

# FUJITSU Software Systemwalker Software Configuration Manager

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

## Installation Guide

Windows/Linux

B1X1-0127-05ENZO(00)  
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# Preface

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## Purpose of this Document

This document explains how to install and uninstall Systemwalker Software Configuration Manager V15.2.0.

## Intended Readers

This document is intended for those who want to install or uninstall Systemwalker Software Configuration Manager.

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

- Basic knowledge of the operating system being used

## Structure of this Document

The structure of this document is as follows:

### [Chapter 1 Operation Design](#)

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

### [Chapter 2 Installation](#)

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

### [Chapter 3 Setup](#)

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

### [Chapter 4 Setup Cancellation](#)

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

### [Chapter 5 Uninstallation](#)

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

### [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	Windows Server 2012	Windows
Microsoft(R) Windows Server(R) 2012 Standard		

Official name	Abbreviation	
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)	

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# Chapter 1 Operation Design

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

## 1.1 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.

## 1.2 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:



Attribute name	Value	Remarks
		<ul style="list-style-type: none"> <li>- Dual-role administrator: administrator</li> <li>- Infrastructure administrator: infra_admin</li> <li>- Tenant administrator: tenant_admin</li> <li>- Tenant user: tenant_user</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
  - tenant\_admin
  - tenant\_user

## 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

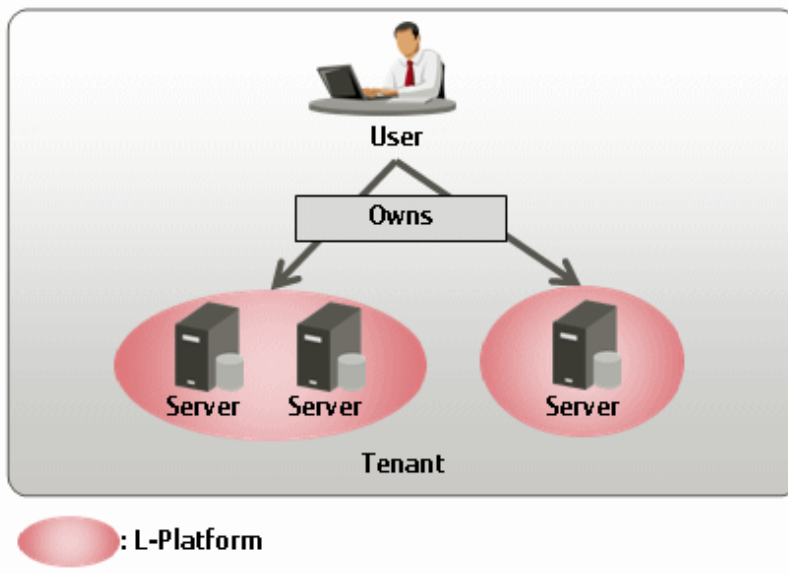
If linked to ServerView Resource Orchestrator, then use it to manage user information - refer to the following manual for details.

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

## 1.3 Designing Tenants, Users, L-Platforms and Servers

This chapter explains how to design tenants, users, L-Platforms, and servers.

Figure 1.1 Tenant/user/L-Platform/server configuration



A tenant is a unit of management for segmenting and isolating the management and operation of resources, based on an organization or business.

Tenants are comprised of the following three resources:

- Server
- L-Platform
- User (tenant administrator, tenant user)

Servers in a tenant are grouped according to the system operated by the business using the L-Platform. Users belonging to a tenant are managed collectively on the server for each L-Platform. Tenant users can manage servers within the L-Platform to which they belong. Tenant administrators can manage all servers within the tenant.

Decide on the configuration of tenants and L-platforms according to the following:

#### Points to note when deciding on the configuration of tenants

- Zero or more users (tenant users or tenant administrators) can belong to a tenant, but each user (tenant user or tenant administrator) can belong to only one tenant.
- Multiple L-Platforms can belong to a tenant, but each L-Platform can belong to only one tenant.

#### Points to note when deciding on the configuration of L-Platforms

- Multiple servers can belong to an L-Platform, but each server can belong to only one L-Platform.
- An L-Platform cannot belong to multiple tenants.
- Select one user from the tenant administrators or tenant users as the L-Platform owner. A user can own multiple L-Platforms.

### 1.3.1 Designing when Linked to ServerView Resource Orchestrator

This section explains how to design tenants, users, L-Platforms, and servers when linked to ServerView Resource Orchestrator. Also refer to *ServerView Resource Orchestrator Cloud Edition Design Guide* for information on design.

By linking to ServerView Resource Orchestrator, patches, software parameters, and software configuration information can be managed for servers that are managed by Systemwalker Software Configuration Manager.

#### L-Platform/server categories

The L-Platforms and servers of Systemwalker Software Configuration Manager are categorized into two types:

- ServerView Resource Orchestrator-managed L-Platforms and servers

This refers to L-Platforms and servers within L-Platforms that are managed by ServerView Resource Orchestrator.

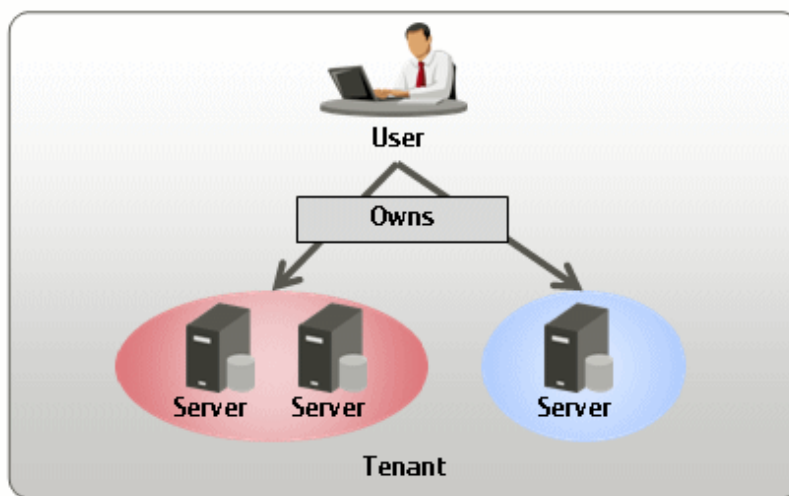
ServerView Resource Orchestrator-managed L-Platforms and servers within L-Platforms are automatically targeted for management by Systemwalker Software Configuration Manager. L-Platforms and servers within L-Platforms that are created using ServerView Resource Orchestrator before installing Systemwalker Software Configuration Manager will also become automatically targeted for management by Systemwalker Software Configuration Manager following installation.


- Non ServerView Resource Orchestrator-managed L-Platforms and servers


This refers to L-Platforms and servers within L-Platforms that are not managed by ServerView Resource Orchestrator (for example, admin servers cannot be managed by ServerView Resource Orchestrator - if these servers are to be targeted for management by Systemwalker Software Configuration Manager, they will be registered as non ServerView Resource Orchestrator-managed servers).

Non ServerView Resource Orchestrator-managed L-Platforms are used when grouping non ServerView Resource Orchestrator-managed servers.

Figure 1.2 Tenant/user/L-Platform/server configuration



 : Non ServerView Resource Orchestrator-managed L-Platform

 : ServerView Resource Orchestrator-managed L-Platform

If linked to ServerView Resource Orchestrator, it is possible for a ServerView Resource Orchestrator-managed L-Platform and non ServerView Resource Orchestrator-managed L-Platform to belong within the same tenant.

Decide on the configuration of tenants and L-platforms according to the following:

- Points to note when deciding on the configuration of L-Platforms
  - A non ServerView Resource Orchestrator-managed server cannot belong to a ServerView Resource Orchestrator-managed L-Platform.
  - A ServerView Resource Orchestrator-managed server cannot belong to a non ServerView Resource Orchestrator-managed L-Platform.

## Chapter 2 Installation

This chapter explains how to install Systemwalker Software Configuration Manager.

### 2.1 Pre-installation Notes

---

Perform the following tasks before installing this product.

#### 2.1.1 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.

#### 2.1.2 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.

#### 2.1.3 Creating Linkage Servers (Repository Servers)

---

To manage OS patches, create repository servers.

Refer to the operating system manuals for information on how to install and set up repository servers.

- Managing Windows patches
  - Windows Server Update Services (WSUS)
- Managing Linux patches
  - Yellowdog Updater Modified (yum) repository

#### 2.1.4 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).



#### Note

- 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 \$ \ " = | [ ] : \* ; + , < > ? / .

#### 2.1.5 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.

### 2.2 Installing on the Admin Server

---

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



## Note

- 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.

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

---

### 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

### Checking the required software and settings

The single sign-on environment must have been built - refer to "[2.1.4 Building a Single Sign-On Environment](#)" for details.

To collect patch management and software information on the admin server, the following software and settings are required on the admin server:

- Register the admin server with Windows Server Update Services (WSUS)  
Refer to "[3.8.1 Settings for Managing Windows Patches](#)" for details.
- Linux patch management
  - Set up the Yellowdog Updater Modified (yum) repository to be looked up  
Refer to the yum manuals for details.
- Collecting patch management and software information for Fujitsu middleware
  - Install the UpdateAdvisor (middleware)  
Refer to the UpdateAdvisor (middleware) manuals for information on the installation method.

### 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.

- redhat-lsb packages
- 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

Red Hat Enterprise Linux 6.0 or later

elfutils-libelf-0.148-1.el6.i686.rpm

\*1: Install 32-bit version of elfutils package even if Linux operating system is 64-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)
- cloog-ppl package (32-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- cpp 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)
- kernel-headers 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)
- libgomp package (32-bit version)
- libstdc++-devel package (32-bit version)
- libtool-ltdl package (32-bit version)
- libxcb package (32-bit version)
- make package (32-bit version)
- mpfr package (32-bit version)
- nss-softokn-freebl 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)



- strace package (32-bit version)
- tcsh package (32-bit version)
- unixODBC package (32-bit version)

Red Hat Enterprise Linux 6.0 or later (for Intel64)

- alsa-lib package (32-bit version)
- audit-libs package (32-bit version)
- cloog-ppl package (64-bit version)
- compat-readline5 package (32-bit version)
- compat-libtermcap package (32-bit version)
- cpp package (64-bit version)
- cracklib 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)
- 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)
- libgcc package (32-bit version)
- libgomp package (64-bit version)
- libseline 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)
- nss-softokn-freebl 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)
- tcsh package (64-bit version)
- unixODBC package (32-bit version)
- zlib package (32-bit version)

## 2.2.2 Tasks Required before Installing on the Admin Server

---

### 2.2.2.1 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\rcxmgrctlstop
```

#### [Linux]

```
/opt/FJSVrcvnr/bin/rcxmgrctl 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.

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

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

### 2.2.2.3 Tuning System Parameters [Linux]

The system parameters must be tuned.

#### 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	75	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	7998	Addition
para3	Maximum number of operators per semaphore call	50	Maximum
para4	Number of semaphore operators for the entire system	1364	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 39998 50 1492
kernel.msgmnb = 114432
kernel.msgmni = 1581
kernel.msgmax = 16384
kernel.shmmax = 2684354560
kernel.shmall = 655360
kernel.shmmni = 4171
```

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 39998 50 1492
...
kernel.msgmnb = 114432
kernel.msgmni = 1581
kernel.msgmax = 16384
kernel.shmmax = 2684354560
kernel.shmall = 655360
kernel.shmmni = 4171
. . .
(omitted)
. . .
```

