of the **Home** window.

Edit notifications by editing the following text file. Data that has been changed is applied immediately.

#### [Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\config\information_mes.txt
```

#### [Linux]

```
/etc/opt/FJSVcfmgm/config/information_mes.txt
```



If the text file does not exist, no notifications will be displayed.

### Settings

Enter each message on separate lines using the following format:

```
date,message
```

- There is no set format for the date.
- Use UTF-8 as the character encoding for the text file.
- The text file contains "YYYY-MM-DD,XXXX" as the default value. If necessary, edit this default value.

### Settings example

2013-07-15, There will be maintenance for related networks over the weekend.  
2013-07-10, A new patch has been released.  
2013-07-02, An urgent security patch has been released.

# Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager

This chapter explains how to start and stop the Systemwalker Software Configuration Manager admin server.

## 10.1 Starting Systemwalker Software Configuration Manager

This section explains how to start Systemwalker Software Configuration Manager.

1. Ensure that ServerView Resource Orchestrator is running if you want to use it to manage servers deployed by the tool.

Refer to the ServerView Resource Orchestrator manuals for more information.

2. Start Systemwalker Runbook Automation (which is included in Systemwalker Software Configuration Manager).

Note that this step is not necessary if integrating with ServerView Resource Orchestrator, as Systemwalker Runbook Automation will be launched automatically when ServerView Resource Orchestrator is started.

### [Windows]

Select **Run as administrator** to execute the command:

```
%SWRBA_HOME%\bin\swrba_start (*1)
```

\*1: %SWRBA\_HOME% contains the Systemwalker Runbook Automation installation directory.

### [Linux]

Execute the command as a superuser:

```
/opt/FJSVswrbam/bin/swrba_start
```

3. If Systemwalker Runbook Automation starts successfully, a startup completion message will be output.

```
Startup processing for Systemwalker Runbook Automation will start.
The database for process management has started.
The server function has started.
The console function has started.
The CMDB Manager has started.
The schedule function has started.
The startup processing for Systemwalker Runbook Automation has completed normally.
```

4. Execute the following command on the admin server:

### [Windows]

Select **Run as administrator** to execute the command:

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_start
```

### [Linux]

Execute the command as a superuser:

```
/opt/FJSVcfmgm/bin/swcfmg_start
```

5. If Systemwalker Software Configuration Manager starts successfully, the following message will be output:

```
Startup processing for Systemwalker Software Configuration Manager will start.
The startup processing for Systemwalker Software Configuration Manager has completed normally.
```



See

Refer to the *Reference Guide* for information on this command.

## 10.2 Stopping Systemwalker Software Configuration Manager

This section explains how to stop Systemwalker Software Configuration Manager.

1. Execute the following command on the admin server:

**[Windows]**

Select **Run as administrator** to execute the command:

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_stop
```

**[Linux]**

Execute the command as a superuser:

```
/opt/FJSVcfmgm/bin/swcfmg_stop
```

2. If Systemwalker Software Configuration Manager stops successfully, the following message will be output:

```
Stop processing for Systemwalker Software Configuration Manager will start.  
The stop processing for Systemwalker Software Configuration Manager has completed normally.
```

3. Stop Systemwalker Runbook Automation (which is included in Systemwalker Software Configuration Manager).

Note that this step is not necessary if integrating with ServerView Resource Orchestrator, and if Systemwalker Runbook Automation and Systemwalker Software Configuration Manager are installed and operating on the same server.

**[Windows]**

Select **Run as administrator** to execute the command:

```
%SWRBA_HOME%\bin\swrba_stop (*1)
```

\*1: %SWRBA\_HOME% contains the Systemwalker Runbook Automation installation directory.

**[Linux]**

Execute the command as a superuser:

```
/opt/FJSVswrbam/bin/swrba_stop
```

4. If Systemwalker Runbook Automation stops successfully, a stop completion message will be output.

```
Stop processing for Systemwalker Runbook Automation will start.  
The schedule function has stopped.  
CMDB Manager has stopped.  
The console function has stopped.  
The server function has stopped.  
The database for process management has stopped.  
The stop processing for Systemwalker Runbook Automation has completed normally.
```



See

Refer to the *Reference Guide* for information on this command.



## 10.3 Checking the Status of Systemwalker Software Configuration Manager

---

Use the status display command to check the setup status and startup status of Systemwalker Software Configuration Manager. The following statuses can be checked:

- Systemwalker Software Configuration Manager has not been set up.
- Systemwalker Software Configuration Manager is running.
- Systemwalker Software Configuration Manager is not running.

Use the following procedure to check the status of Systemwalker Software Configuration Manager:

1. Execute the following command on the admin server:

### [Windows]

Select **Run as administrator** to execute the command:

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_status
```

### [Linux]

Execute the command as a superuser:

```
/opt/FJSVcfmgm/bin/swcfmg_status
```

2. The following messages are output according to the status of Systemwalker Software Configuration Manager:

- If Systemwalker Software Configuration Manager has not been set up:

```
Systemwalker Software Configuration Manager has not been set up.
```

- If Systemwalker Software Configuration Manager is running:

```
Systemwalker Software Configuration Manager is running.
```

- If Systemwalker Software Configuration Manager is not running:

```
Systemwalker Software Configuration Manager is not running.
```



See

.....  
Refer to the *Reference Guide* for information on this command.  
.....

# Chapter 11 Maintenance

This chapter explains topics relating to maintenance, such as the logs that are output when Systemwalker Software Configuration Manager is used, and how to back up and restore the admin server.

## 11.1 Log Output

This section explains the logs output by Systemwalker Software Configuration Manager.

### 11.1.1 Logs Output on the Admin Server

The types of logs that are output on the admin server are shown in the tables below.

#### Investigation logs

Log name	Description	Size	Number of generations
mdr_cfmng_srv.log	A trace log with the following is output:  - Information that is output when hardware/virtual environment information is collected using cmdbrefresh (Observed Record Collection Request Command).	10MB	10 generations (*1)

\*1: If this number is exceeded, previous generations will be deleted, starting with the oldest.

#### 11.1.1.1 Log Output Destination

The output destination for mdr\_cfmng\_srv.log is shown below.

##### [Windows]

Output folder	Output file
%SWCMDB_INSTALL_PATH%\FJSVcmdbm\var\log	Same as the log name.

##### [Linux]

Output folder	Output file
/opt/FJSVcmdbm/var/log	Same as the log name.

##### [Linux]

Output folder	Output file
/var/opt/FJSVcfmgm/logs	Same as the log name.

#### 11.1.1.2 Investigation Logs

The output format for investigation logs is as below. The output destination for investigation logs can be changed.

##### Output format for investigation logs

Output format
<Date/time> <Log level> <Message text>

Item	Description	
<i>Date/time</i>	YYYY-MM-DD HH:MM:SS.sss (local time)	
<i>Log level</i>	One of the following:	
	INFO	Information message
	WARN	Warning message
	ERROR	Error message
	FATAL	Fatal message
<i>Message text</i>	Body text of the message	

### 11.1.1.3 Event Logs or syslogs

Output format for event logs [Windows]

Source	Description
Systemwalker Software Configuration Manager EXPMGR	Message ID and message content

Output format for syslogs [Linux]

Date/time	Host name	Package name	Description
Jun 11 01:01:01	Server	FJSVcfingm	Message ID and message content

## 11.1.2 Audit Logs for CMDB

When operations are performed on the CMDB via agents, commands, or the **Maintenance** window (displayed from the **Configuration management** window on the management console), the content of the operation is output as an audit log.

Audit logs are output to the following file:

[Windows]

```
%SWCMDB_INSTALL_PATH%\FJSVcmdbm\var\log\audit\audit.log
```

[Linux]

```
/opt/FJSVcmdbm/var/log/audit/audit.log
```

- Up to 10 generations of audit log files are kept, named "audit.log", "audit.log.1", "audit.log.2", and so on up to "audit.log.9". Each audit log is 5 MB. Once the maximum number of generations is exceeded, the oldest file (audit.log.9) is deleted.

### Output format for audit logs

```
<Date/time>,<Operation location>,<Execution host>,<Operator>,<Operation type>,<Operation target>,<Operation content>,<Execution result>,<Component>,<Additional information>,<Reserved area>
```

- *<Date/time>*: This item indicates the date and time in "date time time-difference" format.
- *<Operation location>*: This item indicates the IP address of the machine where the operation was performed
- *<Execution host>*: This item indicates the host name of the machine where the operation was performed (the machine hosting the CMDB manager).
- *<Operator>*: This item indicates information on the agent or command that performed the operation.
  - If the operation was performed by an agent, this item indicates the agent ID. However, if it is the first operation and the agent ID has not yet been set up, this item indicates the agent type name.
  - If the operation was performed by a command, this item indicates the OS user name for the user that executed the command.

- <Operation type>: This item indicates the operation name.
- <Operation target>: This item indicates the target and result of the operation in "name=value;" format.
- <Operation content>: This item indicates the content of the operation. If the execution result is operation failure, this item indicates error details.
- <Execution result>: This item indicates one of the following values:
  - S: Success
  - F: Failure
- <Component>: This item indicates "FSERV".
- <Additional information>: This item indicates any additional information for the operation in "name=value;" format.
- <Reserved area>: This item is not used. No value is set for this item.

### Output example

```
"2012/05/10 15:29:37.009
+0900","192.168.1.10","Server1","mdr000000000005","addEntities","id=gid000000000086;
type=LogicalServer; record=observed; version=1;","updateEntity","S","FSERV","",""

"2012/05/10 15:44:21.878
+0900","192.168.1.10","Server1","Administrator","updateEntities","id=gid000000000714; type=Patch;
record=cataloged; version=3;","updateEntity","S","FSERV","",""

"2012/05/10 15:44:21.882
+0900","192.168.1.10","Server1","Administrator","updateEntities","id=gid000000000689; type=Patch;
record=cataloged; version=3;","updateEntity","S","FSERV","",""

"2012/05/10 15:53:24.214 +0900","192.168.1.10","Server1","SYSTEM","updateEntity","id=gid000000008583;
type=Server; record=observed; version=1;","addEntity","S","FSERV","",""

"2012/05/10 15:53:48.316 +0900","192.168.1.10","Server1","SYSTEM","updateEntity","id=gid000000008584;
type=Server; record=observed; version=1;","addEntity","S","FSERV","",""

"2012/05/10 15:54:27.822 +0900","192.168.1.10","Server1","SYSTEM","addEntity","id=gid000000008583;
type=Server; record=observed; version=1;","updateEntity","S","FSERV","",""

"2012/05/10 15:55:28.062 +0900","192.168.1.10","Server1","SYSTEM","addEntity","id=gid000000008583;
type=Server; record=observed; version=1;","updateEntity","S","FSERV","",""
```

## 11.1.3 Audit Logs for Job Management

The history of operations performed by a user is output to an audit log. This includes when one of the following operations is performed using a wizard on the management console or using a command, when an action is executed from the **Job Management** window, or using the job information management command.

- Patch distribution
- Patch application
- Parameter settings
- Script execution

### Audit logs

Log name	Description	Size	Number of generations
swcfmg_job_audit_log	Outputs audit logs for patch distribution, patch application, parameter settings, and script execution.	10 MB	10 generations

## Output destination

The output destination for logs is shown below.

### [Windows]

Output folder	Description
<Systemwalker Software Configuration Manager installation directory> \\SWCFMGM\logs	Same as the log name.

### [Linux]

Output folder	Description
/var/opt/FJSVcfmgm/logs	Same as the log name.

## Output format

The output format is shown below. It is possible to change the output destination for audit logs, the file size, and the number of generations held.

Output format
<Operation date/time>,<User ID>,<Tenant name>,<Operation type>,<Parameters>,<Operation result>

Item	Description
<i>Operation date/time</i>	YYYY-MM-DD HH:MM:SS.sss (local time)
<i>User ID</i>	The user ID of the user that executed the operation Note: When the operation is performed using the command, "#COMMAND" is output.
<i>Tenant name</i>	The tenant name of the user that executed the operation Note: For operations performed by infrastructure administrators, "admin" is output. It is not output when the operation is performed using the command.
<i>Operation type</i>	A string indicating the content of the operation
<i>Parameters</i>	The parameters specified by the request
<i>Operation result</i>	"SUCCESS" if the operation was successful and "FAILURE" if the operation failed

## Operation type

Operation type	Description	Parameter
patchDistributionStart	Requests patch distribution from the <b>Patch Application</b> wizard or using the patch application command	jobid=" <job ID>"&jobname=" <job name>"
patchApplicationStart	Requests patch application from the <b>Patch Application</b> wizard or using the patch application command	jobid=" <job ID>"&jobname=" <job name>"
parameterSettingStart	Requests parameter settings from the <b>Parameter Settings</b> wizard or from the parameter settings command	jobid=" <job ID>"&jobname=" <job name>"
scriptExecutionStart	Request script execution from the <b>Script Execution</b> wizard or using the script execution command	jobid=" <job ID>"&jobname=" <job name>"

Operation type	Description	Parameter
patchDistributionAction	After requesting patch distribution, execute an action from the <b>Job Management</b> window or using the job information management command	jobid=" <job ID>"&jobname=" <job name>"&processname=" <process name>"&processorder=" <process order>"&processtype=" <process type>"&action=" <action>"
patchApplicationAction	After requesting patch distribution, execute an action from the <b>Job Management</b> window or using the job information management command	jobid=" <job ID>"&jobname=" <job name>"&processname=" <process name>"&processorder=" <process order>"&processtype=" <process type>"&action=" <action>"
parameterSettingAction	After requesting parameter settings, execute an action from the <b>Job Management</b> window or using the job information management command	jobid=" <job ID>"&jobname=" <job name>"&processname=" <process name>"&processorder=" <process order>"&processtype=" <process type>"&action=" <action>"
scriptExecutionAction	After requesting script execution, execute an action from the <b>Job Management</b> window or using the job information management command	jobid=" <job ID>"&jobname=" <job name>"&processname=" <process name>"&processorder=" <process order>"&processtype=" <process type>"&action=" <action>"

## 11.2 Backing Up and Restoring the Admin Server

This section explains how to back up and restore the Systemwalker Software Configuration Manager admin server.

### 11.2.1 Notes on Backup and Restoration

This section provides notes regarding Systemwalker Software Configuration Manager backup and restore. Refer to "Mechanism of Backup and Restoration" in the *ServerView Resource Orchestrator Cloud Edition Operation Guide* if linked to ServerView Resource Orchestrator.

#### Notes on operations that use coexistence with Systemwalker Operation Manager or Systemwalker Runbook Automation

Systemwalker Software Configuration Manager backup/restore is executed at the same time as Systemwalker Runbook Automation or Systemwalker Operation Manager backup/restore.

In order to use operations that use coexistence with Systemwalker Runbook Automation or Systemwalker Operation Manager, backup/restore Systemwalker Runbook Automation or Systemwalker Operation Manager using the same backup/restore procedure that is used for Systemwalker Software Configuration Manager. Do not execute backup/restore on the standalone Systemwalker Runbook Automation or Systemwalker Operation Manager.

