



# Systemwalker Service Quality Coordinator

## Installation Guide

Windows/Solaris/Linux

J2X1-7658-01ENZ0(01)  
September 2012

# Preface

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## Purpose of this manual

This manual explains how to install Systemwalker Service Quality Coordinator, how to collect and store performance information, and how to display information on the Console.

## Target audience

This manual is intended for users who will be installing Systemwalker Service Quality Coordinator and persons who will be involved in designing Systemwalker Operation Manager operations.

Readers of this manual should also have a general understanding of basic operating system and GUI operations as well as a working knowledge of communications protocols such as TCP/IP and SMTP.

## Organization of Systemwalker Service Quality Coordinator manuals

The Systemwalker Service Quality Coordinator manuals are organized as follows:

- Systemwalker Service Quality Coordinator Technical Guide  
Provides an overview of the functions of Systemwalker Service Quality Coordinator.
- Systemwalker Service Quality Coordinator Installation Guide  
Explains how to install and set up Systemwalker Service Quality Coordinator.
- Systemwalker Service Quality Coordinator User's Guide  
Explains how to use the functions of Systemwalker Service Quality Coordinator.
- Systemwalker Service Quality Coordinator User's Guide (Console Edition)  
Explains how to use those functions related to console windows.
- Systemwalker Service Quality Coordinator User's Guide (Dashboard Edition)  
Explains how to use the dashboard functions.
- Systemwalker Service Quality Coordinator Reference Guide  
Explains commands, data formats, messages and so on.
- Systemwalker Service Quality Coordinator Troubleshooting Guide  
Explains how to handle any problems that may occur.
- Systemwalker Service Quality Coordinator User's Guide (Website Management Functions Edition)  
Explains the Systemwalker Service Quality Coordinator functions that relate to analyzing Web usage and monitoring Web content tampering.
- Systemwalker Service Quality Coordinator User's Guide (Systemwalker User Management and Single Sign-On Edition)  
Explains how to install and use the Systemwalker User Management and Systemwalker Single Sign-On functions when Systemwalker Service Quality Coordinator is to be used.
- Systemwalker User's Guide - Systemwalker User Management and Single Sign-On  
Explains how to install the Systemwalker User Management function and the Systemwalker Single Sign-On function.
- Systemwalker Service Quality Coordinator Glossary  
This manual explains Systemwalker Service Quality Coordinator terminology.

## Positioning of this document

This manual is common to the following Systemwalker Service Quality Coordinator products for Windows, Linux and Oracle Solaris:

- Systemwalker Service Quality Coordinator Enterprise Edition V15.0.0
- Systemwalker Service Quality Coordinator Standard Edition V15.0.0

## Abbreviations

- The term "Windows Server 2008" refers to the following products:
  - Microsoft(R) Windows Server(R) 2008 R2 Foundation
  - Microsoft(R) Windows Server(R) 2008 R2 Standard
  - Microsoft(R) Windows Server(R) 2008 R2 Enterprise
  - Microsoft(R) Windows Server(R) 2008 R2 Datacenter
  - Microsoft(R) Windows Server(R) 2008 Foundation
  - Microsoft(R) Windows Server(R) 2008 Standard
  - Microsoft(R) Windows Server(R) 2008 Enterprise
  - Microsoft(R) Windows Server(R) 2008 Datacenter
  - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM)
  - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM)
  - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM)
  - Microsoft(R) Windows Server(R) 2008 Standard Server Core
  - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) Server Core
  - Microsoft(R) Windows Server(R) 2008 Enterprise Server Core
  - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) Server Core
  - Microsoft(R) Windows Server(R) 2008 Datacenter Server Core
  - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) Server Core
- The term "Windows Server 2003" refers to the following products:
  - 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, Datacenter Edition
  - Microsoft(R) Windows Server(R) 2003, Standard Edition
  - Microsoft(R) Windows Server(R) 2003, Enterprise Edition
  - Microsoft(R) Windows Server(R) 2003, Datacenter Edition
- The term "Windows 7" refers to the following products:
  - Windows(R) 7 Home Premium
  - Windows(R) 7 Professional
  - Windows(R) 7 Enterprise
  - Windows(R) 7 Ultimate

- The term "Windows Vista" refers to the following products:
  - Windows Vista(R) Home Basic
  - Windows Vista(R) Home Premium
  - Windows Vista(R) Business
  - Windows Vista(R) Enterprise
  - Windows Vista(R) Ultimate
- The term "Windows XP" refers to the following products:
  - Microsoft(R) Windows(R) XP Home Edition
  - Microsoft(R) Windows(R) XP Professional Edition
- Microsoft(R) SQL Server(TM) is abbreviated as "SQL Server".
- Microsoft(R) Cluster Server is abbreviated as "MSCS".
- Oracle Solaris might be described as Solaris, Solaris Operating System, or Solaris OS.
- Oracle WebLogic Server is abbreviated as "WebLogic Server".
- Oracle Database is abbreviated as "Oracle".
- Systemwalker Centric Manager is abbreviated as "Centric Manager".
- Systemwalker Resource Coordinator is abbreviated as "Resource Coordinator".
- Interstage Application Server is abbreviated as "Interstage".
- Symfoware Server is abbreviated as "Symfoware".
- VMware(R) ESX(R) is abbreviated as "VMware ESX" or "ESX".
- VMware(R) ESXi(TM) is abbreviated as "VMware ESXi" or "ESXi".
- VMware(R) vCenter(TM) is abbreviated as "VMware vCenter" or "vCenter".
- VMware vSphere(R) is abbreviated as "VMware vSphere".
- Versions of Systemwalker Service Quality Coordinator that operate under Windows are referred to as "Windows versions".
- Versions of Systemwalker Service Quality Coordinator that operate under Solaris are referred to as "Solaris versions".
- Versions of Systemwalker Service Quality Coordinator that operate under Linux are referred to as "Linux versions".
- Solaris and Linux versions of Systemwalker Service Quality Coordinator are referred to collectively as "UNIX versions".
- The term "Agent" is used to refer to articles common to both Agent for Server and Agent for Business.

## Conventions used in this document

- Edition-specific information

This manual deals mainly with the Standard Edition and Enterprise Edition of Systemwalker Service Quality Coordinator. The following symbols appear in the title or text of an article to distinguish between the Standard Edition (standard specification) and the Enterprise Edition.

**EE**

This indicates that the article relates specifically to Systemwalker Service Quality Coordinator Enterprise Edition.

**SE**

This indicates that the article relates specifically to Systemwalker Service Quality Coordinator Standard Edition.

- Information specific to Windows or UNIX versions

This document contains information common to both Windows versions and UNIX versions of Systemwalker Service Quality Coordinator. Information specific to only the Windows versions and information specific to only the UNIX versions are distinguished from common information by attaching the following symbols:

**[Windows]**

This indicates that the article relates specifically to Windows versions.

**[UNIX]**

This indicates that the article relates specifically to UNIX versions.

The symbols **[Solaris]**, **[Linux]**, **[AIX]**, and **[HP-UX]** are used to distinguish Solaris, Linux, AIX, and HP-UX versions of Systemwalker Service Quality Coordinator.

If notice should be paid, the information is distinguished from common information by attaching the following symbols:



This indicates that the article relates specifically to Solaris versions.

**Symbols**

The symbols used with commands are explained below.

**[Entry example]**

```
[PARA={a | b | c |...}]
```

**[Meaning of each symbol]**

Symbol	Meaning
[ ]	Items enclosed in square brackets are optional.
{ }	Select one of the items enclosed in braces ( { } ).
_	When all optional items enclosed in square brackets ( [ ] ) are omitted, the default value indicated by an underscore ( _ ) is used.
	Select one of the items separated by vertical bars.
...	The item immediately before the ellipsis (...) can be repeatedly specified.

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This guide uses screenshots in accordance with Microsoft Corporation's guidelines.

## Acknowledgement

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)

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## Revision History

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Details of Revisions	Location	Manual Code
Added coefficient of the resource estimation for the VMware vCenter.	2.1.1.2, 2.4.1.2	J2X1-7658-01ENZ0(01) J2X1-7658-01ENZ2(01)
Added coefficient of the resource estimation for the transaction breakdown analysis of the Interstage Application Server in the Java EE environment.	2.1.1.2	
Revised the uninstallation procedure.	9.1	

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# Chapter 1 Installation Design

This chapter explains the installation types and system configurations needed for installing Systemwalker Service Quality Coordinator.

If Systemwalker Service Quality Coordinator is to be linked to other products, refer also to "Installation types corresponding to management types" in the *Technical Guide* and "Linking with Other Products" in the *User's Guide* for more information.

## 1.1 Determining the Installation Type

Systemwalker Service Quality Coordinator can be used to manage the operation of a wide range of system types and sizes, from small-scale systems through to large-scale systems.

To improve the efficiency of the installation process, Systemwalker Service Quality Coordinator provides the following installation types that are suited to different objectives and roles.