## 2.2.2.4 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
```

## 2.2.3 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.

### 2.2.3.1 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.

#### 2.2.3.1.1 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

Setting value	Meaning of the setting value	Default value
Web server (Interstage HTTP Server) port number of Systemwalker Software Configuration Manager	Port number for accessing the management console of Systemwalker Software Configuration Manager	31500 (*1)
Interstage Management Console port number	Port number for accessing the Interstage management console	12000 (*2)
Web server (Interstage HTTP Server) port number of Systemwalker Runbook Automation	Port number for accessing the web console of Systemwalker Runbook Automation	80 (*2)
CORBA service port number	Port number used internally	8002 (*2)
HTTP listener port number	Port number used internally	28080 (*2)
Port number of the HTTP listener for operation management	Port number for accessing the Interstage Java EE management console	12001 (*2)
IIOp port number	Port number used internally	23600 (*2)
IIOp_SSL port number	Port number used internally	23601 (*2)
IIOp_MUTUALAUTH port number	Port number used internally	23602 (*2)
JMX_ADMIN port number	Port number used internally	8686 (*2)
Database storage directory for CMDB Manager	Database storage folder for CMDB Manager	C:\Program Files (x86)\Systemwalker\SWRBAM\CMDB (*2)
Subsystem-number	Subsystem number of Systemwalker Operation Manager	9 (*2)
Job scheduler port number of Systemwalker Runbook Automation	Port number used internally	9690 (*2)
Job execution control port number of Systemwalker Runbook Automation	Port number used internally	9691 (*2)

\*1: It is not necessary to specify the port number if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, since the web service (port number) uses the ServerView Resource Orchestrator web server service "rcxctext2" for connecting to the management console (the default is 3501).

\*2: 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.

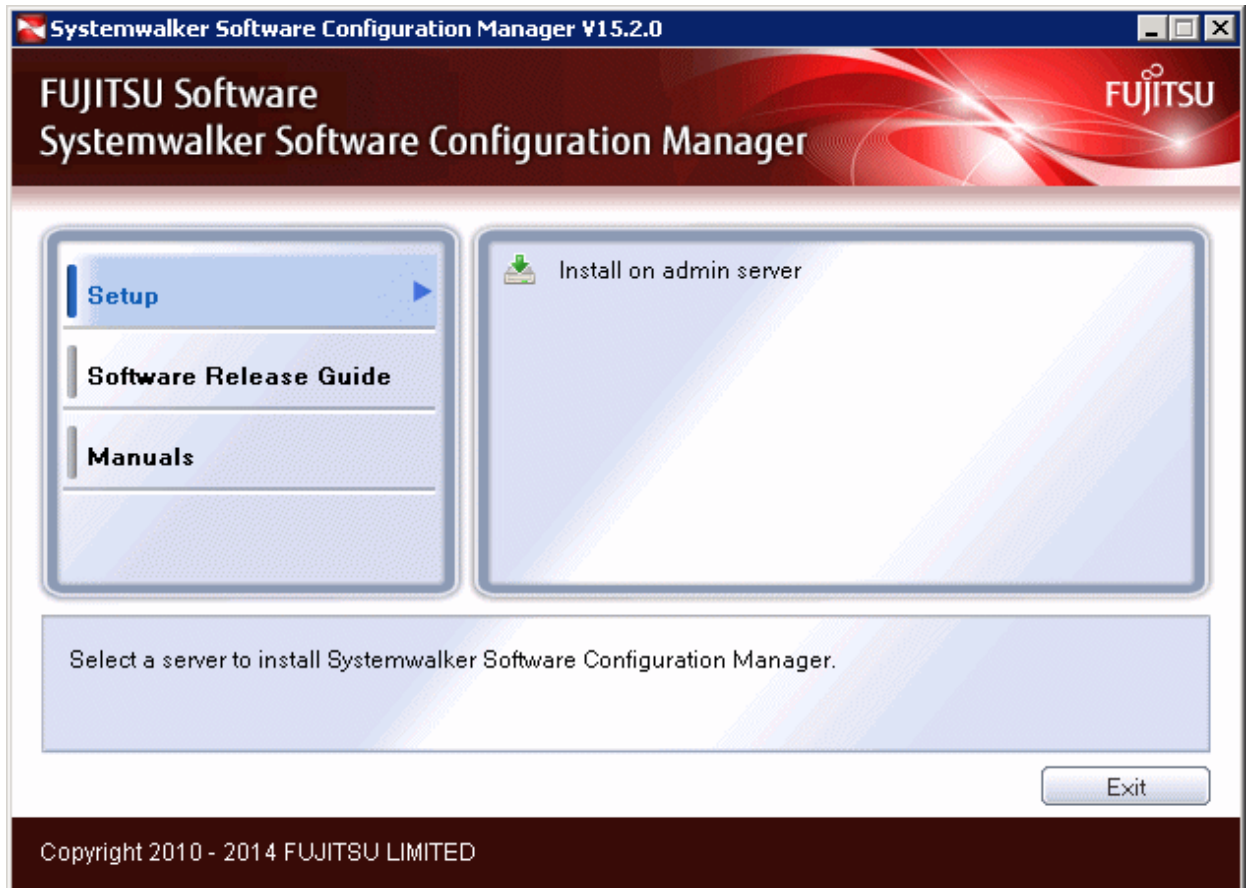
### Information

2.2.3.1.2 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 V15.2.0 DISC1 (Admin Servers Program)" in the DVD-ROM drive.

The following window will be displayed:

Select **Install on admin server**.

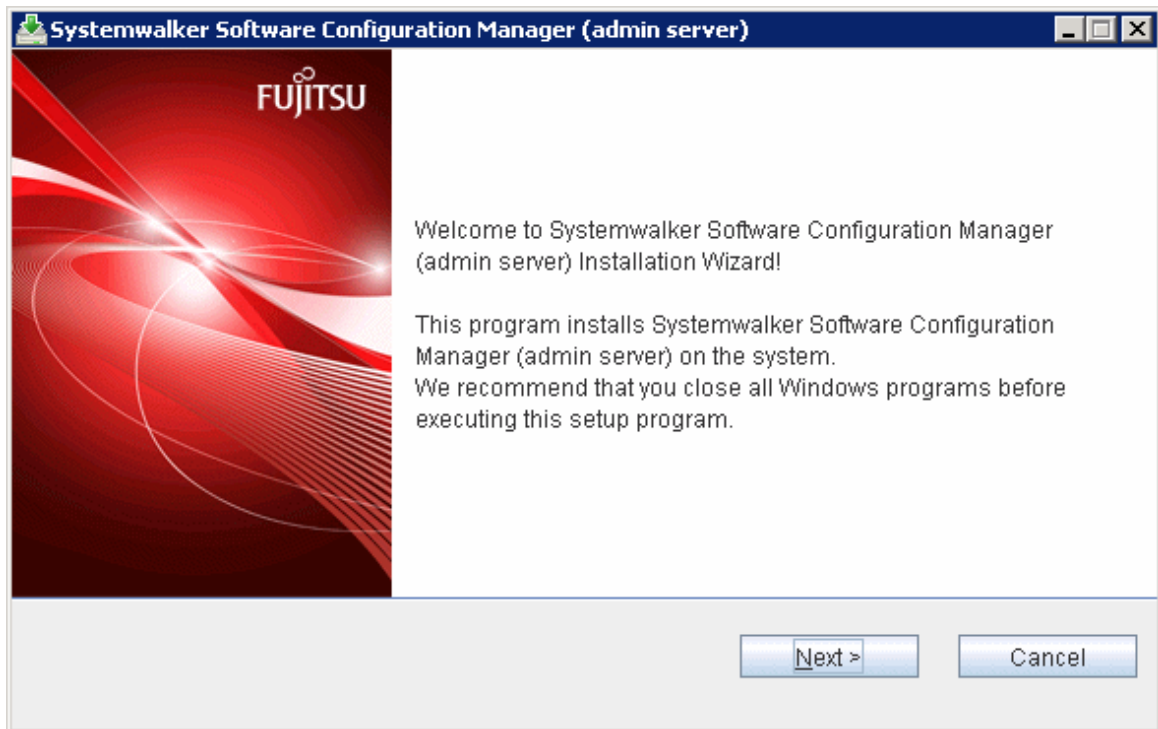


### Note

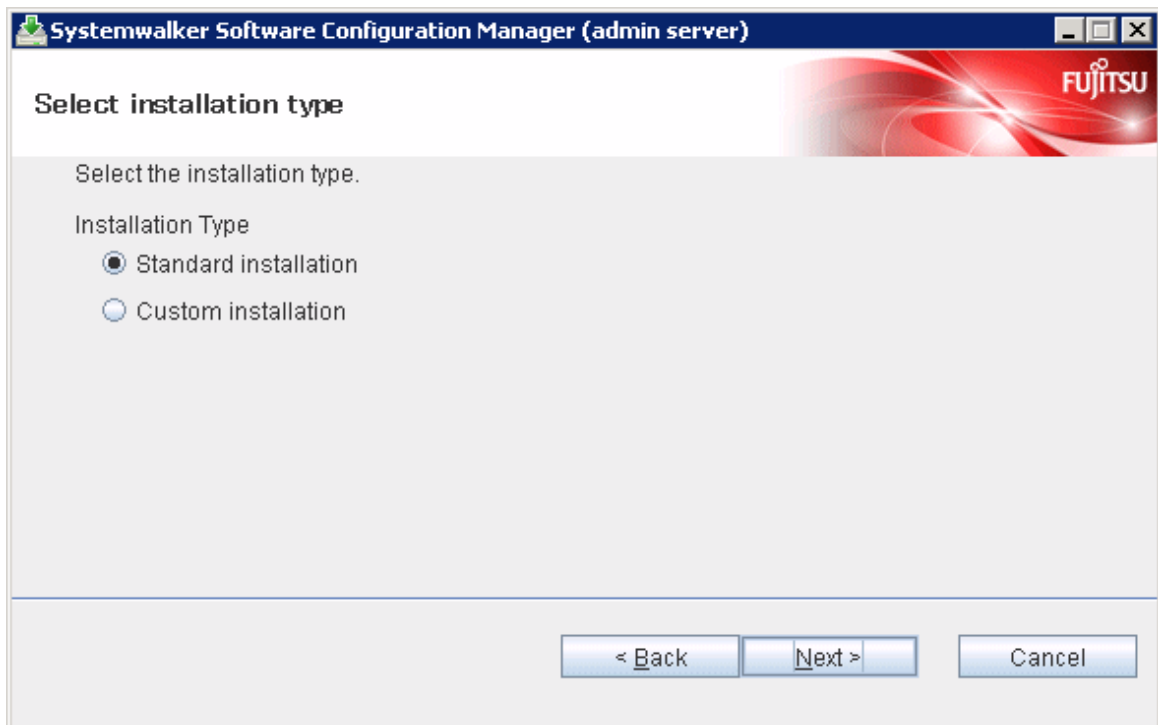
- If this window is not displayed automatically, start the installer manually by executing "swsetup.exe" on the DVD-ROM.
- When using Windows Server 2008 or later, run this command as an administrator.



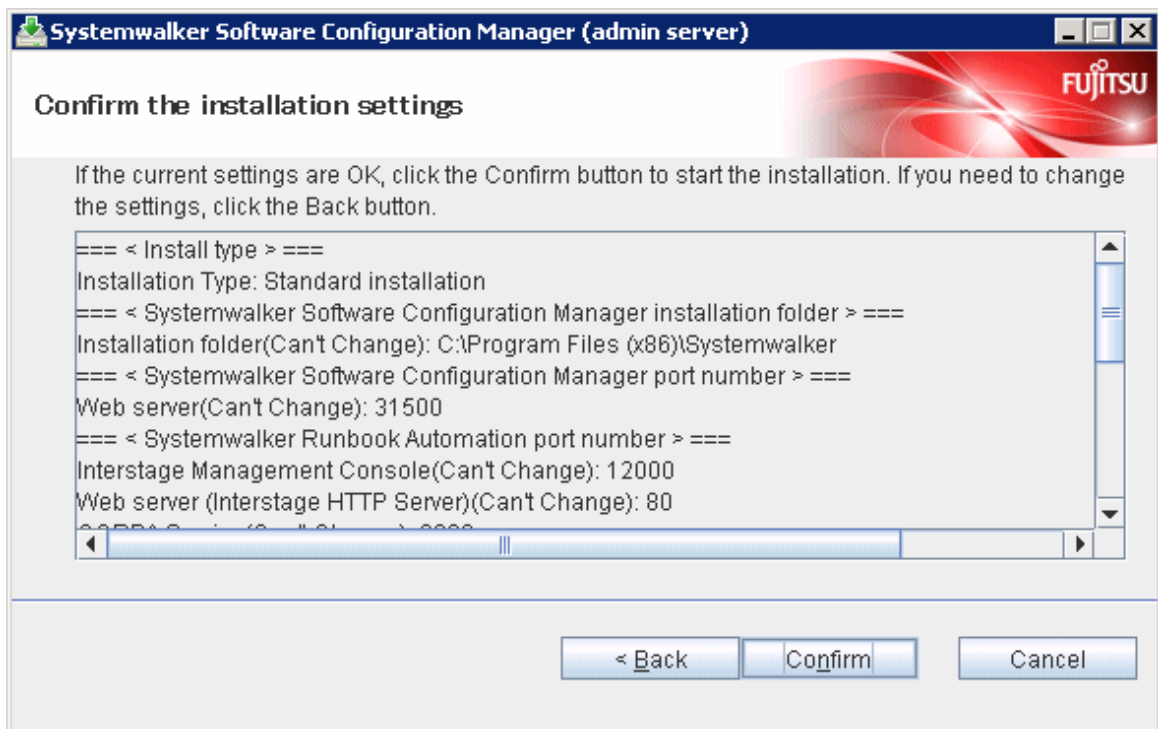
3. A welcome window will be displayed.  
Click the **Next** button.



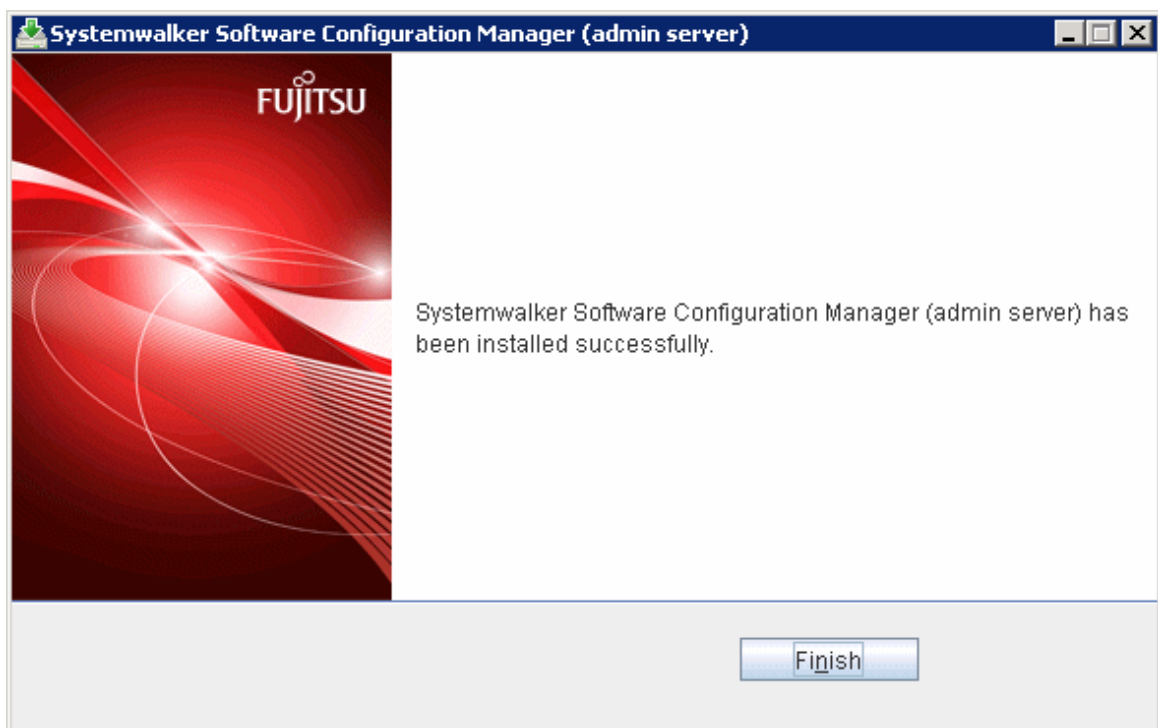
4. The **Select Installation Type** window will be displayed.  
Select **Standard Installation**, and then click the **Next** button.



5. The **Confirm the installation settings** window will be displayed.  
Check the settings, and then click the **Confirm** button to start the installation.

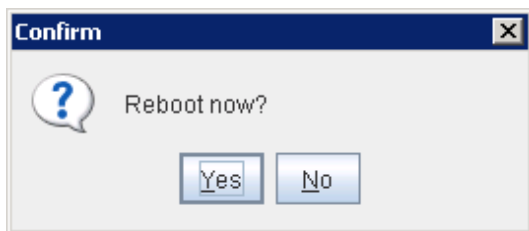


6. Upon successful completion, the following window will be displayed.  
Click the **Finish** button.



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.

## 2.2.3.1.2 Custom installation

1. Log in with Administrator privileges.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack 15.2.0 DISC1 (Admin Servers Program)" in the DVD-ROM drive.

The following window will be displayed.

Select **Install on admin server**.

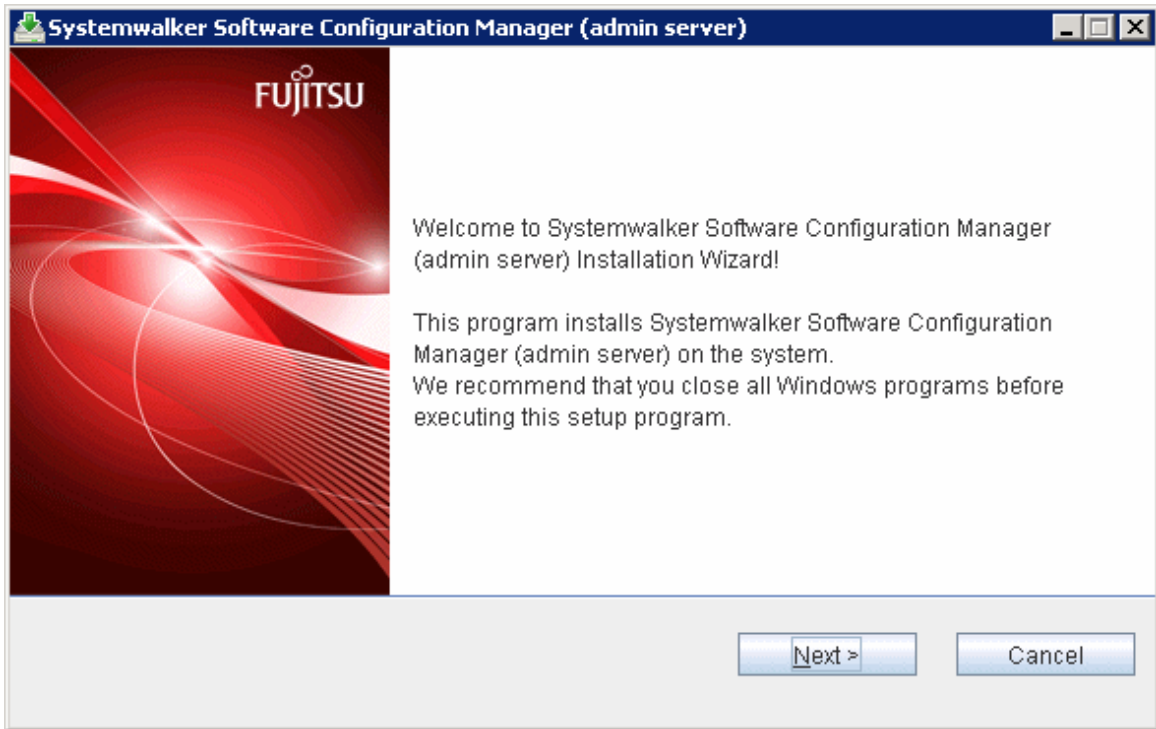


 Note

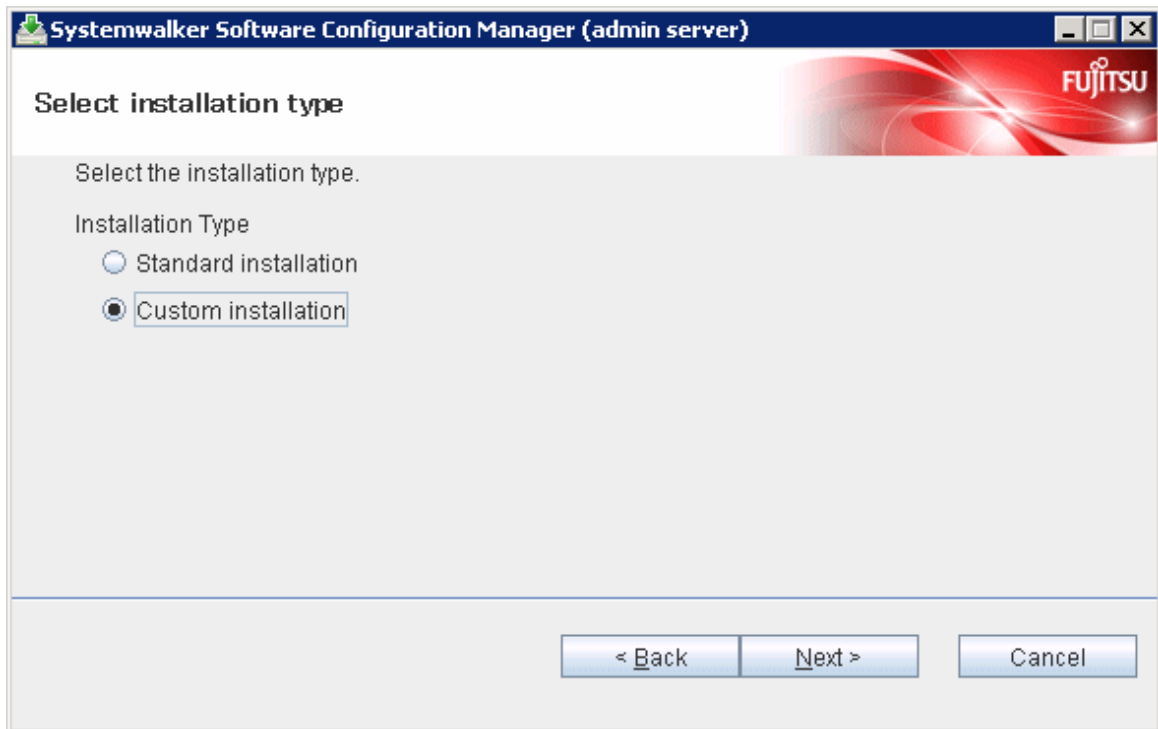
- If the window is not displayed automatically, start the installer manually by executing "swsetup.exe" on the DVD-ROM.
- When using Windows Server 2008 or later, run this command as an administrator.

3. A welcome window will be displayed.

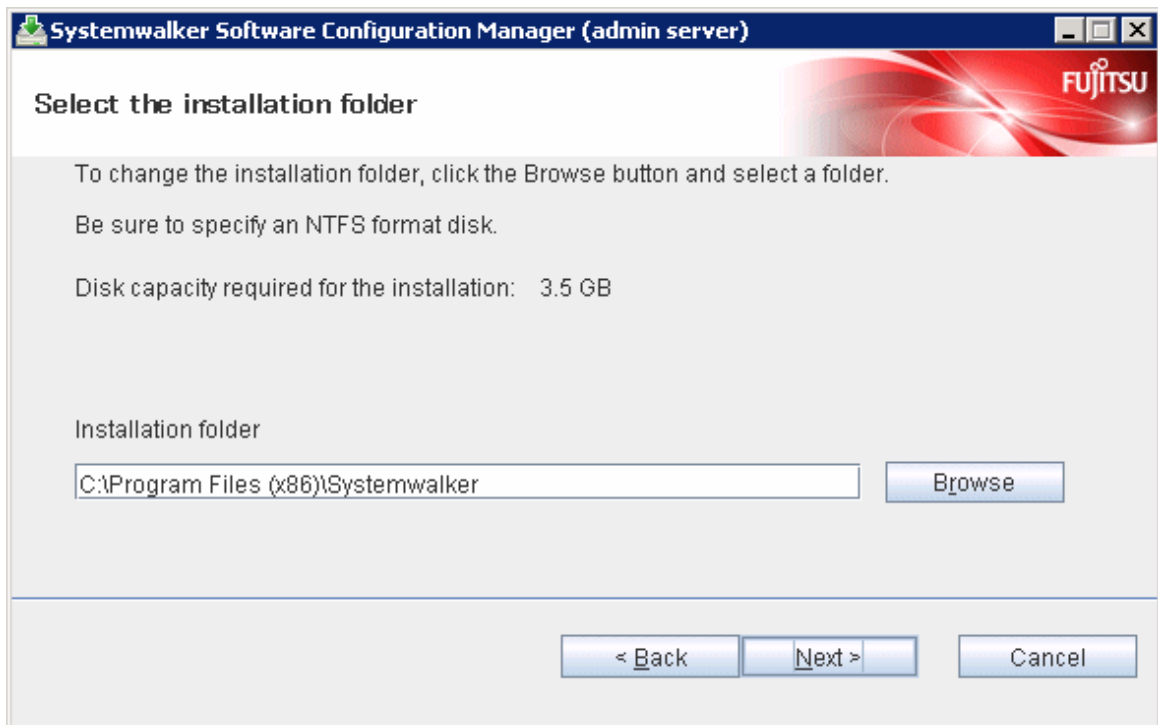
Click the **Next** button.



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.

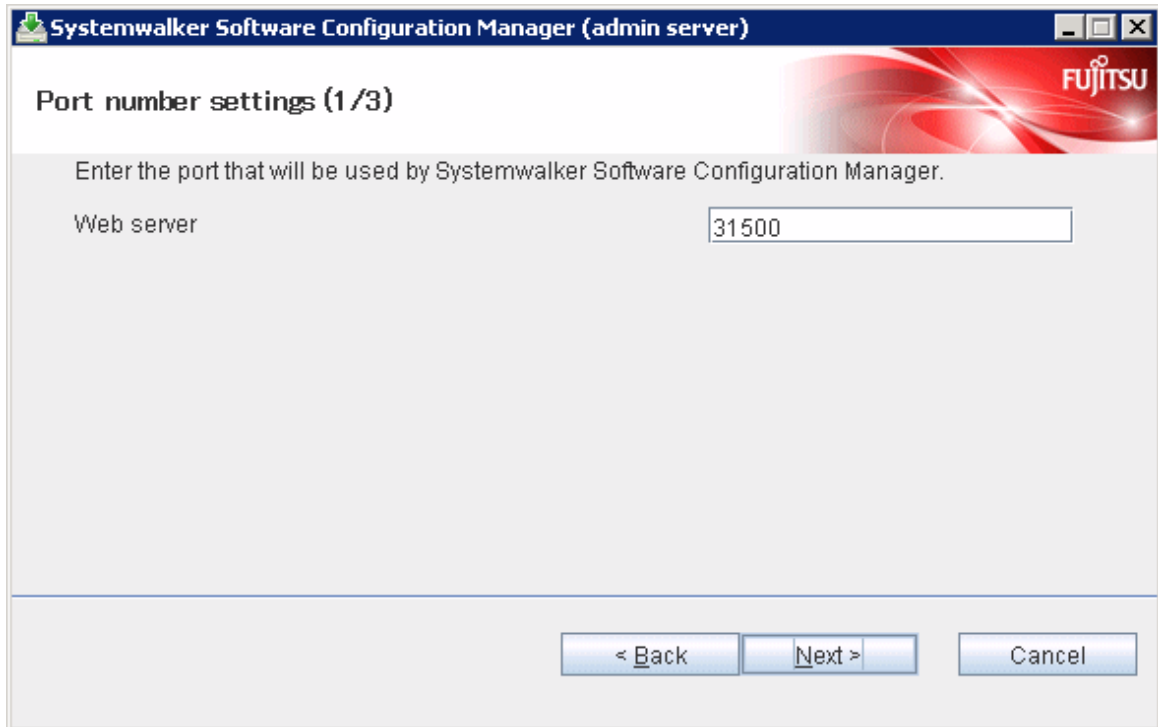
- Specify a path up to 40 bytes long.
- Specify a new folder.
- Do not specify relative paths or paths that start with "\\".
- Specify only alphanumeric characters, spaces, hyphens ("-"), and underscores ("\_").  
You can specify a directory under <system drive>Program Files or <system drive>Program 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%\fjstvpgs83

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.

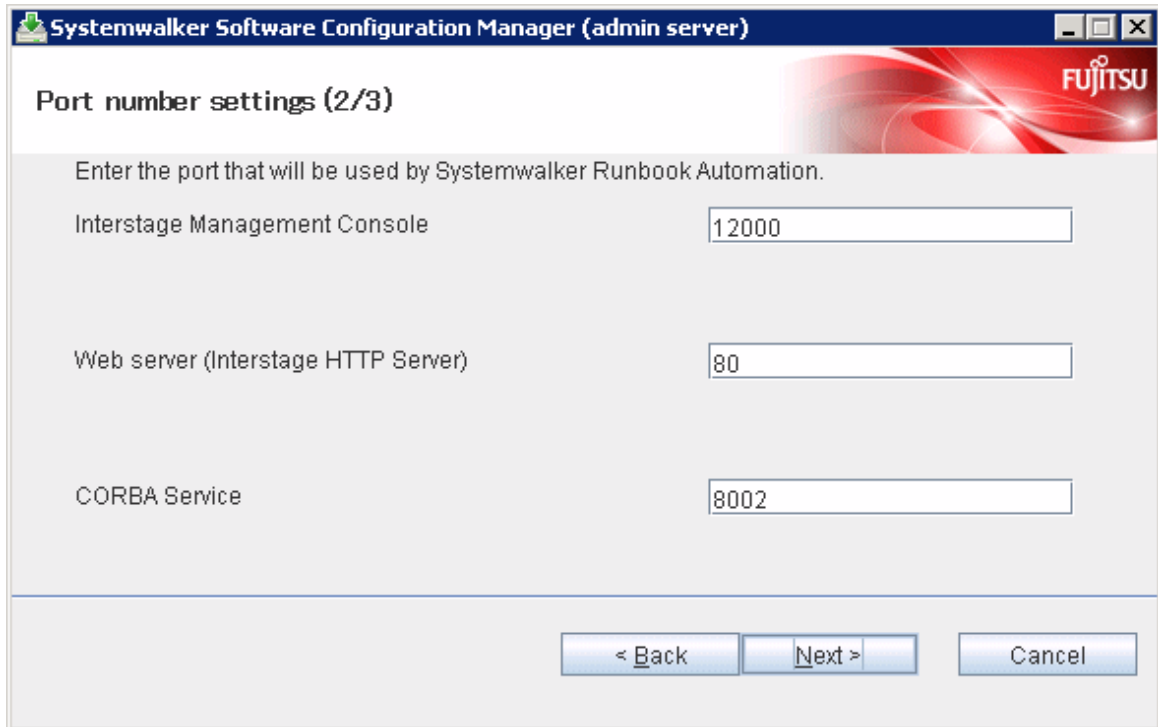


7. The **Port number settings (2/3)** window will be displayed.

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

 Note

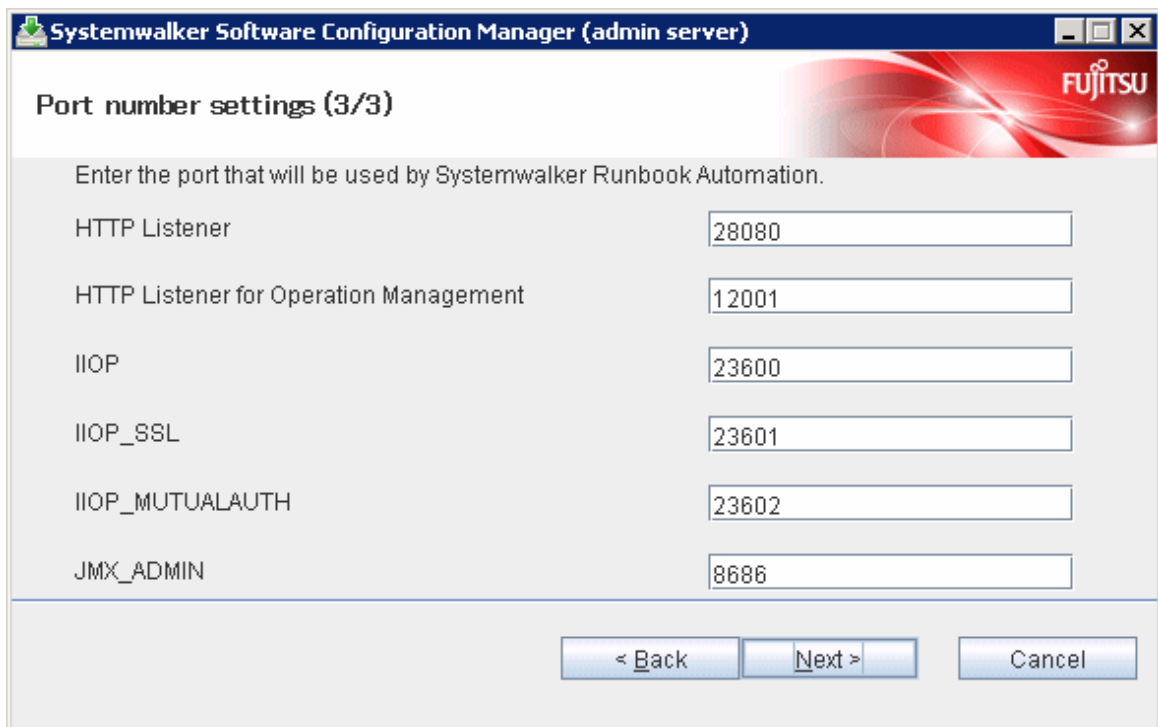
If operating on the same admin server as the Systemwalker Runbook Automation Management Server, then the setting window will not displayed for this and subsequent steps (since their values have already been set), therefore you can proceed to the **Confirm the installation settings** window in step 11.



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.

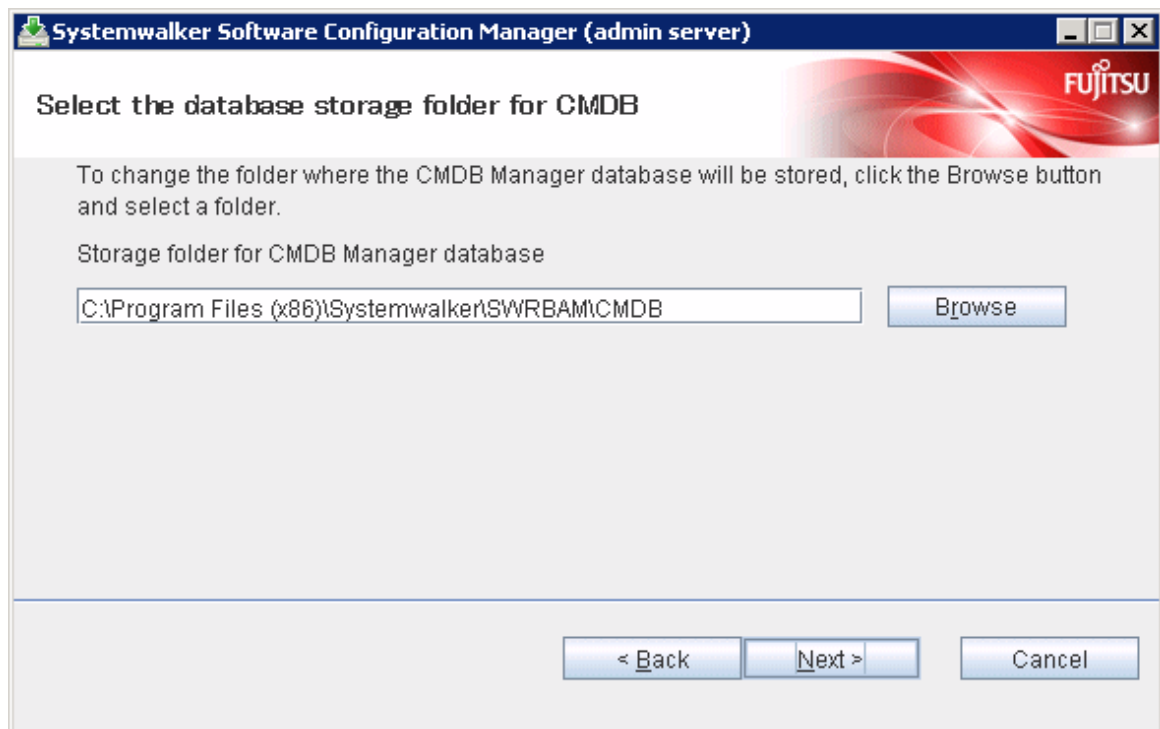


Service	Port Number
HTTP Listener	28080
HTTP Listener for Operation Management	12001
IIOP	23600
IIOP_SSL	23601
IIOP_MUTUALAUTH	23602
JMX_ADMIN	8686



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.

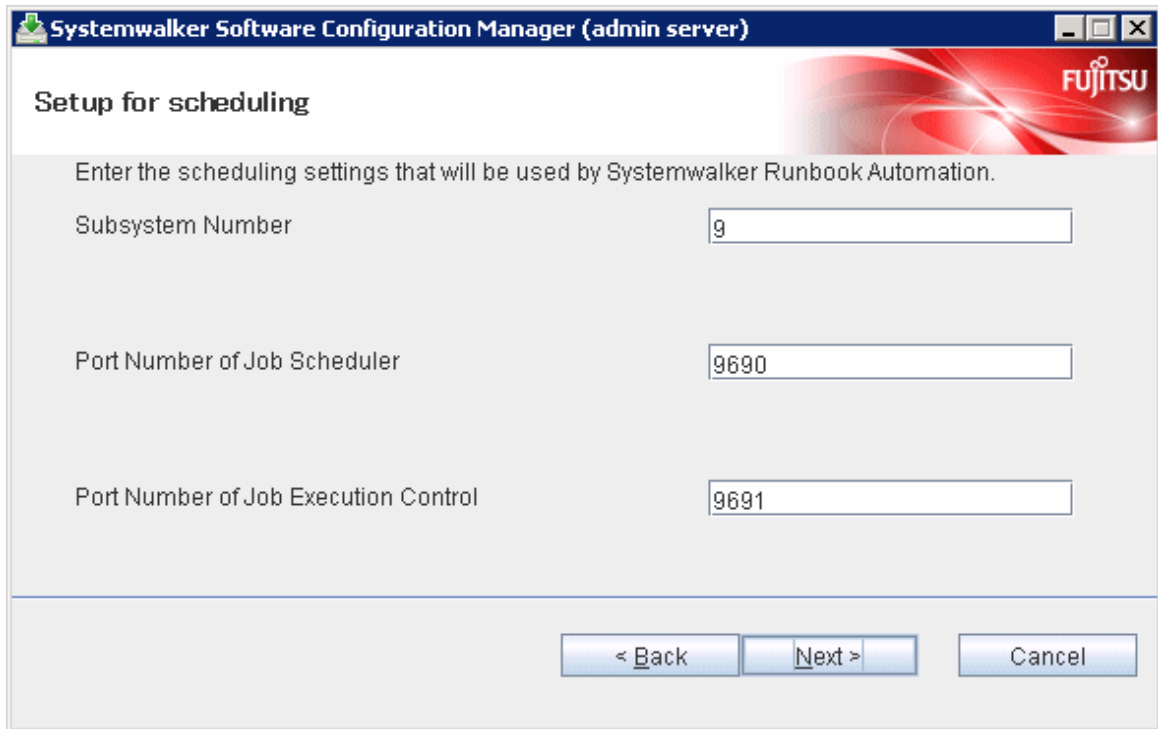
If not operating Systemwalker Operation Manager on the same admin server, or if not using the default port number, click the **Next** button without changing the default values.

#### Note

Only change the displayed default values in the following cases:

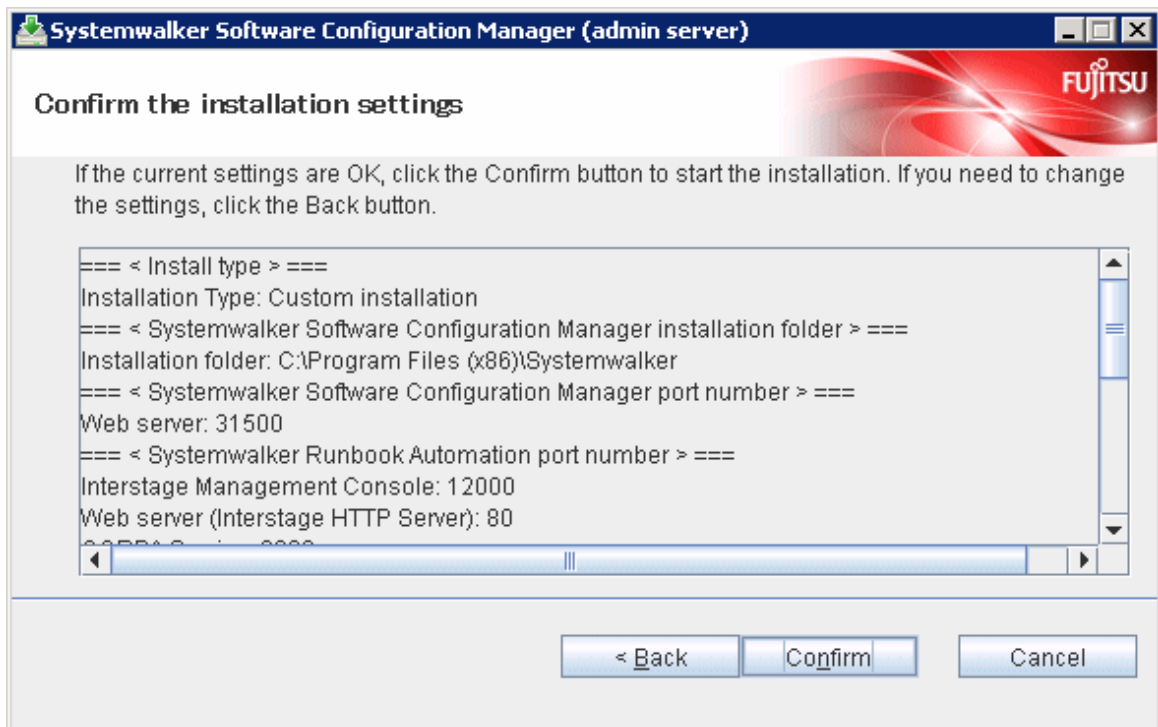
- Port number

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

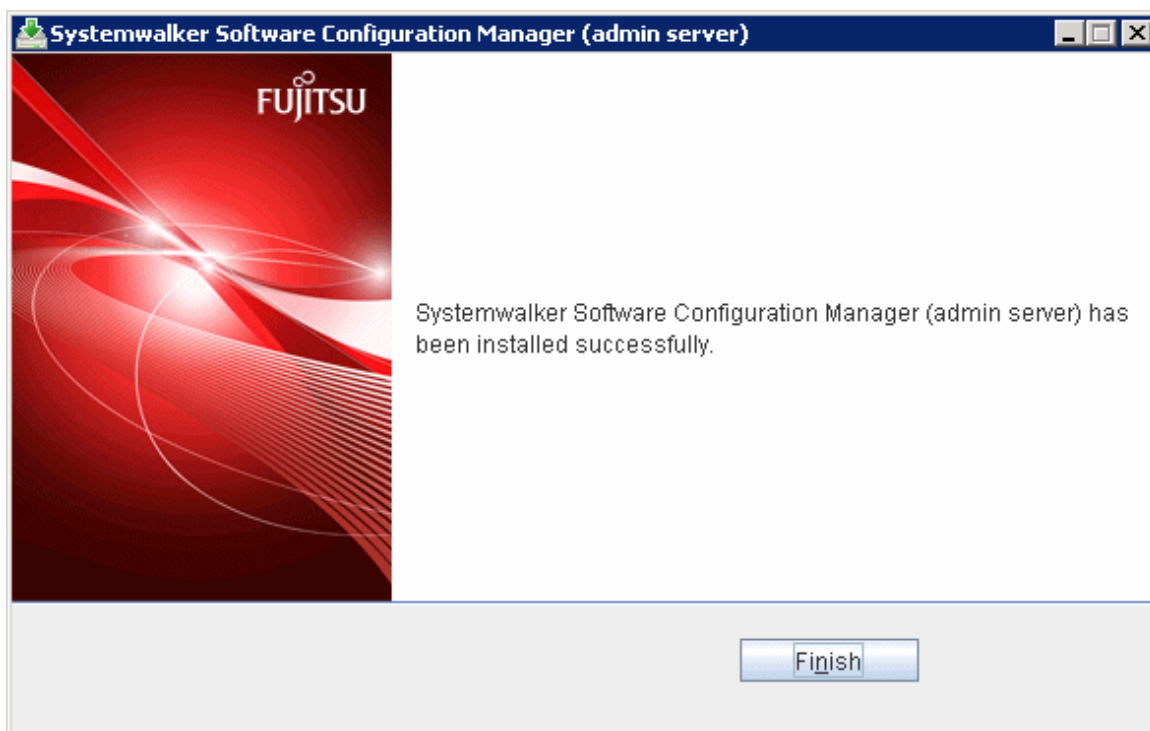


11. The **Confirm the installation settings** window will be displayed.

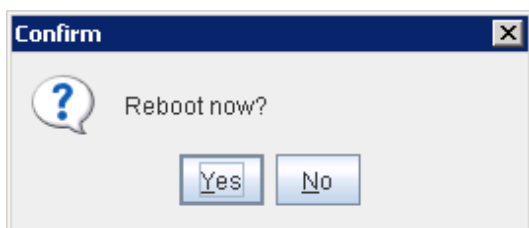
Check the settings, and then click the **Confirm** button to start the installation.



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.

## 2.2.3.2 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.

### 2.2.3.2.1 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 (Interstage HTTP Server) port number of Systemwalker Software Configuration Manager	Port number for accessing the management console of Systemwalker Software Configuration Manager	31500 (*1)
Interstage Management Console port number	Port number for accessing the Interstage Management Console	12000 (*2)
Web server (Interstage HTTP Server) port number of Systemwalker Runbook Automation	Port number for accessing the web console of Systemwalker Runbook Automation	80 (*2)
CORBA Service port number	Port number used internally	8002 (*2)
HTTP listener port number	Port number used internally	28080 (*2)
Port number of the HTTP listener for operation management	Port number for accessing the Interstage Java EE management console	12001 (*2)
IIOp port number	Port number used internally	23600 (*2)
IIOp_SSL port number	Port number used internally	23601 (*2)
IIOp_MUTUALAUTH port number	Port number used internally	23602 (*2)
JMX_ADMIN port number	Port number used internally	8686 (*2)
Database storage directory for CMDB Manager	Database storage folder for CMDB Manager	/var/opt (*2)
Subsystem-number	Subsystem number of Systemwalker Operation Manager	9 (*2)
Job scheduler port number of Systemwalker Runbook Automation	Port number used internally	9690 (*2)
Job execution control port number of Systemwalker Runbook Automation	Port number used internally	9691 (*2)

\*1: It is not necessary to specify the port number if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator, since the web server service (port number) uses the ServerView Resource Orchestrator web server service "rcxctext2" for connecting to the management console (the default is 3501).

\*2: 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, use the values that have already been set.

### Information

Refer to "[2.2.3.2.2 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 V15.2.0 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
```



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
                        V15.2.0
                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
                        V15.2.0
                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]  
=>
```

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]  
=>
```



### 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.

## 2.2.3.2.2 Custom installation

1. Log in to the system as a superuser.
2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.2.0 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
                        V15.2.0
                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
                        V15.2.0
                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]
=>
```

8. 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]
=>
```

9. 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]
=>

```

 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.

## 2.2.4 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
----------------------

- 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
- 

## 2.3 Installing on Business Servers

---

This section explains how to install the product on business servers.

## 2.3.1 Points to Note before Installing on Business Servers

---

This section explains points to note before installing the product on business servers.

### 2.3.1.1 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`

#### Checking the required software and settings

The following software and settings are required on business servers separately for each function used:

- Windows patch management
  - Register the business server with Windows Server Update Services (WSUS)  
Refer to "[3.8.1 Settings for Managing Windows Patches](#)" for information on the registration method.
- Linux patch management
  - Set up the Yellowdog Updater Modified (yum) repository to be looked up  
Refer to the yum manuals for information on the setup method.
- Collecting patch management and software information for Fujitsu middleware
  - Install the UpdateAdvisor (middleware)  
Refer to the UpdateAdvisor (middleware) manuals for information on the installation method.



#### Point

---

#### Managing a server deployed using ServerView Resource Orchestrator

To collect patch management information for Linux operating systems, or patch management and software information for Fujitsu middleware, it is recommended that the installations and settings above be performed on the L-Server for the infrastructure administrator before deployment.

---

#### Mandatory software for Linux

Install the software shown below, which is provided with the operating system (refer to the operating system manual before installing it).

- redhat-lsb packages

On Red Hat Enterprise Linux 6 (for Intel64) environments, install the 32-bit version of the following software provided with the operating system. Refer to the operating system manual for the installation procedure. [Linux]

- expat package
- glibc package
- libattr package
- libcap package
- libgcc package
- libstdc++ package
- nss-softokn-freebl package
- zlib package

## The functions installed

- The following functions are installed as a result of installing a Systemwalker Software Configuration Manager agent:
  - File transfer infrastructure

## If a Systemwalker IT Change Manager V14.1.0 agent has been installed [Windows]

To install a Systemwalker Software Configuration Manager agent in an environment where a Systemwalker IT Change Manager V14.1.0 agent has been installed, the Systemwalker IT Change Manager V14.1.0 agent must be uninstalled in advance. Install a Systemwalker Software Configuration Manager agent first and then a Systemwalker IT Change Manager V14.1.0 agent.

## 2.3.2 Tasks Required before Installing on Business Servers

---

This section explains the tasks that need to be performed before installation.

### 2.3.2.1 Tuning System Parameters [Linux]

The system parameters must be tuned.

#### Tuning values for system parameters

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

- 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	1	Maximum
para2	Number of semaphores for the entire system	2	Addition
para3	Maximum number of operators per semaphore call	1	Maximum
para4	Number of semaphore operators for the entire system	2	Addition

- Message queues

Parameter	Description	Value	Type
kernel.msgmnb	Maximum number of messages that can be held in a single message queue	106496	Maximum
kernel.msgmni	Maximum number of message queue IDs	1024	Addition

#### 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 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
. . .
(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 = 250 32002 32 130
kernel.msgmnb = 106496
kernel.msgmni = 1040
```

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.