#### Notes on the environments where backups and restorations are performed

The backup and restoration environments must follow the criteria below:

- When OS are different in from backup and to restore  
However, execution will be possible if the operating system versions of the same vendor are different.
- When the product installation directories are different [Windows]
- When the host information (host name/IP address) is different
- When the code types are different
- When the Process Management database storage directories are different

- When the CMDB database storage directories are different
- When the sub system number with using scheduling are different
- When the Web server (Interstage HTTP Server), message broker, and server function port numbers are different
- 

#### **Notes on the timing of backups and restorations**

- When backup and restore are executed, it will be necessary to restart Systemwalker Software Configuration Manager. When linked to ServerView Resource Orchestrator, it will be necessary to restart Systemwalker Software Configuration Manager and ServerView Resource Orchestrator. For this reason, the operator should execute backup and restore in a time zone that does not use Systemwalker Software Configuration Manager and ServerView Resource Orchestrator.
- The statuses of patch application, patch distribution, parameter setting, and script execution that were in effect at the time of backup will be restored. If restore is performed using backup resources for which script execution is in progress, operation will be resumed. Before performing backup, confirm that patch application, patch distribution, parameter setting, and script execution are not running.
- If backup is executed while a Systemwalker Operation Manager job/job net/group is running, and that information is then restored, the job/job net/group that is running will end abnormally with the exit code 239. It is recommended that you execute this operation in a time zone in which the job/job net/group are not executed.

#### **Handling backup resources**

- When moving backup resources to the restoration target, move the directory specified as the backup directory and all its files.
- Do not delete the backup resources in the directory specified as the backup directory until the restoration completes.
- The backup command cannot be used to back up data to the following types of media:
  - Optical disks such as CD-Rs and DVD-Rs
 

To save user assets to optical disks, first back up the data to the local disk, and then, write it to the media using a dedicated optical disk writer, for example.
  - Network paths [Windows]
  - Directories whose pathnames include spaces

#### **Operations during backups and restorations**

Do not operate the following middleware products during backups or restorations:

- Interstage Application Server
- Systemwalker Runbook Automation
- Systemwalker Operation Manager
- Systemwalker Centric Manager
- Systemwalker Software Configuration Manager

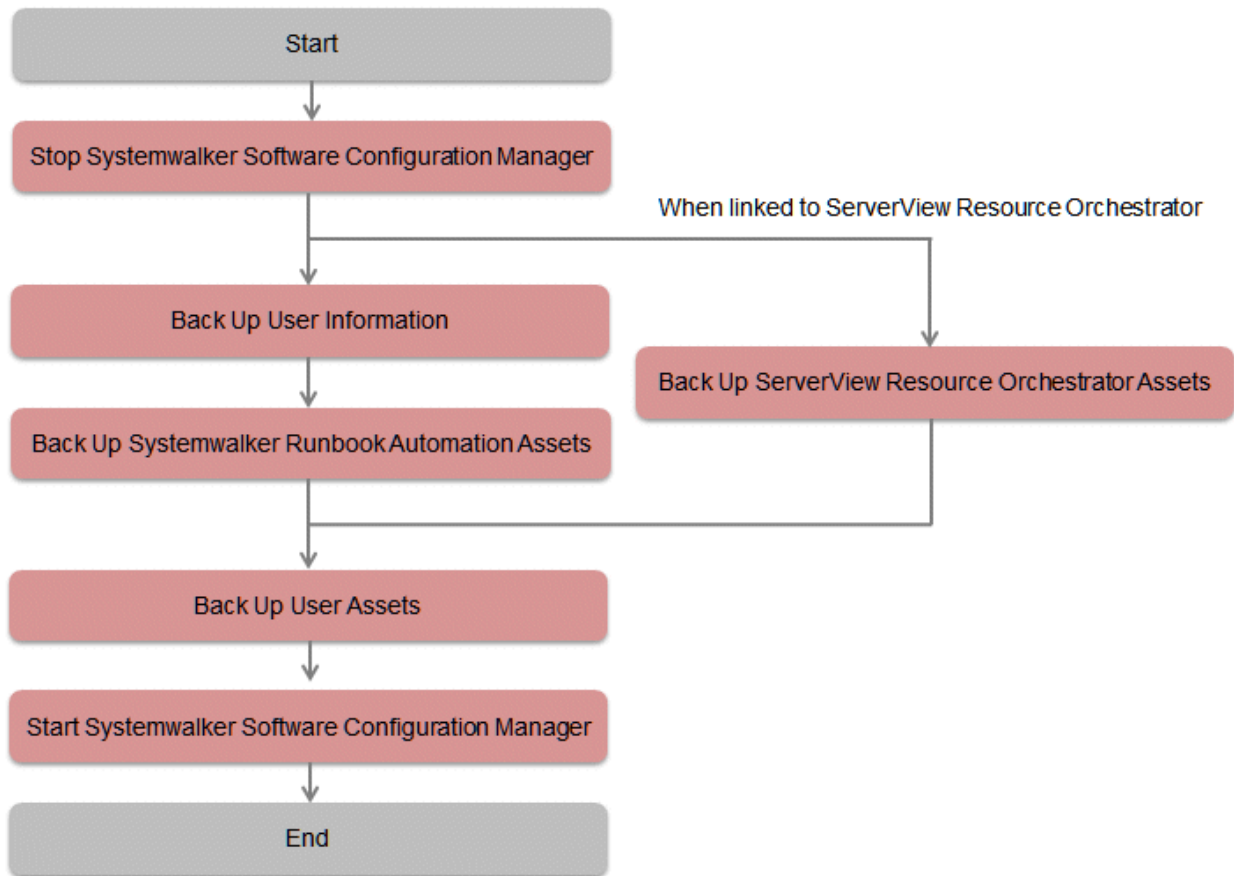
### **11.2.2 Backing Up the Admin Server**

---

This section explains how to back up the Systemwalker Software Configuration Manager admin server.

Note that Systemwalker Software Configuration Manager must be stopped before performing backup.

For details on how to start and stop Systemwalker Software Configuration Manager, refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)".



- 
- [11.2.2.2 Backing Up User Information](#)
- [11.2.2.3 Backing Up Systemwalker Runbook Automation Assets](#)
- [11.2.2.4 Backing Up ServerView Resource Orchestrator Assets \(when Linked to ServerView Resource Orchestrator\)](#)
- [11.2.2.5 Backing Up User Assets](#)

### 11.2.2.1 Required Disk Space for Backup

Before backing up Systemwalker Software Configuration Manager, estimate the amount of disk space required for each asset, as explained below:

Asset	Required disk space
Systemwalker Runbook Automation	<p><b>[Windows]</b></p> <p>Required disk space =</p> <ul style="list-style-type: none"> <li>+ size of backed up resources for the process management database (*1)</li> <li>+ size of [%SWRBA_HOME%] (*2)</li> <li>+ size of [%SWRBA_OMGR%] (*3)</li> <li>+ size of [%SWCMDB_INSTALL_PATH%]\FJSVcmdbm\Shunsaku\directorData</li> <li>+ size of [%SWCMDB_INSTALL_PATH%]\FJSVcmdbm\fcmdb\file</li> <li>+ 100MB</li> </ul> <p>*1: Size specified for the process management database directory during setup</p> <p>*2: %SWRBA_HOME% contains the Systemwalker Runbook Automation (which is included in Systemwalker Software Configuration Manager) installation directory</p>



Asset	Required disk space
	<p>*3: %SWRBA_OMGR% contains the Systemwalker Operation Manager (which is included with Systemwalker Software Configuration Manager) installation directory</p> <p><b>[Linux]</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Required disk space =</p> <ul style="list-style-type: none"> <li>+ size of backed up resources for the process management database (*1)</li> <li>+ size of /etc/opt/FJSVswrbam</li> <li>+ size of /var/opt/FJSVswrbam</li> <li>+ size of /var/opt/FJSVJCMN/etc</li> <li>+ size of /var/opt/FJSVjmcsl</li> <li>+ size of /var/opt/FJSVJOBSC</li> <li>+ size of /var/opt/FJSVfwseo/config/JM (*2)</li> <li>+ size of /opt/FJSVJOBSC/bin</li> <li>+ size of /etc/mjes</li> <li>+ size of /var/spool/mjes</li> <li>+ size of /opt/FJSVcldb/var/Shunsaku/directorData</li> <li>+ size of /opt/FJSVcldb/var/fcldb/file</li> <li>+ 100MB</li> </ul> </div> <p>*1: Size specified for the process management database directory during setup</p> <p>*2: If either of the conditions below is satisfied, replace "FJSVfwseo" with "FJSVfwsec" in your calculation:</p> <ul style="list-style-type: none"> <li>- After installing Systemwalker Software Configuration Manager, Systemwalker Centric Manager V13.4.0 is installed</li> <li>- A more recent version than Systemwalker Centric Manager V13.4.0 is installed (regardless of whether installed before or after Systemwalker Software Configuration Manager)</li> </ul>
ServerView Resource Orchestrator	Refer to "Mechanism of Backup and Restoration" in the ServerView Resource Orchestrator Cloud Edition Operation Guide for details.
User assets	<p><b>[Windows]</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Required disk space =+ size of &lt;Systemwalker Software Configuration Manager installation directory&gt;\SWCFMGM\SWCFMGDB+ 1MB</p> </div> <p>*1: Size specified for the process management database directory during setup</p> <p><b>[Linux]</b></p> <div style="border: 1px solid black; padding: 5px;"> <p>Required disk space =+ size of /var/opt/FJSVcfmgm/SWCFMGMDB+ 1MB</p> </div>

### 11.2.2.2 Backing Up User Information

User information is backed up when the directory service is backed up. Refer to the relevant ServerView Operations Manager manual below for information on how to back up the directory service. If linked to ServerView Resource Orchestrator, then use it to back up user information.

**[Windows]**

- "Backing up and restoring OpenDJ data on Windows systems" in *User Management in ServerView*

**[Linux]**

- "Backing up and restoring OpenDJ data on Linux systems" in *User Management in ServerView*

### 11.2.2.3 Backing Up Systemwalker Runbook Automation Assets

CMDB assets are backed up when Systemwalker Runbook Automation assets are backed up using the command below from the command prompt (refer to the *Reference Guide* for information on commands):

Command	Overview
swrba_backup	Backs up Systemwalker Runbook Automation assets.

### Note

- Systemwalker Runbook Automation assets must be backed up using a user account with administrator privileges for the operating system (administrator or root).
- Specify the full path of the backup target directory (note that the path can contain only halfwidth alphanumeric characters, must not include symbols or spaces, and must be up to 32 characters long).
- The specified backup target directory must either be empty or not exist.

## 11.2.2.4 Backing Up ServerView Resource Orchestrator Assets (when Linked to ServerView Resource Orchestrator)

Use offline backup to back up the ServerView Resource Orchestrator assets. CMDB assets are not backed up by online backups. Refer to "Offline Backup of the Admin Server" in the *ServerView Resource Orchestrator Cloud Edition Operation Guide* for details.

## 11.2.2.5 Backing Up User Assets

To back up user assets, use the following command from a command prompt. Refer to "Command Reference" in the *Reference Guide* for information on this command.

Command name	Overview
swcfmg_backup	This command backs up user assets.

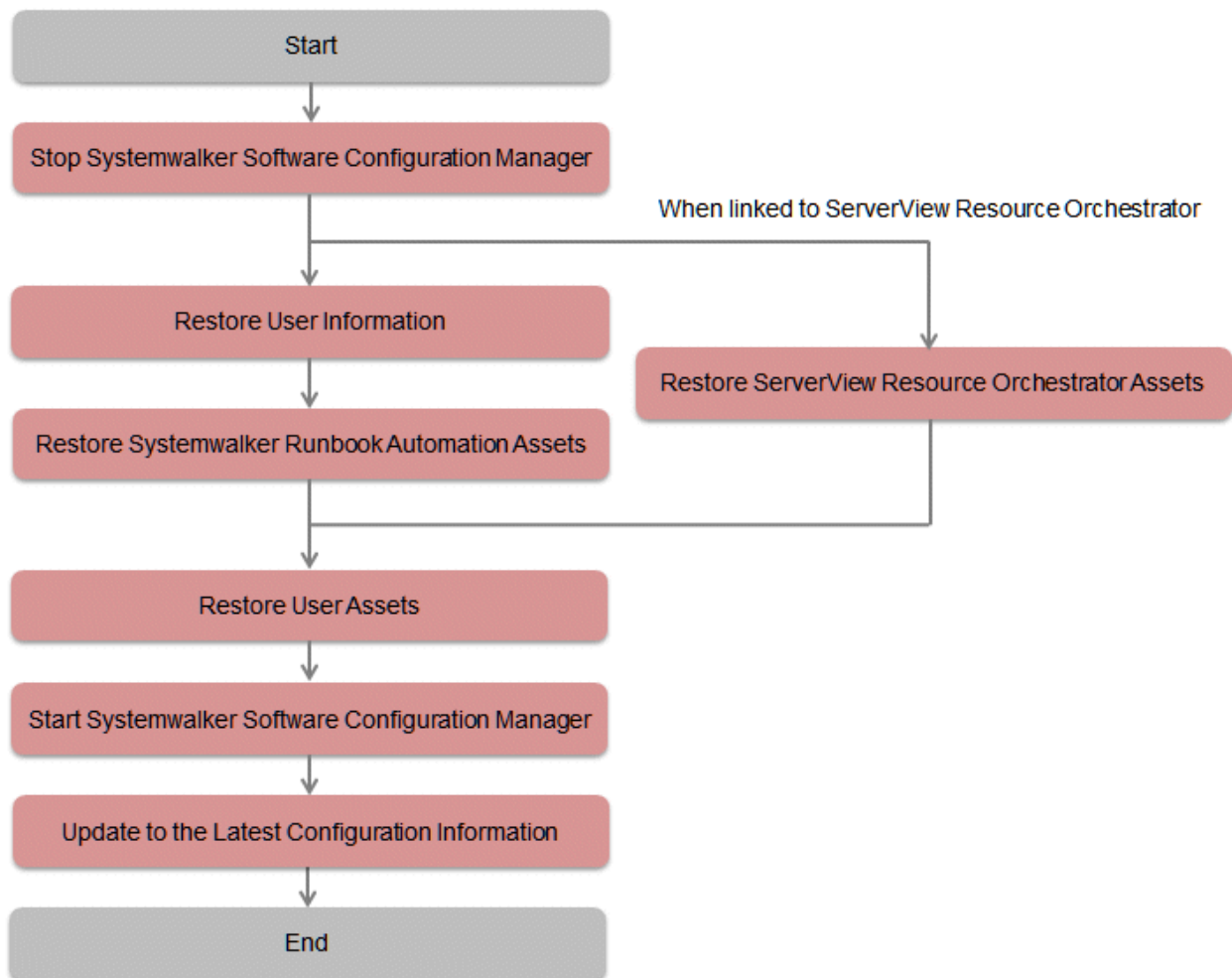
### Note

- User assets must be backed up using OS administrator privileges (administrator or root).
- For the backup destination, specify a directory with sufficient disk space.
- If the disk runs out of space during the backup, all of the data at the backup destination will be deleted.