Installation types	Function
Enterprise Manager	Centrally manages the Managers located in each section. It can manage large-scale systems by constructing Managers in two tiers and performing load distribution. (Enterprise Edition only)
Manager	Collectively manages the information collected by Agents and Proxy Manager. Manager can also act as servers for receiving information collected by Browser Agents and monitoring the operational status of services (HTTP/S, DNS, SMTP, or any port).
Proxy Manager	Provides relay functions between Managers and Agents. If Managers and Agents have been separated by a firewall, site security can be enhanced by placing a Proxy Manager (which relays communications between Managers and Agents) on the site where the Agents reside. Proxy Managers also substitute for the role (normally performed by Managers) of the server that receives information collected by Browser Agents and monitors the operational status of services (HTTP/S, DNS, SMTP, any port).
Operation Management Client	Connects to a Manager or Enterprise Manager to provide console functions for management and control. As well as being able to operate from a machine where an operation management client is installed, the person conducting operation management can also use a Web browser to connect to an operation management client from another machine to perform management operations. Only Windows can be used as the operation platform. When the Manager or Enterprise Manager platform is Windows, Manager/Enterprise Manager and the operation management client can be installed on the same server.
Agent for Server	Manages resource information within servers.
Agent for Business	Manages resources relating to the following business systems, in addition to the Agent for Server functions:  Web servers  Application servers  Database servers
Browser Agent	Uses information about an end user accessing a Web server to measure the response actually felt by the end user. Only Windows can be used as the operation platform.

Installation types	Function
Agent for Agentless Monitoring	Information on the OS/kernel and virtual resources can be managed remotely.

Refer to "Configuration Models" in the *Technical Guide* for information about combining different Systemwalker Service Quality Coordinator products.

If Browser Agents are to be installed, refer to "Managing End User Response" in the *User's Guide*.

For information on the settings to collect data remotely with an agent for Agentless Monitoring, refer to "Management with an Agent for Agentless Monitoring" in the *User's Guide*.

## 1.2 Collecting the Information Needed for Installation

Before installing Systemwalker Service Quality Coordinator, it is necessary to collect information relating to the systems and networks that are to be managed. This section lists the minimum information that is required at installation time.

### 1.2.1 Installing a Manager

Before installing a Manager, it is necessary to obtain information about the server on which it is to be installed.

Refer to "2.1 Manager" to confirm the installation conditions.

This information must be collected prior to installation.

When the installer starts, it prompts the user to specify the following items. Therefore, before starting the installation process, check or decide which settings to use.

#### Windows

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	C:\Program Files\SystemwalkerSQC
Variable file directory	This is the path to the directory where files that change or refer during operation are stored.	C:\SystemwalkerSQC
Performance database storage directory (Summary)	This is the path to the directory where summary data is stored.	C:\SystemwalkerSQC\data
Performance database storage	This is the path to the directory where resource data (10 minutes) is stored.	C:\SystemwalkerSQC\data

Prompt item	Description	Default
directory (10 minutes)		
Performance database storage directory (1 hour)	This is the path to the directory where resource data (1 hour) is stored.	C:\SystemwalkerSQL\data
Performance database storage directory (1 day)	This is the path to the directory where resource data (1 day) is stored.	C:\SystemwalkerSQL\data
Archive file storage directory	This is the path to the directory where archive files are stored.	C:\SystemwalkerSQL\data\spool\BackupPDBinsert
Alert action when thresholds are exceeded	<p>Select either "Event log" or "Centric Manager message linkage" as the notification method to use when thresholds are exceeded.</p> <p>If Systemwalker Centric Manager is installed on the same machine, selecting "Centric Manager message linkage" will cause threshold violations to be notified to Centric Manager.</p> <p>Note that in addition to the event log and Centric Manager event linkage, mail and trap notifications can also be used to notify threshold violations.</p>	Event log
Log data (Troubleshoot) retention period	This is a log data (Troubleshoot) retention period. Specify a value between 1 and 30 days.	7 days

## UNIX

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	/opt
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.	/etc/opt
Variable file directory	This is the path to the directory where files that change during operation are stored.	/var/opt
Performance database storage directory (Summary)	This is the path to the directory where summary data is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (10 minutes)	This is the path to the directory where resource data (10 minutes) is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (1 hour)	This is the path to the directory where resource data (1 hour) is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (1 day)	This is the path to the directory where resource data (1 day) is stored.	/var/opt/FJSVssqc/PDB
Archive file storage directory	This is the path to the directory where archive files are stored.	/var/opt/FJSVssqc/BackupPDBinsert
Alert action when thresholds are exceeded	Select either "Event log" or "Centric Manager message linkage" as the notification method to use when thresholds are exceeded.	Syslog
Log data (Troubleshoot) retention period	This is a log data (Troubleshoot) retention period. Specify a value between 1 and 30 days.	7 days

## 1.2.2 Installing an Agent or Proxy Manager

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Before installing an Agent or Proxy Manager, it is necessary to obtain information about the server on which it is to be installed.

Refer to "[2.2 Agent/Proxy Manager](#)" to confirm the installation conditions.

This information must be collected prior to installation.

When the installer starts, it prompts the user to specify the following items. Therefore, before starting the installation process, check or decide which settings to use.


### Windows

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	C:\Program Files \SystemwalkerSQC
Variable file directory	This is the path to the directory where files that change during operation are stored.	C:\SystemwalkerSQC
Alert action when thresholds are exceeded	Select either "Event log" or "Centric Manager message linkage" as the notification method to use when thresholds are exceeded.  If Systemwalker Centric Manager is installed on the same machine, selecting "Centric Manager message linkage" will cause threshold violations to be notified to Centric Manager.  Note that in addition to the event log and Centric Manager event linkage, mail and trap notifications can also be used to notify threshold violations.	Event log
Manager address	This is the host name or IP address of the Manager that this Agent will connect to.   <b>Note</b> ..... If the Manager has a cluster configuration, specify either a logical host name or a logical IP address.  For relay model operations using Proxy Managers, specify the address of the Proxy Manager. .....	None  *Setting is required even if a default value is not set.
Log data (Troubleshoot) retention period	Specify the retention period for troubleshooting information between 1 and 30 days.	7 days

## UNIX

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	/opt
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.	/etc/opt
Variable file directory	This is the path to the directory where files that change during operation are stored.	/var/opt
Alert action when thresholds are exceeded	Select either "syslog" (output message to the event log) or "centric" (Centric Manager message linkage) as the alert action taken when thresholds are exceeded.	syslog



Prompt item	Description	Default
	<p>If "Centric Manager event linkage" is selected, alerts will be sent to Centric Manager when thresholds are exceeded. For this option, Systemwalker Centric Manager must be installed on this same machine.</p> <p>Note that in addition to the event log and Centric Manager message linkage, mail and trap notifications can also be used to notify threshold violations.</p>	
Manager address	<p>This is the host name or IP address of the Manager that this Agent will connect to.</p> <p> <b>Note</b></p> <p>.....</p> <p>If the Manager has a cluster configuration, specify either a logical host name or a logical IP address.</p> <p>For relay model operations using Proxy Managers, specify the address of the Proxy Manager.</p> <p>.....</p>	<p>None</p> <p>*Setting is required even if a default value is not set.</p>
Log data (Troubleshoot) retention period	Specify the retention period for troubleshooting information between 1 and 30 days.	7 days

### 1.2.3 Installing an Operation Management Client

Before installing an Operation Management Client, it is necessary to obtain information about the server on which it is to be installed.

Refer to "[2.3 Operation Management Client](#)" to confirm the installation conditions.

This information must be collected prior to installation.

When the installer starts, it prompts the user to specify the following items. Therefore, before starting the installation process, check or decide which settings to use.

#### Windows

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	C:\Program Files \SystemwalkerSQC-C
Manager address	This is the host name or IP address of the Manager that the operation management client connects to.	None *Setting is required even if a default value is not set.



### 1.2.4 Installing an Enterprise Manager

Before installing an Enterprise Manager, it is necessary to obtain information about the server on which it is to be installed.

Refer to "[2.4 Enterprise Manager](#)" to confirm the installation conditions.

This information must be collected prior to installation.

When the installer starts, it prompts the user to specify the following items. Therefore, before starting the installation process, check or decide which settings to use.

## Windows

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	C:\Program Files\SystemwalkerSQC
Variable file directory	This is the path to the directory where files that change during operation are stored.	C:\SystemwalkerSQC
Performance database storage directory (Summary)	This is the path to the directory where summary data is stored.	C:\SystemwalkerSQC\data
Performance database storage directory (10 minutes)	This is the path to the directory where resource data (10 minutes) is stored.	C:\SystemwalkerSQC\data
Performance database storage directory (1 hour)	This is the path to the directory where resource data (1 hour) is stored.	C:\SystemwalkerSQC\data
Performance database storage directory (1 day)	This is the path to the directory where resource data (1 day) is stored.	C:\SystemwalkerSQC\data
Archive file storage directory	This is the path to the directory where archive files are stored.	C:\SystemwalkerSQC\spool\BackupPDBinsert
Alert action when thresholds are exceeded	Select either "Event log" or "Centric Manager message linkage" as the notification method to use when thresholds are exceeded.	Event log
Log data (Troubleshoot) retention period	Specify the retention period for troubleshooting information between 1 and 30 days.	7 days

## UNIX

Prompt item	Description	Default
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.	/opt
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.	/etc/opt
Variable file directory	This is the path to the directory where files that change during operation are stored.	/var/opt
Performance database storage directory (Summary)	This is the path to the directory where summary data is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (10 minutes)	This is the path to the directory where resource data (10 minutes) is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (1 hour)	This is the path to the directory where resource data (1 hour) is stored.	/var/opt/FJSVssqc/PDB
Performance database storage directory (1 day)	This is the path to the directory where resource data (1 day) is stored.	/var/opt/FJSVssqc/PDB
Archive file storage directory	This is the path to the directory where archive files are stored.	/var/opt/FJSVssqc/BackupPDBinsert
Alert action when thresholds are exceeded	Select either "Event log" or "Centric Manager message linkage" as the notification method to use when thresholds are exceeded.	syslog
Log data (Troubleshoot) retention period	Specify the retention period for troubleshooting information between 1 and 30 days.	7 days

## 1.3 Notes on Operation in Different Operating Systems

This section contains important notes relating to the operation of Systemwalker Service Quality Coordinator in different operating systems.