- 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 = 250 32002 32 130
. . .
kernel.msgmnb = 106496
kernel.msgmni = 1040
. . .
(omitted)
. . .
```

## 2.3.3 Installing Systemwalker Software Configuration Manager

This section explains how to install the product on business servers.

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

### [Windows]

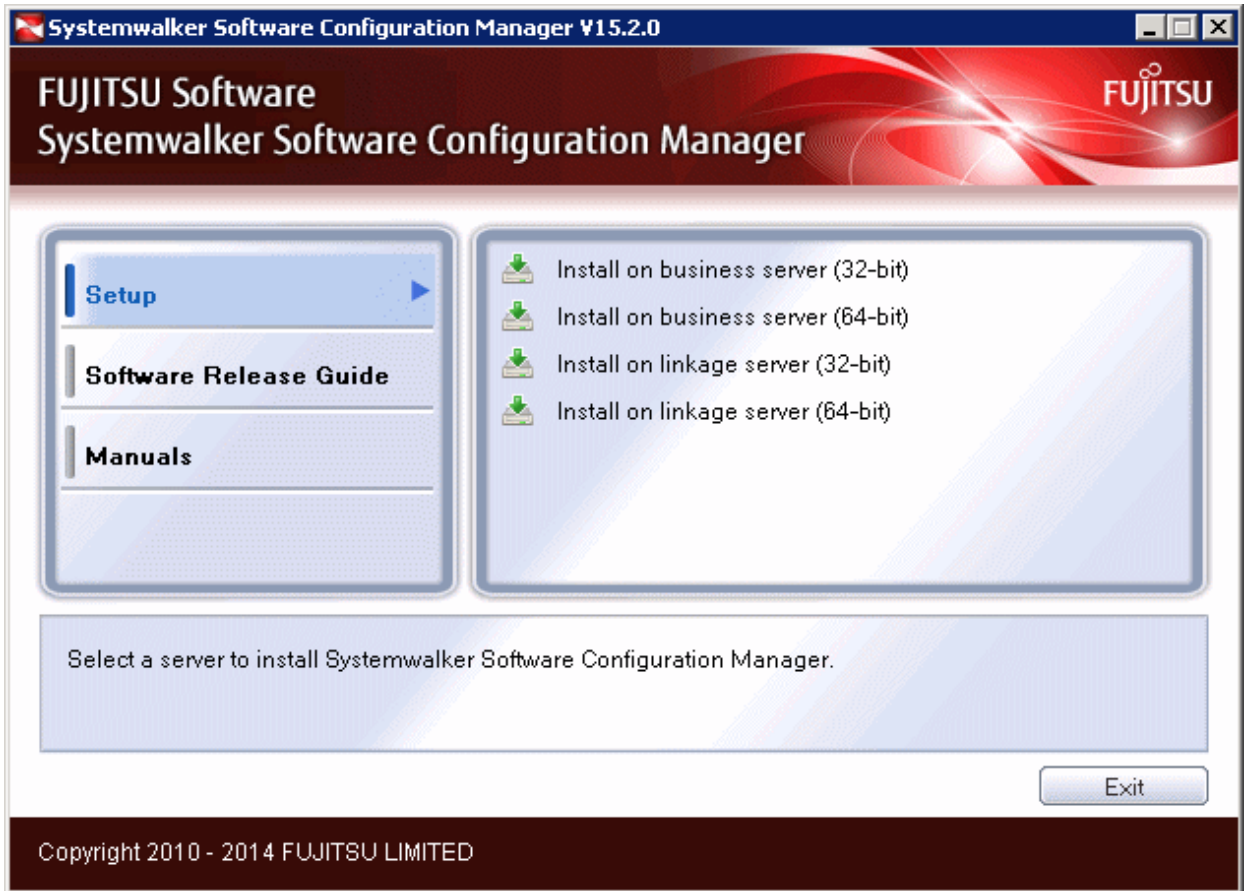
- Log in with administrator privileges.
- Insert the DVD-ROM.

Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.2.0 DISC2 (Linkage Servers/Business Servers Program)" in the DVD-ROM drive.

The window below will be displayed

Select either **Install on business server (32-bit)** or **Install on business server (64-bit)**.

Select either the 32-bit version or the 64-bit version depending on the CPU architecture of the server where the product is to be installed.



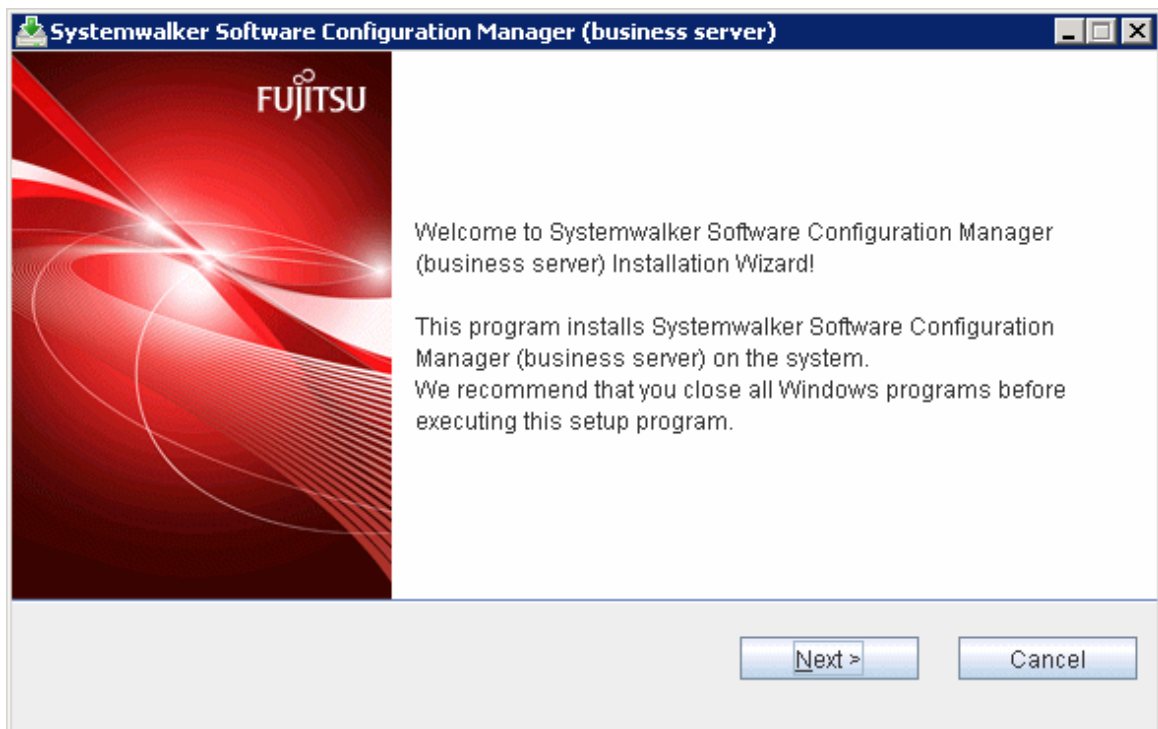
#### Note

- 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.



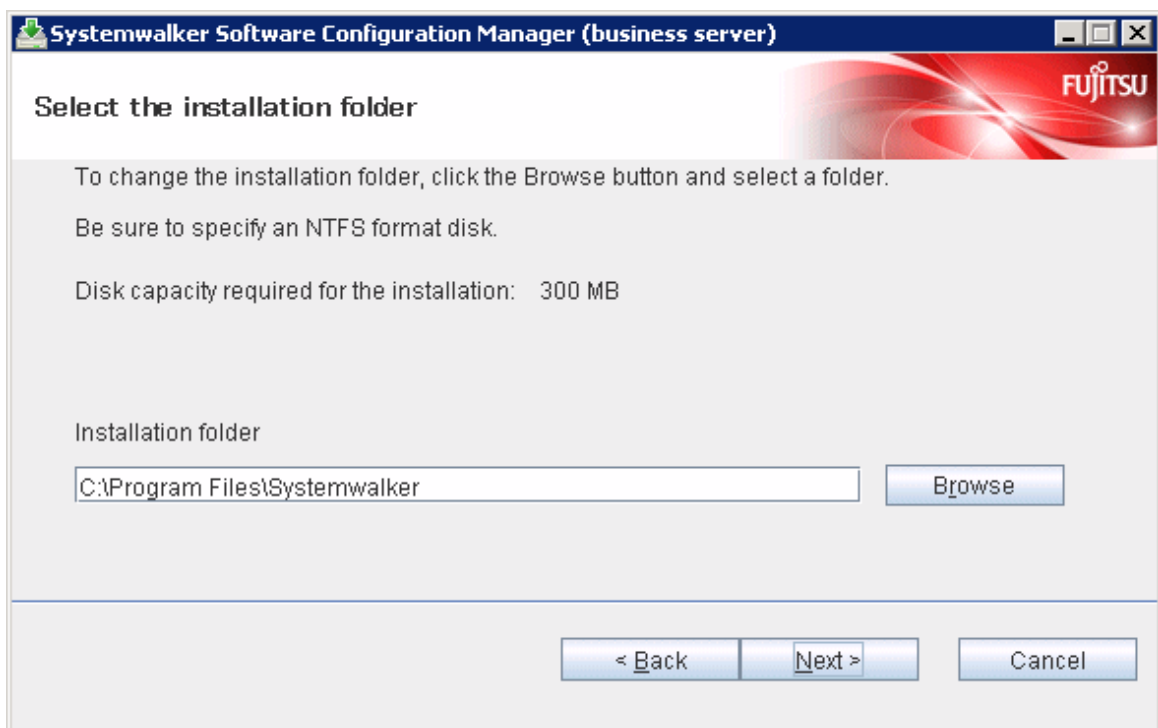
3. A welcome window will be displayed.

Click the **Next** button.



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

Specify the installation folder, and then click the **Next** button.



 **Note**

- Specify an NTFS format disk for the installation folder.

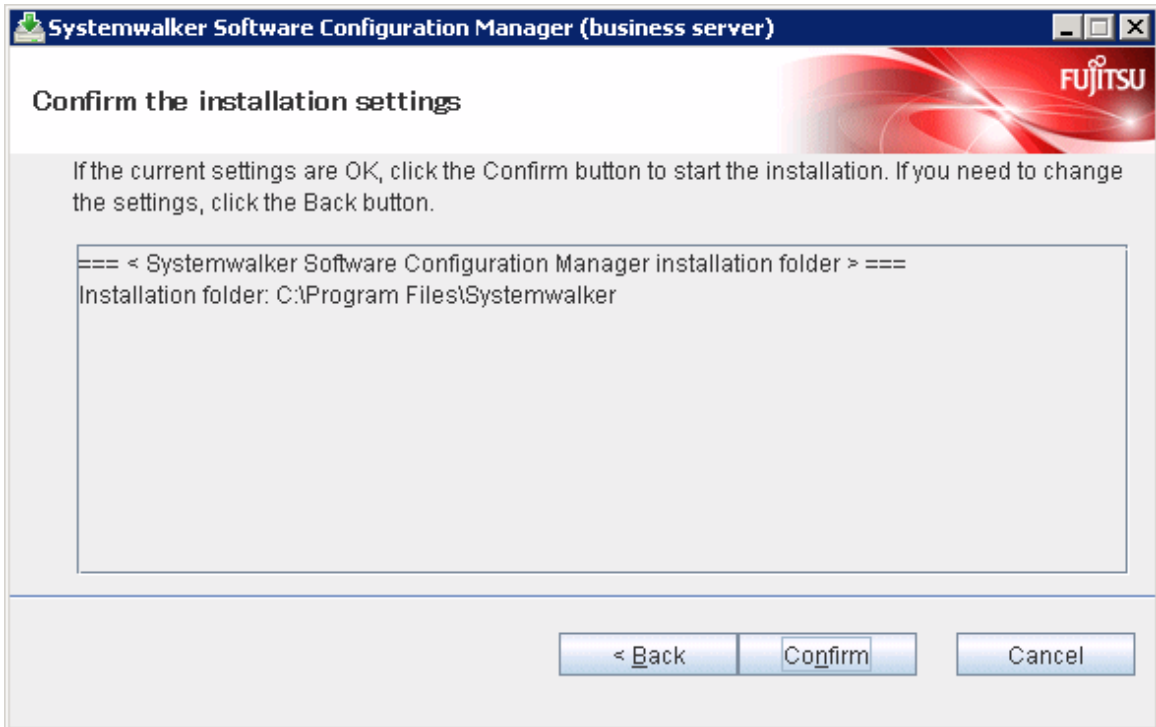
- The maximum length of the path to the installation directory is 51 characters.
- Be sure to specify a new folder.
- Relative paths and paths that start with "\\" cannot be specified.
- Only the following characters can be used for the folder name: alphanumeric characters, spaces, hyphens (-), and underscores (\_).

A standard directory under "<System Drive>\Program Files" or "<System Drive>\Program Files (x86)" can also be specified.

---

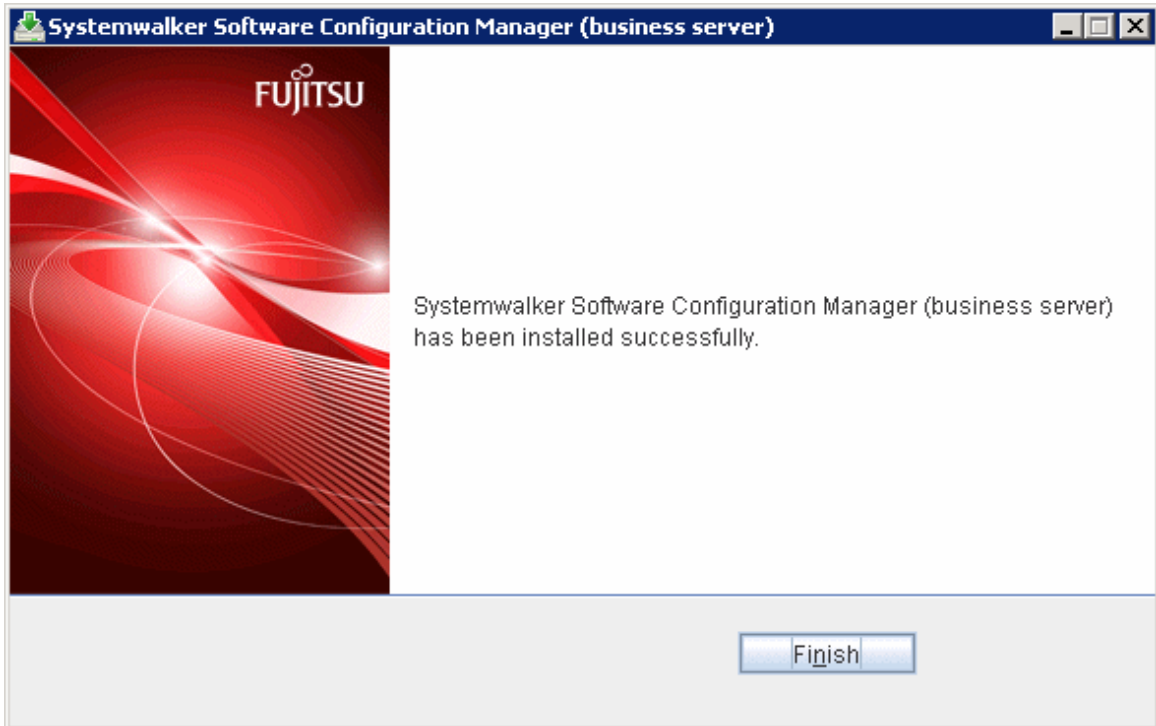
5. The **Confirm the installation settings** window will be displayed.

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.



### Post-installation notes

If a Terminal Server has been installed, the following command is executed to change the Terminal Services to Execute mode.

```
CHANGE USER /EXECUTE
```

### [Linux]

1. Log in as a superuser on the system.

2. Insert the DVD-ROM.

Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.2.0 DISC2 (Linkage Server/Business Server 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
                        V15.2.0
                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.

Enter "1" or "2", depending on the CPU architecture of the server where the product is to be installed.

```
=====
                Systemwalker Software Configuration Manager Setup
                        V15.2.0
                Copyright 2010-2014 FUJITSU LIMITED
=====

<< Select the installation target >>

1. Install on business server (32-bit)
2. Install on business server (64-bit)

=====

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

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

```
Preparing installation.
Please wait for a while.
Systemwalker Software Configuration Manager (business server)
Do you want to start install?
[y,n]
=>
```

7. Check the installation directory. The storage directory cannot be changed, so enter "y".

```
=== < Installation directory > ===
Program location(Can't Change): /opt
Configuration file location(Can't Change): /etc/opt
Work file location(Can't Change): /var/opt

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

8. The installation will start.

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

```
installing...
```

9. The installation will complete.

Upon successful completion, the following message will be displayed:

```
Systemwalker Software Configuration Manager (business server) install completed.
```

## 2.4 Installing on Linkage Servers

---

This section explains how to install the product on linkage servers.

### 2.4.1 Points to Note before Installing on Linkage Servers

---

This section explains points to note before installing the product on linkage servers.

#### Conditions required for installing the product on a linkage server

##### [Windows]

Install a Systemwalker Software Configuration Manager agent on the linkage server (WSUS server).

##### [Linux]

It is not necessary to install a Systemwalker Software Configuration Manager agent on linkage servers (yum servers), unless you want to use the following function:

- Patch management and collection of software information targeted at linkage servers (yum servers)

#### Checking the required software and settings

To collect patch management and software information on the linkage server, the following software and settings are required on the linkage server:

- Register the linkage server with Windows Server Update Services (WSUS)  
Refer to "[3.8.1 Settings for Managing Windows Patches](#)" for details.
- Linux patch management
  - Set up the Yellowdog Updater Modified (yum) repository to be looked up  
Refer to the yum manuals for information on the setup method.
- Collecting patch management and software information for Fujitsu Middleware
  - Install the UpdateAdvisor (middleware)  
Refer to the UpdateAdvisor (middleware) manuals for details.

#### Mandatory software for Linux

Install the following software distributed with the operating system (refer to the operating system manual before installing):

- redhat-lsb packages

For Red Hat Enterprise Linux 6 (for Intel64), install the 32-bit versions of the software listed below, which is distributed with the operating system (refer to the operating system manual before installing):

- expat package
- glibc package
- libattr package
- libcap package
- libgcc package
- libstdc++ package

- nss-softokn-freebl package
- zlib package

### The functions installed

- The following functions are installed as a result of installing a Systemwalker Software Configuration Manager agent:
  - CMDB agent
  - SMEE, SecureCrypt library runtime
  - Systemwalker communication infrastructure
  - File transfer infrastructure

### Coexistence with Systemwalker Operation Manager V13.4.0

Systemwalker Software Configuration Manager can only coexist with Systemwalker Operation Manager V13.4.0 in the following combinations:

#### [Combinations]

- To enable Systemwalker Software Configuration Manager to coexist with the 32-bit version of Systemwalker Operation Manager V13.4.0

To enable Systemwalker Software Configuration Manager to coexist with Systemwalker Operation Manager that has been installed using "Systemwalker Operation Manager Standard Edition Media Pack V13 (13.4)" or "Systemwalker Operation Manager Enterprise Edition Media Pack V13 (13.4)", install Systemwalker Software Configuration Manager using the following media pack:

- Linkage server (32-bit)

- To enable Systemwalker Software Configuration Manager to coexist with the 64-bit version of Systemwalker Operation Manager V13.4.0

To enable Systemwalker Software Configuration Manager to coexist with Systemwalker Operation Manager that has been installed using "Systemwalker Operation Manager Standard Edition Media Pack (64 bit) V13 (13.4)" or "Systemwalker Operation Manager Enterprise Edition Media Pack (64 bit) V13 (13.4)", install Systemwalker Software Configuration Manager using the following media pack:

- Linkage server (64-bit)

### Stopping Systemwalker products

Stop the following Systemwalker product before starting the installation:

- Systemwalker Operation Manager V13.4.0

If an agent (communication infrastructure) is running, then stop it:

```
%F4AN_INSTALL_PATH%\F4ANswnc\bin\swncctrl stop
```

## 2.4.2 Installing Systemwalker Software Configuration Manager

---

This section explains how to install the product on linkage servers.



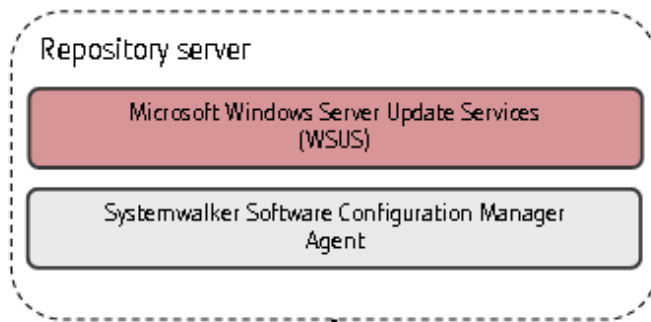
Point

### Using multiple WSUS servers

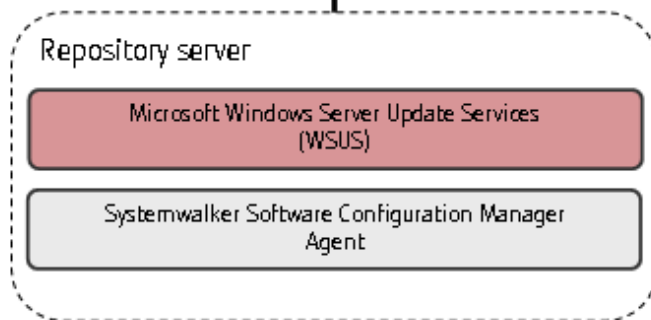
Install a Systemwalker Software Configuration Manager agent on all WSUS servers.

- If WSUS servers have been chained (with upstream servers and downstream servers)  
Install Systemwalker Software Configuration Manager agents on both upstream and downstream servers.

Upstream server



Downstream server  
(replica server)

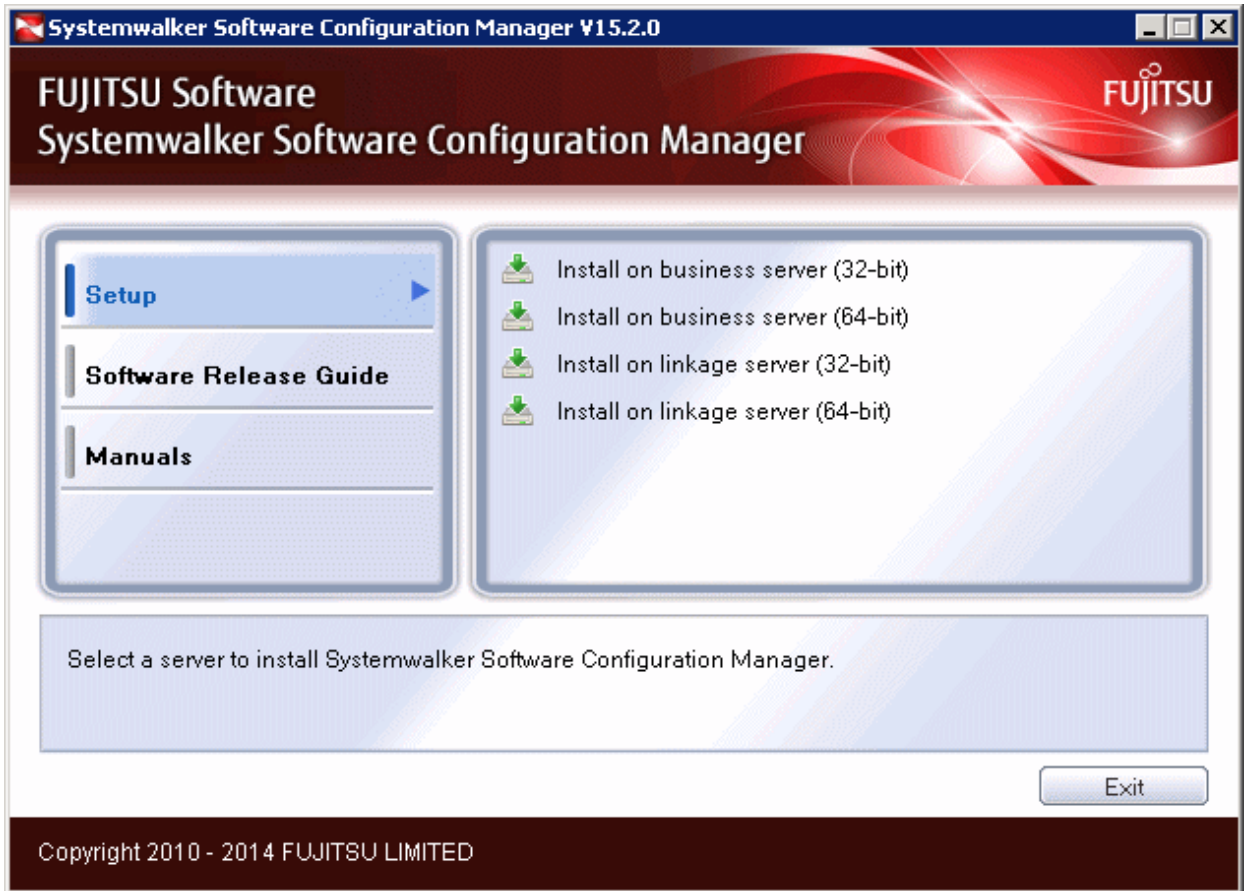


- 
1. Log in with administrator privileges.
  2. Insert the DVD-ROM labeled "Systemwalker Software Configuration Manager Media Pack V15.2.0 DISC2 (Linkage Servers/ Business Servers Program)" in the DVD-ROM drive.

The following window will be displayed:

Select either **Install on linkage server (32-bit)** or **Install on linkage server (64-bit)**.

Select either the 32-bit version or the 64-bit version depending on the CPU architecture of the server where the product is to be installed.



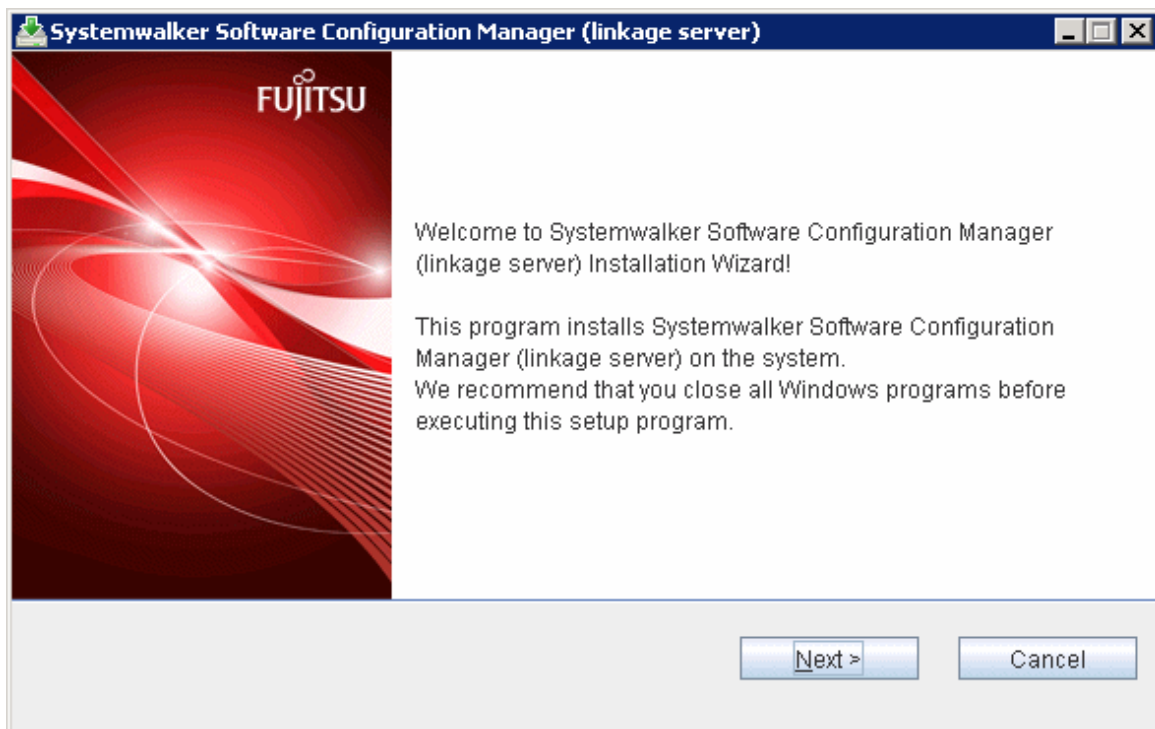
#### Note

- 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.



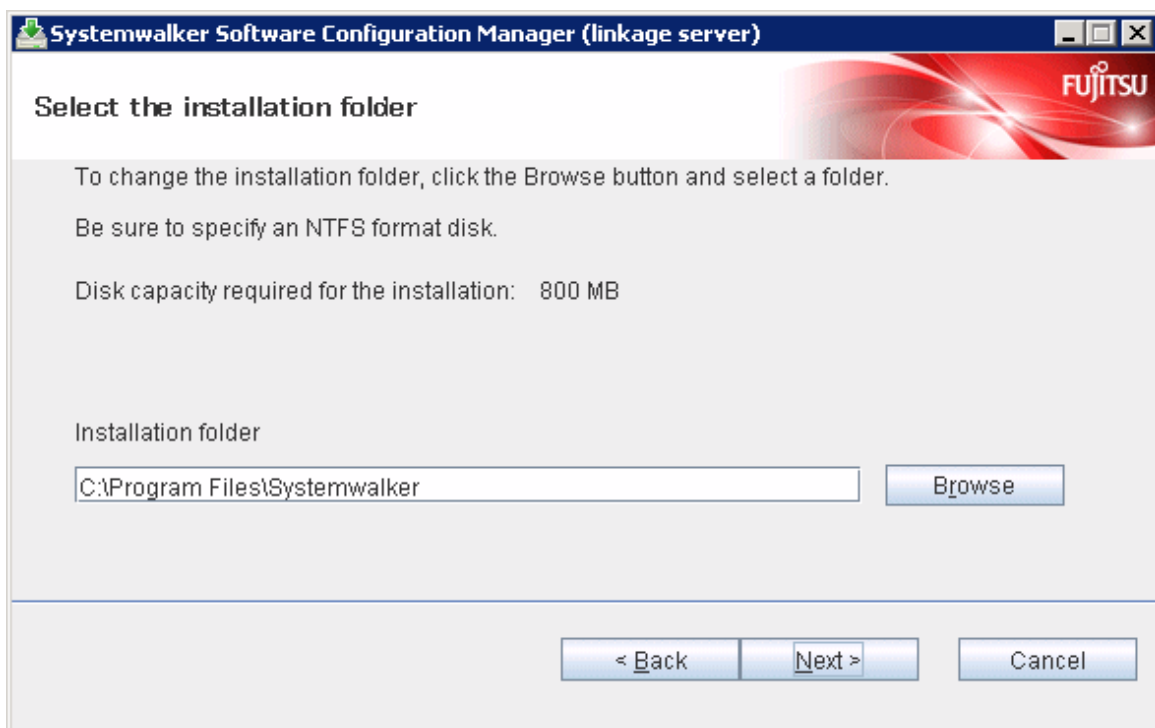
3. A welcome window will be displayed.

Click the **Next** button.



4. The **Select the installation folder** window will be displayed.

Specify the installation folder, and then click the **Next** button.



 **Note**

- Specify an NTFS format disk for the installation folder.

- The maximum length of the path to the installation directory is 51 characters.
- Be sure to specify a new folder.
- Relative paths and paths that start with "\\" cannot be specified.
- Only the following characters can be used for the folder name: alphanumeric characters, spaces, hyphens (-), and underscores (\_).

A standard directory under "<System Drive>\Program Files" or "<System Drive>\Program Files (x86)" can also be specified.

5. The **Admin server settings** window will be displayed.

Enter the appropriate values for the following items, and then click the **Next** button.

- Host name or IP address of the admin server
- Port number of the admin server (web server)

The screenshot shows a window titled "Systemwalker Software Configuration Manager (linkage server)". The window has a blue header bar with the Fujitsu logo on the right. Below the header, the title "Admin server settings" is displayed. The main content area contains the following text and input fields:

Enter the host name (or IP address) and port number used by the admin server.

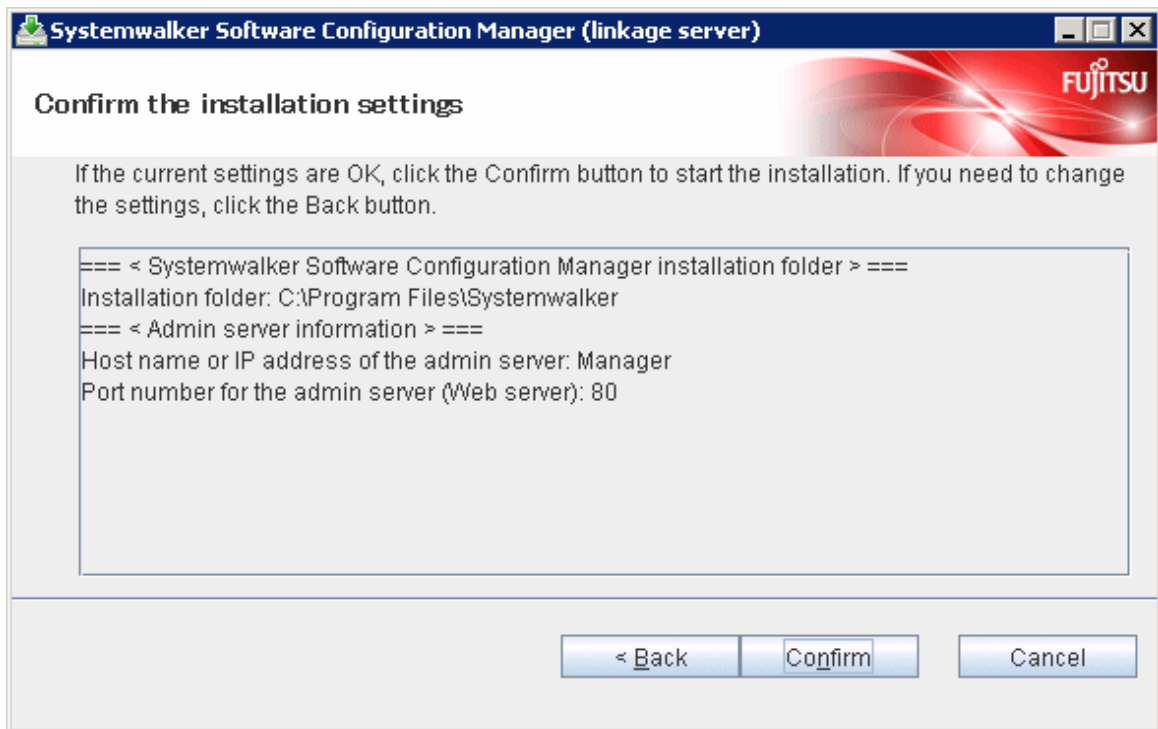
Host name or IP address of the admin server

Port number for the admin server (Web server)

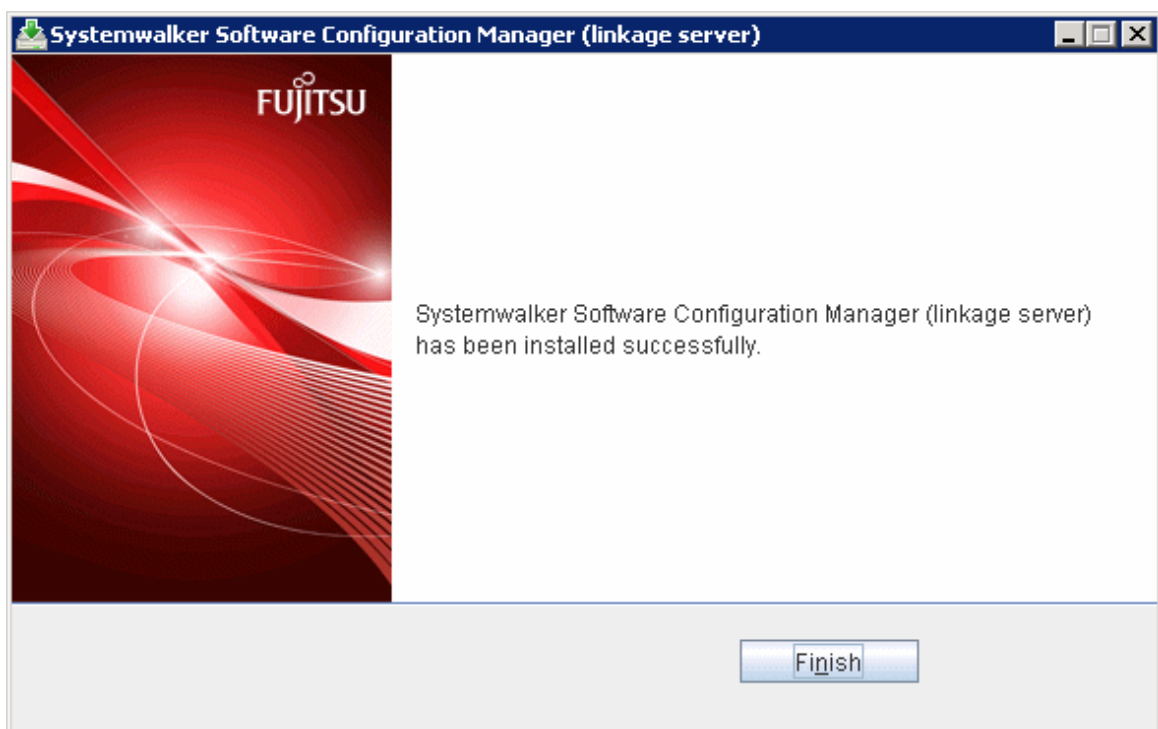
At the bottom of the window, there are three buttons: "< Back", "Next >", and "Cancel".

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

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



8. Upon successful completion, the following window will be displayed.  
Click the **Finish** button.



**[Linux]**

Refer to "[2.3 Installing on Business Servers](#)" for the procedure on installing Systemwalker Software Configuration Manager.

## 2.5 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 3 Setup

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

### 3.1 Setting up the Admin Server

This section explains how to set up the admin server.

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

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

##### 3.1.1.1 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\rcxmgrctl stop
```

###### [Linux]

```
/opt/FJSVrcvnr/bin/rcxmgrctl 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).

##### 3.1.1.2 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

Do not use this procedure if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator or if the SSL communication environment has already been built.

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.

### 3.1.1.2.1 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 "3.1.1.2.2 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).

### 3.1.1.2.2 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/FJJSVawjbc/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.

### 3.1.1.2.3 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/FJSVawjkb/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.
#
```

## Information

### 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:

Do not use this procedure if Systemwalker Software Configuration Manager is to be linked to ServerView Resource Orchestrator.

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 Systemwalker Runbook Automation.

Execute the following command:

**[Windows]**

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

**[Linux]**

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

3. Deregister the old site certificate.

Remove the registration of the registered site certificate.

Refer to ["4.2.4.1 Deleting the SSL Communication Environment"](#) for details.

4. Register the new site certificate.

- a. Register the new site certificate.

Refer to ["3.1.1.2 Building the SSL Communication Environment for Management Console"](#) for details.

- b. Set the connection settings for the management console using the registered site certificate.

Refer to ["3.1.4.1 Connection Settings for the Management Console"](#) for details.

5. Start Systemwalker Runbook Automation.

Execute the following command:

**[Windows]**

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

**[Linux]**

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

6. Start Systemwalker Software Configuration Manager.

Execute the following command:

**[Windows]**

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

**[Linux]**

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

---

### 3.1.1.2.4 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 [Fixed]
Site Certificate Nickname	Set the nickname that was specified when the site certificate was registered in the Interstage certificate environment, in " <a href="#">3.1.1.2.3 Registering Certificates used in SSL Communication</a> ". 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.

## 3.1.2 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

### 3.1.2.1 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.

### 3.1.2.2 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.

### 3.1.2.3 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
```

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

Set up Systemwalker Runbook Automation.

1. Log in to the Admin Server as a user with administrator privileges.

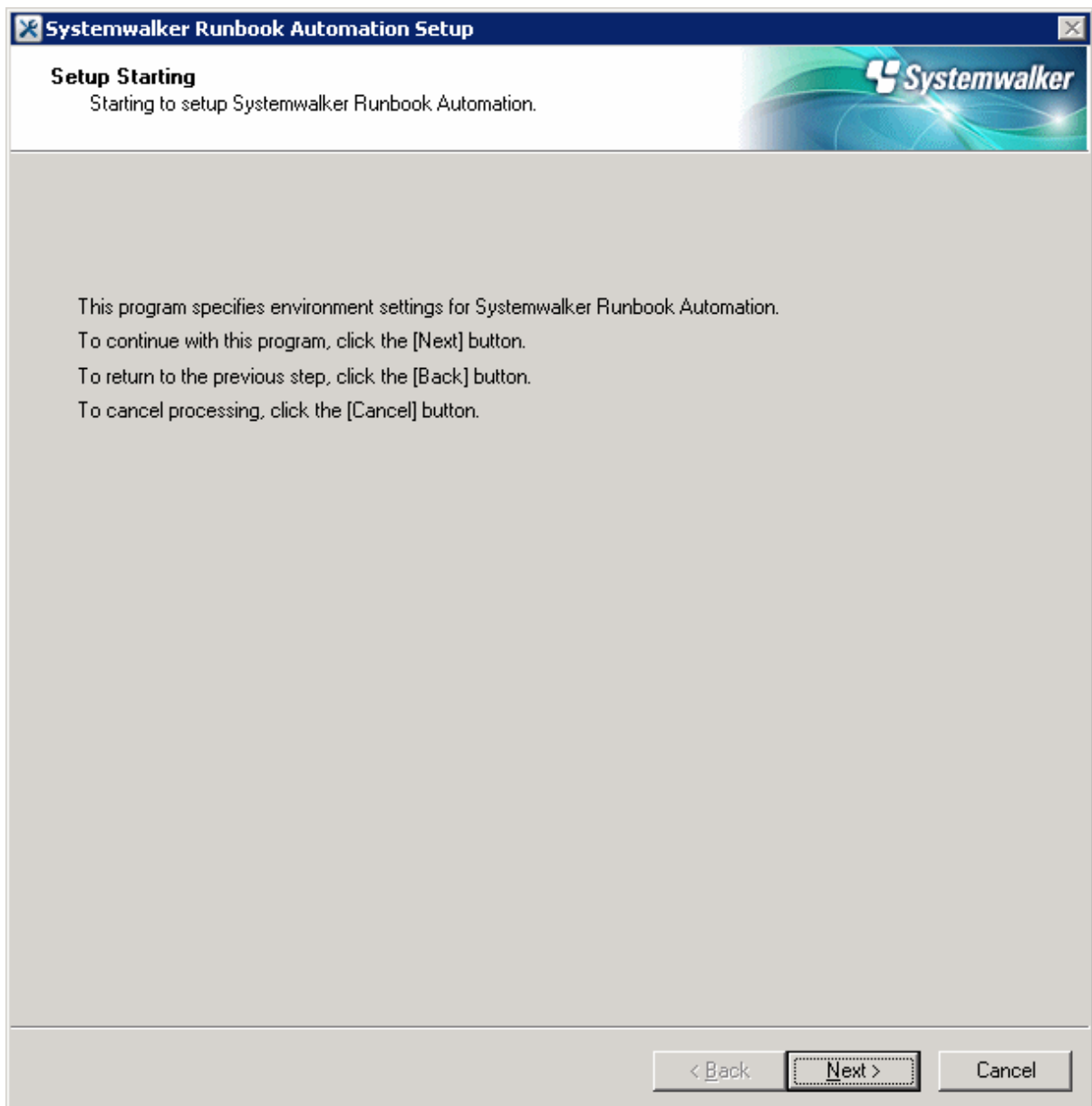
2. Start the setup:

```
%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.

Item name	Input value
<b>Account for Process Management Database</b>	<p>Register a new account, which will be required for Systemwalker Runbook Automation to access the Process Management Database.</p> <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>
<b>Account Password for Process Management Database</b>	<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>
<b>Re-enter Password</b>	<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: - ServerView Operations Manager Single Sign-On Authentication Server
<b>LDAP Used</b>	Select the LDAP to be used, depending on the authentication server type. Interstage Single Sign-On Authentication Server - OpenDJ/OpenDS

Item name	Input value
<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.

**Systemwalker Runbook Automation Setup**

**Environment settings for user authentication**  
Specify the following to configure the environment.

Host Name or IP Address:  Port Number:

Key Name : format: directory name  
< example > : ou=interstage,o=fujitsu,dc=com

Unit of Organization : format: ou = organization unit name  
< example > : ou=Group when organization unit name is Group


Unit of Account Storage : format: ou = account storage unit name  
< example > : ou=User when storage unit name is User

Administrator DN: format: cn=administrator DN name  
< example > : cn=manager when the administrator DN name is manager

Password for Administrator DN

< Back    Next >    Cancel

Item name	Input value
<b>Host Name or IP address</b>	Specify the host name or IP address for the LDAP server. The value can contain up to 64 characters.

Item name	Input value
	 <b>Note</b> ..... 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. .....
<b>Port Number</b>	Specify the port number for the LDAP server.  The value must be between 1 and 65535.  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="#">"3.1.2.3 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="#">"3.1.2.3 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="#">"3.1.2.3 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="#">"3.1.2.3 Registering Users, Groups and Organizational Units"</a> for details).

 **Note**

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

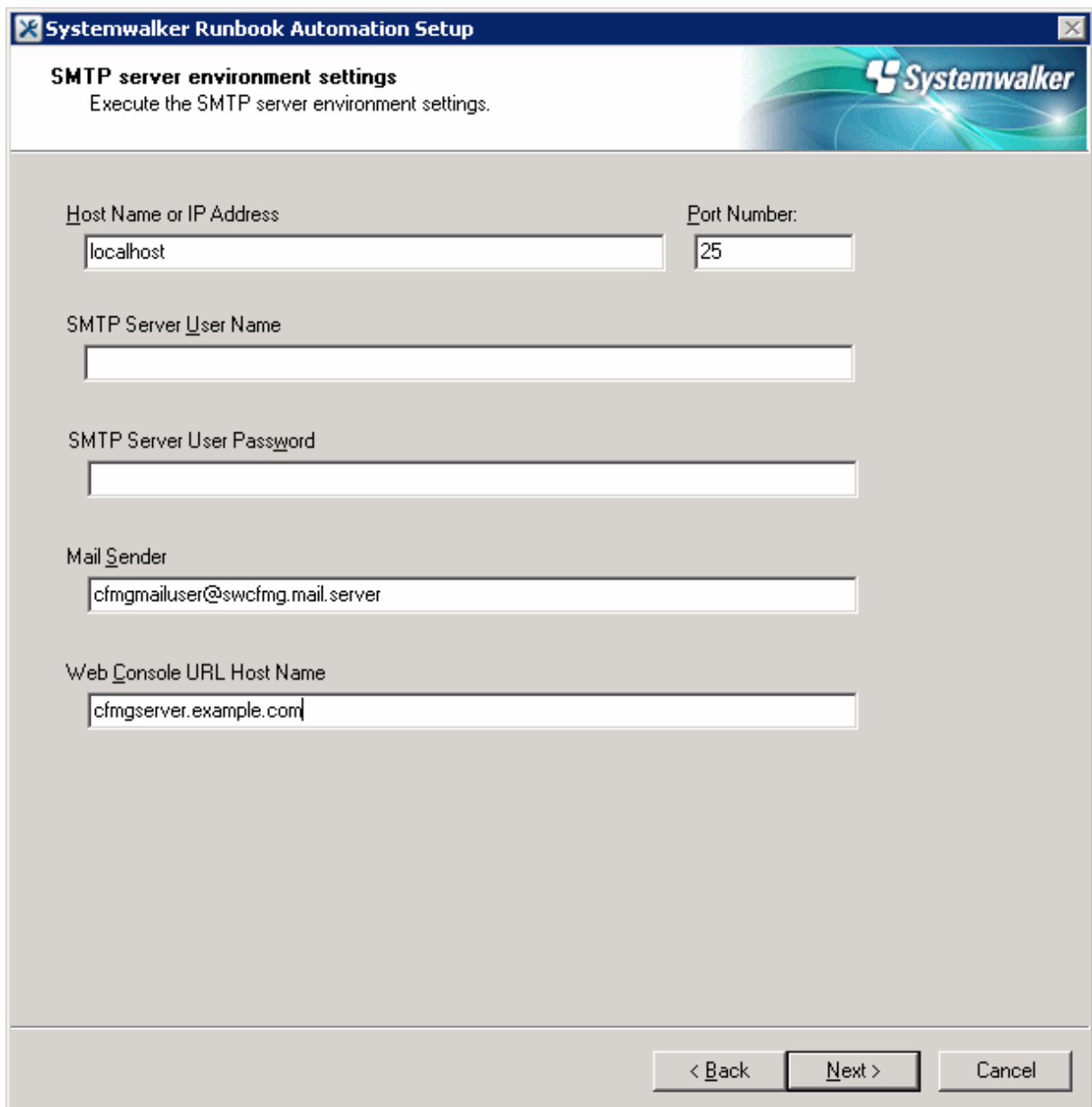
Failed to confirm authentication to LDAP Server, Review the setting value with displayed error messages.

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". Below the sub-header is the instruction "Execute the SMTP server environment settings." and the Systemwalker logo. The dialog contains several input fields: "Host Name or IP Address" with the value "localhost", "Port Number:" with the value "25", "SMTP Server User Name" (empty), "SMTP Server User Password" (empty), "Mail Sender" with the value "cfmgmailuser@swcfmg.mail.server", and "Web Console URL Host Name" with the value "cfmgserver.example.com". At the bottom right, 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**

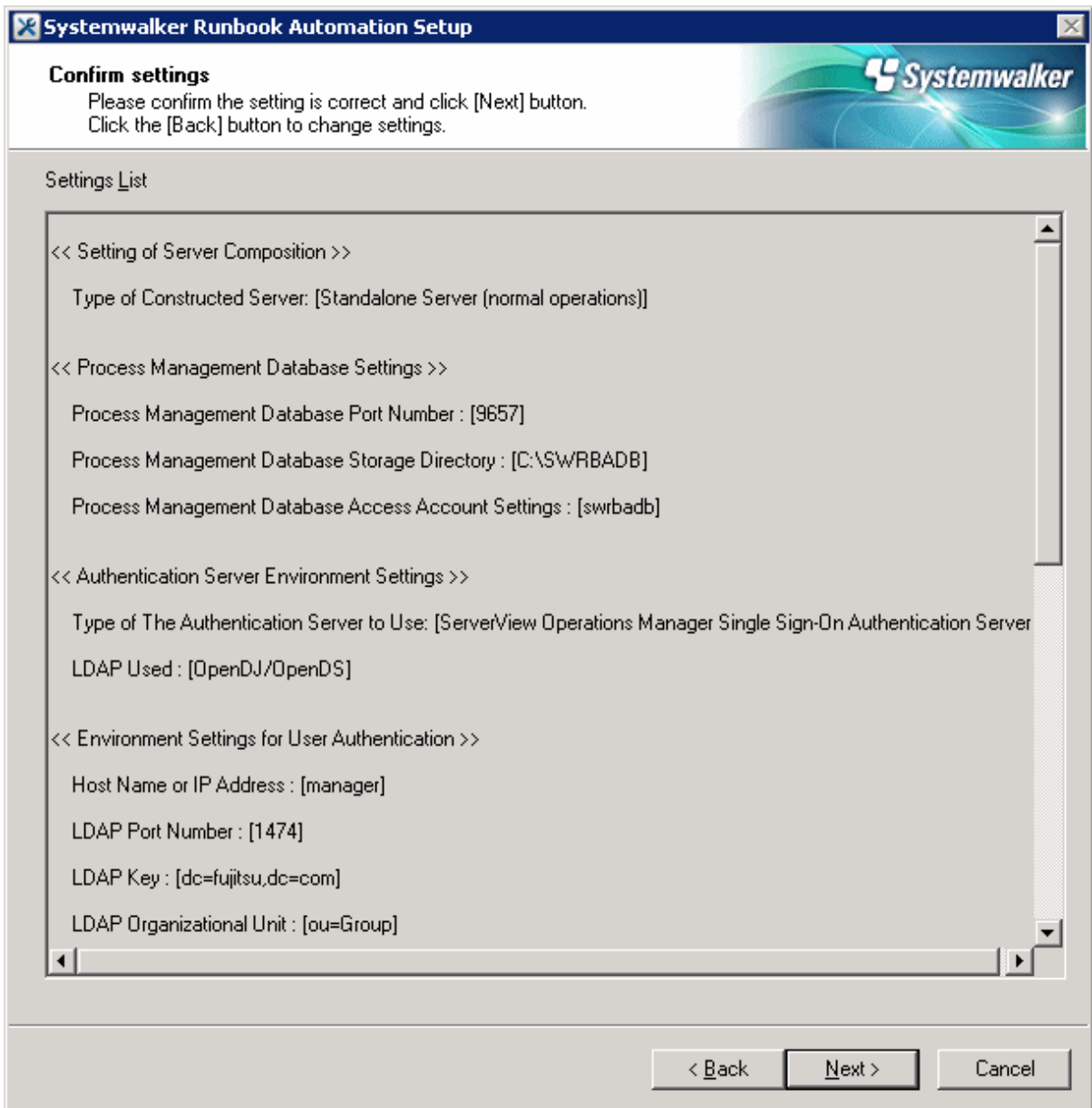


10. Configure the port number to be used by Systemwalker Runbook Automation.  
Enter relevant values, and click **Next**.