## 11.2.3 Restoring the Admin Server

This section explains how to restore the Systemwalker Software Configuration Manager admin server.

Note that Systemwalker Software Configuration Manager must be stopped before restoring. For details on how to start and stop Systemwalker Software Configuration Manager, refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)".



- 
- [11.2.3.1 Restoring User Information](#)
- [11.2.3.2 Restoring Systemwalker Runbook Automation Assets](#)
- [11.2.3.3 Restoring ServerView Resource Orchestrator Assets \(when Linked to ServerView Resource Orchestrator\)](#)
- [11.2.3.4 Restoring User Assets](#)
- [11.2.3.5 Updating to the Latest Configuration Information](#)

### 11.2.3.1 Restoring User Information

Restore user information that was backed up at "Backing Up User Information" (refer to the relevant ServerView Operations Manager manual below for details). If linked to ServerView Resource Orchestrator, then use it to restore user information.

**[Windows]**

- "Backing up and restoring OpenDJ data on Windows systems" in *User Management in ServerView*

**[Linux]**

- "Backing up and restoring OpenDJ data on Linux systems" in *User Management in ServerView*

### 11.2.3.2 Restoring Systemwalker Runbook Automation Assets

Restore Systemwalker Runbook Automation assets backed up at "Backing Up Systemwalker Runbook Automation Assets" using the command below from the command prompt (refer to the *Reference Guide* for information on commands):

Command	Overview
swrba_restore	Restore user assets.

### Note

- Systemwalker Runbook Automation assets must be restored using a user account with administrator privileges for the operating system (administrator or root).
- Specify the full path of the backup target directory (note that the path can contain only halfwidth alphanumeric characters, must not include symbols or spaces, and must be up to 32 characters long).

### 11.2.3.3 Restoring ServerView Resource Orchestrator Assets (when Linked to ServerView Resource Orchestrator)

Restore ServerView Resource Orchestrator assets backed up at "Backing Up ServerView Resource Orchestrator Assets (when Linked to ServerView Resource Orchestrator)" (refer to "Restoring the Admin Server" in the *ServerView Resource Orchestrator Cloud Edition Operation Guide* for details).

### 11.2.3.4 Restoring User Assets

Restore user assets backed up at "Backing Up User Assets", use the following command from a command prompt. Refer to "Command Reference" in the *Reference Guide* for information on this command.

Command name	Overview
swcfmg_restore	This command restores user assets.

### Note

User assets must be restored using OS administrator privileges (administrator or root).

### 11.2.3.5 Updating to the Latest Configuration Information

After restoring Systemwalker Software Configuration Manager, update to the latest configuration information.

The procedure for updating to the latest configuration information is described below:

1. Execute cmdbrefresh to update the CMDB information:

[Windows]

```
%SWCMDB_INSTALL_PATH%\FJSVcmdbm\bin\cmdbrefresh.exe -a -q
```

[Linux]

```
/opt/FJSVcmdbm/bin/cmdbrefresh.sh -a -q
```

## 11.3 Changing the Systemwalker Software Configuration Manager Environment

### 11.3.1 Changing Passwords of Users who Use this Product

This section explains how to change the passwords of users of the following directory services used with this product:

- User for process control

- User for schedule startup
- LDAP administrator

### 11.3.1.1 Changing the Password of a User for Process Control

The procedure for changing the password of a user for process control is described below (note that it cannot be changed if linked to ServerView Resource Orchestrator):

1. Stop Systemwalker Software Configuration Manager.

Refer to "10.2 Stopping Systemwalker Software Configuration Manager" for details.

2. Use ldappasswordmodify to change the password of the directory service user:

[Windows]

```
<OpenDS installation directory>\bat\ldappasswordmodify.bat -p 1473 -D "cn=Directory Manager" -w <LDAP admin DN password> -a "dn:cn=<user for process control>,ou=users,dc=fujitsu,dc=com" -n <new password> -c <current password>
```

[Linux]

```
<OpenDS installation directory>/bin/ldappasswordmodify -p 1473 -D "cn=Directory Manager" -w <LDAP admin DN pwd> -a "dn:cn=<user for process control>,ou=users,dc=fujitsu,dc=com" -n <new password> -c <current password>
```

The default value of the LDAP administrator DN password is "admin". Specify the value that was set for the user for process control during setup of this product. An example is shown below:

**Example:**

[Windows]

```
"C:\Program Files (x86)\Fujitsu\ServerView Suite\opens\bat\ldappasswordmodify.bat" -p 1473 -D "cn=Directory Manager" -w admin -a "dn:cn=swrbaadmin,ou=users,dc=fujitsu,dc=com" -n systemwalker#2 -c systemwalker#1
```

[Linux]

```
/opt/fujitsu/ServerViewSuite/opens/bin/ldappasswordmodify -p 1473 -D "cn=Directory Manager" -w admin -a "dn:cn=swrbaadmin,ou=users,dc=fujitsu,dc=com" -n systemwalker#2 -c systemwalker#1
```

3. Use swcfmg\_environment to set the new password for Systemwalker Software Configuration Manager - specify the same password specified in the previous step:

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_environment -set -key job.process.controller.password -value <new password>
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_environment -set -key job.process.controller.password -value <new password>
```

4. Use swrba\_regist\_password to set the new password for Systemwalker Runbook Automation - select "User for process control", and then enter the same password specified in the previous step (refer to "swrba\_regist\_password(Process Control Password Registration)" in the *Reference Guide* for details):

[Windows]

```
%SWRBA_HOME%\bin\swrba_regist_password (*1)
```

\*1: %SWRBA\_HOME% contains the Systemwalker Runbook Automation (which is included with Systemwalker Software Configuration Manager) installation directory.

[Linux]

```
/opt/FJSVswrbam/bin/swrba_regist_password
```

5. Restart Systemwalker Software Configuration Manager.

Refer to "10.1 Starting Systemwalker Software Configuration Manager" for details.

### 11.3.1.2 Changing the Password of a User for Schedule Startup

The procedure for changing the password of a user for schedule startup is described below (note that it cannot be changed if linked to ServerView Resource Orchestrator):

1. Stop Systemwalker Software Configuration Manager.

Refer to "10.2 Stopping Systemwalker Software Configuration Manager" for details.

2. Use `ldappasswordmodify` to change the password of the directory service user:

[Windows]

```
<OpenDS installation directory>\bat\ldappasswordmodify.bat -p 1473 -D "cn=Directory Manager" -w <LDAP admin DN password> -a "dn:cn=<user for schedule startup>,ou=users,dc=fujitsu,dc=com" -n <new password> -c <current password>
```

[Linux]

```
<OpenDS installation directory>/bin/ldappasswordmodify -p 1473 -D "cn=Directory Manager" -w <LDAP admin DN password> -a "dn:cn=<user for schedule startup>,ou=users,dc=fujitsu,dc=com" -n <new password> -c <current password>
```

The default value of the LDAP administrator DN password is "admin". Specify the value that was set for the user for schedule startup during setup of this product. An example is shown below:

**Example:**

[Windows]

```
"C:\Program Files (x86)\Fujitsu\ServerView Suite\opens\bat\ldappasswordmodify.bat" -p 1473 -D "cn=Directory Manager" -w admin -a "dn:cn=swrbasch,ou=users,dc=fujitsu,dc=com" -n systemwalker#1 -c systemwalker#2
```

[Linux]

```
/opt/fujitsu/ServerViewSuite/opens/bin/ldappasswordmodify -p 1473 -D "cn=Directory Manager" -w admin -a "dn:cn=swrbasch,ou=users,dc=fujitsu,dc=com" -n systemwalker#1 -c systemwalker#2
```

3. Use `swrba_regist_password` to set the new password for Systemwalker Runbook Automation - select "User for schedule startup", and then enter the same password specified in the previous step (refer to "swrba\_regist\_password(Process Control Password Registration)" in the *Reference Guide* for details):

[Windows]

```
%SWRBA_HOME%\bin\swrba_regist_password (*1)
```

\*1: %SWRBA\_HOME% contains the Systemwalker Runbook Automation (which is included with Systemwalker Software Configuration Manager) installation directory.

[Linux]

```
/opt/FJSVswrbam/bin/swrba_regist_password
```

4. Restart Systemwalker Software Configuration Manager.

Refer to "10.1 Starting Systemwalker Software Configuration Manager" for details.

### 11.3.1.3 Changing the Password of an LDAP Administrator DN

The procedure for changing the password of an LDAP administrator DN is described below (if linked to ServerView Resource Orchestrator, then use it instead - refer to "Reconfiguring Single Sign-On" in the *ServerView Resource Orchestrator Cloud Edition Operation Guide* for details):

1. Stop Systemwalker Software Configuration Manager.

Refer to "[10.2 Stopping Systemwalker Software Configuration Manager](#)" for details.

2. Change the LDAP administrator DN password. Refer to the ServerView Operations Manager manual.

- "Configuring directory service access" in *User Management in ServerView*

3. Execute the following command in the command prompt to set the new password for Systemwalker Software Configuration Manager:

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_environment -set -key user.ldap.administrator.password -value <new password>
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_environment -set -key user.ldap.administrator.password -value <new password>
```

4. Use swrba\_regist\_password to set the new password for Systemwalker Runbook Automation - select "LDAP administrator DN", and then enter the same password specified in the previous step (refer to "swrba\_regist\_password(Process Control Password Registration)" in the *Reference Guide* for details):

[Windows]

```
%SWRBA_HOME%\bin\swrba_regist_password (*1)
```

\*1: %SWRBA\_HOME% contains the Systemwalker Runbook Automation (which is included with Systemwalker Software Configuration Manager) installation directory.

[Linux]

```
/opt/FJSVswrbam/bin/swrba_regist_password
```

5. Restart Systemwalker Software Configuration Manager.

Refer to "[10.1 Starting Systemwalker Software Configuration Manager](#)" for details.

### 11.3.2 Changing Passwords of Operating System Users who Use this Product

---

The procedure for changing the passwords of the following users of operating systems used with this product is described below:

[Windows]

- swcfmgdb
- swrbadbuser
- swrbajobuser

[Linux]

- swcfmgdb
- swrbadbuser

### 11.3.2.1 Changing the Password for swcfmgdb

The procedure for changing the password for swcfmgdb is described below:

1. Stop Systemwalker Software Configuration Manager.

Refer to "10.2 Stopping Systemwalker Software Configuration Manager" for details.

2. Change the password.

If using Windows, execute the command below:

```
net user swcfmgdb <new password>
```

3. If using Windows, change the password of the service startup account.

The service below will be changed:

- Systemwalker Software Configuration Manager DataBase Service

4. Set a new password for Systemwalker Software Configuration Manager. Execute the following command: For the new password, set the same value as the password specified in steps 2 and 3.

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_environment -set -key database.user.password -value <new password>
```

[Linux]

```
/opt/FJISVcfmgm/bin/swcfmg_environment -set -key database.user.password -value <new password>
```

5. Restart Systemwalker Software Configuration Manager.

Refer to "10.1 Starting Systemwalker Software Configuration Manager" for details.

### 11.3.2.2 Changing the Password for swrbadbuser and swrbajobuser

The procedure for changing the password for swrbadbuser and swrbajobuser is described below (note that it cannot be changed if linked to ServerView Resource Orchestrator):

1. Stop Systemwalker Software Configuration Manager.

Refer to "10.2 Stopping Systemwalker Software Configuration Manager" for details.

2. Stop the Java EE service.

- a. Stop the message broker by using the Windows(R) **Services** feature as a user with administrator privileges.

Click **Control Panel >> Administrative Tools >> Services**, select **Interstage Message Queue Broker** service, and then click **Stop**.

- b. Stop the Interstage Java EE Node Agent service (execute the command below as a user with administrator privileges):

```
Ijnostop
```

- c. Stop the Interstage Java EE DAS service (execute the command below as a user with administrator privileges):

```
Ijdastop
```

3. Change the password.

4. If using Windows, change the password of the service startup account.

The services below will be changed:

- If swrbajobuser is being changed:

- Systemwalker MpMjes $n$  (where  $n$  is the subsystem number specified during installation - default value is 9).



- Interstage Java EE Node Agent
  - If swrbadbuser is being changed:
    - Systemwalker Runbook Automation DB Service
5. Restart the Java EE service.
- a. Start the Interstage Java EE DAS service (execute the command below as a user with administrator privileges):

```
Ijdastop
```

- b. Start the Interstage Java EE Node Agent service (execute the command below as a user with administrator privileges):

```
Ijnostop
```

- c. Start the message broker by using the Windows(R) **Services** feature as a user with administrator privileges.
- Click **Control Panel** >> **Administrative Tools** >> **Services**, select **Interstage Message Queue Broker** service, and then click **Start**.

6. Restart Systemwalker Software Configuration Manager.

Refer to "10.1 Starting Systemwalker Software Configuration Manager" for details.

## 11.4 Installing Updates on Systemwalker Software Configuration Manager

For stable and continuous operation of Systemwalker Software Configuration Manager, periodically check update information released by Fujitsu, and install released updates as soon as possible.

This section explains how to check update information for Systemwalker Software Configuration Manager, and how to install updates.

### 11.4.1 Checking Update Information

You must check for updates in the update site for each software product used by Systemwalker Software Configuration Manager listed below:

#### Admin server

Product name	Version
Systemwalker Software Configuration Manager	V15.3.0
Systemwalker Runbook Automation	V15.1.3
Interstage Application Server Enterprise Edition	V11.0.0
Systemwalker Operation Manager Enterprise Edition (*1)	<b>[Windows]</b> V13.6.1 <b>[Linux]</b> V13.6.0

\*1: On Windows, a patch does not need to be applied if C/S (item indicating the client/server category) is C (for client-specific updates).

### 11.4.2 Installing Updates on the Admin Server

This section explains how to install updates on the admin server.



[Linux]

Install the updates in single-user mode, and restore to multi-user mode afterwards.

---

The procedure for installing updates is described below:

1. Stop Systemwalker Software Configuration Manager

Execute the following command on the admin server:

**[Windows]**

Execute the command as a user with administrator privileges.

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_stop
```

**[Linux]**

Execute the command as a superuser.

```
/opt/FJSVcfmgm/bin/swcfmg_stop
```

If Systemwalker Software Configuration Manager stops successfully, a stop completion message will be output.

```
Stop processing for Systemwalker Software Configuration Manager will start.  
Stop processing for Systemwalker Software Configuration Manager has completed normally.
```

2. Stop ServerView Resource Orchestrator (only when linked)

If linked to ServerView Resource Orchestrator, stop ServerView Resource Orchestrator.