### Notes on operation in Solaris 10

Systemwalker Service Quality Coordinator can be installed in the global zone, or in a non-global zone if the following conditions are met:

- There must be at least one logical network interface allocated from the global zone.
- The following directories must not be inherited:
  - /opt

- /etc
- /var
- /usr

The /usr directory will be inherited if a non-global zone is created using the default settings, so this directory must be excluded from the target of inheritance.

### Notes on operation in Solaris 11

Systemwalker Service Quality Coordinator can be installed in the global zone, or in a non-global zone if the following conditions are met:

- There must be at least one logical network interface allocated from the global zone.

### Note when operating under Linux

When the SELinux(Security-Enhanced Linux) function is enabled under Red Hat Enterprise Edition 6.1 and earlier

This product cannot be installed in the Linux environment in which the SELinux function is enabled under Red Hat Enterprise Edition 6.1 and earlier. To install this product, disable the SELinux function before installation. Refer to the Linux online manual for more information on how to disable the SELinux function.

## 1.4 Other Notes

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This section contains important information relating to the use of Systemwalker Service Quality Coordinator.

### System time

Set the system time on all computers in the system to the same time.

### Defining the host name

Do not use characters other than ASCII to "host name" set to each computer in system construction.

### CPU information collected by the Red Hat virtualization function (Xen)

If a physical CPU is shared by multiple domains under the Red Hat virtualization function (Xen), which can be used in Red Hat Enterprise Linux v5.0, some of the CPU information collected by each domain may contain larger values than the real values.

The following items are affected:

- CPU time and utilization rate (SUM\_PROC,UX\_CPUBUSY)
- Process CPU time (UX\_PROCESS)



.....  
If a domain has exclusive use of a physical CPU, the correct information will be collected.

Refer to "Data Formats" in the *Reference Guide* for details on the relevant information.  
.....

## Note when operating under IPv6 environment

IPv6 environment being managed is supported when the connection being managed between Agent/Proxy Manager/Agent for Agentless Monitoring and Manager is under following conditions.

- Agent/Proxy Manager -- Between Managers (Push communication)
- Manager - Between Agents for Agentless Monitoring (telnet/ssh/https communication)

### Note

When managing Agent/Proxy Manager/Agent for Agentless Monitoring under IPv6 environment, Manager needs to be under IPv4/IPv6 dual stack environment. Also, enable to communicate between Manager and Operation Management Client via IPv4.

Operating Manager under IPv4/IPv6 dual stack environment, refer to "[6.13 Operation setting under IPv6 environment](#)" and follow steps.

### Point

Under the IPv6 only environment, Systemwalker Service Quality Coordinator is operable only when the Windows versions Manager and the Operation Management Client are installed in the same machine. The Operation Management Client and the Manager communicate via IPv4 by loopback in this case. Specify "127.0.0.1" as the connection destination Manager settings required to the Operation Management Client.

# Chapter 2 Installation Conditions and Resource Estimation

This chapter explains the installation conditions and resource estimation for Systemwalker Service Quality Coordinator.


## 2.1 Manager

This section explains the conditions for installing a Manager.

### 2.1.1 Hardware

#### 2.1.1.1 Hardware requirements

##### Windows

Item		Requirement	Remarks
CPU		<ul style="list-style-type: none"> <li>- For x86 Intel(R) Pentium III 1GHz or higher</li> <li>- For x64 Intel(R) Xeon(R) processor or higher</li> </ul>	
Available disk space	Installation directory	350MB	
	Variable file storage directory	350MB + the space required for the database + the space required for archive files (+ the space required for logs (*)) *: This requirement applies when Agent functions are used on a Manager.	Refer to " <a href="#">2.1.1.2 Estimating the size of the performance database/archive file</a> " for the formula for estimating the required size of the database and archive files. Refer to " <a href="#">2.1.1.3 How to estimate the amount of space required for the log data ("Troubleshoot" directory)</a> " for the formula for estimating the required size of logs.  <b>Note</b> Only the NTFS file system is supported.
Available memory space		200MB min. (+ 900MB (*)) *: When using agent for Agentless Monitoring management functions	

## Solaris

Item		Requirement	Remarks
CPU		SPARC64 600MHz or higher	
Available disk space	Installation directory	300MB	
	Definition file storage directory	50MB	
	Variable file storage directory	100MB + the space required for the database + the space required for archive files (+ the space required for logs (*)) *: This requirement applies when Agent functions are used on a Manager.	Refer to " <a href="#">2.1.1.2 Estimating the size of the performance database/archive file</a> " for the formula for estimating the required size of the database and archive files.  Refer to " <a href="#">2.1.1.3 How to estimate the amount of space required for the log data ("Troubleshoot" directory)</a> " for the formula for estimating the required size of logs.
Available memory space		300MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions	

## Linux

Item		Requirement	Remarks
CPU		- For x86 Intel(R) Pentium III 1GHz or higher  - For x64 64 bit Intel(R) Xeon(R) processor (EM64T) or higher	
Available disk space	Installation directory	300MB	
	Definition file storage directory	50MB	
	Variable file storage directory	100MB + the space required for the database + the space required for archive files (+ the space required for logs (*))	Refer to " <a href="#">2.1.1.2 Estimating the size of the performance database/archive file</a> " for the formula for estimating the required size of the database and archive files.  Refer to " <a href="#">2.1.1.3 How to estimate the amount of space required for the log data ("Troubleshoot" directory)</a> " for

Item		Requirement	Remarks
		*: This requirement applies when Agent functions are used on a Manager.	the formula for estimating the required size of logs.
Available memory space		200MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions	

 **Point**

.....

The disk performance of the Manager affects the performance of each display function (the Summary, Drilled-Down and Report views).

If Systemwalker Centric Manager is installed on the same machine as the Manager for this product, it is recommended that an environment that takes disk performance into account be prepared (by preparing separate disk partitions, for example).

.....

### 2.1.1.2 Estimating the size of the performance database/archive file

Managers require disk space for a performance database/archive file.

The size of this database/archive file depends on the number of instances of the resources being managed, retention period, and the number of Agents/Proxy Managers.

Use the following procedure to make an estimate:

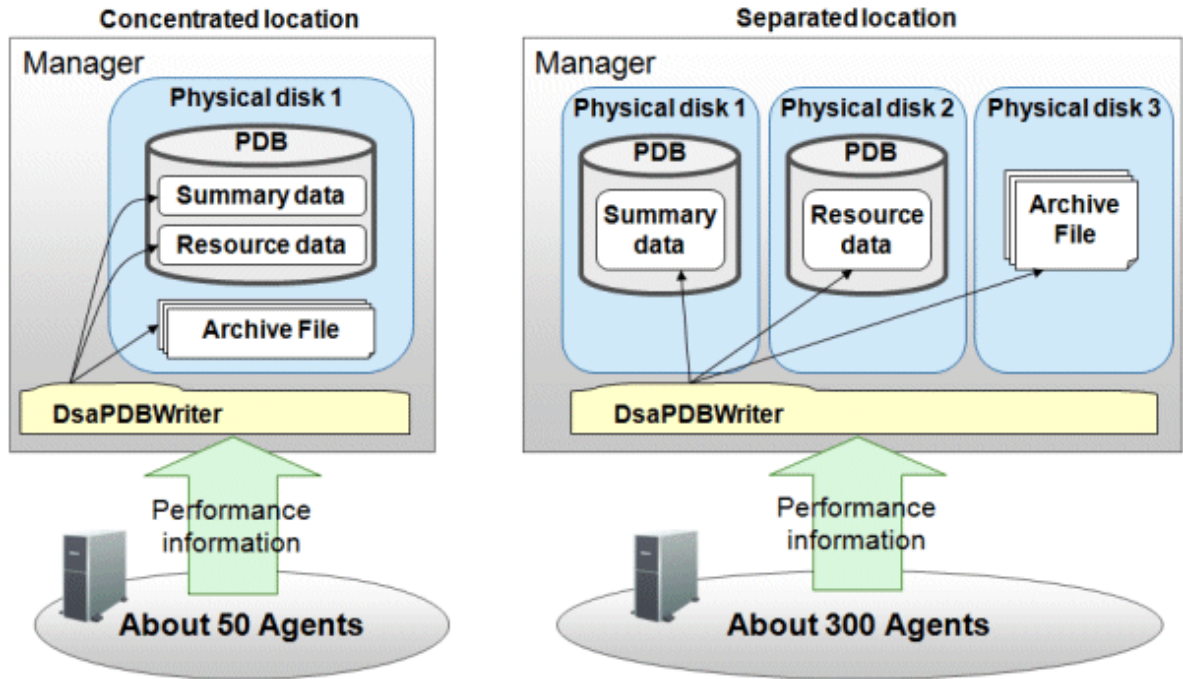
 **Point**

.....

By preparing three physical disks for the Manager and splitting the summary data, resource data and archive files into each disk to disperse disk I/Os, one Manager can manage approximately 300 agents.

Refer to "[6.6.1 Changing the PDB/Archive File Storage Location](#)" for details on how to change the location of the summary data, resource data and archive files.