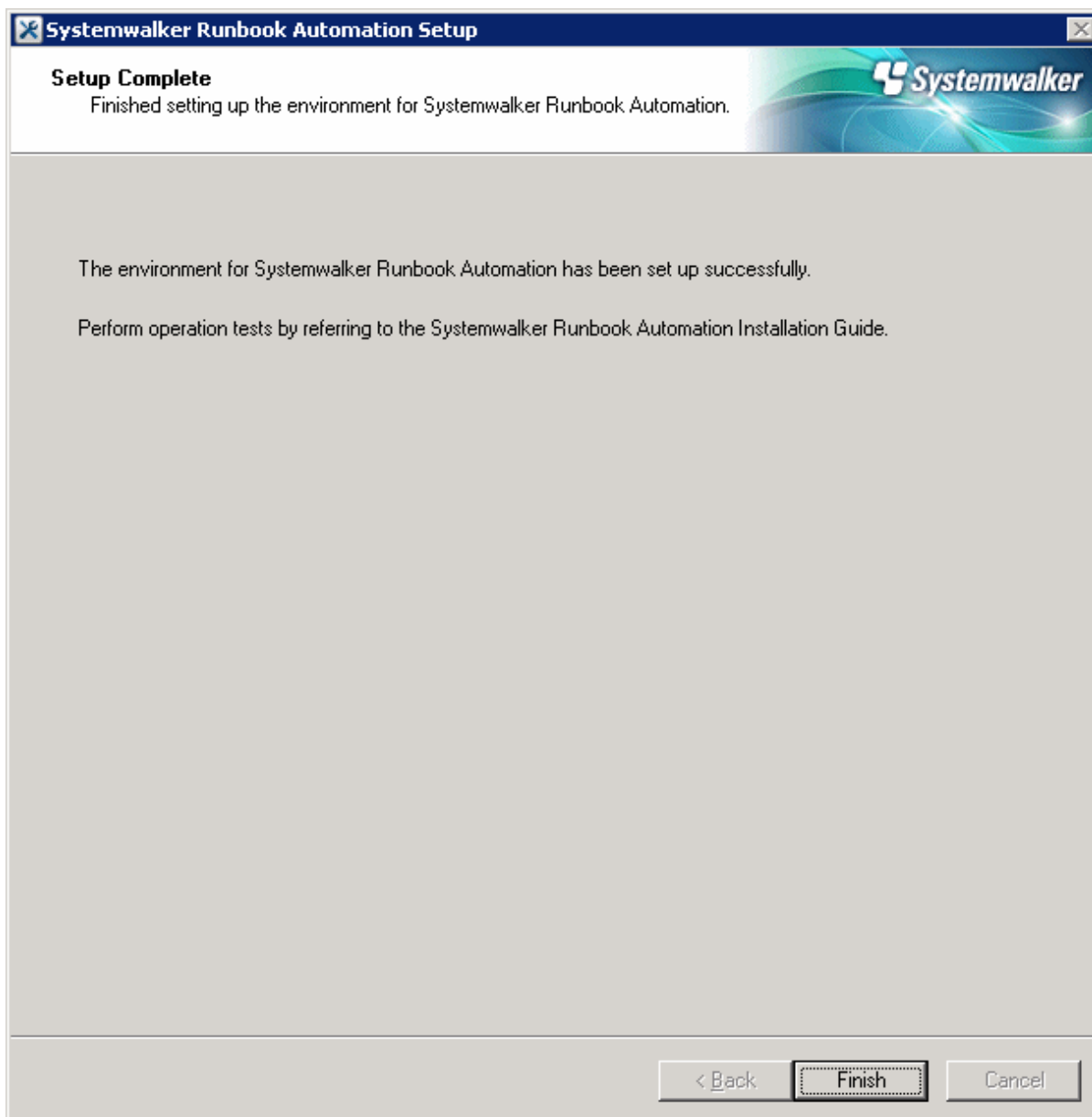
Item name	Input value
<b>Port Number for Message broker</b>	Specify the port number required by Systemwalker Runbook Automation to use the Java EE feature. Default value: 7676
<b>Port Number for Server Function</b>	Specify the port number required to run the Systemwalker Runbook Automation server feature.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

### 3.1.2.5 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==>
```

 Note

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 ["3.1.2.3 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 ["3.1.2.3 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 ["3.1.2.3 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 "3.1.2.3 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.

### 3.1.3 Setting up Systemwalker Software Configuration Manager

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

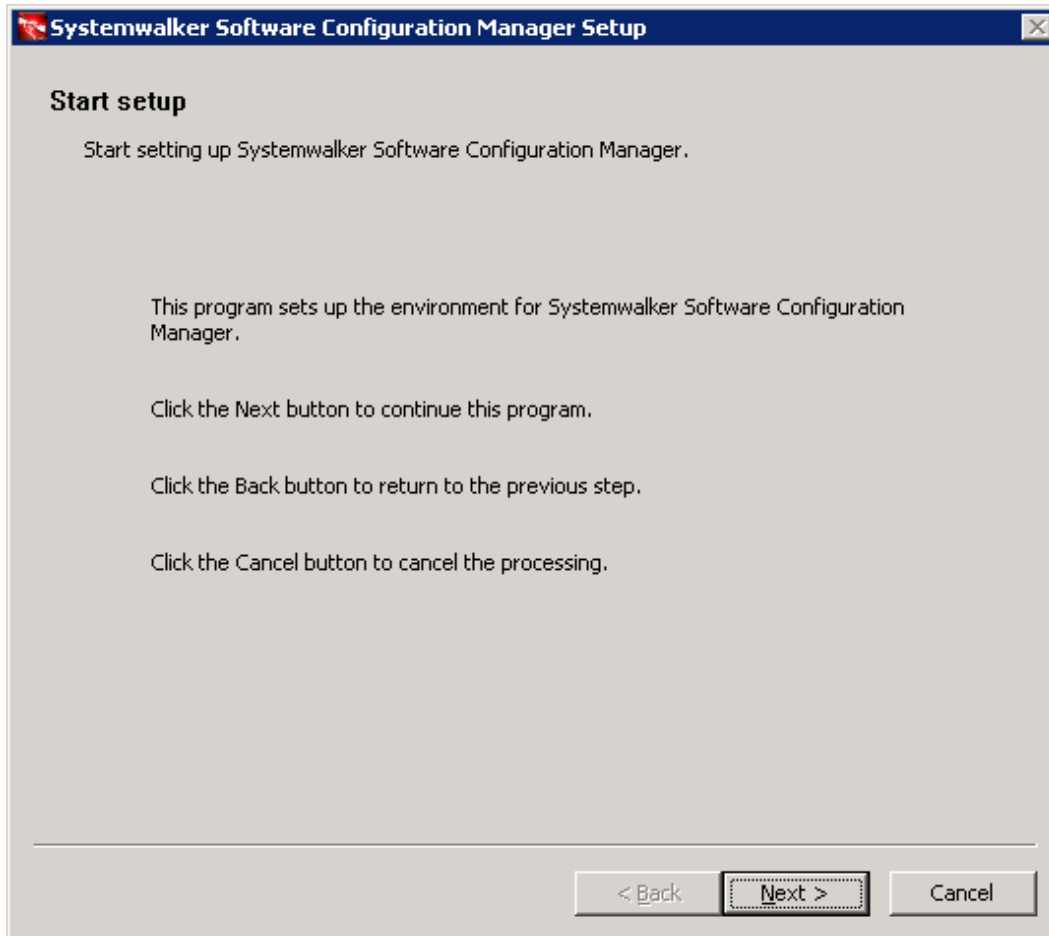
#### [Windows]

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

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_setup -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.

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)

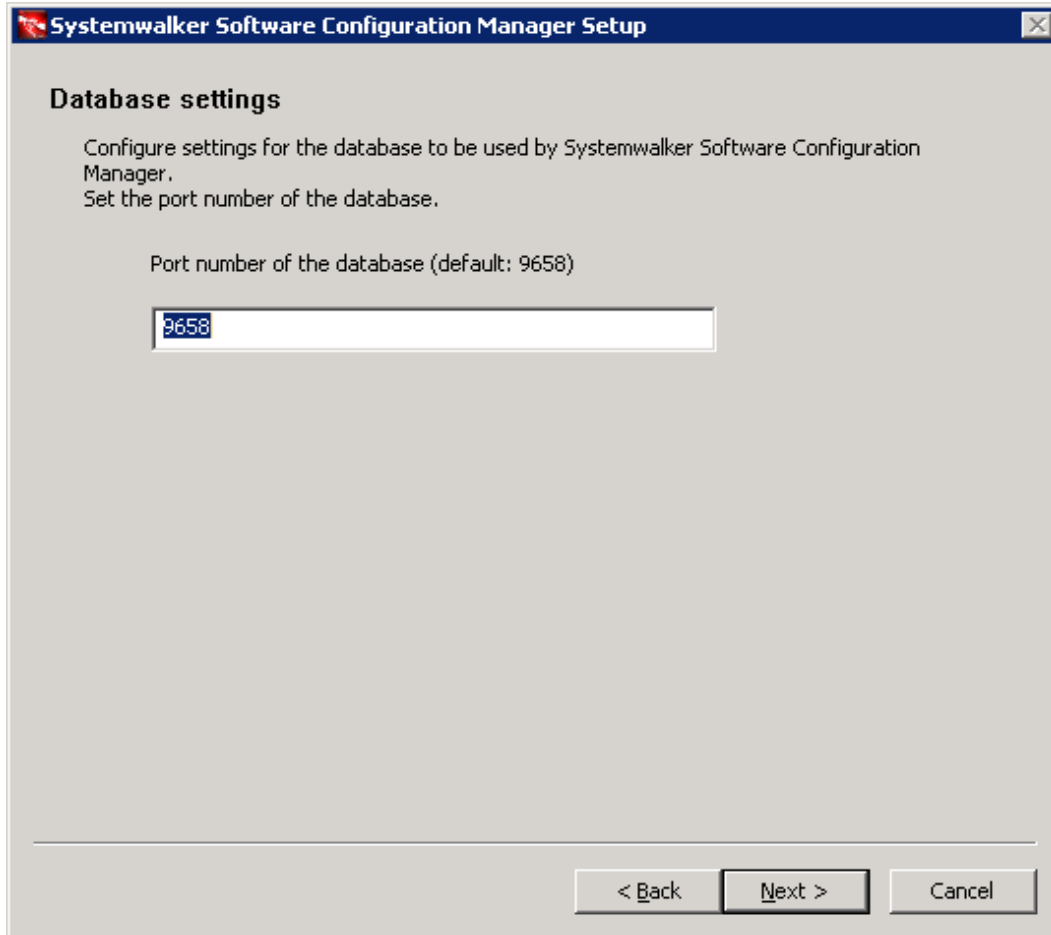
\*1: Specify the value set during Systemwalker Runbook Automation setup.

 **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:

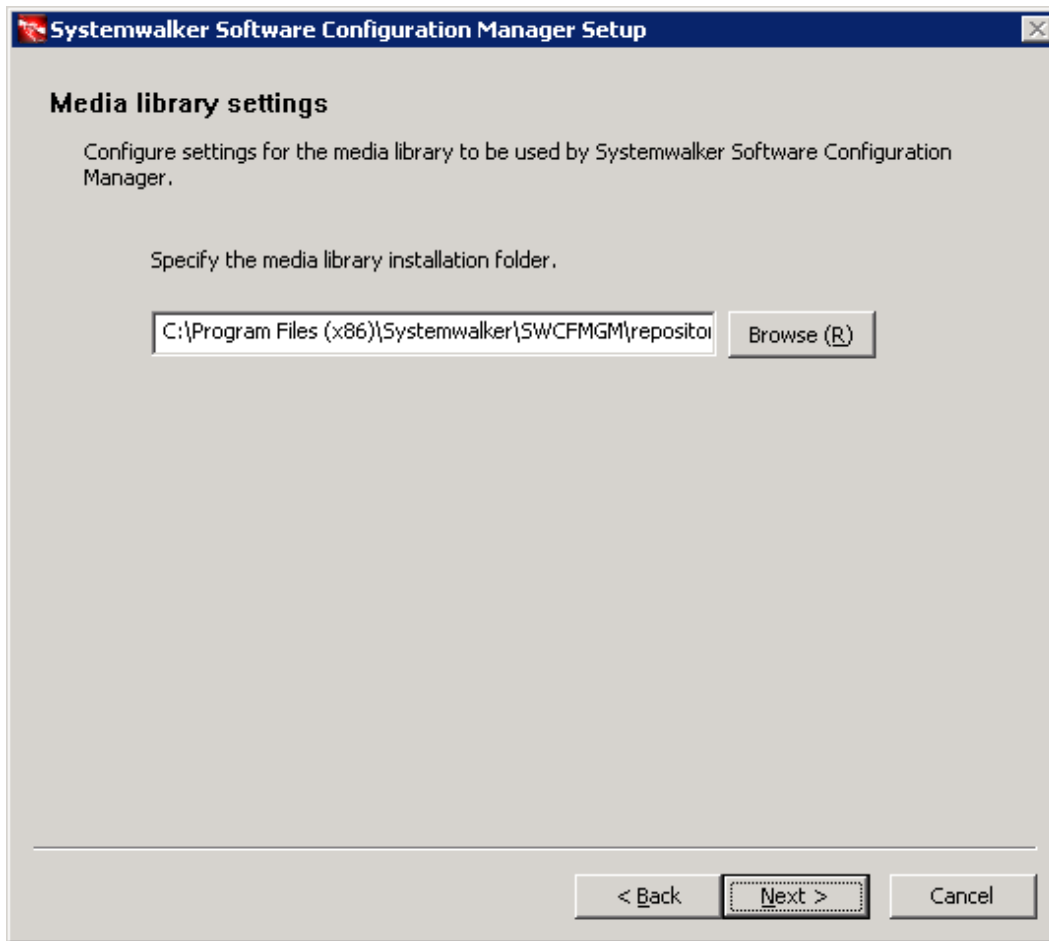
Input parameter	Default value
Database port number	9658

4. The **WSUS settings** window will be displayed.  
Specify the following items, and then click the **Next** button.

The screenshot shows a dialog box titled "Systemwalker Software Configuration Manager Setup" with a close button in the top right corner. The main heading is "WSUS settings". Below the heading is the instruction: "Specify the IP address of the server to be registered as a WSUS server." There are two sections. The first section is "Use a WSUS repository server?" with a checked checkbox labeled "Use (U)". The second section is "Enter the IP address of the WSUS server to be registered." It features a text input field containing "1 . 0 . 0 . 0" and an "Add (A)" button to its right. Below this is a section titled "List of IP addresses for the WSUS servers to be registered" with an empty rectangular list box and a "Delete (D)" button to its right. At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

- a. To use a WSUS server, perform the following operations:  
Specify the IP address of the WSUS server, and then click the **Add** button. Add the IP addresses for all the servers to be registered as WSUS servers. Up to 10 WSUS servers can be linked to this product.  
To remove an IP addresses that has been added, select the IP address in the list, and then click the **Delete** button.
- b. If no WSUS servers are to be used, clear the **Use** checkbox.

5. The **Media library settings** window will be displayed.  
Specify the following items, and then click the **Next** button.



Perform the media library settings.:

Input item	Default value
Media library installation folder	<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\repository

6. The **Environment settings for the email transmission function** window will be displayed.  
Specify the following items, and then click the **Next** button.

- a. To use the email transmission function, set the following items:

Input item	Default value
<b>Host name or IP address of the SMTP server</b>	None
<b>Port number for the SMTP server</b>	25
<b>Sender email address</b>	None
<b>Sender name</b>	None
<b>Retry interval (in seconds) used when transmission errors occur</b>	300
<b>Number of retries when transmission errors occur</b>	10

 **Point**

.....  
Set the **Retry interval (in seconds) used when transmission errors occur** and **Number of retries when transmission errors occur** items to match the operation policy, such as the target time for recovering from problems.

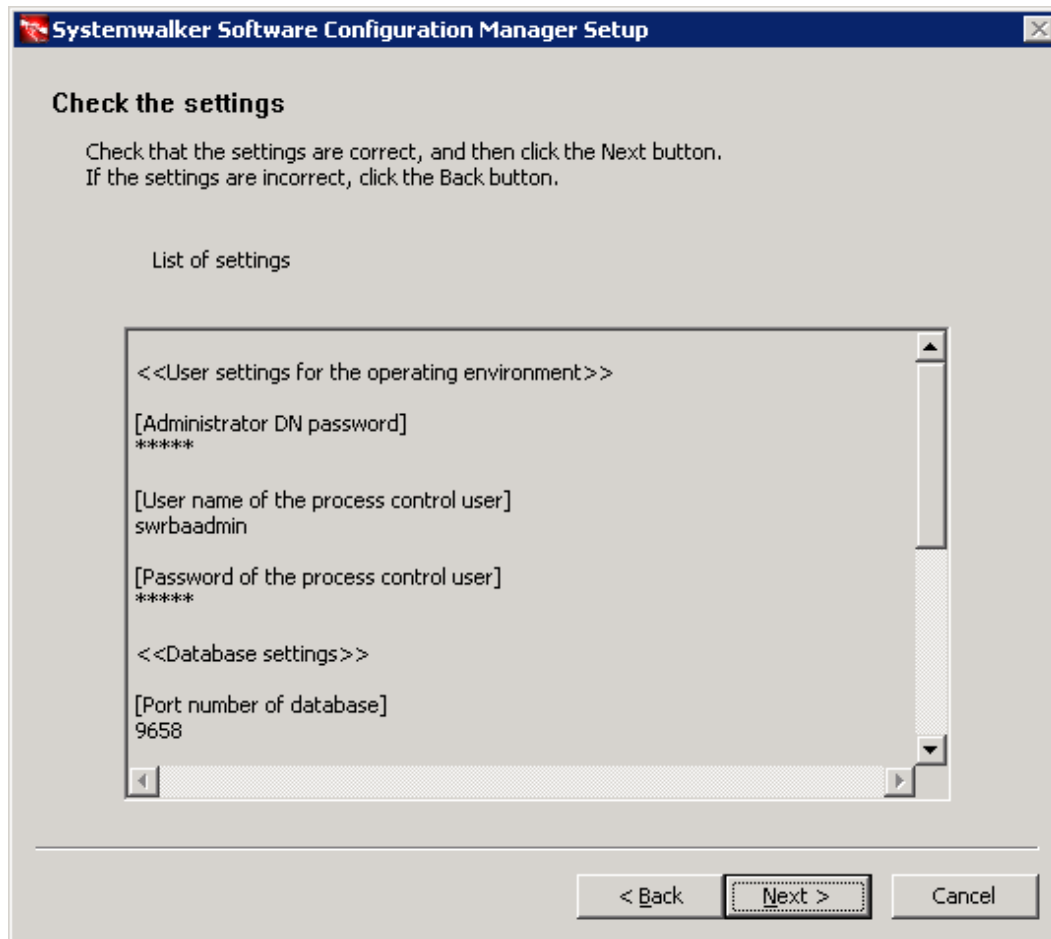
If there is no clear operation policy, use the default values.  
.....

- b. If the email transmission function is not to be used, clear the **Use** checkbox.

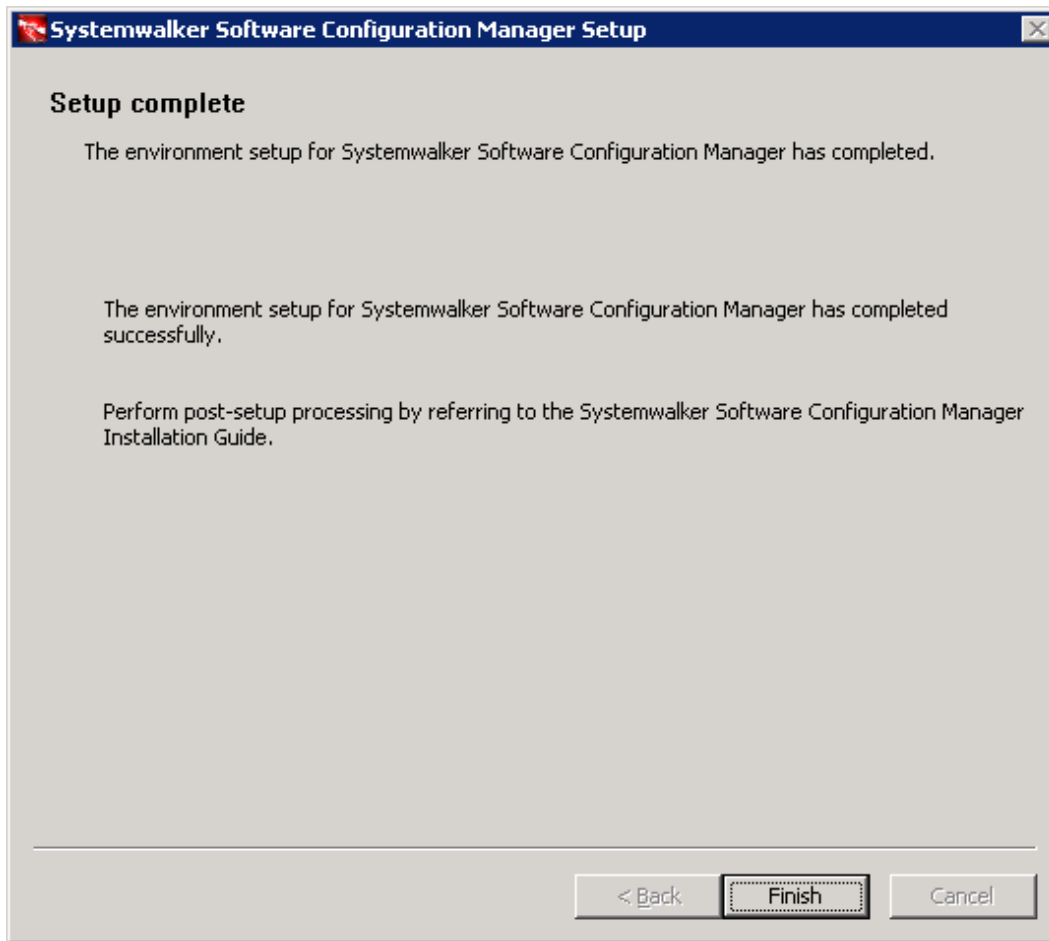


7. The **Check the settings** window will be displayed.

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



- Upon successful completion, the following window will be displayed.  
Click the **Finish** button.



- Click the **Finish** button.

**[Linux]**

Execute the following command to perform the setup:

```
/opt/FJsvcfmgm/bin/swcfmg_setup -s
```

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

```
=====
Systemwalker Software Configuration Manager Setup
                          V15.2.0
                          Copyright 2010-2014 FUJITSU LIMITED
=====

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

Press ENTER.
```

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

```
=====
Systemwalker Software Configuration Manager Setup
                          V15.2.0
                          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 **WSUS settings** window will be displayed. Specify whether to use WSUS server.

```
<< WSUS settings >>
Specify the environment information required to use the WSUS server.
=====

Use a WSUS repository server?

1. Use
2. Do not use
[number,q]
=>
```

6. To use a WSUS server, enter the IP address of the WSUS server.

```
<< WSUS settings >>
Specify the IP address of the server to be registered as a WSUS server.
=====

Enter the IP address of the WSUS server to be registered.
=>
```

7. Enter either the IP address of the WSUS if continuing registration, or "e", if completing registration of multiple WSUS servers.

```
<< WSUS settings >>
Specify the IP address of the server to be registered as a WSUS server.
=====

[List of IP addresses for the WSUS servers to be registered]
WSUS server 1: 192.168.10.10

Enter the IP address if continuing registration, or enter [e] if completing registration.
[IPAddress,e,q]
=>
```

8. The **Media library settings** window will be displayed.

Specify the directory where the media library is to be installed.

```
<< Media library settings >>
Configure settings for the media library to be used by Systemwalker Software Configuration
Manager.
=====

Specify the media library installation directory.
Installation directory (can be changed): /var/opt/FJSVcfmgm/repository

Accept the above settings?
[y,n,q]
=>
```

9. The **Environment settings for the email transmission function** window will be displayed. Specify whether to use the function.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

Specify whether to use the email transmission function.

1. Use
2. Do not use
[number,q]
=>
```

10. To use the email transmission function, set up the email transmission function.

a. Enter the host name or IP address of the SMTP server.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server:
Port number for the SMTP server: 25
Sender email address:
Sender name:
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the host name or IP address of the SMTP server.
=>
```

b. Enter the port number for the SMTP server.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address:
Sender name:
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the port number of the SMTP server.
If the return key is pressed without any input, [default: 25] will be set.
=>
```

c. Enter the email address of the sender.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address:
Sender name:
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the sender's email address.
=>
```

d. Enter the name of the sender.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
```

```
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address: smtp-server@example.com
Sender name:
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the sender's name.
=>
```

- e. Enter the retry interval to be used when transmission errors occur.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address: smtp-server@example.com
Sender name: Smt Server
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the retry interval (in seconds) used when transmission errors occur.
If the return key is pressed without any input, [default: 300] will be set.
=>
```

- f. Enter the number of retries to be performed when transmission errors occur.

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address: smtp-server@example.com
Sender name: Smt Server
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

Enter the number of retries when transmission errors occur.
If the return key is pressed without any input, [default: 10] will be set.
=>
```

- g. Check the settings for the email transmission function, and then enter "y".

```
<< Environment settings for the email transmission function >>
Specify the environment information required to use the email transmission function.
=====

[Settings Information]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address: smtp-server@example.com
Sender name: Smt Server
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10
```

```
Accept the above settings?
[y,n,q]
=>
```

### Point

Set the **Retry interval (in seconds) used when transmission errors occur** and **Number of retries when transmission errors occur** items to match the operation policy, such as the target time for recovering from problems. If there is no clear operation policy, use the default values.

11. 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 setting of operational environment]
Password of DN for manager: *****
User's for process control name of user: swrbaadmin
User's for process control password: *****

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

[WSUS settings]
WSUS servers: Use
List of IP addresses for the WSUS servers to be registered:
WSUS server 1: 192.168.10.10

[Media library settings]
Media library installation directory: /var/opt/FJsvcfmgm/repository

[Environment settings for the email transmission function]
Email transmission function: Use
Host name of the SMTP server: smtp-server.example.com
Port number for the SMTP server: 25
Sender email address: smtp-server@example.com
Sender name: SmtP Server
Retry interval (in seconds) used when transmission errors occur: 300
Number of retries when transmission errors occur: 10

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

12. 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.
```

## 3.1.4 Post-setup Tasks

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

### 3.1.4.1 Connection Settings for the Management Console

Perform the SSL communication settings for the Web server that will be used for management console connections.



## Note

Do not use this procedure if Systemwalker Software Configuration Manager is linked to ServerView Resource Orchestrator, or if the SSL communication environment has already been built.

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/
```

The default port number is "12000".

- c. Log in to the Interstage Management Console.  
Users must log in as an admin server user with Administrator privileges.
2. 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.
3. 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	Use
SSL definition	Select the SSL definition created at " <a href="#">3.1.1.2 Building the SSL Communication Environment for Management Console</a> ". - CFMG-SSL

4. Start the Web server (CFMG-ext).  
Click the **Status** tab, and then click the **Start** button to start the Web server.

### 3.1.4.2 Starting the Products

#### 3.1.4.2.1 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/FJJSVrcvnr/bin/rcxmgrctl start
```

#### 3.1.4.2.2 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
```

### 3.1.4.2.3 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
```

### 3.1.4.3 Registering Middleware Information

Register the following middleware definitions, which will be used for software parameter management by Systemwalker Software Configuration Manager:

- Definition of software information
- Definition of parameters to be set
- Definition of parameters to be collected

Execute the following command.

[Windows]

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_setup_mwinfo.bat
```

[Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_setup_mwinfo
```

#### Note

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

#### See

.....  
Refer to "Middleware List" in the *Parameter Reference* for information on the software and middleware for which information is to be registered.  
.....

## 3.2 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 "User Management" in the *Operation Guide* 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.

## 3.3 Registering Managed Servers

---

Before performing discovery, it is necessary to register managed servers. Design the configuration of tenants, users, L-Platforms, and servers, and then register these.

### When linked to ServerView Resource Orchestrator

To place an L-Platform or server not managed by ServerView Resource Orchestrator under the management of Systemwalker Software Configuration Manager when linked to ServerView Resource Orchestrator, you must register the managed server.

This procedure is not required if only L-Platforms or servers managed by ServerView Resource Orchestrator are to be managed.

### 3.3.1 Designing Tenants, Users, L-Platforms and Servers

---

**Design the configuration of tenants, users, L-Platforms, and servers - refer to "1.3 Designing Tenants, Users, L-Platforms and Servers" for details. The configuration can be changed later.**

### 3.3.2 Registering Tenants, Users, L-Platforms and Servers

---

**Register tenants, users, L-Platforms, and servers in the following order:**

1. Register tenants  
Refer to "Registering a Tenant" in the *Operation Guide* for details.
2. Register users  
Refer to "Registering a User" in the *Operation Guide* for details.
3. Register L-Platforms  
Refer to "Registering an L-Platform" in the *Operation Guide* for details.
4. Register servers  
Refer to "Registering a Server" in the *Operation Guide* for details.

## 3.4 Performing the Connection Test

---

Connection test must be performed for managed servers, to check if they are available to perform patch management, software parameter management, or software configuration information management.

Perform the connection test for managed servers that are to manage Windows OS patches.

Refer to "swcfmg\_connectiontest (Connection Test Command)" in the *Reference Guide* for details.

### When linked to ServerView Resource Orchestrator

Perform the connection test when you want to check if a managed server is available to perform patch management, software parameter management, or software configuration information management.

Perform the connection test for servers that are not managed by ServerView Resource Orchestrator and are to manage Windows OS patches.

## 3.5 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 Windows patch information
  - Create linkage servers  
Refer to "[2.1.3 Creating Linkage Servers \(Repository Servers\)](#)" for details.
  - Set up business servers  
Refer to "[3.8.1 Settings for Managing Windows Patches](#)" for details.
- Discovering Linux patch information
  - Create linkage servers  
Refer to "[2.1.3 Creating Linkage Servers \(Repository Servers\)](#)" for details.
  - Set up business servers  
Refer to "[3.8.2 Settings for Managing Linux Patches](#)" for details.
- Discovering Fujitsu middleware patch information and Fujitsu middleware product information
  - Set up business servers  
Refer to "[3.8.3 Settings for UpdateAdvisor \(Middleware\)](#)" for details.
  - Configure settings on the admin server  
Register the update application management registry configuration file.  
Refer to Step 1-1 and Step 1-2 under "Fujitsu Middleware Patch Management" in "Operation Flow" in the *Operation Guide* for details.
- Discovering parameter information
  - Configure settings on the admin server
    - Collect software configuration information**  
Refer to Step 1 under "Software Parameter Management" in "Operation Flow" in the *Operation Guide* for details.
    - Register software information**  
This step is not required if using the software definition in which this product is already registered.  
Refer to "Definition of Software Information" under "Definition of Software Information" in "Operation Setup" in the *Operation Guide* for details.
    - Register installed software**  
This step is not required if using software supported by UpdateAdvisor (middleware).  
Refer to "Definition of Installed Software Information" under "Definition of Software Information" in "Operation Setup" in the *Operation Guide* for details.
    - Register parameters to be collected**  
This step is not required if using the parameter collection definition in which this product is already registered.  
Refer to Step 4 under "Software Parameter Management" in "Operation Flow" in the *Operation Guide* for details.
    - Associate the software and the parameter collection definition**  
This step is not required if using the software definition in which this product is already registered.  
Refer to Step 5 under "Software Parameter Management" in "Operation Flow" in the *Operation Guide* for details.

Perform the initial discovery for patch information and Fujitsu middleware product information by executing the following command:

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_patch_updateinfo.exe -repository
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -repository
```

To discover only particular information, execute the following command:

- Windows patch information

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_patch_updateinfo.exe -t windows -repository
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -t windows -repository
```

- Linux patch information

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_patch_updateinfo.exe -t linux
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -t linux
```

- Fujitsu middleware patch information and Fujitsu middleware product information

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_patch_updateinfo.exe -t middleware
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -t middleware
```

Register newly released Fujitsu middleware patches after the initial discovery has been performed.

Refer to Step 2-1 to Step 2-4 under "Fujitsu Middleware Patch Management" in "Operation Flow" in the *Operation Guide* for information on how to register newly released Fujitsu middleware patches.