Refer to the ServerView Resource Orchestrator manual for details.

3. Install the updates

Refer to "Applying Updates to Systemwalker Runbook Automation" in the *Systemwalker Runbook Automation Installation Guide* for details.

Refer to the *Software Release Guide* for information on where the SystemwalkerRunbook Automation manual is stored.

4. Start ServerView Resource Orchestrator (only when linked)

If linked to ServerView Resource Orchestrator, start ServerView Resource Orchestrator.

Refer to the ServerView Resource Orchestrator manual for details

5. Start Systemwalker Software Configuration Manager

Execute the following command on the admin server:

**[Windows]**

Execute the command as a user with administrator privileges.

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_start
```

**[Linux]**

Execute the command as a superuser.

```
/opt/FJSVcfmgm/bin/swcfmg_start
```

If Systemwalker Software Configuration Manager starts successfully, a startup completion message will be output.

```
Start processing for Systemwalker Software Configuration Manager will start.  
Start processing for Systemwalker Software Configuration Manager has completed normally.
```

# Part 4 Management

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# Chapter 12 Management Console

Systemwalker Software Configuration Manager provides a management console as a GUI for managing hardware (chassis and servers) and virtual environments (VM hosts and VM guests).

## 12.1 Overview of the Management Console

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

- Configuration information management

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

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

### Setting up the web browser

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

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

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

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

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

The procedure for configuring standard mode is as follows:

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

## 12.2 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 12.1 Functions available from the management console

Function	Window	Information displayed/ button	Infra- struc- ture adminis- trator	Dual- role adminis- trator	Tena- nt adminis- trator	Tena- nt user	Remarks
Home	Home	Function list	Y	Y	Y	Y	A list of functions is displayed.
		Notifications	Y	Y	Y	Y	Notifications from the system are displayed.

Function	Window	Information displayed/ button	Infrastruc- ture administr- ator	Dual- role administr- ator	Tena- nt admini- strator	Tena- nt user	Remarks
Configuration management	Hardware list	Chassis list	Y	Y	-	-	Moves from the link to the chassis name to the chassis details.
		Chassis details	Y	Y	-	-	Moves from the link to the server blade name to the physical server details.
		Physical server list	Y	Y	-	-	Moves from the link to the physical server name and chassis name to the details.
		Physical server details	Y	Y	-	-	Displays the details of the physical server and a list of related VM guests.
		OS list	Y	Y	-	-	Displays the list of servers on which the OS is installed.
		Map view	Y	Y	-	-	Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants.
	Maintenan- ce	View CI	Y	Y	-	-	The configuration information registered in the CMDB can be viewed.
		Register CI	Y (*1)	Y (*1)	-	-	New configuration information can be registered in the CMDB.
		Update/delete CI	Y (*1)	Y (*1)	-	-	The configuration information registered in the CMDB can be updated or deleted.
		Import CI	Y (*1)	Y (*1)	-	-	Configuration information can be imported in the CMDB.

Y: Can be used.

-: Cannot be used.

\*1: These functions may not be available, depending on the ServerView Resource Orchestrator role that has been assigned to the login user. Refer to "12.3 Login Users" for information on roles.

## 12.3 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	Operations in the <b>Configuration management &gt;&gt; Maintenance</b> 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	-	-
	Tenant operator		-	-
	Tenant monitor		-	-
Tenant Use Roles	Tenant user	Tenant user	-	-
Multiple Roles	Administrator	Dual-role administrator	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 "[4.2 Managing User Information](#)" for information on requirements to use this product.

## 12.4 Login and Logout

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

### 12.4.1 Login

Use the following methods to open the management console:

#### Starting the management console from a URL

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

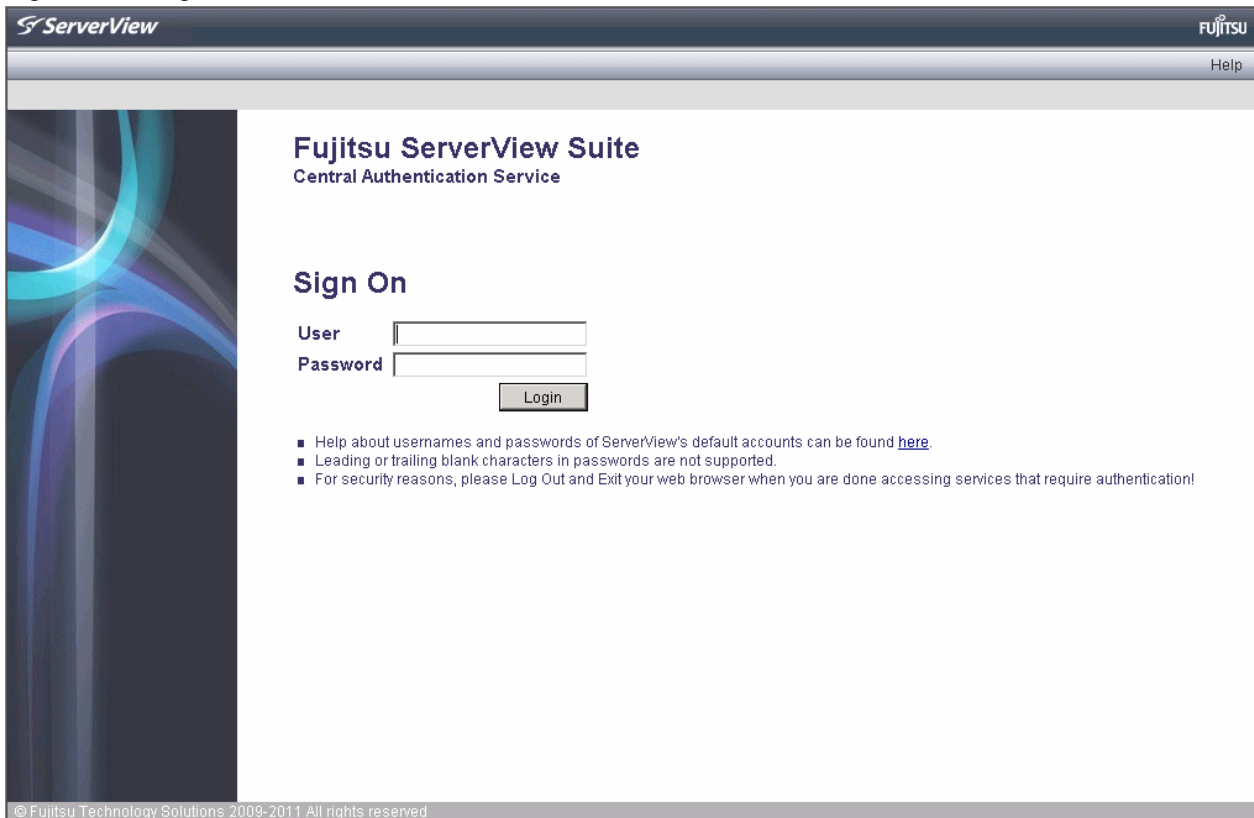
If the port number for accessing the management console was changed when Systemwalker Software Configuration Manager was installed, specify the new port number.

#### Starting the management console from the Start on the admin server

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

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

Figure 12.1 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.

## 12.4.2 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.

## 12.5 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 ▾ FUJITSU


---

**Home**    Configuration management

---

Configuration management

- [Hardware list](#)
- [Maintenance](#)



Notifications

<b>2014-07-15</b>	Briefly unavailable for scheduled maintenance from 6p.m. to 8p.m.
-------------------	---

**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.

- **Maintenance**

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

**Notifications**

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

Refer to the "[9.3 Notification Settings in the Management Console](#)" for information on how to edit notifications.



# Chapter 13 Configuration Management

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

- **Hardware list**

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

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



## Information

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

- **Maintenance**

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

## 13.1 Hardware List

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

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

### 13.1.1 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**

Hardware list **Maintenance**

Chassis list Physical server list OS list Map view

Name	Product name	Admin IP address	Number of mounted server...
Chassis#1	BX900	192.168.1.10	9

### 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 <b>Chassis Details</b> window.
Product name	Displays the product name of the chassis.
Admin IP address	Displays the admin IP address of the chassis.
Mounted server blades	Displays the number of server blades mounted on the chassis.

### 13.1.1.1 Chassis details

#### Display method

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



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

## Server blade list

Slot n...	Server blade name	Product name	Admin IP address	OS	OS IP address
5	<a href="#">Blade#5</a>	PRIMERGY BX920 S1	192.168.1.205	VMware ESXi 5.1.0...	192.168.1.105
6	<a href="#">Blade#6</a>	PRIMERGY BX920 S2	192.168.1.206	VMware ESX 4.1.0...	192.168.1.106
17	<a href="#">Blade#9</a>	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.
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 <b>Physical Server Details</b> window.
Product name	Displays the product name of the server blade.
Admin IP address	Displays the admin IP address of the server blade.

Display item	Description
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.

## 13.1.2 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 header with the text "Systemwalker Software Configuration Manager" on the left, a user profile "cfmgadmin" with a dropdown arrow, and the "FUJITSU" logo on the right. Below the header is a navigation bar with "Home" and "Configuration management" tabs. Under "Configuration management", there are sub-tabs for "Hardware list" and "Maintenance". The "Hardware list" sub-tab is active and contains further sub-tabs: "Chassis list", "Physical server list", "OS list", and "Map view". The "Physical server list" sub-tab is selected. To the right of these sub-tabs are two icons: a downward-pointing triangle and a refresh icon. Below the sub-tabs is a table with the following columns: Name, Product name, Admin IP address, OS, OS IP address, and Chassis name. The table contains three rows of data:

Name	Product name	Admin IP address	OS	OS IP address	Chassis name
Blade#5	PRIMERGY BX920 S1	192.168.1.205	VMware ESXi 5.1.0...	192.168.1.105	Chassis#1
Blade#6	PRIMERGY BX920 S2	192.168.1.206	VMware ESXi 5.1.0...	192.168.1.106	Chassis#1
Blade#9	PRIMERGY BX920 S2	192.168.1.209	VMware ESXi 5.1.0...	192.168.1.109	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
<b>Filter</b>	The following filter conditions can be specified. Multiple filter conditions can be specified. - Name

Display item	Description
	<ul style="list-style-type: none"> <li>- Product name</li> <li>- Admin IP address</li> <li>- OS</li> <li>- OS IP address</li> <li>- Chassis name</li> </ul>

### 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 <b>Physical Server Details</b> window.</p>
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 <b>Chassis Details</b> window.</p>

### 13.1.2.1 Physical Server Details

#### Display method

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

Systemwalker Software Configuration Manager cfmgadmin

Home **Configuration management**

Hardware list **Maintenance**

[Physical server list](#) / Physical server details

Name	Blade#9
Product name	PRIMERGY BX920 S2
Admin IP address	192.168.1.209
OS	VMware ESXi 5.1.0 build-1021289
OS IP address	192.168.1.109
Memo	Application server#2
Asset number	000000001
Serial number	AAA0000010
Firmware version	0551
BIOS version	3D41
CPU	Xeon (2793 MHz) x 2
Mounted memory	73728 MB
Chassis name	<a href="#">Chassis#1</a>
Slot number	17

VM guest list

Server name	L-Platform name	Tenant name	OS	IP address
ST_RHEL510_x64_JA			Red Hat Enterprise Linux 5 (64...	192.168.1.182
ST_RHEL59_x64_EN			Red Hat Enterprise Linux 5 (64...	192.168.1.180

## Display item

### Physical server details

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

Display item	Description
Name	Displays the physical server name.
Product name	Displays the product name of the physical server.
Admin IP address	Displays the IP address of the physical server.
OS	Displays the operating system name.
OS IP address	Displays the IP address of the operating system.
Memo	Displays the memo.
Asset number	Displays the asset number.
Serial number	Displays the serial number.
Firmware version	Displays the firmware version.
BIOS version	Displays BIOS information.

Display item	Description
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 <b>Chassis Details</b> window.