**Procedure for estimating performance data base/archive file**

1. Estimate the space necessary for each Agent/Proxy Manager to be managed.

a. Estimate of number of records acquired in one collection

**Summary data**

Using the table for estimating summary data below, multiply the number of resource instances to be managed by the summary data coefficient and sum up them, to calculate the number of summary data records acquired in one collection (MR).

**Resource data**

Using the table for estimating resource data below, multiply the number of resource instances to be managed by the resource data coefficient and sum up them, to calculate the number of resource data records acquired in one collection (RR).



For example, to estimate the amount of data required to manage a server with Symfoware Server installed under Windows, determine the totals for each resource instance shown in the "OS (Windows)" and "Symfoware Server" columns.

b. Use the following formulas to calculate the amount of space required from the number of records obtained in a single collection operation.

**Volume of the performance database (PDB)**

$\text{Summary data [KB]} = (\text{MR} * 50[\text{KB}]) * \text{Summary data retention period [days]}$
$\text{Resource data [KB]} = \text{RR} * (144 * \text{A} + 24 * \text{B} + 1 * \text{C}) * 0.35[\text{KB}]$

A: Retention period (in days) of resource data (10-minute interval)

B: Retention period (in days) of resource data (1-hour interval)

C: Retention period (in days) of resource data (1-day interval)

$$\text{Performance database (PDB) volume [KB]} = \text{Summary data [KB]} + \text{Resource data [KB]}$$

## Point

Default retention times are as follows:

- Summary data: 3[days]
- Resource data(10-minute interval): 7[days]
- Resource data(1-hour interval): 42[days] (6 weeks)
- Resource data(1-day interval): 397[days] (13months)

## Note

Each of the disk size of performance database (PDB) is as follows when storing the summary data, resource data and archive files into separated disks.

$$\begin{aligned} \text{Performance database (PDB) volume of the disk storing the summary data [KB]} \\ = \text{Summary data [KB]} \end{aligned}$$

$$\begin{aligned} \text{Performance database (PDB) volume of the disk storing the resource data [KB]} \\ = \text{Resource data [KB]} \end{aligned}$$

### Archive size

$$\text{Summary data [KB]} = (\text{MR} * 45[\text{KB}]) * 4[\text{days}]$$

$$\text{Resource data [KB]} = (\text{RR} * 50[\text{KB}]) * 4[\text{days}]$$

$$\text{Archive size [MB]} = \text{Summary data [MB]} + \text{Resource data [MB]}$$

2. Add up the result of the calculations for all Agents/Proxy Managers. The result of this equation is the space necessary for archive files on the Manager.

### Summary data estimation

Managed resource	Instance	Summary data Coefficient (MB)
OS <Agent for Agent-based Monitoring>	1 (fixed value)	30
OS <Agent for Agentless Monitoring>	1 (fixed value)	6
VMware ESX/ESXi	1 (fixed value)	6
	Number of guests	6
VMware vCenter	Number of clusters	4
	Number of resource pools	8
Hyper-V <Agent for Agent-based Monitoring>	1 (fixed value)	10

Managed resource	Instance	Summary data Coefficient (MB)
	Number of guests	10
Hyper-V	1 (fixed value)	8
<Agent for Agentless Monitoring>	Number of guests	2
Linux virtualization function (KVM)	Number of guests	10
<Agent for Agent-based Monitoring>		
Linux virtualization function (KVM)	1 (fixed value)	6
<Agent for Agentless Monitoring>	Number of guests	6
Linux virtualization function (Xen)	Number of guests	10
<Agent for Agent-based Monitoring>		
Linux virtualization function (Xen)	1 (fixed value)	6
<Agent for Agentless Monitoring>	Number of guests	6
Solaris Container	Number of Zones	10
<Agent for Agent-based Monitoring>		
Solaris Container	Number of Zones	2
<Agent for Agentless Monitoring>		
Solaris Container (Solaris 10)	Number of Zones	10
<Agent for Agent-based Monitoring>		
Service operational management	Number of operational monitoring targets	10
End user response management	Number of Browser Agents * number of monitored URLs	1
Web transaction management	Number of services	2
Interstage Application Server (EJB Application)	Number of applications * number of methods * number of processes * number of threads	2
Interstage Application Server (CORBA Application)	Number of applications * number of operations * number of processes * number of threads	2
Interstage Application Server (Transaction Application)	Number of applications * number of operations * number of processes	2
Interstage Application Server (IIServer)	Number of Work Units	2
Interstage Application Server (IIServer cluster)	Number of Server Instances	2
Interstage Business Application Server/ Application Framework Suite	Number of servers	2
Interstage Service Integrator	Number of sequences	10
	Number of queues	10
Oracle WebLogic Server	Number of management servers + Number of managed servers	2

Managed resource	Instance	Summary data Coefficient (MB)
Microsoft .NET Server	Number of instances	10
SAP	Number of SAP instances	8
Symfoware Server	Number of RDB systems	2
	Number of RDB systems * number of connected processes	2
Oracle Database Server	Number of instances (SID)	4
Microsoft SQL Server	Number of instances	10
Systemwalker Operation Manager	1 (fixed value)	4
Systemwalker Resource Coordinator (Network)	Number of network interfaces	4
Systemwalker Resource Coordinator (Storage)/ ETERNUS SF Storage Cruiser	Number of RAIDGroups	4
ServerView Resource Orchestrator	Number of VM pools	2
	Number of storage pools	2
	Number of network pools	2
	Number of server pools	2
	Number of address pools	2
User Data	Amount of data stored in PDB in 10 minutes	1

## Resource data estimation

### Point


Resources that do not change, such as the number of Windows or UNIX processes and the number of physical disks (partitions), are not subject to collection and should be removed from the estimation. Refer to "Drilled-Down/Report Information" in the *Reference Guide* for details on the conditions for removal from the estimation.

### Point

- The operating system (Windows) becomes the subject of monitoring if you make Hyper-V a subject of monitoring. Add the calculation for Hyper-V and the operating system (Windows).
- The operating system (Linux) becomes the subject of monitoring if you make Red Hat virtualized functions (KVM) the subject of monitoring. Add the calculation for Red Hat virtualized functions (KVM) and the operating system (Linux).
- The operating system (Linux) becomes the subject of monitoring if you make Red Hat virtualized functions (Xen) the subject of monitoring. Add the calculation for Red Hat virtualized functions (Xen) and the operating system (Linux).
- The operating system (Solaris) becomes the subject of monitoring if you make Solaris Container the subject of monitoring. Add the calculation for Solaris Container and the operating system (Solaris).




Managed resource	Instance	Resource Data Coefficient
OS (Windows) <Agent for Agent-based Monitoring>	1 (fixed value)	3
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of processes	1
	Number of network interfaces	1
	Number of page files	2
OS (Solaris) <Agent for Agent-based Monitoring>	1 (fixed value)	17
	Number of CPUs	2
	Number of cores	1
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
	Number of processes	1
	Number of network interfaces	1
	Number of message queues	1
	Number of shared memories	1
Number of semaphore	1	
OS (Linux) <Agent for Agent-based Monitoring>	1 (fixed value)	15
	Number of CPUs	3
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
	Number of processes	1
	Number of network interfaces	1
	Number of message queues	1
	Number of shared memories	1
Number of semaphore	1	
OS (Windows) <Agent for Agentless Monitoring>	1 (fixed value)	1
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of page files	2
OS (Solaris) <Agent for Agentless Monitoring>	1 (fixed value)	11
	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
OS (Linux) <Agent for Agentless Monitoring>	Fixed value	11
	Number of CPUs	2
	Number of (mounted) logical disks	1

Managed resource	Instance	Resource Data Coefficient
	Number of physical disks (partitions)	2
OS (AIX) <Agent for Agentless Monitoring>	1 (fixed value)	11
	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
OS (HP-UX) <Agent for Agentless Monitoring>	1 (fixed value)	11
	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
VMware ESX/ESXi	Number of guests	2
	Number of guests * number of physical devices	1
	Number of guests * number of virtual processors	2
	Number of guests * number of virtual devices	1
	Number of guests * number of virtual network interfaces	1
VMware vCenter	Number of clusters	3
	Number of resource pools	4
	Number of data stores	1
	Number of guests	2
Hyper-V <Agent for Agent-based Monitoring and Agent for Agentless Monitoring>	1 (fixed value)	1
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of page files	2
	Number of guests * number of virtual processors	3
	Number of guests * number of virtual devices	2
	Number of guests * number of virtual network interfaces	4
Red Hat virtualization function (KVM) <Agent for Agent-based Monitoring and Agent for Agentless Monitoring>	1 (fixed value)	11
	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
	Number of domains	3
	Number of domains * number of virtual network interfaces	1
Red Hat virtualization function (Xen) <Agent for Agent-based Monitoring and Agent for Agentless Monitoring>	1 (fixed value)	11
	Number of CPUs	2
	Number of (mounted) logical disks	1