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

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_param_updateinfo.exe
```

**[Linux]**

```
/opt/FJSVcfmgm/bin/swcfmg_param_updateinfo
```

Refer to "swcfmg\_param\_updateinfo (Parameter Information Update Command)" in the *Reference Guide* for information on the options that can be used in swcfmg\_param\_updateinfo.

## Note

- Perform the procedure in "3.6 Registering Discovery Schedules" after the initial discovery is complete. The initial discovery can take quite a long time, so if the execution of a discovery registered using the procedure in "3.6 Registering Discovery Schedules" coincides with the execution of the initial discovery, then the regular discovery will fail to execute.
- Perform the procedure in "3.7 Registering a Configuration Baseline Creation Schedule" after the initial discovery is complete. The initial discovery can take quite a long time, so if a configuration baseline creation registered using the procedure in "3.7 Registering a Configuration Baseline Creation Schedule" coincides with the execution of the initial discovery, then the configuration baseline will not be created correctly.

## 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:

- Windows patch information

Number of business servers	Number of WSUS servers (*1)	Time required for the initial discovery
500	1	240 minutes or more
1,000	2	330 minutes or more
1,500	3	420 minutes or more

\*1: The "Number of WSUS servers" refers to the recommended number of WSUS servers when business servers are managed by distributing them to multiple WSUS servers in order to balance the load on WSUS servers. It is recommended that each WSUS server manage no more than 500 business servers.

- Linux patch information

Number of business servers	Time required for the initial discovery
500	240 minutes or more
1,000	420 minutes or more
1,500	600 minutes or more

- Fujitsu middleware patch information and Fujitsu middleware product information

Number of business servers	Time required for the initial discovery
500	90 minutes or more
1,000	120 minutes or more
1,500	150 minutes or more

- All information

To discover all information, estimate the time required for discovery based on the following conditions:

The time required for the initial discovery for all information is either of the following, whichever is longer:

- Time required for the initial discovery for Windows patch information
- Time required for the initial discovery for Linux patch information + time required for the initial discovery for Fujitsu middleware patch information and Fujitsu middleware product information

**Example:**

To discover OS patch information and Fujitsu middleware patch information for 1,500 business servers (1,000 Windows business servers + 500 Linux business servers), the time required for the initial discovery is as follows:

- Time required for the initial discovery for Windows patch information (1,000 business servers): At least 330 minutes
- Time required for the initial discovery for Linux patch information (500 business servers): At least 240 minutes
- Processing time for the initial discovery for Fujitsu middleware patch information and Fujitsu middleware product information (1,500 business servers): At least 150 minutes

The time required for the initial discovery will be at least 390 minutes (i.e., 240 + 150 minutes).

---

## 3.6 Registering Discovery Schedules

Register schedules for regular discoveries.

For Windows, register the following program with the Task Scheduler:

For Linux, add the following program to cron. Refer to the cron manuals for information on cron.

### Patch information and Fujitsu middleware product information

- [Program]

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg_patch_updateinfo.exe
```

**[Linux]**

```
/opt/FJsvcfmgm/bin/swcfmg_patch_updateinfo
```

- [Options]

```
-repository
```

To perform regular discovery for only particular information, register the following program:

- Windows patch information

- [Program]

**[Windows]**

```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin  
\swcfmg_patch_updateinfo.exe
```

**[Linux]**

```
/opt/FJsvcfmgm/bin/swcfmg_patch_updateinfo
```

- [Options]

```
-t windows -repository
```

- Linux patch information

- [Program]

**[Windows]**

<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin  
\swcfmg\_patch\_updateinfo.exe

**[Linux]**

/opt/FJSVcfmgm/bin/swcfmg\_patch\_updateinfo

- [Options]

-t linux

- Fujitsu middleware patch information and Fujitsu middleware product information

- [Program]

**[Windows]**

<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin  
\swcfmg\_patch\_updateinfo.exe

**[Linux]**

/opt/FJSVcfmgm/bin/swcfmg\_patch\_updateinfo

- [Options]

-t middleware



To perform regular discovery for only particular information, discovery for only the following combinations of information can be executed simultaneously:

Information collected by regular discovery	Windows patch information	Linux patch information	Fujitsu middleware patch information and Fujitsu middleware product information
Windows patch information	-	Y	Y
Linux patch information	Y	-	-
Fujitsu middleware patch information and Fujitsu middleware product information	Y	-	-

Y: Can be executed simultaneously

-: Cannot be executed simultaneously

**Parameter information**

- [Program]

**[Windows]**

<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin\swcfmg\_param\_updateinfo.exe

**[Linux]**

```
/opt/FJSCvcmgm/bin/swcfmg_param_updateinfo
```

- [Options]

Refer to "swcfmg\_param\_updateinfo (Parameter Information Update Command)" in the *Reference Guide* for information on the valid options.

### Note

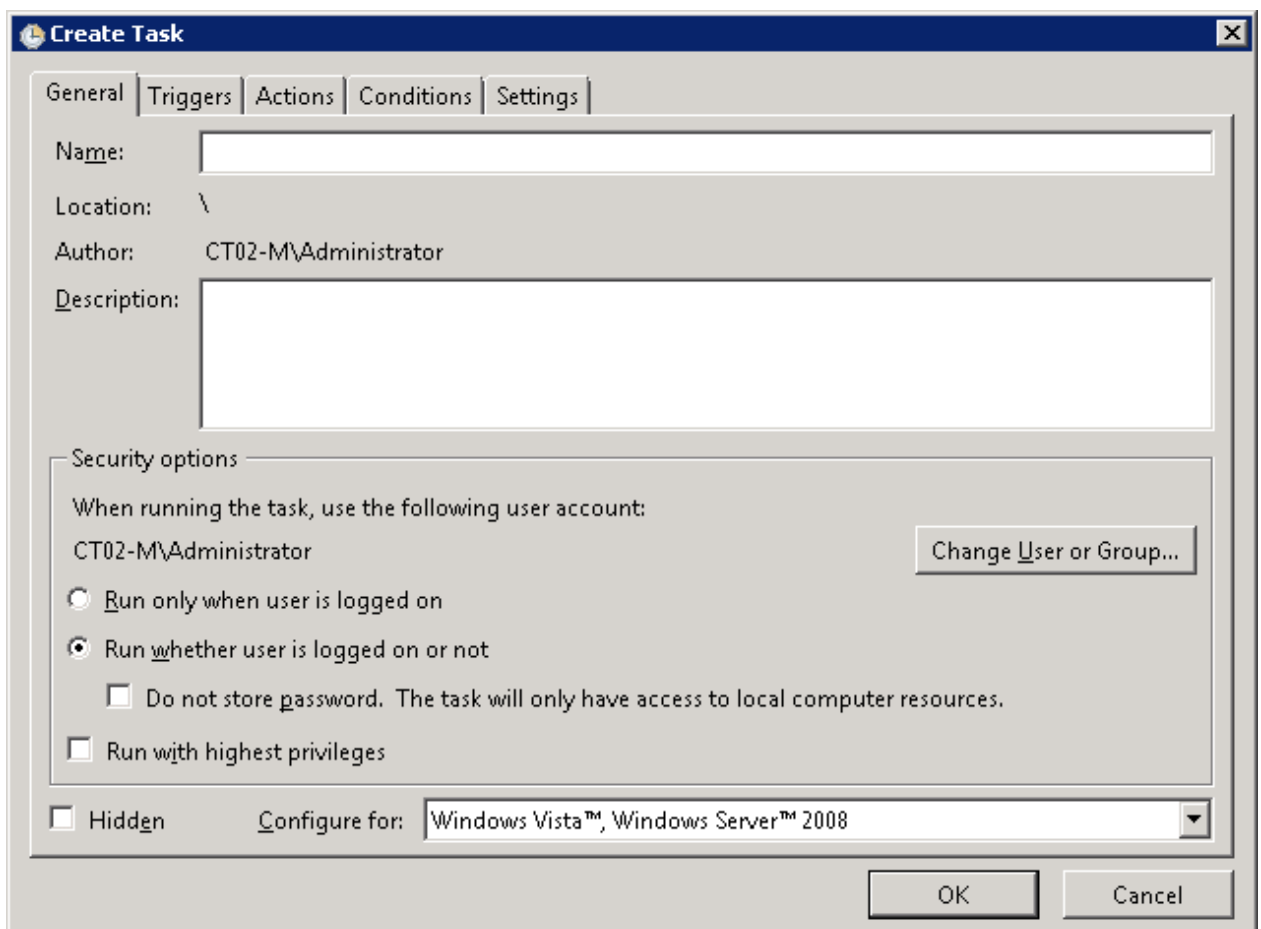
Discovery of "patch information and Fujitsu middleware product information" and discovery of "parameter information" cannot be executed concurrently.

## Example setting procedures

### [Windows]

The following example shows how to register a schedule with the Task Scheduler. In this example, regular discovery is executed for all patch information.

1. Log in to Windows using an account that belongs to the Administrators group.
2. Select **Start >> Administrative Tools >> Task Scheduler**.  
The **Task Scheduler** window will be displayed.
3. Select **Action >> Create Task**.  
The **Create New** window will be displayed.



**Create Task**

General | Triggers | Actions | Conditions | Settings

Name:

Location: \\

Author: CT02-M\Administrator

Description:

Security options

When running the task, use the following user account:  
CT02-M\Administrator

Run only when user is logged on

Run whether user is logged on or not

Do not store password. The task will only have access to local computer resources.

Run with highest privileges

Hidden

Configure for: Windows Vista™, Windows Server™ 2008



- a. Enter a task name in the **Name** field in the **General** tab, and then select **Run whether user is logged on or not**.
- b. Select the **Triggers** tab, and then click the **New** button.  
The **New Trigger** window will be displayed.

**Edit Trigger**

Begin the task: On a schedule

Settings

One time    Start: 7/ 1/2012    2:00:00 AM     Synchronize across time zones

Daily

Weekly

Monthly

Recur every: 1 days

Advanced settings

Delay task for up to (random delay): 1 hour

Repeat task every: 1 hour    for a duration of: 1 day

Stop all running tasks at end of repetition duration

Stop task if it runs longer than: 3 days

Expire: 6/18/2013    5:24:42 PM     Synchronize across time zones

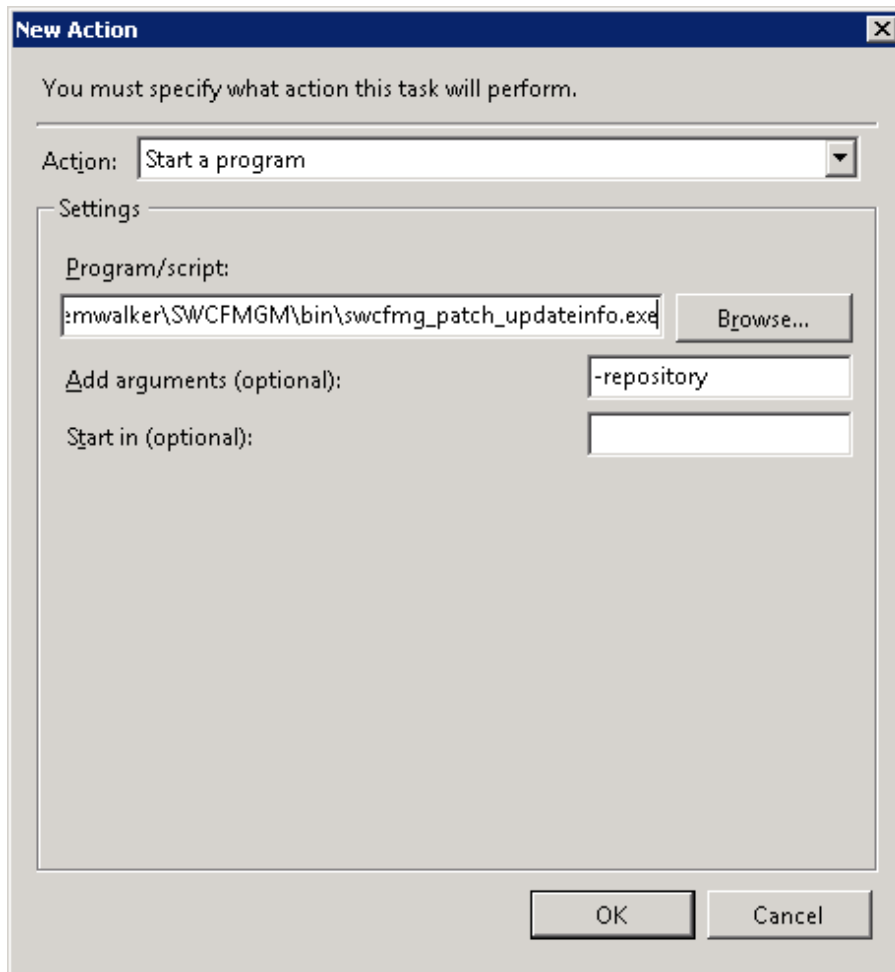
Enabled

OK    Cancel

Register the discovery schedule.

c. Select the **Actions** tab, and then click the **New** button.

The **New Action** window will be displayed.



Configure the following settings:

- Select **Start a program** from the **Action** pull-down menu.
- Add the following command to the **Program/script** field:

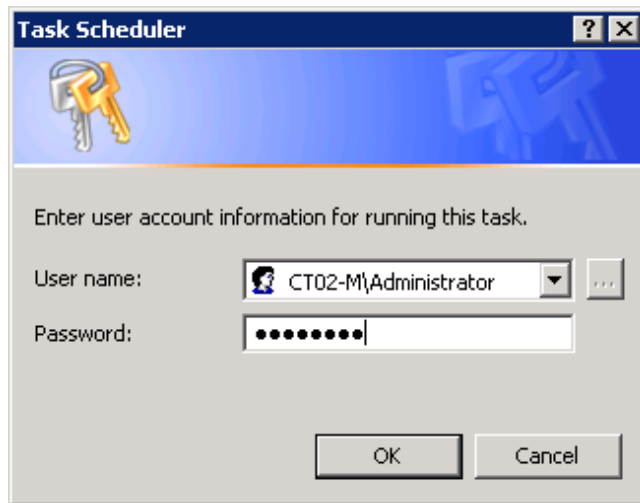
```
<Systemwalker Software Configuration Manager installation directory>\SWCFMGM\bin  
\swcfmg_patch_updateinfo.exe
```

- Add the following argument to the **Add arguments (optional)** field:

```
-repository
```

4. Click the **OK** button in the **Create Task** window.

The following window will be displayed:



5. Enter the user name for an account belonging to the Administrators group and the corresponding password, and then click the **OK** button.

### [Linux]

The following example shows how to register a schedule with cron. In this example, regular discovery is executed for all patch information.

Perform the following procedure as the root user:

1. Check that the cron service has started

```
>/etc/rc.d/init.d/crond status  
crond (pid xxx) is running...
```

2. If the cron service is not running, use the following command to start the cron service:

```
>/etc/rc.d/init.d/crond start  
Starting crond:
```

### Point

The cron service normally starts when the operating system starts.

By executing the following command, it is possible to check whether the cron service has been set to start when the operating system starts:

```
>chkconfig --list crond  
crond          0:off  1:off  2:on   3:on   4:on   5:on   6:off
```

If the cron service has been set to start when the operating system starts, the numbers 2, 3, 4 and 5 above are set to "on" as shown above.

To set the cron service to start when the operating system starts, execute the following command:

```
>chkconfig --level 2345 crond on
```

3. Execute the following command to edit the schedule definitions:

```
>crontab -e
```

Executing the "crontab -e" command starts the vi editor. Refer to the vi editor manuals for information on the vi editor.

Example: Discovering all patch information every day at 2:00

```
0 2 * * * /opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -repository > /dev/null 2>&1
```

## Point

### 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:

- Windows patch information

Number of business servers	Number of WSUS servers (*1)	Execution interval
500	1	30 minutes or more
1,000	2	60 minutes or more
1,500	3	60 minutes or more

\*1: The "Number of WSUS servers" refers to the recommended number of WSUS servers when business servers are managed by distributing them to multiple WSUS servers in order to balance the load on WSUS servers. It is recommended that each WSUS server manage no more than 500 business servers.

- Linux patch information

Number of business servers	Execution interval
500	90 minutes or more
1,000	150 minutes or more
1,500	210 minutes or more

- Fujitsu middleware patch information and Fujitsu middleware product information

Number of business servers	Execution interval
500	60 minutes or more
1,000	90 minutes or more
1,500	120 minutes or more

- All information

To perform regular discovery for all information, estimate the discovery execution interval based on the following conditions:

The execution interval for regular discovery for all information is either of the following, whichever is longer:

- Discovery execution interval for Windows patch information
- Discovery execution interval for Linux patch information + discovery execution interval for Fujitsu middleware patch information and Fujitsu middleware product information

### Example:

To discover OS patch information and Fujitsu middleware information for 1,500 business servers (1,000 Windows business servers + 500 Linux business servers), the discovery execution interval is as follows:

- Discovery execution interval for Windows patch information (1,000 business servers): At least 60 minutes
- Discovery execution interval for Linux patch information (500 business servers): At least 90 minutes
- Discovery execution interval for Fujitsu middleware patch information and Fujitsu middleware product information (1,500 business servers): At least 120 minutes

The execution interval for regular discovery will be at least 210 minutes (i.e., 90 + 120 minutes).



If the system is stopped at the specified discovery start time (due to maintenance, for example), discovery will be performed at the next scheduled time.

## 3.7 Registering a Configuration Baseline Creation Schedule

---

Register the configuration baseline creation.schedule.

For Windows, register the following program with the Task Scheduler:

For Linux, add the following program to cron. Refer to the cron manuals for information on cron.

- [Program]

### [Windows]

```
%SWCMDB_INSTALL_PATH%\FJsvcmdbm\bin\snapcreate.exe
```

### [Linux]

```
/opt/FJsvcmdbm/bin/snapcreate.sh
```

- [Options]

```
-q
```

### [Windows]

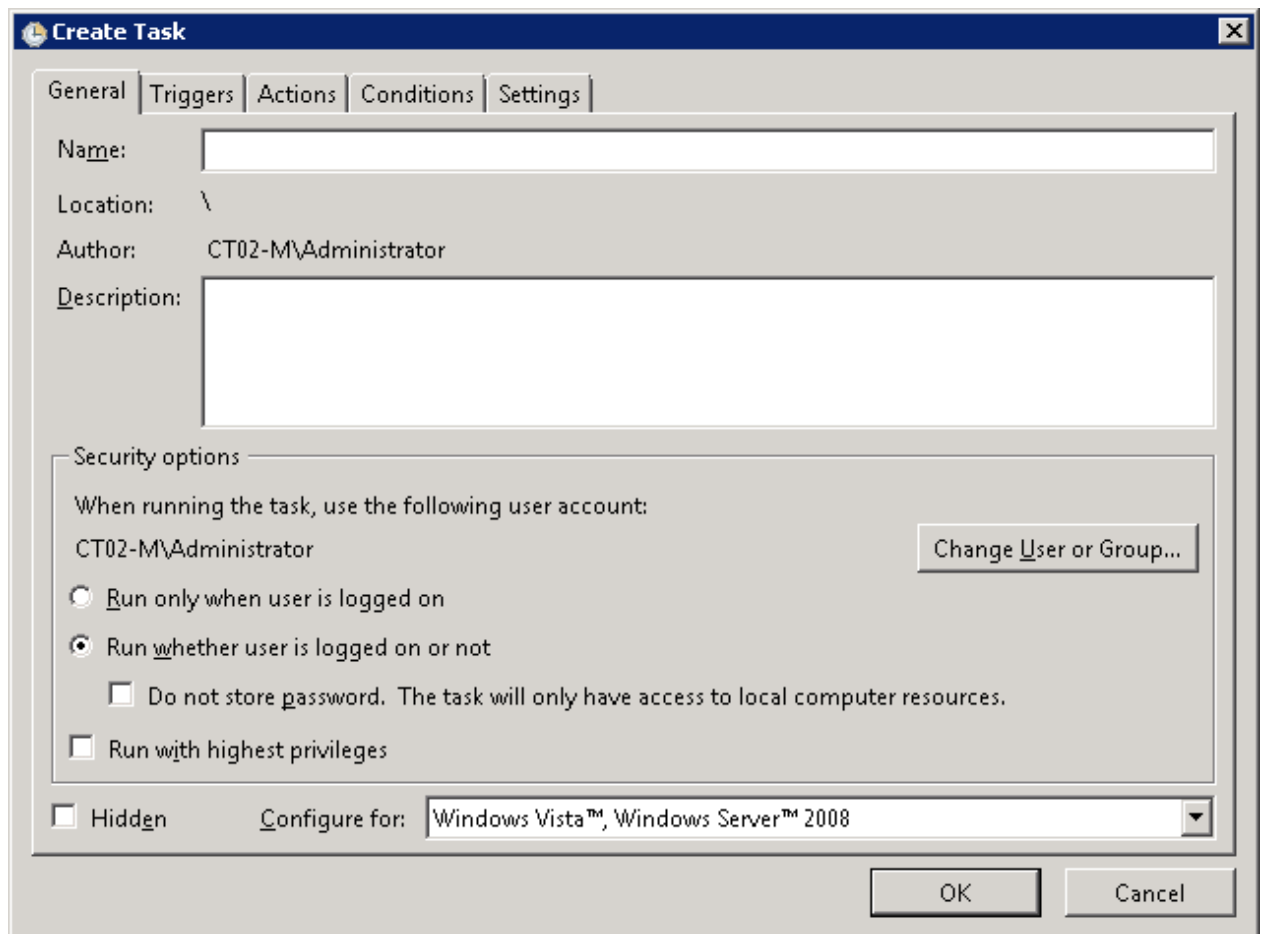
The following example shows how to register a schedule with the Task Scheduler:

1. Log in to Windows using an account that belongs to the Administrators group.
2. Select **Start >> Administrative Tools >> Task Scheduler**.

The **Task Scheduler** window will be displayed.

3. Select **Action >> Create Task**.

The **Create New** window will be displayed.



- a. Enter a task name in the **Name** field in the **General** tab, and then select **Run whether user is logged on or not**.

- b. Select the **Triggers** tab, and then click the **New** button.  
The **New Trigger** window will be displayed.

**New Trigger**

Begin the task: On a schedule

Settings

One time

Daily

Weekly

Monthly

Start: 7/ 2/2012 2:00:00 AM  Synchronize across time zones

Recur every: 1 weeks on:

Sunday  Monday  Tuesday  Wednesday

Thursday  Friday  Saturday

Advanced settings

Delay task for up to (random delay): 1 hour

Repeat task every: 1 hour for a duration of: 1 day

Stop all running tasks at end of repetition duration

Stop task if it runs longer than: 3 days

Expire: 6/18/2013 5:29:12 PM  Synchronize across time zones

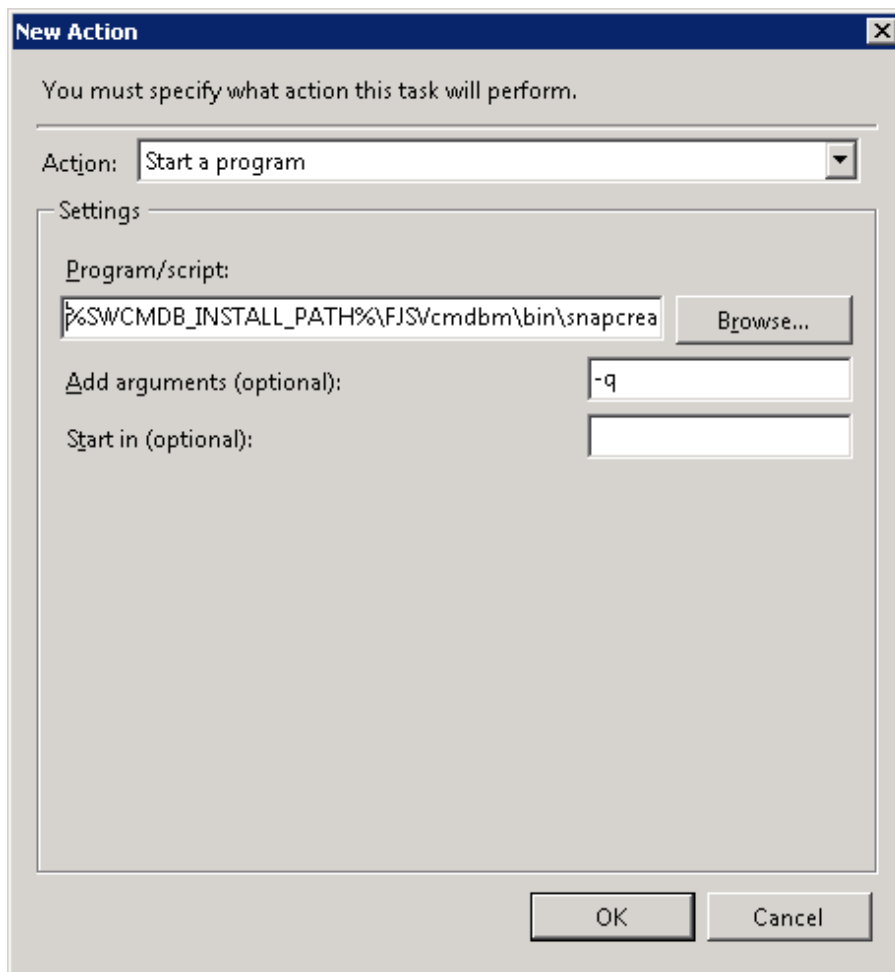
Enabled

OK Cancel

Register the configuration baseline creation schedule.

c. Select the **Actions** tab, and then click the **New** button.

The **New Action** window will be displayed.



Configure the following settings:

- Select **Start a program** from the **Action** pull-down menu.
- Add the following command to the **Program/script** field:

%SWCMDB\_INSTALL\_PATH%\FJSVcmdbm\bin\snapcreate.exe

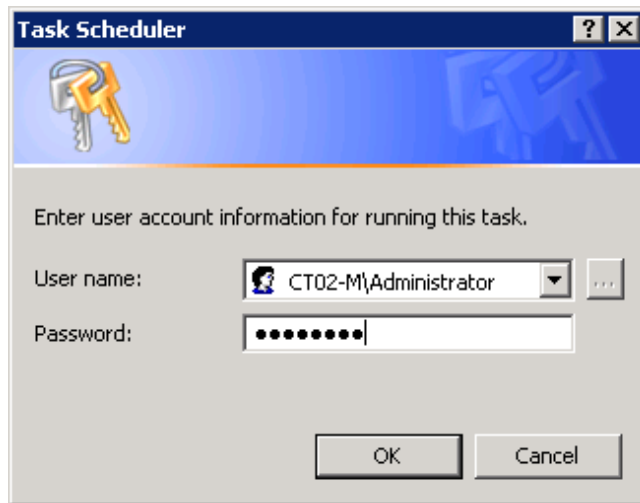
- Add the following argument to the **Add arguments (optional)** field:

-q



4. Click the **OK** button in the **Create Task** window.

The following window will be displayed:



5. Enter the user name for an account belonging to the Administrators group and the corresponding password, and then click the **OK** button.

## [Linux]

The following example shows how to register the program with cron:

Perform the following procedure as the root user:

1. Check that the cron service has started

```
>/etc/rc.d/init.d/crond status  
crond (pid xxx) is running...
```

2. If the cron service is not running, use the following command to start the cron service:

```
>/etc/rc.d/init.d/crond start  
Starting crond:
```

## Point

The cron service normally starts when the operating system starts.

By executing the following command, it is possible to check whether the cron service has been set to start when the operating system starts:

```
>chkconfig --list crond  
crond          0:off  1:off  2:on   3:on   4:on   5:on   6:off
```

If the cron service has been set to start when the operating system starts, the numbers 2, 3, 4 and 5 above are set to "on" as shown above.

To set the cron service to start when the operating system starts, execute the following command:

```
>chkconfig --level 2345 crond on
```

3. Execute the following command to edit the schedule definitions:

```
>crontab -e
```

Executing the "crontab -e" command starts the vi editor. Refer to the vi editor manuals for information on the vi editor.

Example: Creating a configuration baseline every Monday at 6:00

```
0 6 * * 1 /opt/FJSVcmdbm/bin/snapcreate.sh -q> /dev/null 2>&1
```

### Note

- Set up a schedule so that configuration baselines are created no more than once a week.
- Take care that the configuration baseline creation schedule does not conflict with the regular discovery schedule. If the creation of a configuration baseline conflicts with the execution of regular discovery, the configuration baseline will not be created correctly.

## 3.8 Setting up Related Software

---

This section explains how to set up related software.

### 3.8.1 Settings for Managing Windows Patches

---

To manage Windows patches, managed servers must be registered as the computers managed by WSUS.

There are the following two methods for registering managed servers as the computers managed by WSUS, as published by Microsoft. Refer to the information published by Microsoft for details.

- Modifying the registry
- Editing the group policy (gpedit.msc)

### Information

Systemwalker Software Configuration Manager provides a connection destination repository server registration command (swcfmg\_register\_repsv) in order to simplify the task of registering managed servers as the computers managed by WSUS. Refer to the *Reference Guide* for information on the connection destination repository server registration command.

Note the following points when using the connection destination repository server registration command.

When creating a managed server (if linking to ServerView Resource Orchestrator)

When a new business server is deployed using ServerView Resource Orchestrator, use the software parameter settings function to execute the connection destination repository server registration command.

Refer to the *Software Parameter Setting Guide for ServerView Resources Orchestrator* for information on the software parameter settings function.

When creating a managed server

Either the tenant administrator or a tenant user should obtain the connection destination repository server registration command from the infrastructure administrator, and then execute the command by copying it to a directory on the managed server.

Registering an existing managed server as the computer managed by WSUS

Either the tenant administrator or a tenant user should obtain the connection destination repository server registration command from the infrastructure administrator, and then execute the command by copying it to an arbitrary directory on the business server.

### 3.8.2 Settings for Managing Linux Patches

---

To manage Linux patches, the Yellowdog Updater Modified (yum) repository server that managed servers refer to must be set up on the business servers. Refer to "[2.3.1 Points to Note before Installing on Business Servers](#)" for details.

### 3.8.3 Settings for UpdateAdvisor (Middleware)

---

To manage software information and patches for Fujitsu middleware, the latest version of the UpdateAdvisor (middleware) must be installed on managed servers. Refer to "[2.3.1 Points to Note before Installing on Business Servers](#)" for details.

## Chapter 4 Setup Cancellation

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

### 4.1 Points to Note before Canceling the Setup

---

Note the following points when canceling the setup.

#### 4.1.1 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 "Backing up the Admin Server" in the *Operation Guide* for information on the various assets to back up.