Slot number	For a server blade, the slot number is displayed.
Server name	When an OS (except for a VM host) is installed on a physical server, the server name is displayed.
L-Platform name	When an OS (except for a VM host) is installed on a physical server, the L-Platform name is displayed.
Tenant name	When an OS (except for a VM host) is installed on a physical server, the tenant name is displayed.
VM guest list	Displays a list of related VM guests operating on the physical server.

#### Server list

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

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

### 13.1.3 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**

Hardware list **Maintenance**

Chassis list Physical server list OS list Map view

Server name	OS	IP address	L-Platform name	Physical server...	Admin IP address
tenant_g-Q7L9...	Microsoft Windows...	169.254.169.190		Blade#6	192.168.1.206
default-Q7LFSY...	Red Hat Enterprise...	192.168.1.10		Blade#6	192.168.1.206
ST_WIN2K8R2_...	Microsoft Windows...	192.168.1.175		Blade#6	192.168.1.206
ST_WIN2K3R2_...	Microsoft Windows...	192.168.1.176		Blade#6	192.168.1.206
ST_WIN2K8R2_...	Microsoft Windows...	192.168.1.179		Blade#6	192.168.1.206
ST_RHEL59_x6...	Red Hat Enterprise...	192.168.1.180		Blade#9	192.168.1.209
ST_RHEL65_x6...	Red Hat Enterprise...	192.168.1.181		Blade#9	192.168.1.209
ST_RHEL510_x...	Red Hat Enterprise...	192.168.1.182		Blade#9	192.168.1.209
tenant-1IYMES...	Microsoft Windows...	192.168.99.3		Blade#6	192.168.1.206
default-9Q6PGY...	Red Hat Enterprise...	192.168.99.4		Blade#6	192.168.1.206
tenant-K1H5YO...	Microsoft Windows...	192.168.99.5		Blade#6	192.168.1.206
tenant1-XEU9R...	Red Hat Enterprise...	192.168.99.11		Blade#6	192.168.1.206
tenant1-Q7N2K...	Microsoft Windows...	192.168.99.12		Blade#6	192.168.1.206

## 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
<b>Filter</b>	<p>The following filter conditions can be specified. Multiple filter conditions can be specified.</p> <ul style="list-style-type: none"> <li>- Server name</li> <li>- OS</li> <li>- IP address</li> <li>- L-Platform name</li> <li>- Physical server name</li> <li>- Admin IP address</li> </ul>

### 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.

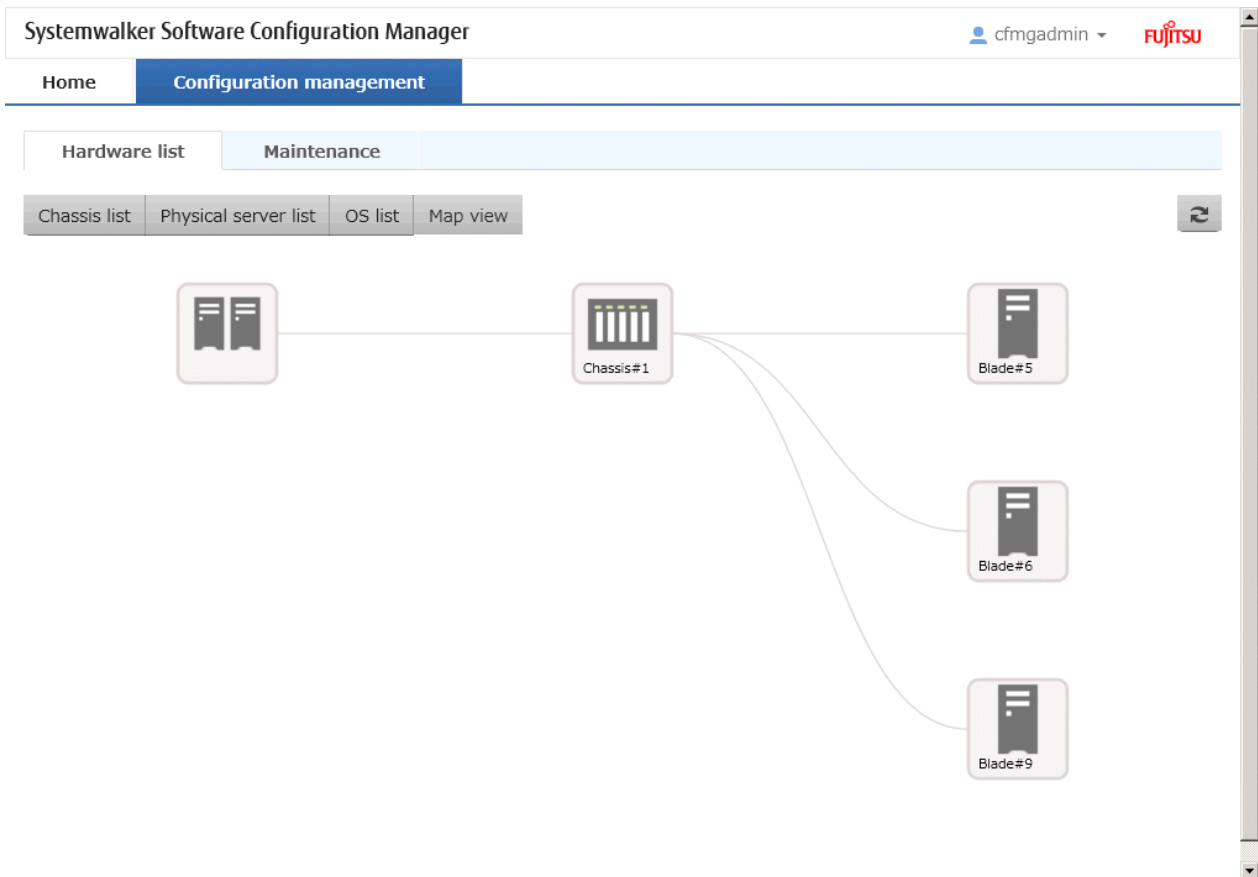


Display item	Description
OS	Displays the operating system name.
IP address	Displays the IP address of the operating system.
L-Platform name	Displays the L-Platform name.
Physical server name	Displays the physical server name. Clicking a physical server name displays the <b>Physical Server Details</b>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

## 13.1.4 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

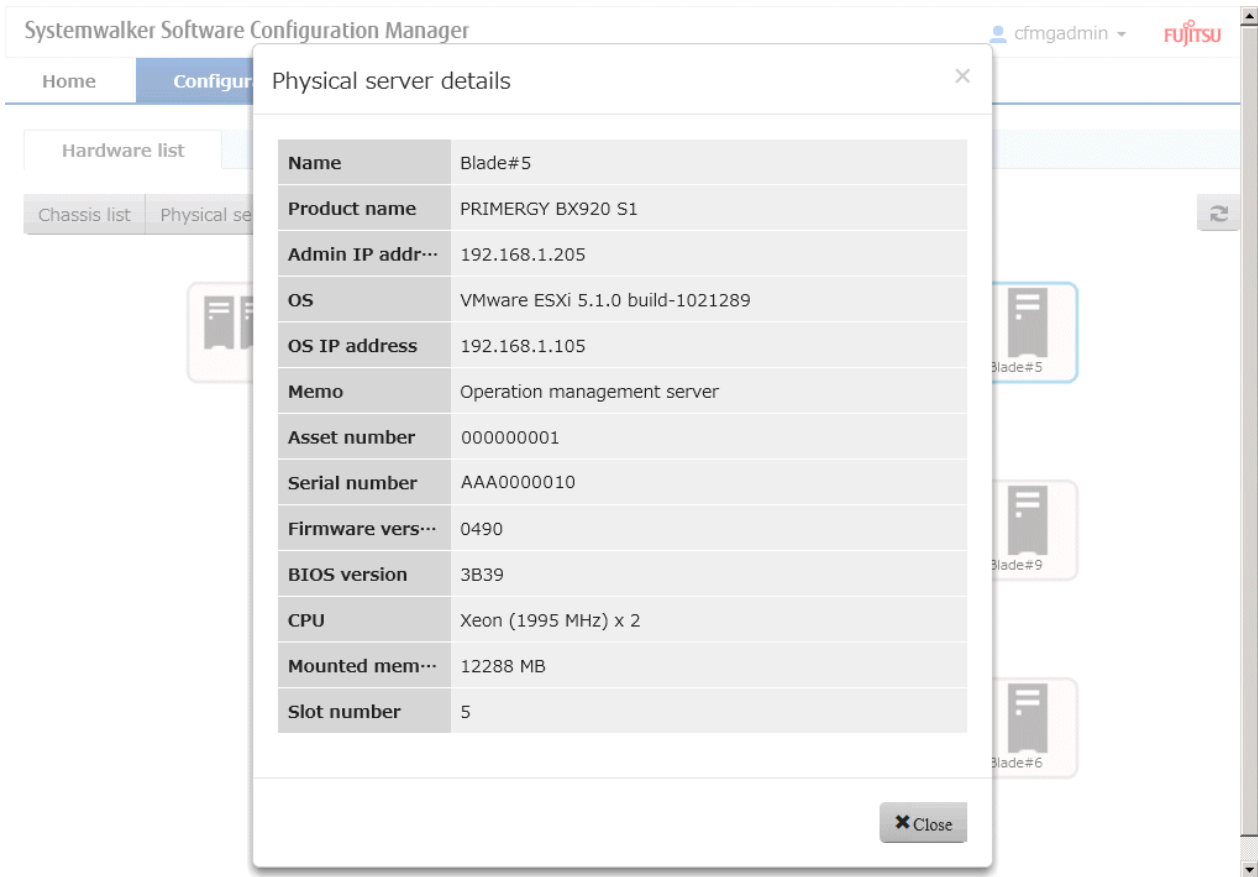
Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants.

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

Selection item	Description
 <span data-bbox="274 280 327 309">Root</span>	<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>
 <span data-bbox="274 396 352 425">Chassis</span>	<p data-bbox="518 358 1141 387">Displays relationships between the chassis and physical servers.</p> <p data-bbox="518 409 1279 439">Reselecting this item while it is still selected displays the detailed information.</p>
 <span data-bbox="274 517 427 546">Physical server</span>	<p data-bbox="518 474 1321 539">Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the physical server.</p> <p data-bbox="518 562 1279 591">Reselecting this item while it is still selected displays the detailed information.</p>
 <span data-bbox="274 633 352 663">Servers</span>	<p data-bbox="518 591 1321 656">Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the server.</p> <p data-bbox="518 678 1279 707">Reselecting this item while it is still selected displays the detailed information.</p>
 <span data-bbox="274 763 384 792">L-Platform</span>	<p data-bbox="518 725 1321 790">Displays relationships between chassis, physical servers, servers, L-Platforms, and tenants, starting from the L-platform.</p> <p data-bbox="518 813 1279 842">Reselecting this item while it is still selected displays the detailed information.</p> <p data-bbox="518 864 1086 893">Displays an L-Platform when a physical server is selected.</p>
 <span data-bbox="274 938 347 967">Tenant</span>	<p data-bbox="518 896 1091 925">Displays relationships between the tenant and L-Platforms.</p> <p data-bbox="518 947 1279 976">Reselecting this item while it is still selected displays the detailed information.</p> <p data-bbox="518 999 1026 1028">Displays a tenant when a physical server is selected.</p>

### 13.1.4.1 Displaying Details

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



## Display item

When a chassis is selected

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

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

When a physical server is selected

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

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

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

## 13.2 Maintenance

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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.

### 13.2.1 View CI

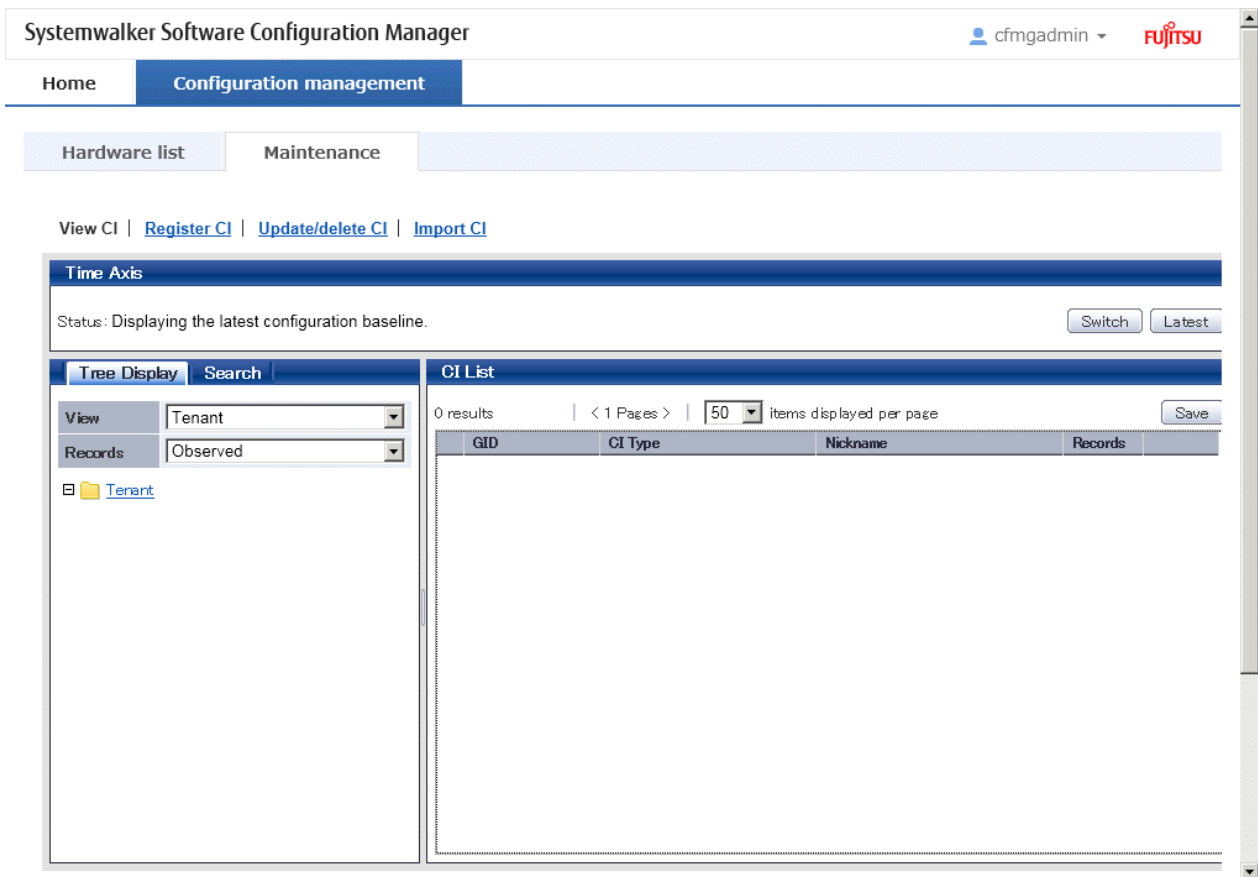
---

#### 13.2.1.1 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
<b>Tree Display</b> tab (Displays the relationships between configuration items using a tree.)	<b>View</b>	Pull-down list box used to select the tree model for the CIs to be displayed.
	<b>Records</b>	Pull-down list box used to select the record type for the configuration items to be manipulated. There are three record types: <b>Expected</b> , <b>Observed</b> , and <b>Catalog</b> .
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.
<b>CI List</b> (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 <b>View</b> pull-down list box. <b>Tenant</b> )	<b>GID</b>	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 <b>GID</b> column header.  Clicking a GID link opens a window displaying detailed information about the corresponding configuration item.
	<b>CI Type</b>	Displays the types of the configuration items. The list can be sorted by CI types by clicking the <b>CI Type</b> column header.
	<b>Nickname</b>	Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.
	<b>Records</b>	Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).

Item	Description
	<p><b>items displayed per page</b></p> <p>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 &gt; link.</p> <p>To go back, click the &lt; link.</p>
	<p><b>Save button</b></p> <p>Saves the configuration items selected using checkboxes to a file.</p>
<p><b>CI List</b></p> <p>(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 <b>View</b> pull-down list box: <b>VM Host</b>)</p>	<p><b>VM Host</b></p> <p>Displays the VM hosts. The list can be sorted by VM hosts by clicking the <b>VM Host</b> column header.</p>
	<p><b>IP address</b></p> <p>Displays the IP addresses. The list can be sorted by IP addresses by clicking the <b>IP address</b> column header.</p>
	<p><b>Number of VMs</b></p> <p>Displays the number of VMs. The list can be sorted by the number of VMs by clicking the <b>Number of VMs</b> column header.</p>
	<p><b>VM Type</b></p> <p>Displays the VM types. The list can be sorted by VM types by clicking the <b>VM Type</b> column header.</p>
	<p><b>items displayed per page</b></p> <p>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 &gt; link.</p> <p>To go back, click the &lt; link.</p>
	<p><b>Save button</b></p> <p>Saves the configuration items selected using checkboxes to an XML file.</p> <ul style="list-style-type: none"> <li>- <b>Save selected search results:</b> Saves only the configuration items selected by checkboxes to an XML file.</li> <li>- <b>Save all search results:</b> Saves all of the configuration items displayed in the CI list to an XML file.</li> </ul>

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 and L-Servers currently used by the tenant.

- **VM Host**

Displays a list of VM hosts.

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

### 13.2.1.2 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
<b>Search tab</b> (Used to specify the search conditions for the configuration item search)	<b>CI Type</b> Pull-down list box used to select the type of configuration item to be searched for.
	<b>Records</b> Pull-down list box used to select the record type for the configuration items to be searched. There are three record types: <b>Expected</b> , <b>Observed</b> , and <b>Catalog</b> .
	<b>All Clear</b> button Initializes the settings for the type of configuration item to be searched for and the filter conditions.
	<b>Search</b> button Performs searches based on the specified type of configuration item to be searched for and the specified filter conditions.
	The <b>Add</b> 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 <b>Add</b> 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.
<b>CI List</b> (Displays a list of configuration items as the search results.)	<b>GID</b> 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 <b>GID</b> column header.  Clicking a GID link opens a window displaying detailed information about the corresponding configuration item.
	<b>CI Type</b> Displays the types of the configuration items. The list can be sorted by CI types by clicking the <b>CI Type</b> column header.
	<b>Nickname</b> Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.
	<b>Records</b> Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).
	<b>items displayed per page</b> 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.
	<b>Save</b> button Saves the configuration items selected using checkboxes to an XML file.  <ul style="list-style-type: none"> <li>- <b>Save selected search results:</b> Saves only the configuration items selected by checkboxes to an XML file.</li> <li>- <b>Save all search results:</b> Saves all of the configuration items displayed in the CI list to an XML file.</li> </ul>

### 13.2.1.3 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	
<b>Selected Information</b>	<b>GID</b>	Displays the GID of the selected configuration item.	
	<b>CI Type</b>	Displays the CI type of the selected configuration item.	
	<b>Nickname</b>	Displays the nickname of the selected configuration item.	
	<b>Records</b>	Displays the record type of the selected configuration item. There are three record types: <b>Expected</b> , <b>Observed</b> , and <b>Catalog</b> .	
<b>Records tab</b> (Displays information about expected, observed or catalog records)	<b>Detailed Tree</b>	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 <b>Basic Information</b> section.	
	<b>Basic Information</b>	<b>Attribute</b>	Displays the names of the attributes. The list can be sorted by attribute names by clicking the <b>Attribute</b> column header.