Managed resource	Instance	Resource Data Coefficient
for Agentless Monitoring>	Number of physical disks (partitions)	2
	Number of domains	3
	Number of domains * number of virtual network interfaces	1
Solaris Container <Agent for Agent-based Monitoring and Agent for Agentless Monitoring>	Number of Zones	3
Solaris Container (Solaris 10) <Agent for Agentless Monitoring>	Number of Zones	1
Service operational management	Number of monitored operations	1
End user response management	Number of Browser Agents * number of monitored URLs	4
Web transaction management	Number of URLs to be analyzed   <b>Note</b> ..... Total number of inclusion statements specified in the transaction log configuration file (specified in each service statement) .....	1
Interstage Application Server(EJB Application)	Number of applications * number of methods * number of processes * number of threads	1
Interstage Application Server(CORBA Application)	Number of applications * number of operations * number of processes * number of threads	1
Interstage Application Server(Transaction Application)	Number of applications * number of operations * number of processes	1
Interstage Application Server(IJServer)	Number of Work Units * number of JVMs	1
	Number of Work Units * number of JTARESOURCEs * number of processes	1
	Number of Work Units * number of DATASOURCEs	1
Interstage Application Server (IJServer Cluster)	Number of Server Instances	Default : 2  When increased monitoring items : 5
	Number of Server Instances * number of JDBC data sources	1

Managed resource	Instance	Resource Data Coefficient
	Number of Server Instances * number of MessageDriveBeans * number of applications	1
	Number of Server Instances * number of thread pools	1
	Number of Server Instances * number of JMS/connector connection pools	1
	Number of Server Instances * number of EntityBeans * number of applications	1
	Number of Server Instances * number of StatefulSessionBeans * number of applications	1
	Number of Server Instances * number of StatelessSessionBeans * number of applications	1
Interstage Application Server (Transaction Breakdown Analysis) (J2EE environment)	Number of Work Units * number of Servlet containers * (number of transaction executions/100)	1
	Number of Work Units * number of Web applications * (number of transaction executions/100)	1
	Number of Work Units * number of EJB container executions * (number of transaction executions/100)	1
	Number of Work Units * number of EJB application executions * (number of transaction executions/100)	1
Interstage Application Server (Transaction Breakdown Analysis) (Java EE environment)	Number of Server Instances * number of Servlet containers * (number of transaction executions/100)	1
	Number of Server Instances * number of Web applications * (number of transaction executions/100)	1
	Number of Server Instances * number of EJB container executions * (number of transaction executions/100)	1
	Number of Server Instances * number of EJB application executions * (number of transaction executions/100)	1
Interstage Business Application Server/ Application Framework Suite	Number of servers * (number of transactions/sampling rate)	1
Interstage Service Integrator	Number of sequences	1
	Number of queues	1
Oracle WebLogic Server	Number of management servers	3
	Number of managed servers	3



Managed resource	Instance	Resource Data Coefficient
	Number of managed servers * number of JDBC data sources	1
Microsoft .NET Server	Number of instances	3
SAP	Number of SAP instances	13
Symfoware Server	Number of RDB systems	1
	Number of RDB systems * number of buffer pools	1
	Number of RDB systems * number of DB Spaces	1
	Number of RDB systems * number of connected processes	2
Oracle Database Server	Number of Instances (SID)	7
	Instances (number of SID) * number of table spaces	1
	Instances (number of SID) * number of rollback segments	1
	Instances (number of SID) * number of dictionary caches	1
Microsoft SQL Server	Number of instances	5
	Number of instances * number of objects	3
Systemwalker Operation Manager	<p>Number of subsystems + number of projects in all subsystems + number of queues in all subsystems</p> <p> <b>Note</b></p> <p>.....</p> <p>If you have limited subsystems, projects, and queues to be analyzed in the jla.ini configuration file, the number is that set by the limitations.</p> <p>.....</p>	7
Systemwalker Centric Manager(Traffic)	<p>Number of network interfaces</p> <p> <b>Note</b></p> <p>.....</p> <p>This is the value if data one-hour's worth of data is continuously stored in the PDB every hour.</p> <p>.....</p>	7
Systemwalker Network Manager	<p>Number of nodes + number of interface hosts</p> <p> <b>Note</b></p> <p>.....</p> <p>This is the value if data one-hour's worth of data is continuously stored in the PDB every hour.</p> <p>.....</p>	10
Systemwalker Resource Coordinator(Network)	Number of network interfaces	1
Systemwalker Resource Coordinator(Storage)	Number of RAIDGroups	2
	Number of CMs	1

Managed resource	Instance	Resource Data Coefficient
	Number of CMs(ROEs)	1
	Number of LUNs	1
	Number of Disks	1
	Number of switch ports	1
	Number of NR1000 devices	1
ServerView Resource Orchestrator	Number of VM pools	1
	Number of storage pools	1
	Number of network pools	1
	Number of server pools	1
	Number of address pools	1
ECO Information	Number of machines monitored	2

### 2.1.1.3 How to estimate the amount of space required for the log data ("Troubleshoot" directory)

Agents require disk space for a log to temporarily hold the data that is collected. When using an Agent on a Manager, space is required for a log to temporarily hold the data that is collected.

The size of this log depends on the number of instances of the resources being managed.

Use the following procedure to make an estimate:

#### Point

Log data (Troubleshoot) contains more detailed information (operating system information only) than the information stored in the Manager database. Use this information when it is necessary to check more detailed information. (Operating system items in Drilled-Down display are saved at one-minute intervals while Drilled-Down display appears at 10-minute intervals.)

#### Procedure for estimating the amount of space required for the log data

1. Estimate the number of records acquired in one collection.

##### Log data

Use the estimating log data table (below) to calculate the number of log data records acquired in one collection (TR). First, multiply the number of instances of resources to be managed by the log data coefficient shown in the table for the resource. Then, add together the results of these calculations for all of the resources in order to obtain the TR.

2. Calculate the volume used with the following formula from the number of records in one collection.

$$\text{Log data[MB]} = (\text{TR} * 0.5[\text{MB}]) * (\text{Retention period} + 1)[\text{days}]$$

#### Log data estimation

Log data (Troubleshoot) requires the retention period plus one additional day because it also holds the data that is being stored on any given day. The default retention period for log data is 7 days.

Managed resource	Instance	Log data coefficient
Windows	1 (fixed value)	2
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of processes	1
	Number of network interfaces	1
	Number of page files	2
Solaris	1 (fixed value)	13
	Number of CPUs	2
	Number of cores	1
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
	Number of processes	1
	Number of network interfaces	1
	Number of zones	1
Linux	1 (fixed value)	11
	Number of CPUs	3
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
	Number of processes	1
	Number of network interfaces	1

## 2.1.2 Software

### 2.1.2.1 Operating system requirements

#### Windows


Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003, Standard Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise Edition	Service Pack: None/1/2

Item	Requirement	Remarks
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Standard(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)	Service Pack: None/1 (*1)

\*1: With the Systemwalker Service Quality Coordinator Windows (32bit) edition, values that exceed "4294967295" are collected, but "4294967295" is stored in the performance database according to Windows specifications.

## Solaris

Item	Requirement	Remarks
Operating system	Solaris 9	
	Solaris 10	This product can be installed on global zone and on non-global zones that meet the following conditions:  - One or more logical network interfaces have been allocated from the global zone.

Item	Requirement	Remarks
		<ul style="list-style-type: none"> <li>- The following directories are not inherited: /opt /etc /var /usr</li> </ul> <p> <b>Note</b></p> <p>.....</p> <p>If a non-global zone is created using the default settings, the /usr directory will be subject to inheritance, so remove it from the inheritance target.</p> <p>.....</p>
	Solaris 11	<p>This product can be installed on global zone and on non-global zones that meet the following conditions:</p> <ul style="list-style-type: none"> <li>- One or more logical network interfaces have been allocated from the global zone.</li> </ul>
Package	SUNWaccu	<p>&lt;Solaris 9/10&gt;</p> <p>When using Agent functions with the Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>
	compatibility/ucb	<p>&lt;Solaris 11&gt;</p>
	system/ accounting/legacy- accounting	<p>&lt;Solaris 11&gt;</p> <p>When using Agent functions with the Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>

## Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 5 (for Intel64)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 6 (for x86)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>This product cannot be installed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul> <p>This product can be installed in Linux environments where the SELinux function has been enabled or disabled.</p>

Item	Requirement	Remarks
	Red Hat Enterprise Linux 6 (for Intel64)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>This product cannot be installed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul> <p>This product can be installed in Linux environments where the SELinux function has been enabled or disabled.</p>
Package	sysstat	<p>When using Agent functions with the Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>
	redhat-lsb	

### 2.1.2.2 Products that cannot be installed

Product name	Remarks
SystemWalker TrendView Systemwalker WebMGR Systemwalker PerfMGR	These products are the predecessors to this product.
ETERNUS SF Disk Space Monitor Systemwalker Service Catalog Manager	

## 2.2 Agent/Proxy Manager

---

This section explains the installation conditions for Agents and Proxy Managers.


### 2.2.1 Hardware

---

#### 2.2.1.1 Hardware requirements

##### Windows

Item	Requirement	Remarks
CPU	<ul style="list-style-type: none"> <li>- For x86 Intel(R) Pentium III 1GHz or higher</li> </ul>	

Item		Requirement	Remarks
		- For x64 Intel(R) Xeon(R) processor or higher	
Available disk space	Installation directory	350MB	
	Variable file storage directory	350MB + the space required for the log	<p>Refer to "2.2.1.2 How to estimate the amount of space required for the log data ("Troubleshoot" directory)" for the formula for estimating the required size of logs.</p> <p> <b>Note</b></p> <p>.....</p> <p>Only the NTFS file system is supported.</p> <p>.....</p>
Available memory space		200MB min. (+ 900MB (*)) *: When using agent for Agentless Monitoring management functions (Proxy Manager)	

## Solaris

Item		Requirement	Remarks
CPU		SPARC64 600MHz or higher	
Available disk space	Installation directory	300MB	
	Definition file storage directory	50MB	
	Variable file storage directory	100MB+ the space required for the log	Refer to "2.2.1.2 How to estimate the amount of space required for the log data ("Troubleshoot" directory)" for the formula for estimating the required size of logs.
Available memory space		300MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions (Proxy Manager)	

## Linux

Item		Requirement	Remarks
CPU		<ul style="list-style-type: none"> <li>- For x86 Intel(R) Pentium III 1GHz or higher</li> <li>- For x64 64 bit Intel(R) Xeon(R) processor (EM64T) or higher</li> </ul>	
Available disk space	Installation directory	300MB	
	Definition file storage directory	50MB	
	Variable file storage directory	100MB+ the space required for the log	Refer to "2.2.1.2 How to estimate the amount of space required for the log data ("Troubleshoot" directory)" for the formula for estimating the required size of logs.
Available memory space		200MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions (Proxy Manager)	

### 2.2.1.2 How to estimate the amount of space required for the log data ("Troubleshoot" directory)

Agents require disk space for a log to temporarily hold the data that is collected.