### 4.2 Canceling the Setup for the Admin Server

---

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

#### 4.2.1 Tasks Required before Setup Cancellation

---

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

##### 4.2.1.1 Deleting the Discovery Schedule

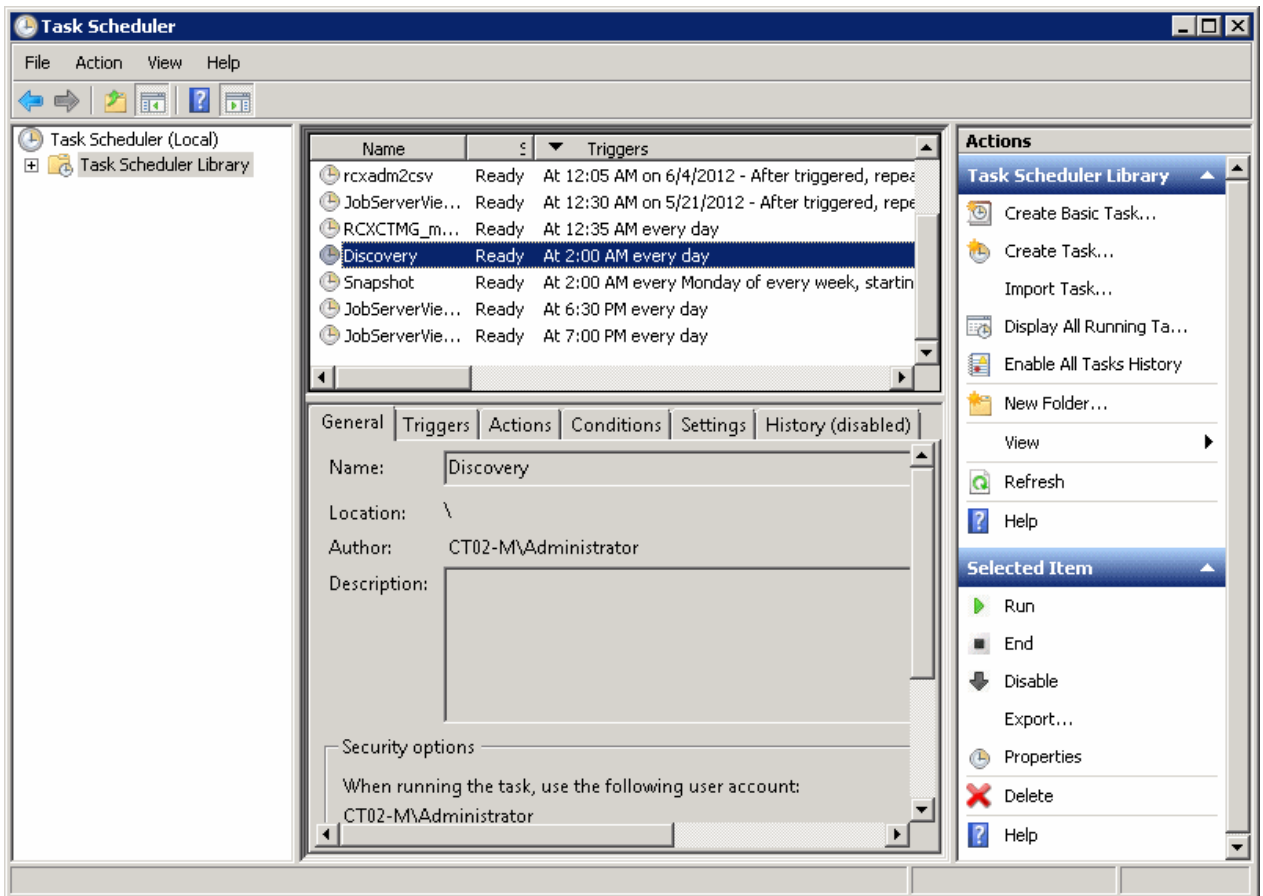
###### [Windows]

Delete the discovery schedule that has been registered with the Task Scheduler.

1. Log in to Windows using an account that belongs to the Administrators group.

2. Select **Start >> Administrative Tools >> Task Scheduler**.

The **Task Scheduler** window will be displayed.



3. Select the task to be deleted.
4. Delete the task by selecting **Action >> Delete**.

### [Linux]

Delete the discovery schedule that has been registered with cron.

Perform the following procedure as the root user:

1. Execute the following command to edit the schedule definitions:

```
>crontab -e
```

Executing the "crontab -e" command starts the vi editor. Refer to the vi editor manuals for information on the vi editor.

Example: Deleting the following discovery schedule:

```
0 2 * * * /opt/FJSVcfmgm/bin/swcfmg_patch_updateinfo -repository
```

## 4.2.1.2 Deleting the Configuration Baseline Creation Schedule

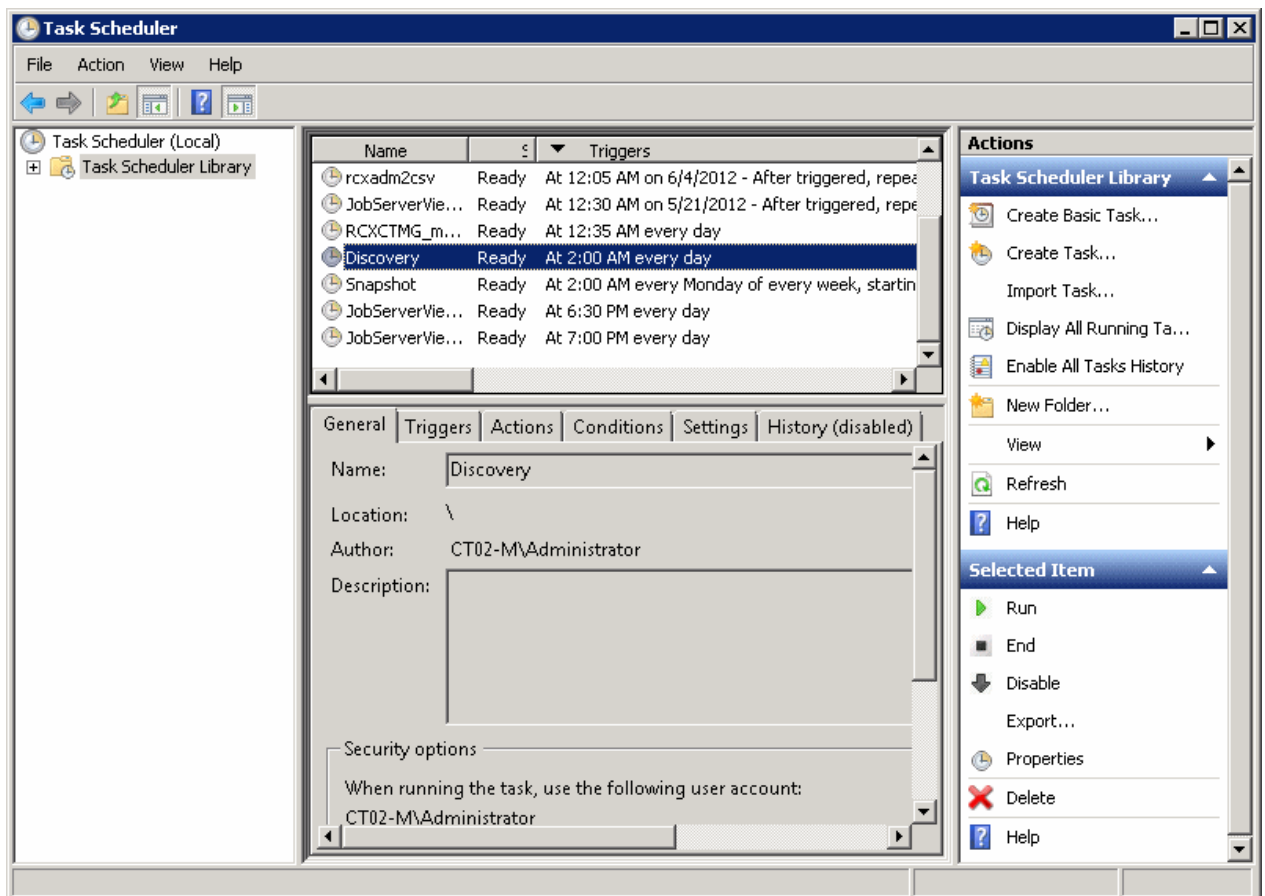
### [Windows]

Delete the configuration baseline creation schedule that has been registered with the Task Scheduler.

1. Log in to Windows using an account that belongs to the Administrators group.

2. Select **Start >> Administrative Tools >> Task Scheduler**.

The **Task Scheduler** window will be displayed.



3. Select the task to be deleted.
4. Delete the task by selecting **Action >> Delete**.

### [Linux]

Delete the configuration baseline creation schedule that has been registered with cron.

Perform the following procedure as the root user:

1. Execute the following command to edit the schedule definitions:

```
>crontab -e
```

Executing the "crontab -e" command starts the vi editor. Refer to the vi editor manuals for information on the vi editor.

Example: Deleting the following configuration baseline creation schedule:

```
0 6 * * 1 /opt/FJSVcmdbm/bin/snapcreate.sh -q
```

### 4.2.1.3 Deleting an Automated Operation Process Group

Delete the automated operation process group (cfmgApplication) that has been used in Systemwalker Software Configuration Manager.

To delete an automated operation process group for patch distribution/application processing, parameter configuration processing, or script execution processing, there must be no process instances in the automated operation process group, and the state must be **Offline**. Taking this into consideration, perform the following procedure:

1. Log in to the Web console for Systemwalker Runbook Automation.

```
http://<Name of the admin server>:<Port number>/console/Default/
```

If the port number has been changed from the initial value "80", specify the new port number.

User ID	swrbaadmin
Password	systemwalker#1

If these values have been changed from the initial values, log in using the new values.

```
cfmgApplication
```



#### Note

Be careful not to select automated operation process groups other than "cfmgApplication". Otherwise, operations of other products may be affected.

2. Click the **Process Instances** submenu on the **Process Management** tab to display the **Process Instances** tab in the work area.
3. Select **All Processes** in the **Process Filters** pull-down menu, and delete all of the process instances that are displayed.  
Select the process instances to be deleted and then click the **Delete** button. Multiple process instances can be selected using the Shift key.
4. Click the **Process Group Settings** submenu on the **System Administration** tab to display the **Process Group Settings** tab in the work area.
5. Select the "cfmgApplication" automated operation process group from the process group list, and then select **Offline** in the **Details** tab of the details panel.  
The status of the automated operation process group will change to **Offline**.
6. Select the "cfmgApplication" automated operation process group from the process group list, and then select **Uninstall** in the **Details** tab of the details panel.



#### Note

Be careful not to uninstall automated operation process groups other than "cfmgApplication". Otherwise, operations of other products may be affected.

7. Click the **OK** button in the deletion confirmation message window.

### 4.2.1.4 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>\SVRORManager\bin\rcxmgrctl stop
```

#### [Linux]

```
/opt/FJSVrcvnr/bin/rcxmgrctl stop
```

### 4.2.1.5 Stopping Systemwalker Runbook Automation



## Note

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
```

## 4.2.2 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 -u
```

### [Linux]

```
/opt/FJSVcfmgm/bin/swcfmg_setup -u
```

## 4.2.3 Canceling the Setup for Systemwalker Runbook Automation



## Note

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

### 4.2.3.1 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



## Note

When canceling the setup for Systemwalker Runbook Automation:

- Execute the "isstat" command and ensure that Interstage is running.

### 4.2.3.2 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.  
.....

### 4.2.3.3 Deleting the Environment for Systemwalker Runbook Automation [Windows]

Follow the steps below to delete the Systemwalker Runbook Automation environment:



**Note**

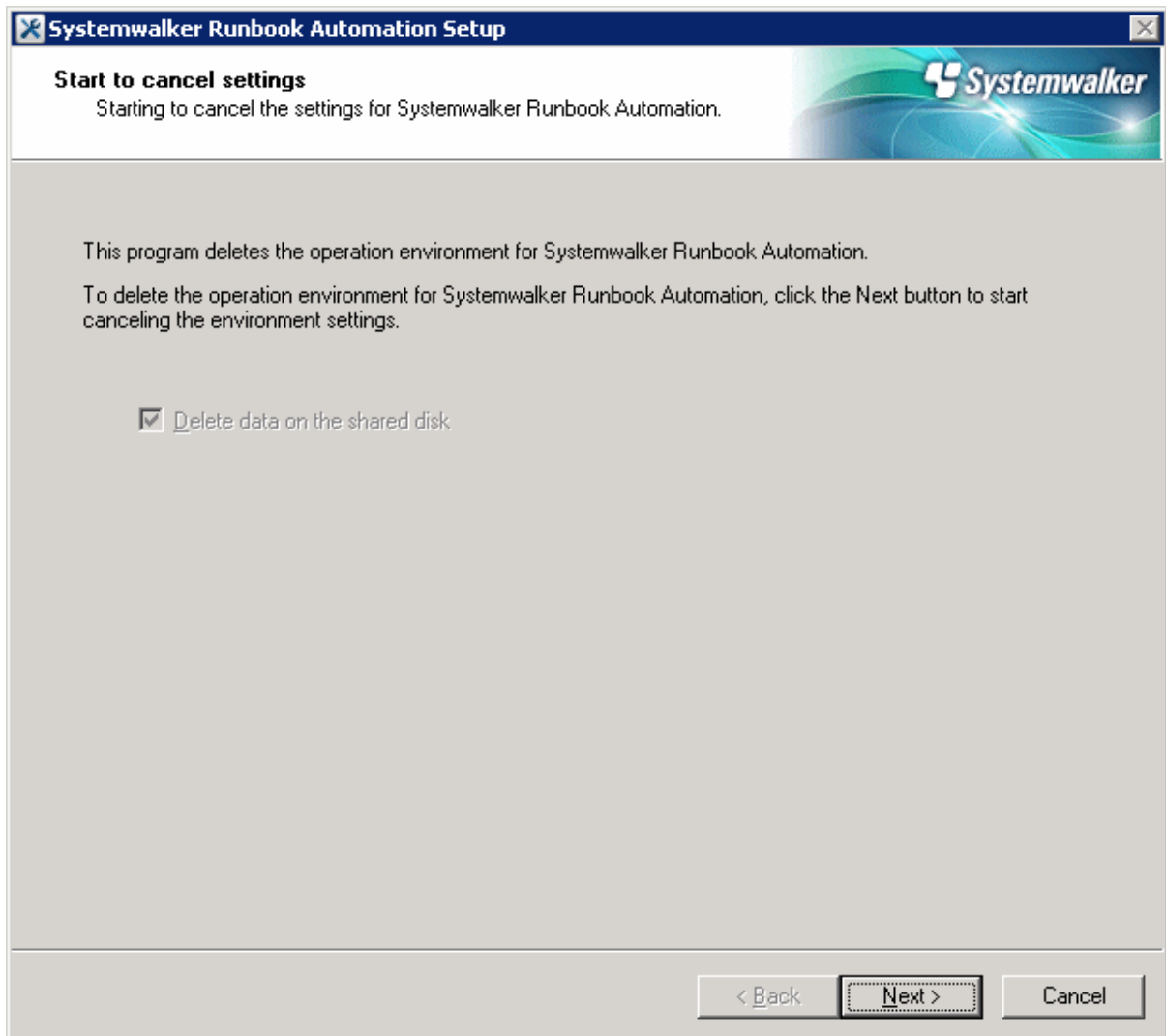
.....  
To cancel the setup, log in as the same user that executed the setup.  
.....

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
```

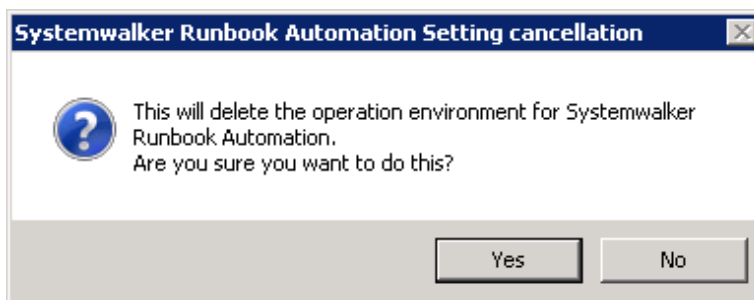
3. Click the **Next** button.

It is recommended to backup resources such as ticket histories, because they will be deleted.



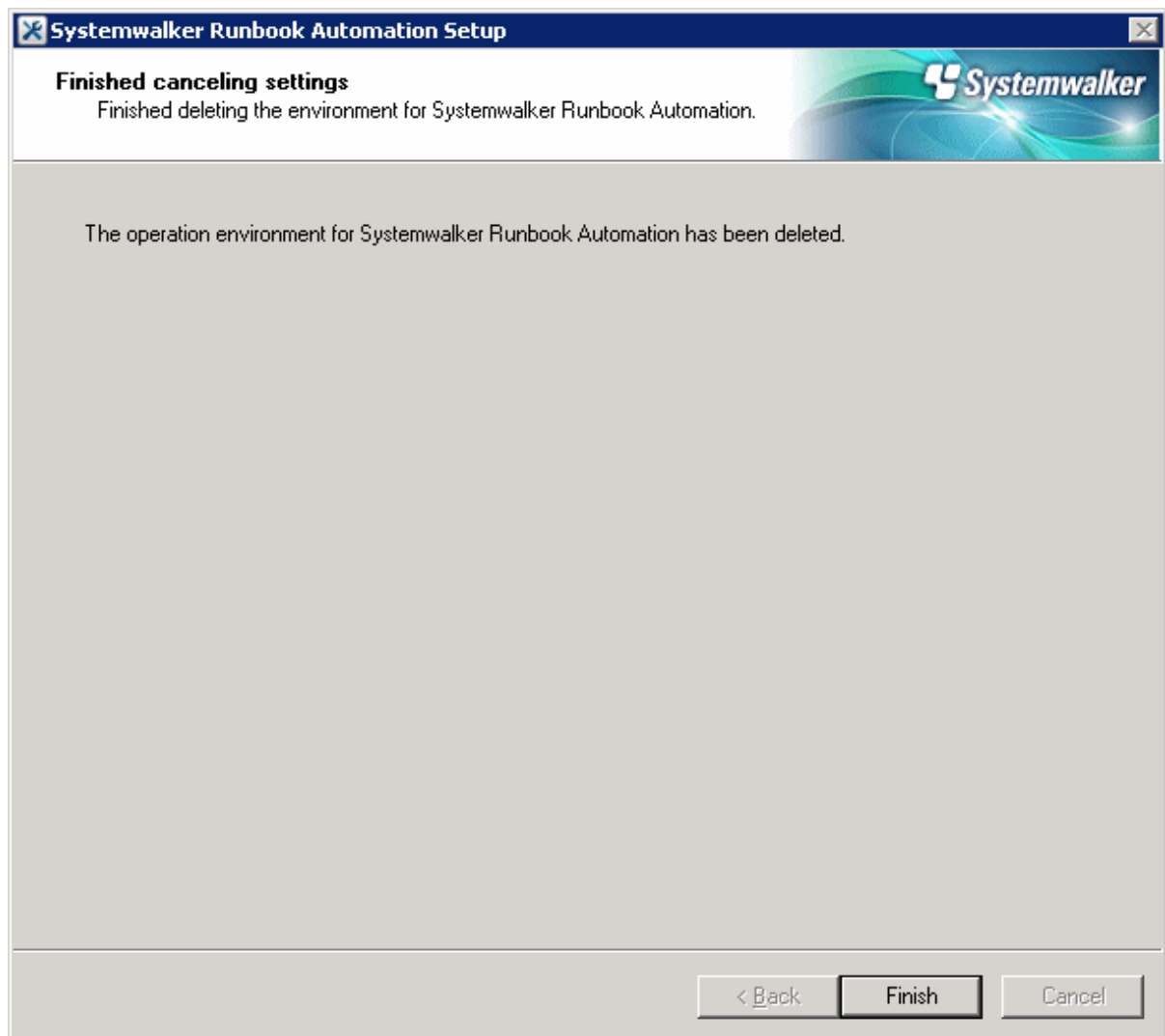
4. Click the **Yes** button.

Setup cancellation will start.



5. Setup cancelation 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 "[5.2.2 Uninstalling Systemwalker Software Configuration Manager](#)" for details.

### 4.2.3.4 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
                          V15.1.3
                          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/FJSVcmdbm/bin/cmdbunsetupenv.sh -k ALL
```

```
/opt/FJSVcmdbm/bin/cmdbunsetupenv.sh -k MGR
```

2. Uninstall Systemwalker Software Configuration Manager.

Refer to "[5.2.2 Uninstalling Systemwalker Software Configuration Manager](#)" for details.

### 4.2.3.5 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

## 4.2.4 Tasks Required after Setup Cancellation

---

### 4.2.4.1 Deleting the SSL Communication Environment

This section explains the deletion of the SSL communication 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.

### 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

- 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 5 Uninstallation

This chapter explains how to uninstall Systemwalker Software Configuration Manager.

## 5.1 Pre-uninstallation Notes

Before uninstalling Systemwalker Software Configuration Manager, the environment settings for Systemwalker Software Configuration Manager must be canceled. Refer to "[Chapter 4 Setup Cancellation](#)" for information on setup cancellation.

## 5.2 Uninstalling from the Admin Server

### 5.2.1 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 4 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.

### 5.2.2 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:

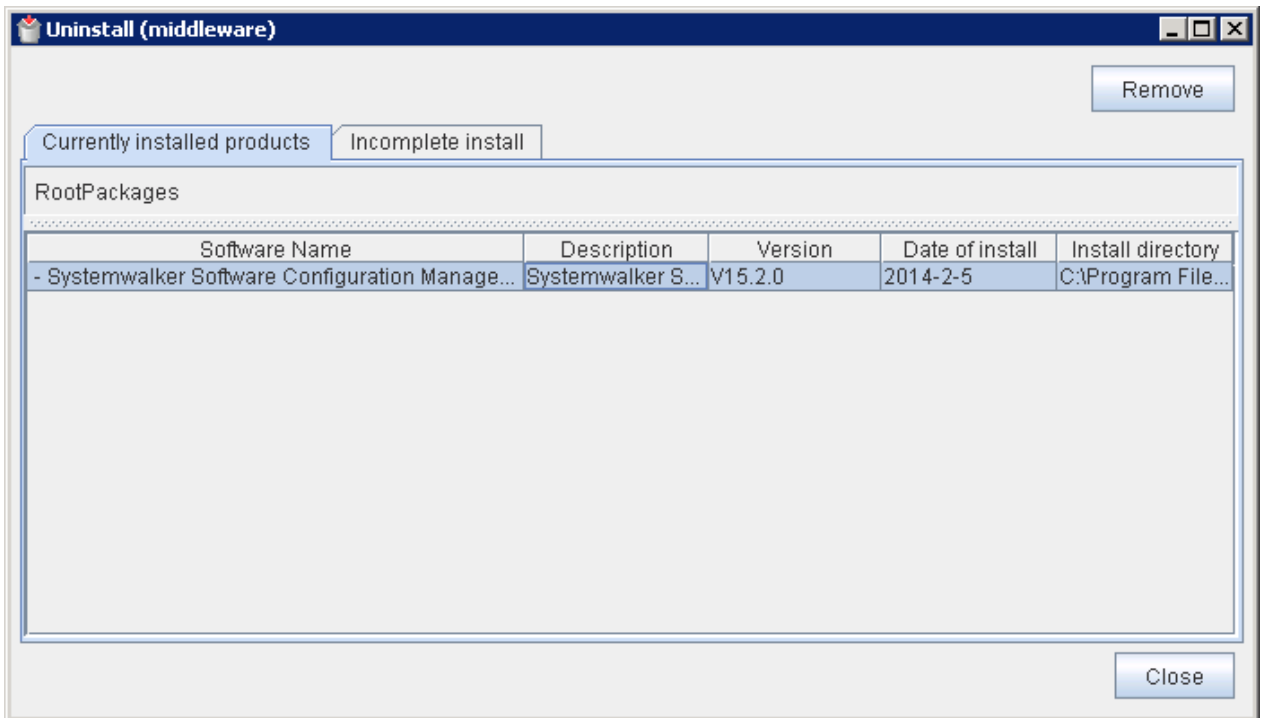
- If linked to ServerView Resource Orchestrator
- If operating on the same admin server as the Systemwalker Runbook Automation Management Server

```
%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.

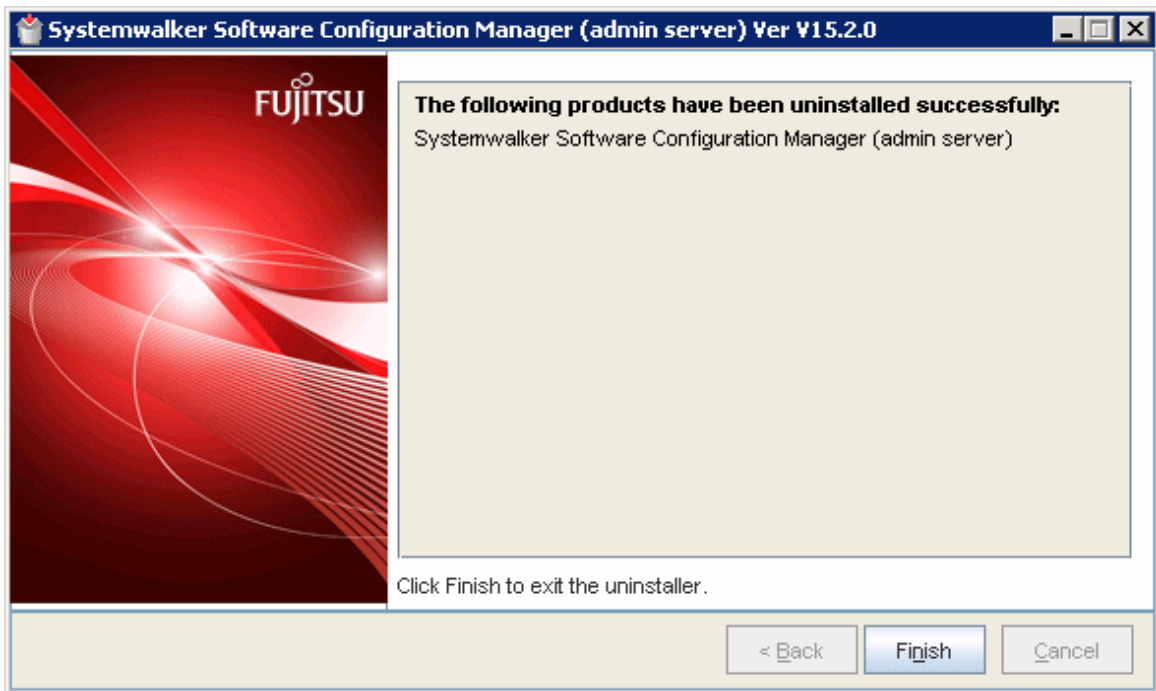
4. The **Uninstall Systemwalker Software Configuration Manager (admin server)** window will be displayed.

If the software can be removed, click the **Uninstall** button.

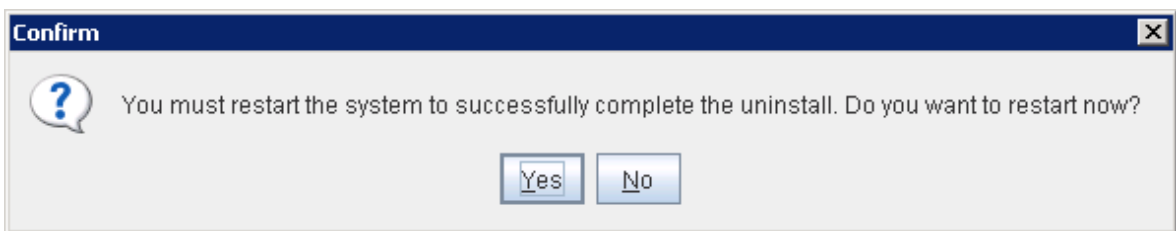




5. Upon successful completion, the following window will be displayed.  
Click the **Finish** button.



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/FJJSwnc/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) V15.2.0

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: V15.2.0
  Manufacturer: Fujitsu Limited
  Install directory: /opt
  Date of install: 2014-2-26

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.
```

## 5.2.3 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.

## 5.2.4 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
```

## 5.2.5 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 FJSVsclr package:

```
rpm -e FJSVsclr
```

## 5.3 Uninstalling from Business Servers

---

This section explains how to uninstall a Systemwalker Software Configuration Manager agent from business servers.

### 5.3.1 Pre-uninstallation Notes regarding Business Servers

---

#### If a Systemwalker IT Change Manager V14.1.0 agent has been installed

Use the following procedure to perform uninstallation tasks in an environment where both the Systemwalker Software Configuration Manager agent and the Systemwalker IT Change Manager V14.1.0 agent have been installed on the same business server:

1. Uninstall the Systemwalker IT Change Manager V14.1.0 agent.
2. Uninstall the Systemwalker Software Configuration Manager agent.

Then, if either the Systemwalker Software Configuration Manager agent or the Systemwalker IT Change Manager V14.1.0 agent continues to be used, install the appropriate agent again.

### 5.3.2 Uninstalling Systemwalker Software Configuration Manager

---

This section explains how to uninstall a Systemwalker Software Configuration Manager agent from business servers.