		<b>Value</b>	Displays the values of the attributes. The list can be sorted by attribute values by clicking the <b>Value</b> column header.
<b>Related CIs tab</b> (Displays a list of the configuration items that are related to the configuration item for which the details are being displayed.)	<b>GID</b>	Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the <b>GID</b> column header.	
	<b>CI Type</b>	Displays the types of the configuration items. The list can be sorted by CI types by clicking the <b>CI Type</b> column header.	
	<b>Nickname</b>	Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.	
	<b>Records</b>	Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).	
	<b>Direction</b>	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 <b>Direction</b> column header.	
<b>Files tab</b> (Displays a list of the files held by the configuration item for which the details are being displayed.)	<b>File Name</b>	Displays the names of the files. The list can be sorted by file names by clicking the <b>File Name</b> column header.	
	<b>Nickname</b>	Displays the nicknames of the files. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.	
	<b>Annotation</b>	Displays the comments for the files. The list can be sorted by annotations by clicking the <b>Annotation</b> column header.	
	<b>File Size</b>	Displays the size of each file. The list can be sorted by file size by clicking the <b>File Size</b> column header.	
	<b>Last Updated</b>	Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the <b>Last Updated</b> column header.	



Item		Description
	<b>File ID</b>	Displays the IDs of the files. The list can be sorted by file IDs by clicking the <b>File ID</b> column header.
	<b>Version</b>	Displays the version names of the files. The list can be sorted by version names by clicking the <b>Version</b> column header.
	<b>Hash value</b>	Displays the hash values for the files. The list can be sorted by hash values by clicking the <b>Hash value</b> column header.
<b>Close button</b>		Closes the window.

## 13.2.2 Registering Configuration Items

### Display method

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

The screenshot shows the Systemwalker Software Configuration Manager interface. At the top, there is a navigation bar with 'Home' and 'Configuration management' tabs. Below this, there are sub-tabs for 'Hardware list' and 'Maintenance'. The 'Maintenance' tab is active, and a 'Register CI' link is visible. The main content area is titled 'CI Registration' and features a dropdown menu for 'Select CI Type' set to 'L-Server'. Below this, there are tabs for 'Records', 'Related CIs', and 'Files'. The 'Records' tab is active, showing sub-tabs for 'Observed Record', 'Expected Record', and 'Catalog Record'. The 'Observed Record' sub-tab is selected, displaying a 'Detailed Tree' on the left and a 'Basic Information' table on the right. The 'Detailed Tree' shows a tree structure with 'L-Server' selected. The 'Basic Information' table lists various attributes such as 'comment', 'CPU Share', 'Number of CPUs', 'CPU Clock(GHz)', 'cpuSockets', 'deploy Type', 'Exclusion Policy', 'Host ID', 'Host Name', 'iRMC IP Address', 'iRMC Login User ID', 'iSCSI IP Address', and 'ID'. At the bottom of the interface, there are buttons for 'Copy Element', 'Delete Element', and 'Register'.

### Operation method

Item		Description
<b>Register CI</b>	<b>Select CI Type</b>	Pull-down list box used to select the CI type of the configuration items to be registered.
<b>Records tab</b> (Displays expected, observed and catalog information)	<b>Detailed Tree</b>	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 <b>Basic Information</b> section.

Item		Description
	<b>Basic Information</b>	<b>Attribute</b>
		<b>Value</b>
	<b>Copy Element</b> button	
	<b>Delete Element</b> button	
<b>Related CIs</b> tab (Displays a list of the configuration items that are related to the configuration item for which the details are being displayed.)	<b>GID</b>	
	<b>CI Type</b>	
	<b>Nickname</b>	
	<b>Records</b>	
	<b>Direction</b>	
	<b>Add</b> button	
	<b>Remove</b> button	
<b>Files</b> tab (Displays a list of the files held by the configuration item for which the details are being displayed.)	<b>File Name</b>	
	<b>Nickname</b>	
	<b>Annotation</b>	

Item		Description
	<b>File Size</b>	Displays the size of each file. The list can be sorted by file size by clicking the <b>File Size</b> column header.
	<b>Last Updated</b>	Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the <b>Last Updated</b> column header.
	<b>File ID</b>	Displays the IDs of the files. The list can be sorted by file IDs by clicking the <b>File ID</b> column header.
	<b>Version</b>	Displays the version names of the files. The list can be sorted by version names by clicking the <b>Version</b> column header.
	<b>Hash value</b>	Displays the hash values for the files. The list can be sorted by hash values by clicking the <b>Hash value</b> column header.
	<b>Add button</b>	Adds a file to the configuration item.
	<b>Remove button</b>	Deletes a file that has been registered with the configuration item.
<b>Register button</b>		Registers the settings with the CMDB.

## 13.2.3 Update/delete CI

### 13.2.3.1 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**.

The screenshot displays the 'Selected Information' window in the Configuration Management console. At the top, a table shows the configuration item details:

GID	CI Type	Nickname	Records
gid000000000020	L-Server	192.168.99.199	

Below this table are tabs for 'Records', 'Related CIs', and 'Files'. Under 'Records', there are sub-tabs for 'Observed Record', 'Expected Record', and 'Catalog Record'. The 'Observed Record' tab is active, showing a 'Detailed Tree' on the left and a 'Basic Information' table on the right.

The 'Detailed Tree' shows a hierarchy starting with 'L-Server', which includes sub-items like 'FileConfigurations', 'InstalledApplication', 'InstalledPatches', 'InstalledSoftwares', 'L-Server Configuration', 'ManagementProduct', 'Processes', and 'SystemSettings'.

The 'Basic Information' table lists various attributes and their values:

Attribute	Value
comment	
CPU Share	
Number of CPUs	
CPU Clock(GHz)	
cpuSockets	
deploy Type	
Exclusion Policy	
Host ID	
Host Name	
IRMC IP Address	
IRMC Login User ID	
iSCSI IP Address	
ID	192.168.99.199
Image ID	
Image Name	
interleaveMode	
IP Address	192.168.99.199
isOverCommitted	
lastUpdate	
machineType	
Maintenance Mode	
memo	

At the bottom of the window, there are buttons for 'Copy Element', 'Delete Element', 'Update', and 'Close'.

## Operation method

Item		Description	
<b>Selected Information</b>	<b>GID</b>	Displays the GID of the selected configuration item.	
	<b>CI Type</b>	Displays the CI type of the selected configuration item.	
	<b>Nickname</b>	Displays the nickname of the selected configuration item.	
	<b>Records</b>	Displays the record type of the selected configuration item. There are three record types: <b>Expected</b> , <b>Observed</b> , and <b>Catalog</b> .	
<b>Records tab</b> (Displays expected, observed and catalog information)	<b>Detailed Tree</b>		
	<b>Basic Information</b>	<b>Attribute</b>	Displays the names of the attributes. The list can be sorted by attribute names by clicking the <b>Attribute</b> column header.
		<b>Value</b>	Displays the values of the attributes. The value of an attribute can be edited by selecting the <b>Value</b> 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 <b>Value</b> column header.
<b>Related CIs tab</b> (Displays a list of the configuration items that are related to the configuration item for which the details are being displayed.)	<b>GID</b>	Displays the GIDs of the configuration items. The list can be sorted by GIDs by clicking the <b>GID</b> column header.	
	<b>CI Type</b>	Displays the types of the configuration items. The list can be sorted by CI types by clicking the <b>CI Type</b> column header.	
	<b>Nickname</b>	Displays the nicknames of the configuration items. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.	
	<b>Records</b>	Displays the records held by the configuration items. It displays "O" (observed record), "E" (expected record), or "C" (catalog).	
<b>Files tab</b> (Displays a list of the files held by the configuration item for which the details are being displayed.)	<b>File Name</b>	Displays the names of the files. The list can be sorted by file names by clicking the <b>File Name</b> column header.	
	<b>Nickname</b>	Displays the nicknames of the files. The list can be sorted by nicknames by clicking the <b>Nickname</b> column header.	
	<b>Annotation</b>	Displays the comments for the files. The list can be sorted by comments by clicking the <b>Annotation</b> column header.	
	<b>File Size</b>	Displays the size of each file. The list can be sorted by file size by clicking the <b>File Size</b> column header.	
	<b>Last Updated</b>	Displays the date and time when the file was last updated. The list can be sorted by last update date/time by clicking the <b>Last Updated</b> column header.	
	<b>File ID</b>	Displays the IDs of the files. The list can be sorted by file IDs by clicking the <b>File ID</b> column header.	
	<b>Version</b>	Displays the version names of the files. The list can be sorted by version names by clicking the <b>Version</b> column header.	
	<b>Hash value</b>	Displays the hash values for the files. The list can be sorted by hash values by clicking the <b>Hash value</b> column header.	
<b>Close button</b>		Closes the window.	

## Note

### The value for the "ID" attribute

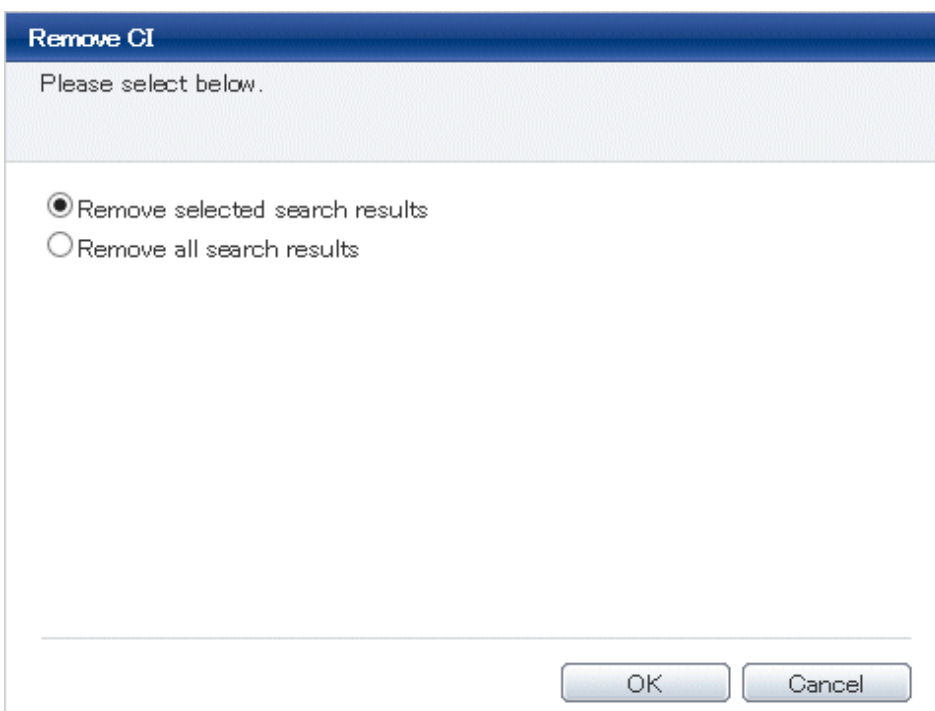
Do not change the value for the "ID" attribute. If the value for the "ID" attribute is changed and then an update operation is performed, a new configuration item will be registered with the new value, and the target configuration item will not be updated.

## 13.2.3.2 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.



**Remove CI**

Please select below.

Remove selected search results

Remove all search results

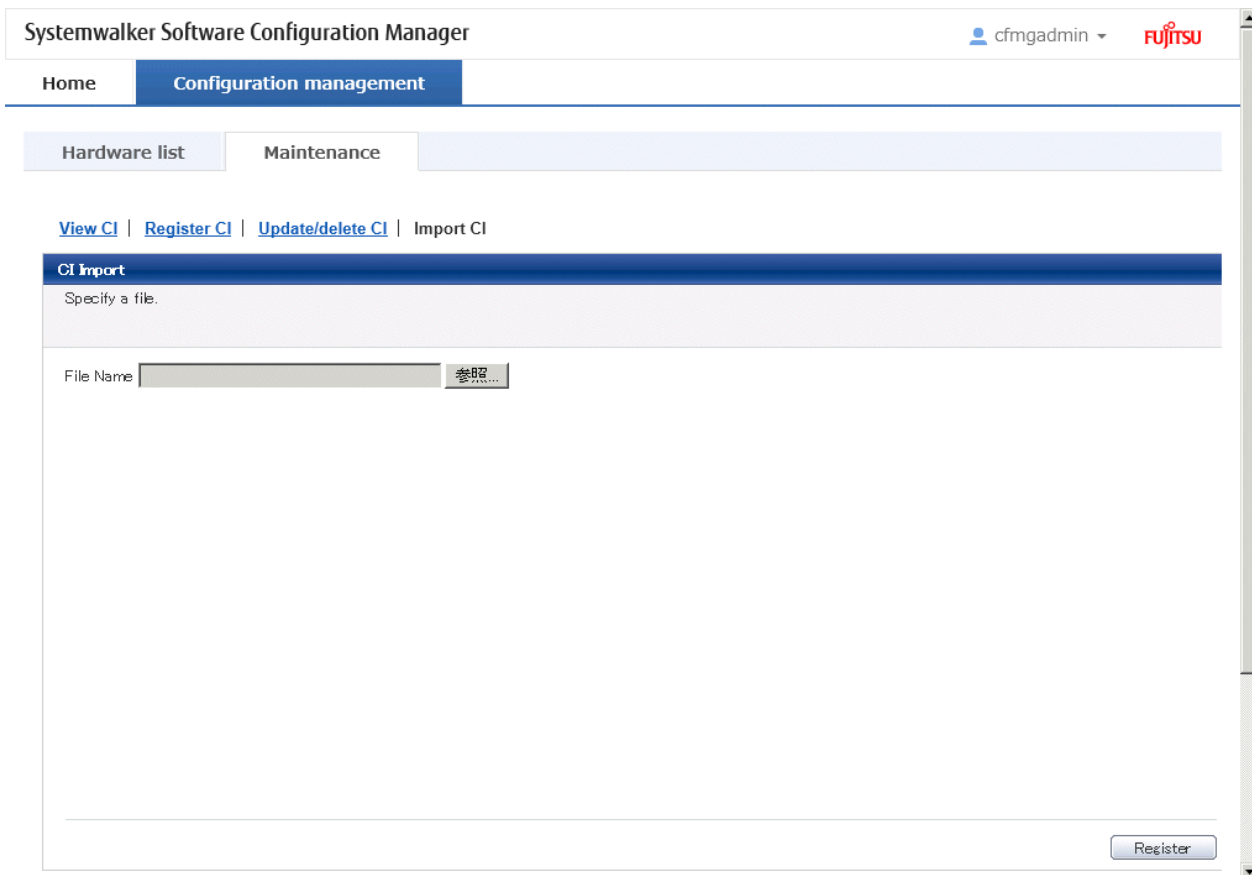
OK Cancel

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**.

## 13.2.4 Importing Configuration Items

### Display method

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



### Operation method

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

# Appendix A Port Number List

After being installed, Systemwalker Software Configuration Manager uses the communication paths described in this appendix.

Port numbers must be unique within the network. If any of the port numbers listed in the "[A.1 Port Number List](#)" are already being used, the following action is required:

- Port numbers where the "Changeable?" column is "Yes".

Change the port number by following the "[A.2 Procedure for Changing Ports](#)".

- Port numbers where the "Changeable?" column is "No".

Change the port number for the software that is currently using the port.

Check the usage status of port numbers by executing the following command:

[Windows]