The size of this log depends on the number of instances of the resources being managed.

Use the following procedure to make an estimate:



Log data (Troubleshoot) contains more detailed operating system information collected at 1-minute intervals than the information stored in the Manager database, which is collected at 10-minute intervals. Use this information when it is necessary to check more detailed information.

Determine the retention period, taking the usable disk size and the usage of log data into account.

#### Procedure for estimating the log data

1. Estimate the number of records acquired in one collection.

##### Log data

Use the estimating log data table below to calculate the number of number of log data records acquired in one collection (TR). First multiply the number of instances of resources to be managed by the log data coefficient shown in the table for the resource. Next add together the results of these calculations for all of the resources to obtain TR.



- Use the following formulas to calculate the amount of space required from the number of records obtained in a single collection operation.

$$\text{Log data[MB]} = (\text{TR} * 0.5[\text{MB}]) * (\text{Retention period} + 1)[\text{days}]$$

## Log data estimation



Log data (Troubleshoot) requires the retention period plus one additional day because it also holds the data that is being stored on any given day. The default retention period for log data is 7 days.

Managed resource	Instance	Log data coefficient
Windows	1 (fixed value)	2
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of processes	1
	Number of network interfaces	1
	Number of page files	2
Solaris	1 (fixed value)	13
	Number of CPUs	2
	Number of cores	1
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
	Number of processes	1
	Number of network interfaces	1
	Number of zones	1
Linux	1 (fixed value)	11
	Number of CPUs	3
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
	Number of processes	1
	Number of network interfaces	1

## 2.2.2 Software

### 2.2.2.1 Operating system requirements

#### Windows


Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003, Standard Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003, R2 Enterprise Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Datacenter Edition	Service Pack: None/1/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2003 R2, Datacenter Edition	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition	Service Pack: None /2 (*1)
	Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2003, Datacenter x64 Edition	Service Pack: None/1/2 Only Enterprise Edition Agents operable (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Datacenter x64 Edition	Service Pack: None/2 Only Enterprise Edition Agents operable (*1)
	Microsoft(R) Windows Server(R) 2008 Standard(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Datacenter(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Datacenter(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Datacenter(x64)	Service Pack: None/1 (*1)
Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x86)	Service Pack: None/2	
Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)	

Item	Requirement	Remarks
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Standard Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Enterprise Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Datacenter Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft(R) Windows Server(R) 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)	Service Pack: None/1 (*1)

\*1: With the Systemwalker Service Quality Coordinator Windows (32bit) edition, values that exceed "4294967295" are collected, but "4294967295" is stored in the performance database according to Windows specifications.

## Solaris

Item	Requirement	Remarks
Operating system	Solaris 9	
	Solaris 10	This product can be installed on global zone and on non-global zones that meet the following conditions: <ul style="list-style-type: none"> <li>- One or more logical network interfaces have been allocated from the global zone.</li> <li>- The following directories are not inherited: /opt /etc</li> </ul>

Item	Requirement	Remarks
		/var /usr   <b>Note</b> ..... If a non-global zone is created using the default settings, the /usr directory will be subject to inheritance, so remove it from the inheritance target. .....
	Solaris 11	This product can be installed on global zone and on non-global zones that meet the following conditions:  - One or more logical network interfaces have been allocated from the global zone.
Package	SUNWaccu	<Solaris 9/10>  For Agent and when using Agent functions with the Proxy Manager  It must be possible to use sar commands when using Agent functions.
	compatibility /ucb	<Solaris 11>
	system/accounting/legacy-accounting	<Solaris 11>  For Agent and when using Agent functions with the Proxy Manager  It must be possible to use sar commands when using Agent functions.

## Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 5 (for Intel64)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 6 (for x86)	- Red Hat Enterprise Linux 6.1 and earlier  This product cannot be installed in Linux environments where the SELinux function has been enabled.  - Red Hat Enterprise Linux 6.2 or later  This product can be installed in Linux environments where the SELinux function has been enabled or disabled.
	Red Hat Enterprise Linux 6 (for Intel64)	- Red Hat Enterprise Linux 6.1 and earlier  This product cannot be installed in Linux environments where the

Item	Requirement	Remarks
		SELinux function has been enabled.  - Read Hat Enterprise Linux 6.2 or later  This product can be installed in Linux environments where the SELinux function has been enabled or disabled.
Package	sysstat	For Agent and when using Agent functions with the Proxy Manager  It must be possible to use sar commands when using Agent functions.
	redhat-lsb	

### 2.2.2.2 Products that cannot be installed

Product name	Remarks
SystemWalker TrendView Systemwalker WebMGR Systemwalker PerfMGR	These products are the predecessors to this product.
ETERNUS SF Disk Space Monitor Systemwalker Service Catalog Manager	

## 2.3 Operation Management Client

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This section explains the installation conditions for operation management clients. Operation management clients only run on Windows platforms. If the Manager platform is also Windows, then both the Manager and the operation management client can be installed on the same server.



The Manager and the operation management client cannot be installed on the same server if the Manager is running on a cluster system.

### 2.3.1 Hardware

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#### 2.3.1.1 Hardware requirements

##### Windows

Item	Requirement	Remarks
CPU	Intel(R) Pentium III 1GHz or higher	

Item		Requirement	Remarks
Available disk space	Installation directory	850MB + Space required for reports	Refer to " <a href="#">2.3.1.2 How to estimate the space required for reports</a> " for the formula for estimating the required size of reports.
Available memory space		100 MB min.	


### 2.3.1.2 How to estimate the space required for reports

Operation management clients must have space for reports.

If you want to change the save location for reports for each console definition, you must also estimate the usage for each such location.

The procedure for making the estimate is described below.

Disk usage in the report management folder =  
 Disk Usage by Summary and Drilled-Down  
 + Disk Usage by Analysis / Planning Report  
 + Disk Usage by Scheduled Report

Type of report function	Estimation method
Summary and Drilled-Down	500 KB * N(copies) N= Number of reports created in an hour
Analysis/Planning Report	Up to 50 analyses can be stored, so 25 megabytes of space is required. 500KB * 50 (copies) = 25MB
Scheduled report	Assuming that one copy of each daily, weekly and monthly report is registered and then kept for one year, a total of 215 megabytes of space will be required. <ul style="list-style-type: none"> <li>- Daily reports: 500 KB * 1 (copy) * 365 (days) = 182.5 MB</li> <li>- Weekly reports: 500 KB * 1 (copy) * 53 (weeks) = 26.5 MB</li> <li>- Monthly reports: 500 KB * 1 (copy) * 12 (months) = 6.0 MB</li> </ul> <div style="border: 1px dashed orange; padding: 5px; margin-top: 10px;"> <p> <b>Note</b></p> <p>Scheduled reports are not deleted automatically by default. If necessary, delete scheduled reports by scheduling the scheduled report deletion command.</p> </div>

Reports each normally use about 500KB.

## 2.3.2 Software

### 2.3.2.1 Operating system and related software

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003, Standard Edition	Service Pack: None/1/2

Item	Requirement	Remarks
	Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)	Service Pack: None/1
	Microsoft(R) Windows Server(R) 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)	Service Pack: None/1
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Foundation(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)	Service Pack: None/1
	Microsoft(R) Windows(R) XP Professional	Service Pack 3
	Windows Vista(R) Business(x86)	Service Pack: 2
	Windows Vista(R) Enterprise(x86)	Service Pack: 2
	Windows Vista(R) Ultimate(x86)	Service Pack: 2
	Windows(R) 7 Professional(x86)	Service Pack: None/1
	Windows(R) 7 Enterprise(x86)	Service Pack: None/1
	Windows(R) 7 Ultimate(x86)	Service Pack: None/1
	Windows(R) 7 Professional(x64)	Service Pack: None/1
	Windows(R) 7 Enterprise(x64)	Service Pack: None/1
	Windows(R) 7 Ultimate(x64)	Service Pack: None/1
HTTP server	Microsoft(R) Internet Information Services 5.1 or later	
	Interstage HTTP Server (bundled with Interstage Application Server) 7.0 or later	
Web browser	Microsoft(R) Internet Explorer 8/9	This standard also applies when Web pages provided by the

Item	Requirement	Remarks
		operation management client are looked up from other machines.

### Note

The number of connections is restricted to a maximum of 10 for Internet Information Services included in the OS below. Consider using a different version if the number of accesses might exceed 10.