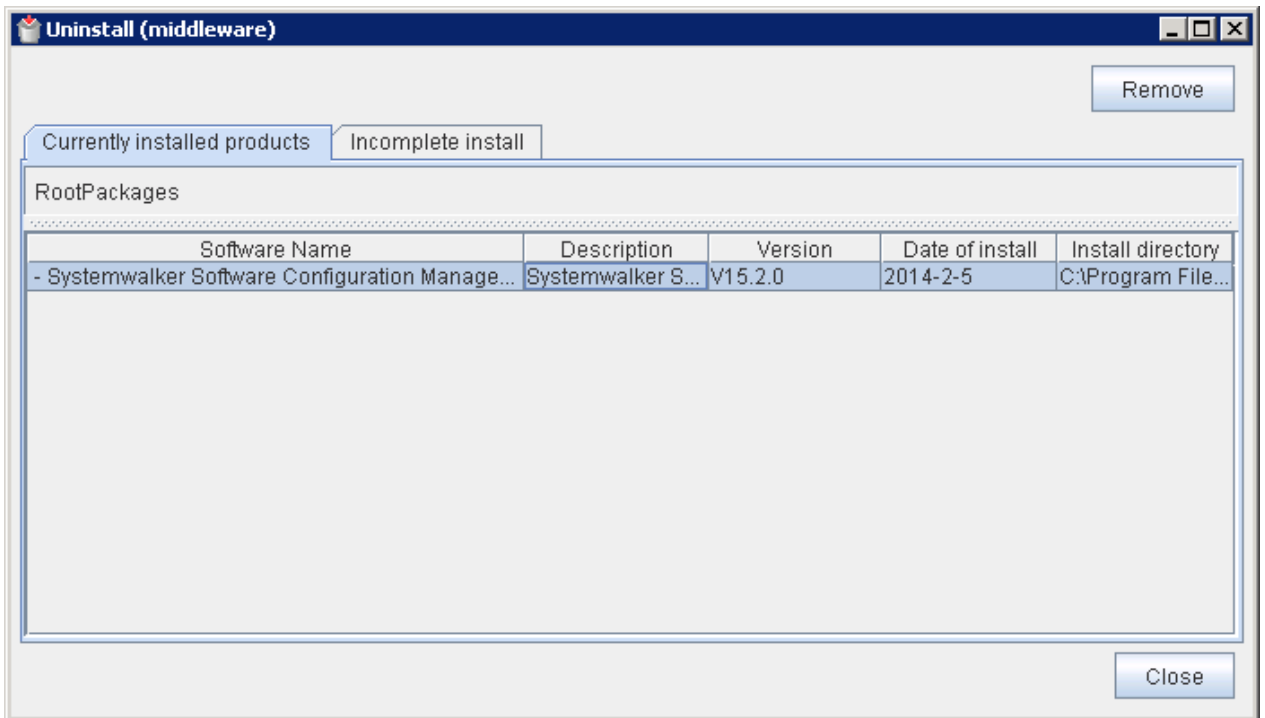
If necessary, uninstall the agents from a Windows or a Linux machine.

#### [Windows]

1. Log in with administrator privileges.
2. Select **Start >> All Programs** or **All apps >> Fujitsu >> Uninstall (middleware)**.

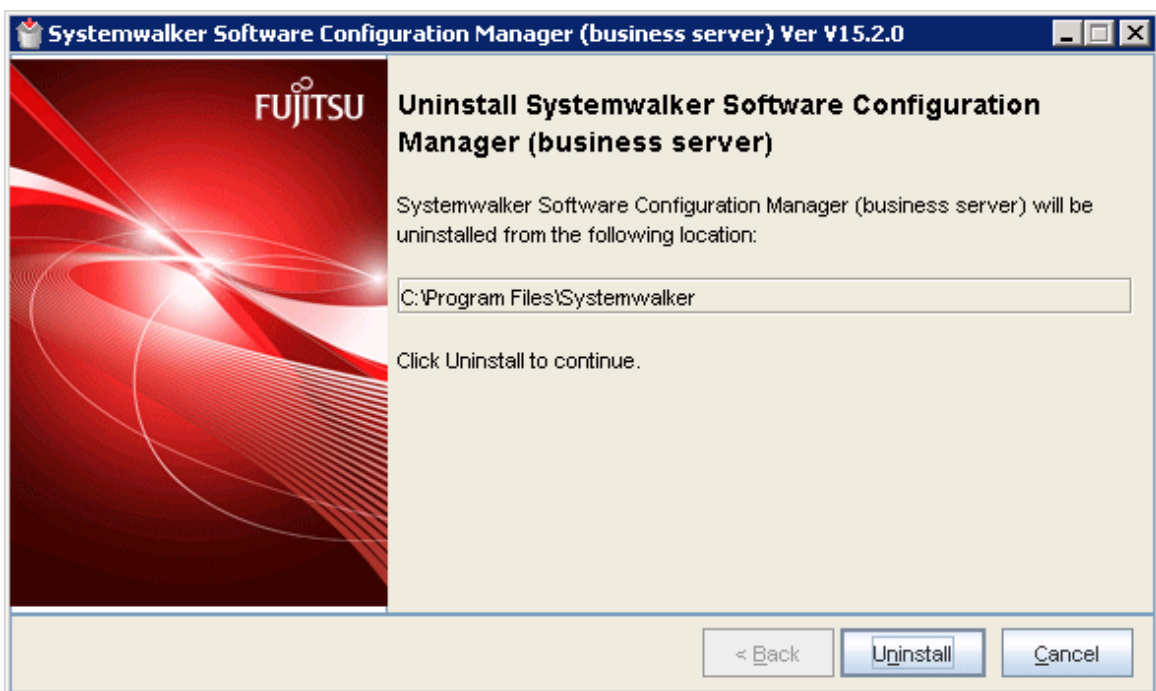
The uninstaller will start.

Select **Systemwalker Software Configuration Manager (business server)**, and then click the **Delete** button.

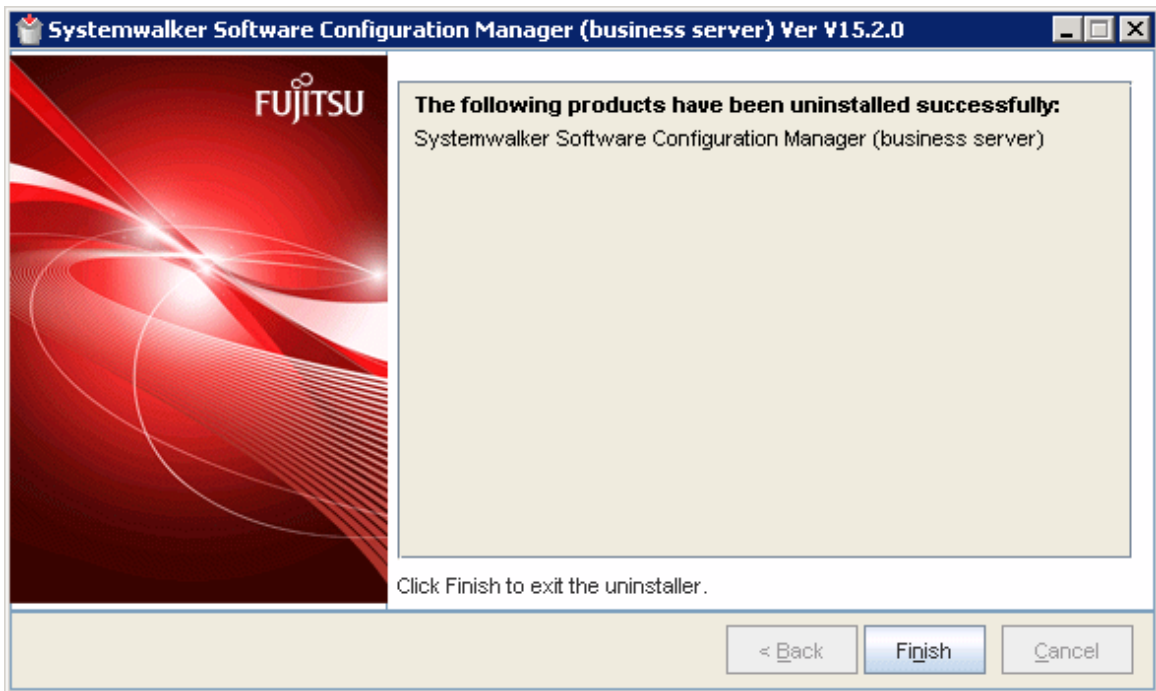


When uninstalling Systemwalker Software Configuration Manager because of installation failure or for some other reason, Systemwalker Software Configuration Manager may be displayed in the **Incomplete install** tab. If Systemwalker Software Configuration Manager is not displayed in the **Currently installed 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.

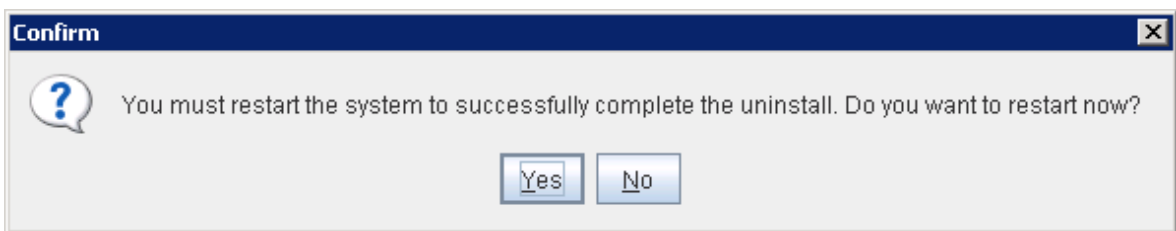
3. The **Uninstall Systemwalker Software Configuration Manager (business server)** window will be displayed.  
If the software can be removed, click the **Uninstall** button.



4. Upon successful completion, the following window will be displayed.  
Click the **Finish** button.



5. 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. Start the uninstaller.

```
# /opt/FJSVcir/cimanager.sh -c
```

3. The window for selecting the product to uninstall will be displayed.

Select **Systemwalker Software Configuration Manager (business server)**.

Entering "q" closes the uninstaller.

```
Loading Uninstaller...

Currently installed products
1. Systemwalker Software Configuration Manager (business server) V15.2.0

Type [number] to select the software you want to uninstall.
[number,q]
=>
```

#### 4. Execute the uninstallation.

Enter "y" (Entering "b" returns to the previous window, and entering "q" closes the uninstaller).

```
Systemwalker Software Configuration Manager (business server)
  Description: Systemwalker Software Configuration Manager (business server)
  Version: V15.2.0
  Manufacturer: Fujitsu Limited
  Install directory: /opt
  Date of install: 2014-2-26

Starting the uninstall of the software. Are you sure you want to continue?
[y,b,q]
=>
```

#### 5. The uninstallation will start.

When the uninstallation completes, the following window will be displayed:

```
Uninstalling...

The following products have been uninstalled successfully:
  Systemwalker Software Configuration Manager (business server)

Exiting Uninstaller.
```

## 5.4 Uninstalling from Linkage Servers

---

### 5.4.1 Uninstalling Systemwalker Software Configuration Manager

---

This section explains the procedure for uninstalling Systemwalker Software Configuration Manager agents from linkage servers.

#### [Windows]

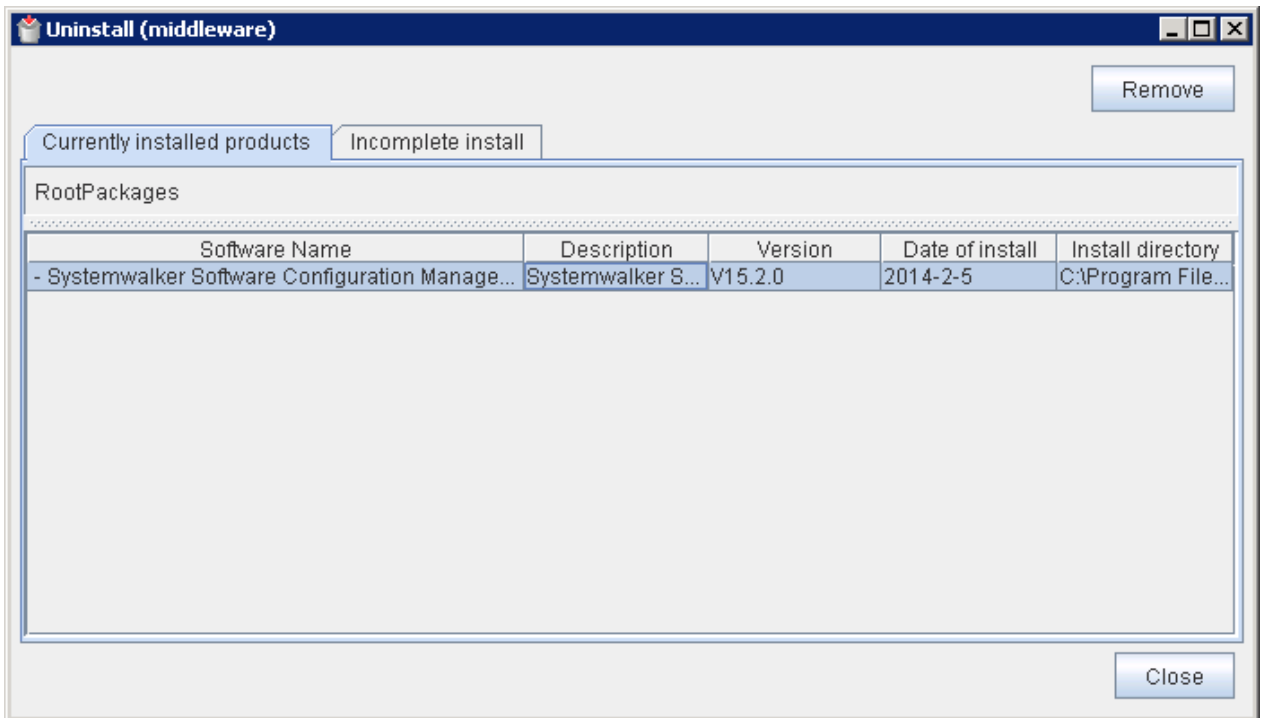
1. Log in with administrator privileges.
2. If an agent (communication infrastructure) is running, stop it by executing the following command:

```
%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 (linkage 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.

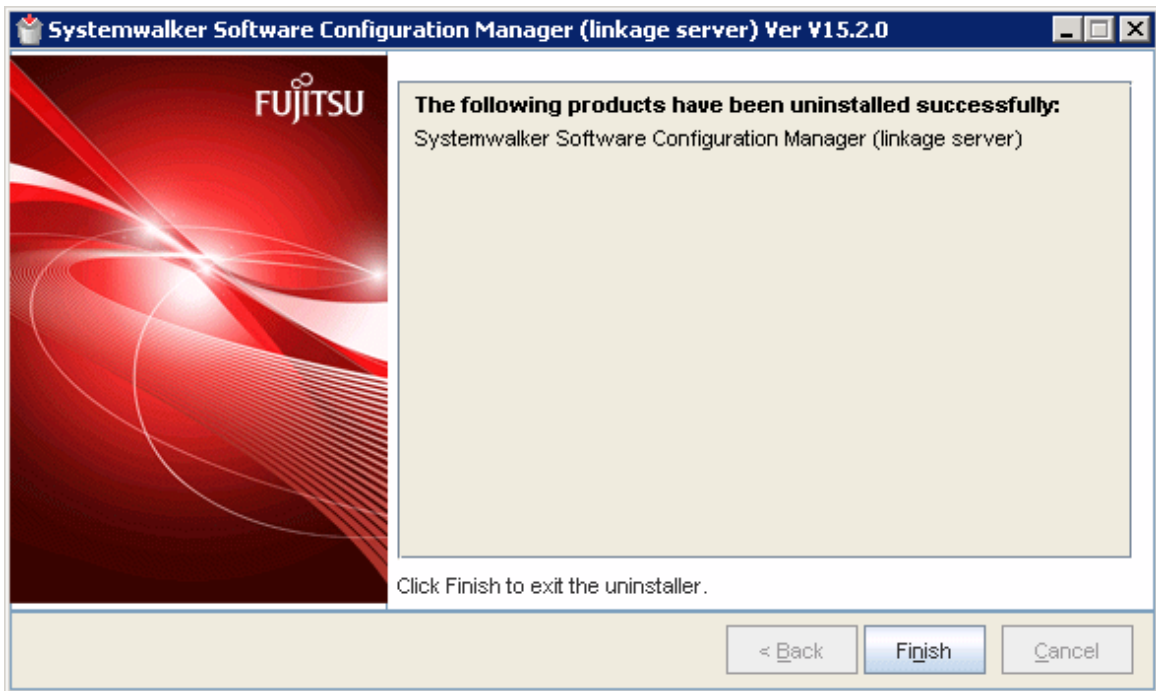
4. The **Uninstall Systemwalker Software Configuration Manager (linkage server)** window will be displayed.  
If the software can be removed, click the **Uninstall** button.





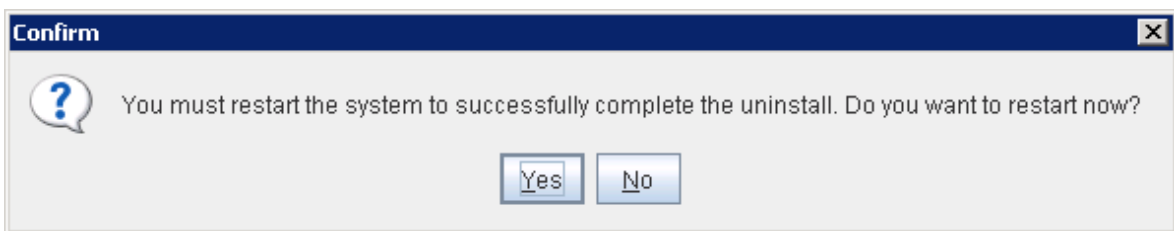
5. Upon successful completion, the following window will be displayed.

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]

Refer to "[5.3 Uninstalling from Business Servers](#)" for details on how to uninstall Systemwalker Software Configuration Manager.

## 5.5 Post-uninstallation Notes

---

### 5.5.1 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/FJSVawjkb*
- */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/FJSVssoac*
- */etc/opt/FJSVssoaz*
- */etc/opt/FJSVssofs*

- /etc/opt/FJSSosv
- /etc/opt/FJSVtd
- /opt/FJSVawjkb
- /opt/FJSCfmgb
- /opt/FJSCfmgm
- /opt/FJSCmdba
- /opt/FJSCmdbm
- /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/FJSMqd
- /opt/FJSVod
- /opt/FJSVsoap
- /opt/FJSVsoac
- /opt/FJSVsoaz
- /opt/FJSSocm
- /opt/FJSSofs
- /opt/FJSSosv
- /opt/FJSVtd (\*1)
- /var/opt/FJSVawjkb
- /var/opt/FJSCfmgb
- /var/opt/FJSCfmgm
- /var/opt/FJSCmdba
- /var/opt/FJSCmdbm
- /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/FJSVslr

## **5.5.2 Points to Note after Uninstalling from the Business Server**

---

This section provides points to note after uninstalling the Agent on the linkage server.

### **Files and directories that may remain after uninstalling Systemwalker Software Configuration Manager**



## Note

Deletion may fail if these files are locked. If that is the case, restart the operating system and then delete the files.

### [Windows]

The Agent installation directory and files may still remain after the uninstallation - if this happens, manually delete any unnecessary directories or files.

### [Linux]

The following directories and files in these directories may still remain after the uninstallation - if this happens, manually delete any unnecessary directories or files.

- /etc/opt/FJSVcfmgb
- /etc/opt/FJSVcmdba
- /etc/opt/FJSVInkbs
- /etc/opt/FJSVInkcf
- /etc/opt/FJSVswrbaa
- /etc/opt/FJSVswrbac
- /opt/FJSVcfmgb
- /opt/FJSVcmdba
- /opt/FJSVInkbs
- /opt/FJSVInkcf
- /opt/FJSVswrbaa
- /opt/FJSVswrbac
- /var/opt/FJSVcfmgb
- /var/opt/FJSVcmdba
- /var/opt/FJSVInkbs
- /var/opt/FJSVInkcf
- /var/opt/FJSVswrbaa
- /var/opt/FJSVswrbac

## 5.5.3 Points to Note after Uninstalling from the Linkage Server

---

This section provides points to note after uninstalling the Agent on the linkage server.

### Files and directories that remain after uninstalling Systemwalker Software Configuration Manager



## Note

Deletion may fail if these files are locked. If that is the case, restart the operating system and then delete the files.

### [Windows]

The Agent installation directory and files may still remain after the uninstallation - if this happens, manually delete any unnecessary directories or files.

### [Linux]

Refer to "[5.5.2 Points to Note after Uninstalling from the Business Server](#)" for details on how to delete unnecessary directories.

## 5.5.4 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.



- 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 V15.2.0 DISC1 (Admin Servers Program)" or "Systemwalker Software Configuration Manager Media Pack V15.2.0 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 V15.2.0 DISC1 (Admin Servers Program)" or "Systemwalker Software Configuration Manager Media Pack V15.2.0 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/

# 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 (Interstage HTTP Server)	31500/tcp (*1) 80/tcp	Only during installation
For the SSO authentication server	3169/tcp 3170/tcp	No
File transfer infrastructure	9664/tcp (*1) (*2) 9764/tcp (*3)	Yes
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: If operating the admin server with ServerView Resource Orchestrator linked, use the port number for the web server service rcxtext2 of ServerView Resource Orchestrator. (The default is 3501.)

\*2: Required when the patch application function or the software parameter settings function is used.

\*3: 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 13323/tcp 13324/tcp 13325/tcp 13326/tcp 13327/tcp 13328/tcp 13331/tcp 13332/tcp 13333/tcp	No
Database	9658/tcp	Only during setup
Communication infrastructure	18005/tcp 18009/tcp	No
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.

## Linkage server

### Port numbers for which communications from external servers must be allowed

Function	Port number/protocol	Changeable?
File transfer infrastructure	9664/tcp (*1) 9764/tcp (*2)	Yes

\*1: Required when the software parameter settings function is used.

\*2: Required when the discovery function is used.

## Business server

### Port numbers for which communications from external servers must be allowed

Function	Port number/protocol	Changeable?
File transfer infrastructure	9664/tcp (*1) 9764/tcp (*2)	Yes

\*1: Required when the patch application function or the software parameter settings function is used.

\*2: Required when the discovery function is used.

### Note

If Windows Server 2008 or Windows Server 2012 is being used as the operating system for the communication destination, the Windows firewall function is enabled by default, and so firewall exceptions need to be specified for the port numbers and protocols in the table above.

## A.2 Procedure for Changing Ports

This section explains the procedure for changing ports.

### A.2.1 When the Port for the File Transfer Infrastructure (the Patch Application Function or the Software Parameter Settings Function) is Duplicated

When either the patch application function or the software parameter settings function is used, the file transfer infrastructure uses port number 9664. 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 directory>\System32\drivers\etc\services file to a free port number:

```
dtranh02    9664/tcp          #FJSVlnkbs
```

#### [Linux]

Change the following port number in the "/etc/services" file to a free port number:

```
dtranh02    9664/tcp          #FJSVlnkbs
```

Specify a port number between 1 and 65535.

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/linkage servers/business servers

```
%LNKBS_HOME%\lnk02\gen\network_def.txt
* The installation folder for the file transfer infrastructure is set to the "%LNKBS_HOME
%" environment variable.
```

#### [Linux]

- Admin server/business servers

```
/opt/FJSVlnkbs/lnk02/gen/network_def.txt
```

2. After changing the network definition file, execute the following command to update the definition information:

**[Windows]**

- Admin server/linkage servers/business servers

```
%LNKBS_HOME%\lnk02\bin\f3jtlxgentrn.exe -i 02 %LNKBS_HOME%\lnk02\gen\network_def.txt
```

**[Linux]**

- Admin server/business servers

```
/opt/FJSVlnkbs/lnk02/bin/f3jtlxgentrn -i 02 /opt/FJSVlnkbs/lnk02/gen/network_def.txt
```

3. Restart the file transfer infrastructure.

**[Windows]**

- Admin server/linkage servers/business servers

Restart the "Systemwalker File Transfer Library Control" service.

**[Linux]**

- Admin server/business servers

Execute the following commands:

```
# service FJSVlnkbs stop  
# service FJSVlnkbs start
```

## A.2.2 When the Port Number for the File Transfer Infrastructure (the Discovery Function) is Duplicated

When the discovery function is used, the file transfer infrastructure uses port number 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:

```
dtranh03 9764/tcp #FJSVlnkcf
```

**[Linux]**

Change the following port number in the "/etc/services" file to a free port number:

```
dtranh03 9764/tcp #FJSVlnkcf
```

Specify a port number between 1 and 65535.

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/linkage servers/business servers

```
%LNKCF_HOME%\lnk03\gen\network_def.txt
* The installation folder for the file transfer infrastructure is set to the "%LNKCF_HOME
%" environment variable.
The default folder for the admin server is C:\Fujitsu\Systemwalker\SWCFMGM\FJSVlnkcf.
The default folder for linkage servers is C:\Fujitsu\Systemwalker\SWCFMGA\FJSVlnkcf.
The default folder for business servers is C:\Fujitsu\Systemwalker\SWCFMGB\FJSVlnkcf.
```

#### [Linux]

- Admin server/business servers

```
/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/linkage servers/business servers

```
%LNKCF_HOME%\lnk03\bin\f3jtlxgentrn.exe -i 03 %LNKCF_HOME%\lnk03\gen\network_def.txt
```

#### [Linux]

- Admin server/business servers

```
/opt/FJSVlnkcf/lnk03/bin/f3jtlxgentrn -i 03 /opt/FJSVlnkcf/lnk03/gen/network_def.txt
```

3. Restart the file transfer infrastructure.

#### [Windows]

- Admin server/linkage servers/business servers

Restart the "Systemwalker File Transfer Library Control (SWCFMG)" service.

#### [Linux]

- Admin server/business servers

Execute the following commands:

```
# service FJSVlnkcf stop
# service FJSVlnkcf 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 IIOP\_SSL port number

Use the set subcommand of the asadmin command to change the IIOP\_SSL port number (refer to the "System Design Guide" for Interstage Application Server for details).

### Changing the IIOP\_MUTUALAUTH port number

Use the set subcommand of the asadmin command to change the IIOP\_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 "[2.2.2.3 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 "Starting and Stopping Systemwalker Software Configuration Manager" in the *Operation Guide* 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 "Starting and Stopping Systemwalker Software Configuration Manager" in the *Operation Guide* 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, FJSVslr and FJSVsmee packages:

```
rpm -e FJSVod FJSVslr FJSVsmee
```

## Install SystemwalkerSoftware Configuration Manager and stop Interstage

1. Install a SystemwalkerSoftware Configuration Manager Admin Server.
2. Refer to "2.2 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 "3.1 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 "Starting and Stopping Systemwalker Software Configuration Manager" in the *Operation Guide* 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 "2.2 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 "3.1 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



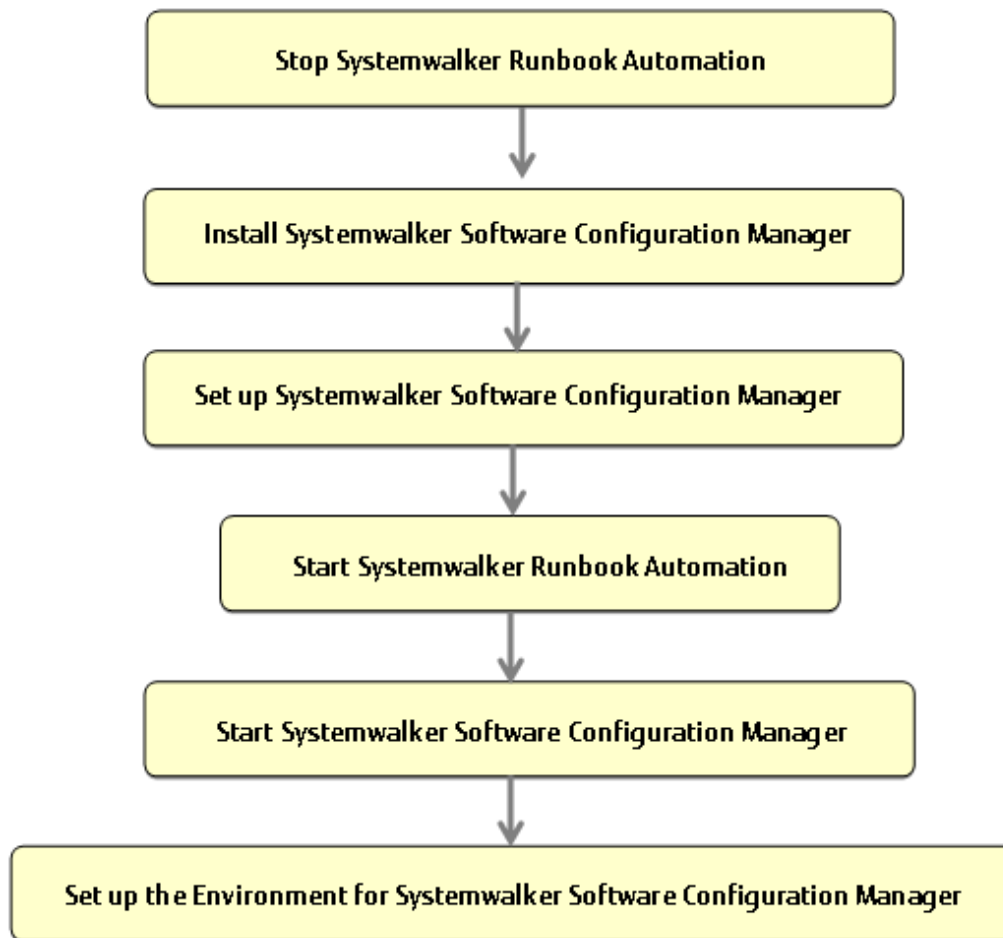
Be sure to back up Systemwalker Runbook Automation before performing this procedure, in case an error occurs during installation of Systemwalker Software Configuration Manager.

#### 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 "2.2 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 "3.1 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 "Starting and Stopping Systemwalker Software Configuration Manager" in the *Operation Guide* for details.

## **B.2.6 Setting up the Environment for Systemwalker Software Configuration Manager**

---

Set up the environment for operating Systemwalker Software Configuration Manager - refer to "[3.2 Registering an Infrastructure Administrator](#)", "[3.3 Registering Managed Servers](#)", "[3.4 Performing the Connection Test](#)", "[3.5 Executing the Initial Discovery](#)", "[3.6 Registering Discovery Schedules](#)", "[3.7 Registering a Configuration Baseline Creation Schedule](#)", and "[3.8 Setting up Related Software](#)" for details.

## 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/FJSVawjbc/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

.....  
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.  
.....