```
netstat -an
```

[Linux]

```
netstat -an
```

## A.1 Port Number List

### Admin server

Port numbers for which communications from external servers must be allowed

Function	Port number/protocol	Changeable
Web server	31500/tcp (*1)	Only during installation
	80/tcp	
	31600/tcp	Yes
For the SSO authentication server	3169/tcp	No
	3170/tcp	
File transfer infrastructure	9664/tcp (*1)	Yes
	9764/tcp (*2)	
For the CMDB	18443/tcp 18444/tcp	No
For the Interstage Management Console	12000/tcp	Yes
HTTP listener for operation management	12001/tcp	Yes

\*1: Required when the patch application function or the software parameter settings function is used.

\*2: Required when the discovery function is used.

### Port numbers used internally

Function	Port number/protocol	Changeable
For the CMDB	13300/tcp 13301/tcp 13321/tcp 13322/tcp	No

Function	Port number/protocol	Changeable
	13323/tcp 13324/tcp 13325/tcp 13326/tcp 13327/tcp 13328/tcp 13331/tcp 13332/tcp 13333/tcp	
Servlet Container	One unused port number after 9000/tcp is used.	No
Database	9658/tcp	Only during setup
Communication infrastructure	18005/tcp 18009/tcp	No
Web server for internal linkage	31501/tcp 31502/tcp	Only during setup
syslog	514/udp (*1)	Yes
CORBA service	8002/tcp	Yes
HTTP listener	28080/tcp	Yes
IIOp	23600/tcp	Yes
IIOp_SSL	23601/tcp	Yes
IIOp_MUTUALAUTH	23602/tcp	Yes
JMX_ADMIN	8686/tcp	Yes
Message broker	7676/tcp	Only during setup
Process management	9657/tcp	Only during setup
For the server function	23700/tcp	Only during setup
Schedule	9690/tcp 9691/tcp	Yes
JMX service	12200/tcp 12210/tcp	Yes

\*1: Only used by Linux.

## A.2 Procedure for Changing Ports

This section explains the procedure for changing ports.

### A.2.1 When the Port Number for the File Transfer Infrastructure is Duplicated

The file transfer infrastructure uses port number 9664 and 9764. If port number duplication occurs, this port number must be changed. Change the port number for the target server and for all the servers linking to that server.

Changing the content registered in the "services" file

[Windows]

Change the following port number in the "<Windows system installation directory>\SYSTEM32\DRIVERS\ETC\SERVICES" file to a free port number:

dtranh02	9664/tcp	#FJSV1nkbs
----------	----------	------------



```
dtranh03 9764/tcp #FJSVlnkcf
```

**[Linux]**

Change the following port number in the "/etc/services" file to a free port number:

```
dtranh02 9664/tcp #FJSVlnkbs
```

```
dtranh03 9764/tcp #FJSVlnkcf
```

### Changing the network definition

For the port number specified in the network definition file for the file transfer infrastructure, specify the same value as the port number set above.

1. Change the port number in the following network definition file:

**[Windows]**

- Admin server

```
%LNKBS_HOME%\lnk02\gen\network_def.txt
```

```
%LNKCF_HOME%\lnk03\gen\network_def.txt
```

\* The installation folder for the file transfer infrastructure is set to the "%LNKBS\_HOME%" and "%LNKCF\_HOME%" environment variable.

**[Linux]**

- Admin server

```
/opt/FJSVlnkbs/lnk02/GEN/network_def.txt
```

```
/opt/FJSVlnkcf/lnk03/GEN/network_def.txt
```

2. After changing the network definition file, execute the following command to update the definition information:

**[Windows]**

- Admin server

```
%LNKBS_HOME%\lnk02\bin\f3jtlxgentrn.exe -i 02 %LNKBS_HOME%\lnk02\gen\network_def.txt
```

```
%LNKCF_HOME%\lnk03\bin\f3jtlxgentrn.exe -i 03 %LNKCF_HOME%\lnk03\gen\network_def.txt
```

**[Linux]**

- Admin server

```
/opt/FJSVlnkbs/lnk02/bin/f3jtlxgentrn -i 02 /opt/FJSVlnkcf/lnk02/GEN/network_def.txt
```

```
/opt/FJSVlnkcf/lnk03/bin/f3jtlxgentrn -i 03 /opt/FJSVlnkcf/lnk03/GEN/network_def.txt
```

3. Restart the file transfer infrastructure.

**[Windows]**

- Admin server

Restart the "Systemwalker File Transfer Library Control" service.

Restart the "Systemwalker File Transfer Library Control (SWCFMG)" service.

**[Linux]**

- Admin server

Execute the following commands:

```
# service FJSVlnkbs stop
# service FJSVlnkbs start
```

```
# service FJSVlnkcf stop
# service FJSVlnkcf start
```

## A.2.2 When the Port Number for the Web Server (31600) is Changed

When changing the port number for the Web server (31600), use the following procedure.

1. Stop Systemwalker Software Configuration Manager.

Execute the following command to stop Systemwalker Software Configuration Manager:

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_stop
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_stop
```

2. Start the Interstage Management Console.

Follow the procedure below to start the Interstage Management Console:

- a. Start the Web browser.
- b. Specify the Interstage Management Console URL.

```
http://<Host name of the Admin Server>:<Port number for the Interstage Management Console>/IsAdmin/
```

Note that the default port number is "12000".

- c. Login to the Interstage Management Console.

Users must log in as an admin server user with Administrator privileges.

3. Stop the Web server (CFMG-ext).

[Click **System** >> **Services** >> **Web Server** >> **CFMG-ext**, and then open the status tab. If the Web server is not stopped, then click the **Stop** button.

4. Change the port number of the Web server (CFMG-ext).

Select the Web server name (CFMG-ext), click the environment settings tab, change the environment settings as shown below, and then click the Update button.

Settings item	Settings value
Port number	Port number after change

5. Start the Web server (CFMG-ext).

Click the **Status** tab, and then click the **Start** button to start the Web server.

6. Start the Systemwalker Software Configuration Manager Admin Server:

Execute the following command to start Systemwalker Software Configuration Manager:

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_start
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_start
```

## A.2.3 When the Port Number for syslog is Changed [Linux]

---

If the port number for syslog has been changed, modify the following files:

File names

- manager\_base\_log4j.xml
- manager\_discovery\_fjmw\_log4j.xml
- manager\_discovery\_log4j.xml
- manager\_discovery\_wsus\_log4j.xml
- manager\_discovery\_yum\_log4j.xml
- manager\_log4j.xml

File location

```
/etc/opt/FJSVcfmgm/config
```

How to modify the files

Add the port number to "SyslogHost" under SyslogAppender(appender name="cfmgevent"). Add the port number after the colon (":").

```
localhost:<Port number>
```

Example: Changing the port number to "415"

```
<appender name="cfmgevent" class="org.apache.log4j.net.SyslogAppender">  
<param name="SyslogHost" value="localhost:415" />  
... (omitted) ...  
</appender>
```

After the files have been modified, there is no need to restart Systemwalker Software Configuration Manager.

## A.2.4 Procedure for Changing Other Port Numbers

---

### Changing the Interstage Management Console port number

Use the Interstage Management Console to change the Interstage Management Console port number (refer to the Help for the Interstage Management Console for details).

### Changing the port number for the HTTP listener for operation management

Use the set subcommand of the asadmin command to change the port number for the HTTP listener for operation management (refer to the "System Design Guide" for Interstage Application Server for details).

### Changing the HTTP listener port number

Use the set subcommand of the asadmin command to change the HTTP listener port number (refer to the "System Design Guide" for Interstage Application Server for details).

### Changing the IIOP port number

Use the set subcommand of the asadmin command to change the IIOP port number (refer to the "System Design Guide" for Interstage Application Server for details).

## Changing the IOP\_SSL port number

Use the set subcommand of the asadmin command to change the IOP\_SSL port number (refer to the "System Design Guide" for Interstage Application Server for details).

## Changing the IOP\_MUTUALAUTH port number

Use the set subcommand of the asadmin command to change the IOP\_MUTUALAUTH port number (refer to the "System Design Guide" for Interstage Application Server for details).

## Changing the JMX\_ADMIN port number

Use the set subcommand of the asadmin command to change the JMX\_ADMIN port number (refer to the "System Design Guide" for Interstage Application Server for details).

## Changing the schedule port numbers

Follow the steps below to change the port numbers used by Systemwalker Runbook Automation via a schedule.

1. Stop Systemwalker Runbook Automation.

```
%SWRBA_HOME%\bin\swrba_stop
```

2. Specify unused port numbers to the services.

### [Windows]

Change the following port numbers in the <Windows directory>\System32\drivers\etc\services file to free port numbers.

### [Linux]

Change the following port numbers described in the "/etc/services" to free port numbers.

```
jobsch_winn (*1)    9690/tcp    #SWRBA Jobsch subsystem
mjsnetn (*1)      9691/tcp    #SWRBA Mpmjes subsystem
```

\*1: *n* is the subsystem number (the default is 9) used by Systemwalker Runbook Automation.

3. Start Systemwalker Runbook Automation:

```
%SWRBA_HOME%\bin\swrba_start
```

## Changing the JMX service port numbers

Modify the following environment definition file to change the JMX service port numbers (refer to the "System Design Guide" for Interstage Application Server for details).

### [Windows]

```
%IS_HOME%\jmx\etc\isjmx.xml
```

### [Linux]

```
/etc/opt/FJSVisjmx/isjmx.xml
```

# Appendix B Installing Operation Management Products on Admin Server

This appendix describes the installation procedure and notes to consider when the product below is installed on the Systemwalker Software Configuration Manager Admin Server:

- Systemwalker Centric Manager
- Systemwalker Runbook Automation

## B.1 Installing Systemwalker Centric Manager

Systemwalker Runbook Automation built into Systemwalker Software Configuration Manager shares some functions of Systemwalker Centric Manager. Care is therefore required when you install Systemwalker Centric Manager to the same admin server. This section describes how to install Systemwalker Centric Manager to Systemwalker Software Configuration Manager.

Refer to the Systemwalker Centric Manager manuals for details on the environment setup procedure, commands, and so on.

### These notes apply to the Systemwalker Centric Manager Operation Management Server.

If Systemwalker Software Configuration Manager and Systemwalker Centric Manager are installed on the same system, they can only be used with the same operating system.

Note also that the following versions of Systemwalker Centric Manager cannot be installed on the same computer as a Systemwalker Software Configuration Manager Admin Server:

- Windows version Systemwalker CentricMGR before V10.0L21
- Windows version Systemwalker/CentricMGR V5.0Lxx
- Do the tuning of system parameter when Systemwalker Centric Manager and Systemwalker Software Configuration Manager are installed in the same server. If the tuning is not done the installer will fail.
- Please refer to "[5.2.2.3 Tuning System Parameters \[Linux\]](#)" for the setting of system parameter of Systemwalker Software Configuration Manager. Please refer to "*Systemwalker Centric Manager User's Guide - Running Interstage, Symfoware and ObjectDirector*" for the setting of system parameter of Systemwalker Centric Manager.

### B.1.1 When a Systemwalker Centric Manager Operation Management Server is installed on a computer where a Systemwalker Software Configuration Manager Admin Server has already been installed

Follow the steps below to install a Systemwalker Centric Manager Operation Management Server:

#### Stop Systemwalker Software Configuration Manager and install Systemwalker Centric Manager

1. If the Systemwalker Software Configuration Manager Admin Server, then stop it.

Refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)" for details.

Enable auto-start of service.

[Windows]

Using the Windows(R) Services function, change **Startup type** for the following services from **Manual** to **Automatic**.

- Systemwalker MpAosfB
- Systemwalker MpAosfP
- Systemwalker MpAosfX

2. Stop Interstage.

Method 1: Via the Interstage Management Console.

Method 2: Via the command line:

```
isstop -f
```

3. Install a Systemwalker Centric Manager Operation Management Server.  
Refer to the *Systemwalker Centric Manager Installation Guide* for details.
4. Restart the computer.
5. Perform steps 1 and 2 again.

## Create an environment and start Systemwalker Centric Manager

Create an environment for Systemwalker Centric Manager.

[Windows]



Environments in which a Systemwalker Software Configuration Manager Admin Server has been installed already have an ObjectDirector environment, so there is no need to recreate it. Refer to the *Systemwalker Centric Manager User's Guide - Running Interstage, Symfoware and ObjectDirector* for details (provided from Systemwalker CentricMGR V10.0L20 and later).

1. Start the Operation Environment Maintenance Wizard.
2. Select "Create Operation Environment" to create a Systemwalker Centric Manager environment.  
(Click **No** when prompted to confirm whether to rebuild the environment)
3. Start the Systemwalker Centric Manager service:

```
C:\><Systemwalker Centric Manager installation directory>\MPWALKER.DM\bin\scentricmgr
```

[Linux]

1. Set up Systemwalker Centric Manager:  

```
# /opt/systemwalker/bin/MpFwSetup -mix
```

  - In the setup menu, enter "1" to create a Systemwalker Centric Manager environment.
  - In the Connection environment check result window, enter "2" to continue processing without recreating the Systemwalker Centric Manager environment.
  - In the setup menu, enter "3" to start each daemon for Systemwalker Centric Manager.

## Start Interstage and Systemwalker Software Configuration Manager

1. If using Windows Admin server, start Interstage HTTP Service by `ihstart` command.  
If using Linux Admin server, you do not execute this procedure.