- Microsoft(R) Windows(R) XP Professional
- Windows Vista(R) Business(x86)
- Windows Vista(R) Enterprise(x86)
- Windows Vista(R) Ultimate(x86)
- Windows(R) 7 Professional(x86)
- Windows(R) 7 Enterprise(x86)
- Windows(R) 7 Ultimate(x86)
- Windows(R) 7 Professional(x64)
- Windows(R) 7 Enterprise(x64)
- Windows(R) 7 Ultimate(x64)

### Note

When contents of the report contents output in Excel(R) format files under V13.5.0 and earlier, Microsoft(R) Excel is required to be installed in the Operation Management Console, but the installation is no more required from V15.0.0 and later.

## 2.3.2.2 Products that cannot be installed

Product name	Remarks
ETERNUS SF Disk Space Monitor Systemwalker Service Catalog Manager	

## 2.4 Enterprise Manager

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This section explains the installation conditions for Enterprise Managers.


### 2.4.1 Hardware

---

#### 2.4.1.1 Hardware requirements



## Windows

Item		Requirement	Remarks
CPU		<ul style="list-style-type: none"> <li>- For x86 Intel(R) Pentium III 1GHz or higher</li> <li>- For x64 Intel(R) Xeon(R) processor or higher</li> </ul>	
Available disk space	Installation directory	350MB	
	Variable file storage directory	350MB + the space required for database + the space required for archive files (+ the space required for logs (*)) *: This requirement applies when Agent functions are used on an Enterprise Manager.	Refer to " <a href="#">2.4.1.2 Estimating the size of the performance database/archive file</a> " for the formula for estimating the required size of the database and archive files.  Refer to " <a href="#">2.4.1.3 How to estimate the amount of space required for the log data</a> " " <a href="#">Troubleshoot</a> " directory" for the formula for estimating the required size of logs.   <b>Note</b> ..... Only the NTFS file system is supported. .....
Available memory space		200MB min.	

## Solaris

Item		Requirement	Remarks
CPU		SPARC64 600MHz or higher	
Available disk space	Installation directory	300MB	
	Definition file storage directory	50MB	
	Variable file storage directory	100MB + the space required for the database + the space required for archive files (+ space required for logs (*)) *: This requirement applies when Agent	Refer to " <a href="#">2.4.1.2 Estimating the size of the performance database/archive file</a> " for the formula for estimating the required size of the database and archive files.  Refer to " <a href="#">2.4.1.3 How to estimate the amount of space required for the log data</a> " " <a href="#">Troubleshoot</a> " directory" for the formula for estimating the required size of logs.

Item	Requirement	Remarks
	functions are used on an Enterprise Manager.	
Available memory space	300MB min.	

## Linux

Item	Requirement	Remarks
CPU	<ul style="list-style-type: none"> <li>- For x86 Intel(R) Pentium III 1GHz or higher</li> <li>- For x64 64 bit Intel(R) Xeon(R) processor (EM64T) or higher</li> </ul>	
Available disk space	Installation directory	300MB
	Definition file storage directory	50MB
	Variable file storage directory	100MB + the space required for the database + the space required for archive files (+ space required for logs (*)) *: This requirement applies when Agent functions are used on an Enterprise Manager.
Available memory space	200MB min.	

### 2.4.1.2 Estimating the size of the performance database/archive file

Enterprise Managers require disk space for performance database/archive file

The size of this database depends on the number of Agents/Proxy Managers and on the number of instances of the resources being managed.

Enterprise Managers store only the information displayed in the **Summary** view, and so Enterprise Managers require less disk space for each Agent/Proxy Manager than Managers. . On the other hand, disk space is required for all of the Agents and Proxy Managers under all of the Managers.

Use the following procedure to make an estimate:

## Point

The storage location of the performance database and the archive files can be changed in order to distribute the disk I/O and disk size.

Refer to "6.6.1 Changing the PDB/Archive File Storage Location" for details.

### Procedure for estimating the size of the performance database/archive file

1. Estimate the space necessary for each Agent/Proxy Manager to be managed.
  - a. Estimate of number of records acquired in one collection

#### Summary data

Using the table below for estimating summary data, get the overall total of the number of summary data records acquired in one collection (MR) by multiplying the number of instances of resources to be managed by the summary data record coefficient.

## Point

For example, to estimate the amount of data required to manage a server with Symfoware Server installed, determine the totals for each resource shown in the "OS (Windows)" and "Symfoware Server" rows of the following table by multiplying the number of instances by the corresponding coefficient, and then add up these totals.

- b. Calculate the volume used with the following formula from the number of records in one collection.

#### Volume of the performance database (PDB)

$$\text{Summary data [KB]} = (\text{MR} * 50[\text{KB}]) * \text{Summary data retention period[days]}$$

## Point

Default retention times are as follows:

- Summary data : 3[days]

#### Archive size

$$\text{Archive size [MB]} = (\text{MR} * 45[\text{KB}]) * 4[\text{days}]$$

2. Add up the result of the calculations for all Agents/Proxy Managers. The result of this is the space necessary for the performance database and archive files on the Manager.

### Summary data estimation

Managed resource	Instance	Summary data Coefficient
OS <Agent for Agent-based Monitoring>	1 (fixed value)	30
OS <Agent for Agentless Monitoring>	1 (fixed value)	6
VMware ESX/ESXi	1 (fixed value)	6

Managed resource	Instance	Summary data Coefficient
	Number of guests	6
VMware vCenter	Number of clusters	4
	Number of resource pools	8
Hyper-V <Agent for Agent-based Monitoring>	1 (fixed value)	10
	Number of guests	10
Hyper-V <Agent for Agent-based Monitoring>	1 (fixed value)	8
	Number of guests	2
Red Hat virtualization function (KVM) <Agent for Agent-based Monitoring>	Number of guests	10
Red Hat virtualization function (KVM) <Agent for Agent-based Monitoring>	1 (fixed value)	6
	Number of guests	6
Red Hat virtualization function (Xen) <Agent for Agent-based Monitoring>	Number of guests	10
Red Hat virtualization function (Xen) <Agent for Agent-based Monitoring>	1 (fixed value)	6
	Number of guests	6
Solaris container <Agent for Agent-based Monitoring>	Number of zones	10
Solaris container <Agent for Agentless Monitoring>	Number of zones	2
Solaris container (Solaris 10) <Agent for Agent-based Monitoring>	Number of zones	10
Service operational management	Number of operational monitoring targets	10
End user response management	Number of Browser Agents * number of monitored URLs	1
Web transaction management	Number of services	2
Interstage Application Server (EJB application)	Number of applications * number of methods * number of processes * number of threads	2
Interstage Application Server (CORBA application)	Number of applications * number of operations * number of processes * number of threads	2

Managed resource	Instance	Summary data Coefficient
Interstage Application Server (transaction application)	Number of applications * number of operations * number of processes	2
Interstage Application Server (IJServer)	Number of Work Units	2
Interstage Application Server (IJServer cluster)	Number of Server Instances	2
Interstage Business Application Server /Application Framework Suite	Number of target servers	2
Interstage Service Integrator	Number of sequences	10
	Number of queues	10
Oracle WebLogic Server	Number of management servers + number of managed servers	2
Microsoft .NET Server	Number of instances	10
SAP	Number of SAP instances	8
Symfoware Server	Number of RDB systems	2
	Number of RDB systems * number of processes connected	2
Oracle Database	Number of instances (SIDs)	4
Microsoft SQL Server	Number of instances	10
Systemwalker Operation Manager	1 (fixed value)	4
Systemwalker Resource Coordinator(Network)	Number of network interfaces	4
Systemwalker Resource Coordinator(Storage) ETERNUS SF Storage Cruiser	Number of RAID groups	4
ServerView Resource Orchestrator	Number of VM pools	2
	Number of storage pools	2
	Number of network pools	2
	Number of server pools	2
	Number of address pools	2
User Data	Amount of data stored in PDB in 10 minutes	1

### 2.4.1.3 How to estimate the amount of space required for the log data "Troubleshoot" directory

Space for the log that temporarily stores collected data is required when using Agent functions on an Enterprise Manager.

The space needed for log data depends on the number of resources instances to be managed and the retention period.

Use the following procedure to make an estimate:

 **Point**

Log data (Troubleshoot) contains more detailed operating system information collected at 1-minute intervals than the information stored in the Manager database, which is collected at 10-minute intervals. Use this information when it is necessary to check more detailed information.

For this reason, decide the retention period after taking into account the available disk size and also what the purpose of the data is.

**Procedure for estimating the amount of space required for the log data**

1. Estimate the number of records acquired in one collection.

**Log data**

Using the table below for estimating log data, get the overall total of the number of log data records acquired in one collection (TR) by multiplying the number of instances of resources to be managed by the log data coefficient.

2. Use the following formulas to calculate the amount of space required from the number of records obtained in a single collection operation.

$$\text{Log data[MB]} = (\text{TR} * 0.5[\text{MB}]) * (\text{Retention period} + 1)[\text{days}]$$

**Log data estimation**

 **Point**

Log data (Troubleshoot) requires the retention period plus one additional day because it also holds the data that is being stored on any given day. The default retention period for log data is 7 days.

Managed resource	Instance	Log data coefficient
Windows	1 (fixed value)	2
	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of processes	1
	Number of network interfaces	1
	Number of page files	2
Solaris	1 (fixed value)	13
	Number of CPUs	2
	Number of cores	1
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
	Number of processes	1
	Number of network interfaces	1
	Number of zones	1
Linux	1 (fixed value)	11

Managed resource	Instance	Log data coefficient
	Number of CPUs	3
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
	Number of processes	1
	Number of network interfaces	1

## 2.4.2 Software

---

### 2.4.2.1 Operating system requirements


#### Windows

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server (R) 2003, Standard Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003 , Enterprise Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R), Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Standard(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x86)	Service Pack: None/2	

Item	Requirement	Remarks
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)	Service Pack: None/1 (*1)

\*1: With the Systemwalker Service Quality Coordinator Windows (32bit) edition, values that exceed "4294967295" are collected, but "4294967295" is stored in the performance database according to Windows specifications.