```
ihstart -all
```

2. Start Interstage.

Method 1: Via the Interstage Management Console.

Method 2: Via the command line:

```
isstop -f
```

3. Start the Systemwalker Software Configuration Manager Admin Server:

Refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)" for details.

## B.1.2 When a Systemwalker Software Configuration Manager Admin Server is installed on a computer where a Systemwalker Centric Manager Operation Management Server has already been installed

---

Follow the steps below to install a Systemwalker Software Configuration Manager Admin Server.

### Stop Systemwalker Centric Manager and delete its environment

#### [Windows]

1. Stop all Systemwalker Centric Manager functions:

```
<Systemwalker Centric Manager installation directory>\MPWALKER.DM\bin\pcentricmgr
```

2. Start the Operation Environment Maintenance Wizard.
3. Select Backup Operation environment to back up the Systemwalker Centric Manager environment.
4. Select Delete Operation environment to delete the Systemwalker Centric Manager environment.

#### [Linux]

1. Stop all Systemwalker Centric Manager functions:

```
# /opt/systemwalker/bin/pcentricmgr
```

2. Back up Systemwalker Centric Manager.  
Refer to the Systemwalker Centric Manager manuals for details.
3. Delete the Systemwalker Centric Manager environment:

```
# /opt/systemwalker/bin/MpFwSetup
```

In the setup menu, enter "2".

### Uninstall the packages

#### [Windows]

1. Uninstall the ObjectDirector that was installed alongside Systemwalker Centric Manager.
2. Open the **Services** dialog box from **Administrative Tools** under the **Control Panel** and stop the "OD\_start" service.
3. Open the **Add or Remove Programs** (or **Programs and Features**, if you use Windows Server 2008 or later), dialog box from the **Control Panel**, and uninstall ObjectDirector Server.
4. Restart the computer.
5. Stop all Systemwalker Centric Manager functions:

```
<Systemwalker Centric Manager installation directory>\MPWALKER.DM\bin\pcentricmgr
```

#### [Linux]

1. Stop ObjectDirector that was installed alongside Systemwalker Centric Manager:

```
/opt/FJSVod/bin/OD_stop
```

2. Uninstall the FJSVod, FJSVslcr and FJSVsmee packages:

```
rpm -e FJSVod FJSVslcr FJSVsmee
```

## Install SystemwalkerSoftware Configuration Manager and stop Interstage

1. Install a SystemwalkerSoftware Configuration Manager Admin Server.
2. Refer to "5.2 Installing on the Admin Server" for details.
3. Restart the computer.
4. Stop Interstage.

Method 1: Via the Interstage Management Console.

Method 2: Via the command line:

```
isstop -f
```

5. Enable automatic startup for the service.

### [Windows]

Using the Windows(R) Services function, change **Startup Type** for the following services from **Manual** to **Automatic**.

- Systemwalker MpAosfP
- Systemwalker MpAosfX

## Restore the environment and start Systemwalker Centric Manager

Restore the environment and start Systemwalker Centric Manager

### [Windows]



Environments in which a SystemwalkerSoftware Configuration Manager Admin Server has been installed already have an ObjectDirector environment, so there is no need to recreate it. Refer to the *Systemwalker Centric Manager User's Guide - Running Interstage, Symfoware and ObjectDirector* for details (provided from Systemwalker CentricMGR V10.0L20 and later).

1. Start the Operation Environment Maintenance Wizard.
2. Restore the Systemwalker Centric Manager environment. Select **Restore operation environment**.  
(In the window that prompts for confirmation to rebuild the environment, click **No**.)
3. Start the Systemwalker Centric Manager service:

```
<Systemwalker Centric Manager installation directory>\MPWALKER.DM\bin\scentricmgr
```

### [Linux]

1. Create an environment for Systemwalker Centric Manager (for restoration):

```
/opt/systemwalker/bin/MpFwSetup -mix
```

- In the setup menu, enter "5" to display the maintenance menu.
- In the maintenance menu, enter "2" to create an environment.
- In the connection environment check result window, enter "2" to continue without recreating the environment.



2. Restore Systemwalker Centric Manager.

Refer to the Systemwalker Centric Manager manuals for details.

3. Start the Systemwalker Centric Manager service:

```
/opt/systemwalker/bin/scentricmgr
```

## Start Interstage and set up Systemwalker Software Configuration Manager

1. If using Windows Admin server, start Interstage HTTP Service by ihsstart command.

If using Linux Admin server, you do not execute this procedure.

```
ihsstart -all
```

2. Start Interstage.

Method 1: Via the Interstage Management Console.

Method 2: Via the command line:

```
isstart
```

3. Set up Systemwalker Software Configuration Manager.

Refer to "6.1 [Setting up the Admin Server](#)" for details.

## B.1.3 Installing a Systemwalker Centric Manager Section Management Server or Business Server on an Admin Server where Systemwalker Software Configuration Manager is Installed

---

Follow the steps below to install a Systemwalker Centric Manager section management server or business server.

1. Stop Systemwalker Software Configuration Manager.

Refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)" for details.

2. Enable automatic startup for the services.

**[Windows]**

Using the Windows(R) Services function, change **Startup Type** for the following services from **Manual** to **Automatic**.

- Systemwalker MpAosfB
- Systemwalker MpAosfP
- Systemwalker MpAosfX

3. Install the Systemwalker Centric Manager section management server or business server.

Refer to *Systemwalker Centric Manager Installation Guide* for details.

4. Restart the operating system.

## B.1.4 Installing Systemwalker Software Configuration Manager on a Server where a Systemwalker Centric Manager Section Management Server or Business Server is Installed

---

Follow the steps below to install Systemwalker Software Configuration Manager.

1. Stop all Systemwalker Centric Manager function:

**[Windows]**

```
<Systemwalker Centric Manager installation directory>\MPWALKER.DM\bin\pcentricmgr
```

**[Linux]**

```
/opt/systemwalker/bin/pcentricmgr
```

2. Install Systemwalker Software Configuration Manager.

Refer to "5.2 Installing on the Admin Server" for details.

It is not necessary to restart the operating system immediately after installing Systemwalker Software Configuration Manager. The operating system will be restarted in a later step.

3. Enable automatic startup for the services.

**[Windows]**

Using the Windows(R) Services function, change **Startup Type** for the following services from **Manual** to **Automatic**.

- Systemwalker MpAosfB
- Systemwalker MpAosfP
- Systemwalker MpAosfX

4. Restart the operating system.
5. Set up Systemwalker Software Configuration Manager.

Refer to "6.1 Setting up the Admin Server" for details.

## B.2 Installing Systemwalker Runbook Automation

---

Because part of Systemwalker Runbook Automation is included in Systemwalker Software Configuration Manager, caution is needed when operating the latter on the same admin server as the former.

This section explains how to install, and provides notes for cases in which the following software and Systemwalker Software Configuration Manager are operated on the same admin server:

- Systemwalker Runbook Automation V15.1.3



**Note**

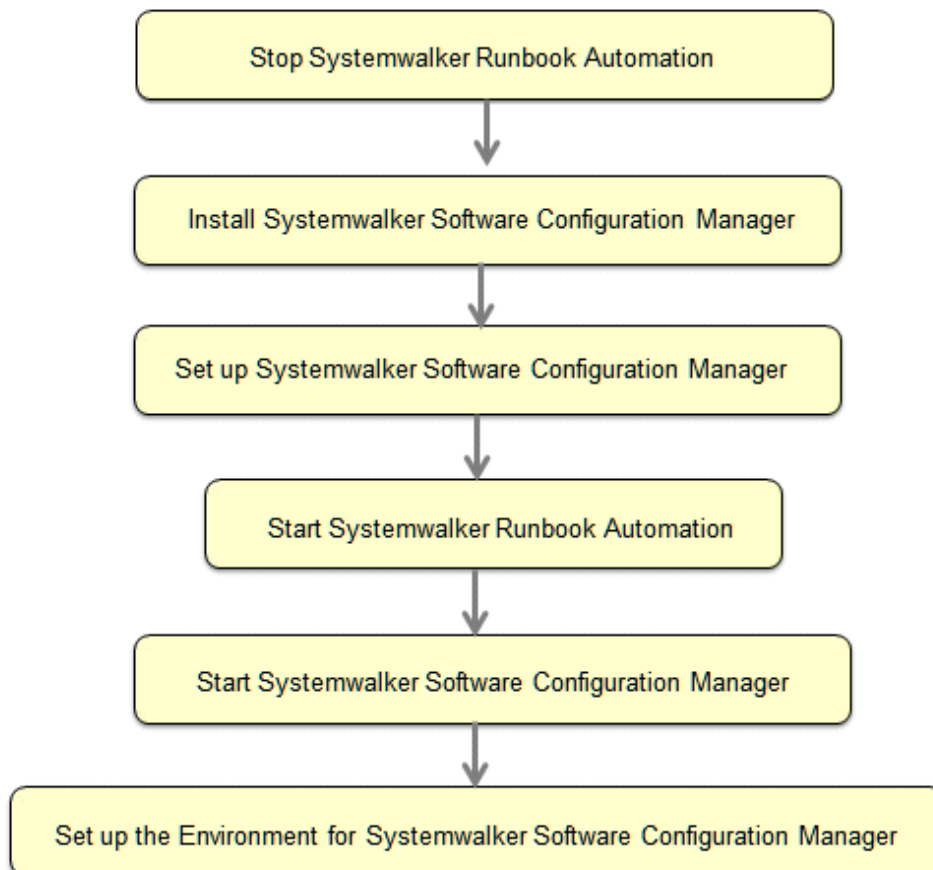
Be sure to back up Systemwalker Runbook Automation before performing this procedure, in case an error occurs during installation of Systemwalker Software Configuration Manager.

**Order of installation**

The procedure below explains how to install Systemwalker Software Configuration Manager on the admin server on which Systemwalker Runbook Automation is installed.

**Installation procedure for Systemwalker Software Configuration Manager**

The procedure for installing Systemwalker Software Configuration Manager is as follows:



### Note

- This procedure can only be used when using ServerView Operations Manager single sign-on as the authentication infrastructure. Systemwalker Software Configuration Manager cannot be installed if using another authentication platform.
- Do not perform operations such as deletion on automated operation process groups (cfmgApplication) created in Systemwalker Software Configuration Manager. This will cause Systemwalker Software Configuration Manager to stop working.
- Once you have started the installation, do not operate any other products installed in the same environment until installation of Systemwalker Software Configuration Manager is completed.

## B.2.1 Stopping Systemwalker Runbook Automation

---

Stop Systemwalker Runbook Automation before starting installation of Systemwalker Software Configuration Manager - refer to "Starting and Stopping" in the *Systemwalker Runbook Automation Installation Guide* for details.

## B.2.2 Installing Systemwalker Software Configuration Manager

---

Install Systemwalker Software Configuration Manager as a user with administrator privileges - refer to "[5.2 Installing on the Admin Server](#)" for details.

## B.2.3 Setting up Systemwalker Software Configuration Manager

---

Set up Systemwalker Software Configuration Manager as a user with administrator privileges - refer to "[6.1 Setting up the Admin Server](#)" for details.

## **B.2.4 Starting Systemwalker Runbook Automation**

---

Start Systemwalker Runbook Automation - refer to "Starting and Stopping" in the *Systemwalker Runbook Automation Installation Guide* for details.

## **B.2.5 Starting Systemwalker Software Configuration Manager**

---

Start Systemwalker Software Configuration Manager.

Refer to "[Chapter 10 Starting and Stopping Systemwalker Software Configuration Manager](#)" for details.

## **B.2.6 Setting up the Environment for Systemwalker Software Configuration Manager**

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Set up the environment for operating Systemwalker Software Configuration Manager

For details, refer to "[6.2 Registering an Infrastructure Administrator](#)", "[6.4 Executing the Initial Discovery](#)", "[6.3 Registering Hardware Information](#)", and "[6.5 Registering Discovery Schedules](#)".

## Appendix C Creating Test Site Certificates

The test site certificate can only be used for testing before the site certificate issued by the CA is used. Examples of how to create the test site certificate are shown below:



The test site certificate can only be used in a test environment.  
Do not use the test site certificate in actual operations.

The command execution examples shown below use the following values:

```
- Test site certificate nickname: testCert
- First and last name: ssoserver.example.com
- Name of organizational unit: FUJITSU TOKYO
- Name of organization: FUJITSU
- Name of City or Locality: Shinjuku
- Name of State or Province: Tokyo
- Two-letter country code for this unit:jp
```

The password that was entered will not be displayed. The password will be registered the first time it is entered. To create the certificate using the information displayed for the confirmation of the password that was entered, enter "yes". To enter a different password, enter "no".  
[Windows]

```
scsmakeenv -n testCert
New Password:
Retype:

Input X.500 distinguished names.
What is your first and last name?
  [Unknown]: ssoserver.example.com
What is the name of your organizational unit?
  [Unknown]: FUJITSU TOKYO
What is the name of your organization?
  [Unknown]: FUJITSU
What is the name of your City or Locality?
  [Unknown]: Shinjuku
What is the name of your State or Province?
  [Unknown]: Tokyo
What is the two-letter country code for this unit?
  [Un]: jp

Is <CN=ssoserver.fujitsu.com, OU=FUJITSU TOKYO, O=FUJITSU, L=Shinjuku, ST=Tokyo,C=jp> correct?
  [no]: yes
SCS: INFO: scs0102: Self-sign certificate was issued
```

[Linux]

The Bourne shell has been used in the execution example.

```
# JAVA_HOME=/opt/FJJSVawj/bk/jdk6;export JAVA_HOME
# scsmakeenv -n testCert
New Password:
Retype:

Input X.500 distinguished names.
What is your first and last name?
  [Unknown]: ssoserver.example.com
What is the name of your organizational unit?
  [Unknown]: FUJITSU TOKYO
What is the name of your organization?
```

```
[Unknown]: FUJITSU
What is the name of your City or Locality?
[Unknown]: Shinjuku
What is the name of your State or Province?
[Unknown]: Tokyo
What is the two-letter country code for this unit?
[Un]: jp

Is <CN=ssoserver.example.com, OU=FUJITSU TOKYO, O=FUJITSU, L=Shinjuku, ST=Tokyo,C=jp> correct?
[no]: yes
UX:SCS: INFO: scs0102: Self-sign certificate was issued
UX:SCS: INFO: scs0180: The owners group of Interstage certificate environment was set
#
```

## Note

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You will be prompted to input password for Interstage certificate environment if Interstage certificate environment is already configured. In this case, input the password that was set when you configured Interstage certificate environment.

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