## Solaris

Item	Requirement	Remarks
Operating system	Solaris 9	
	Solaris 10	<p>This product can be installed on global zone and on non-global zones that meet the following conditions:</p> <ul style="list-style-type: none"> <li>- One or more logical network interfaces have been allocated from the global zone.</li> <li>- The following directories are not inherited: /opt /etc /var /usr</li> </ul> <p> <b>Note</b></p> <p>.....</p> <p>If a non-global zone is created using the default settings, the /usr directory will be subject to inheritance, so remove it from the inheritance target.</p> <p>.....</p>
	Solaris 11	<p>This product can be installed on global zone and on non-global zones that meet the following conditions:</p> <ul style="list-style-type: none"> <li>- One or more logical network interfaces have been allocated from the global zone.</li> </ul>
Package	SUNWaccu	<p>&lt;Solaris 9/10&gt;</p> <p>When using Agent functions with the Enterprise Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>
	compatibility/ucb	<Solaris 11>
	system/accounting/legacy-accounting	<p>&lt;Solaris 11&gt;</p> <p>When using Agent functions with the Enterprise Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>

## Linux



Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 5 (for Intel64)	This product cannot be installed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 6 (for x86)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>This product cannot be installed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul> <p>This product can be installed in Linux environments where the SELinux function has been enabled or disabled.</p>
	Red Hat Enterprise Linux 6 (for Intel64)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>This product cannot be installed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul> <p>This product can be installed in Linux environments where the SELinux function has been enabled or disabled.</p>
Package	sysstat	<p>When using Agent functions with the Enterprise Manager</p> <p>It must be possible to use sar commands when using Agent functions.</p>
	redhat-lsb	

#### 2.4.2.2 Products that cannot be installed

Product name	Remarks
SystemWalker TrendView Systemwalker WebMGR Systemwalker PerfMGR	These products are the predecessors to this product.
ETERNUS SF Disk Space Monitor Systemwalker Service Catalog Manager	

## 2.5 Agent for Agentless Monitoring

---

The following describes the software conditions for the servers to be monitored by an agent for Agentless Monitoring.

### Point

Refer to "Management with an Agent for Agentless Monitoring" in the *User's Guide* for more information about software which is needed for communication between the monitoring server and the monitored server and target virtualization software for virtual resource management.

### 2.5.1 Software

---

#### 2.5.1.1 Operating System

##### Windows

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003, Standard Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Datacenter Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Datacenter Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Standard x64 Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Standard x64 Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Enterprise x64 Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Enterprise x64 Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2003, Datacenter x64 Edition	Service Pack: None/1/2
	Microsoft(R) Windows Server(R) 2003 R2, Datacenter x64 Edition	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Standard(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Standard(x64)	Service Pack: None/1
	Microsoft(R) Windows Server(R) 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Enterprise(x64)	Service Pack: None/1
	Microsoft(R) Windows Server(R) 2008 Datacenter(x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Datacenter(x64)	Service Pack: None/2
Microsoft(R) Windows Server(R) 2008 R2 Datacenter(x64)	Service Pack: None/1	
Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x86)	Service Pack: None/2	

Item	Requirement	Remarks
	Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) (x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) (x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) (x86)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) (x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 Foundation(x64)	Service Pack: None/2
	Microsoft(R) Windows Server(R) 2008 R2 Foundation(x64)	Service Pack: None/1

### Solaris

Item	Requirement	Remarks
Operating system	Solaris 9	
	Solaris 10	
	Solaris 11	
Package	SUNWaccu	<Solaris 9/10> It must be possible to use sar commands when using Agent functions.
	system/accounting/legacy-accounting	<Solaris 11> It must be possible to use sar commands when using Agent functions.

### Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	Monitoring by agents for Agentless Monitoring cannot be performed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 5 (for Intel64)	Monitoring by agents for Agentless Monitoring cannot be performed in Linux environments where the SELinux function has been enabled.
	Red Hat Enterprise Linux 6 (for x86)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>Monitoring by agents for Agentless Monitoring cannot be performed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul>

Item	Requirement	Remarks
		Monitoring by agents for Agentless Monitoring can be performed in Linux environments where the SELinux function has been enabled or disabled.
	Red Hat Enterprise Linux 6 (for Intel64)	<ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.1 and earlier</li> </ul> <p>Monitoring by agents for Agentless Monitoring cannot be performed in Linux environments where the SELinux function has been enabled.</p> <ul style="list-style-type: none"> <li>- Red Hat Enterprise Linux 6.2 or later</li> </ul> <p>Monitoring by agents for Agentless Monitoring can be performed in Linux environments where the SELinux function has been enabled or disabled.</p>
Package	sysstat	It must be possible to use sar commands in the Agent.

#### AIX

Item	Requirement	Remarks
Operating system	AIX 5L V5.2	
	AIX 5L V5.3	
	AIX 6.1	
	AIX 7.1	

#### HP-UX

Item	Requirement	Remarks
Operating system	HP-UX 11i V2(11.23)	
	HP-UX 11i V3	

# Chapter 3 Installation and Setup

This chapter explains how to use the Installer, and the installation procedure based on "Configuration Models" of the *Technical Guide*.

The explanations in this section assume that the system will manage resource information within the server by using the "Push" method as communication mode.

## Information

When installing this product, FJSVcir which is a common tool for middleware products provided by Fujitsu is installed. FJSVcir controls install and uninstall, manages installed product information, and executes of uninstaller (Uninstallation and Management (middleware)).

## 3.1 Installation

This section explains the installation procedures used for the different installation types.

### 3.1.1 Installing a Manager/Enterprise Manager[EE]

#### 3.1.1.1 Installing Windows Versions

This section explains the procedure for installing Systemwalker Service Quality Coordinator on a Windows server.

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Starting the Installer

1. Log onto the Windows machine and insert the product DVD-ROM into the DVD-ROM drive.
2. The installer will start automatically.

#### Point

The Installer may not start automatically depending on the settings of the machine where the product is to be installed. In this case, the Installer can be started manually as follows:

1. Select Run from the Start menu.
2. When the Run window appears, click the Browse button, select the following file, and then click the OK button:

DVD-ROM drive \SwSetup.exe

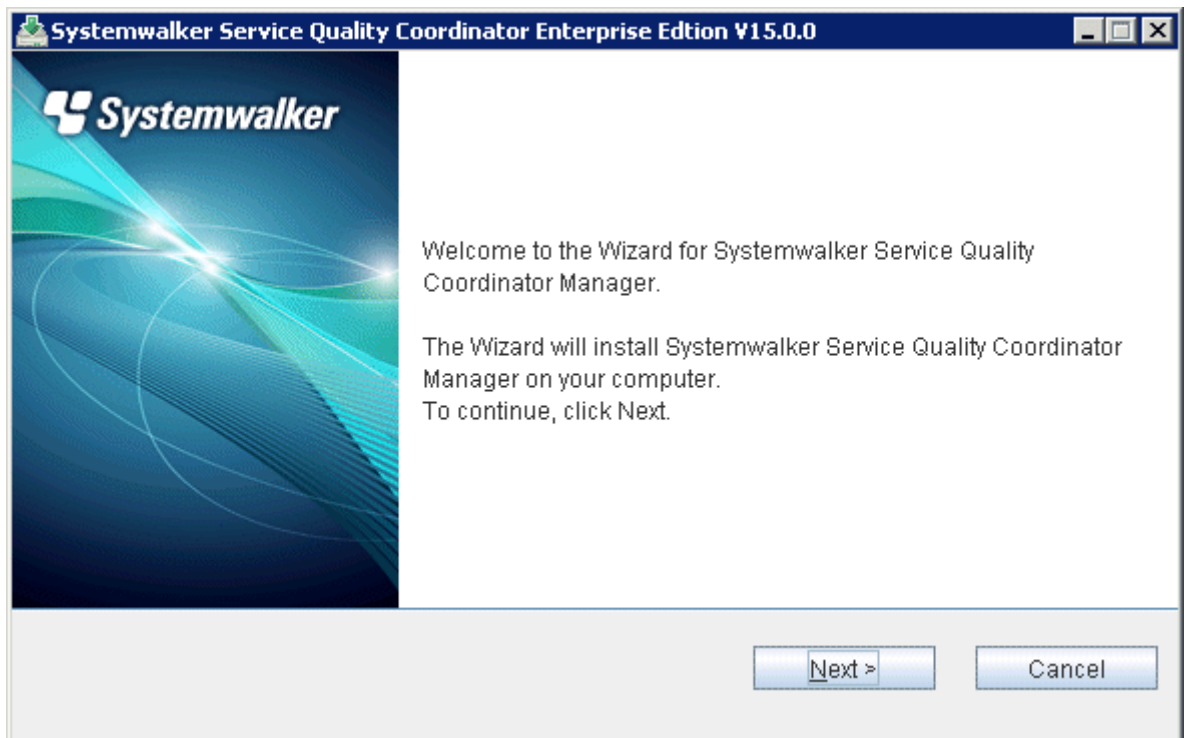
3. Select components

Click **Setup (Server)** and select the components from the list to be installed.



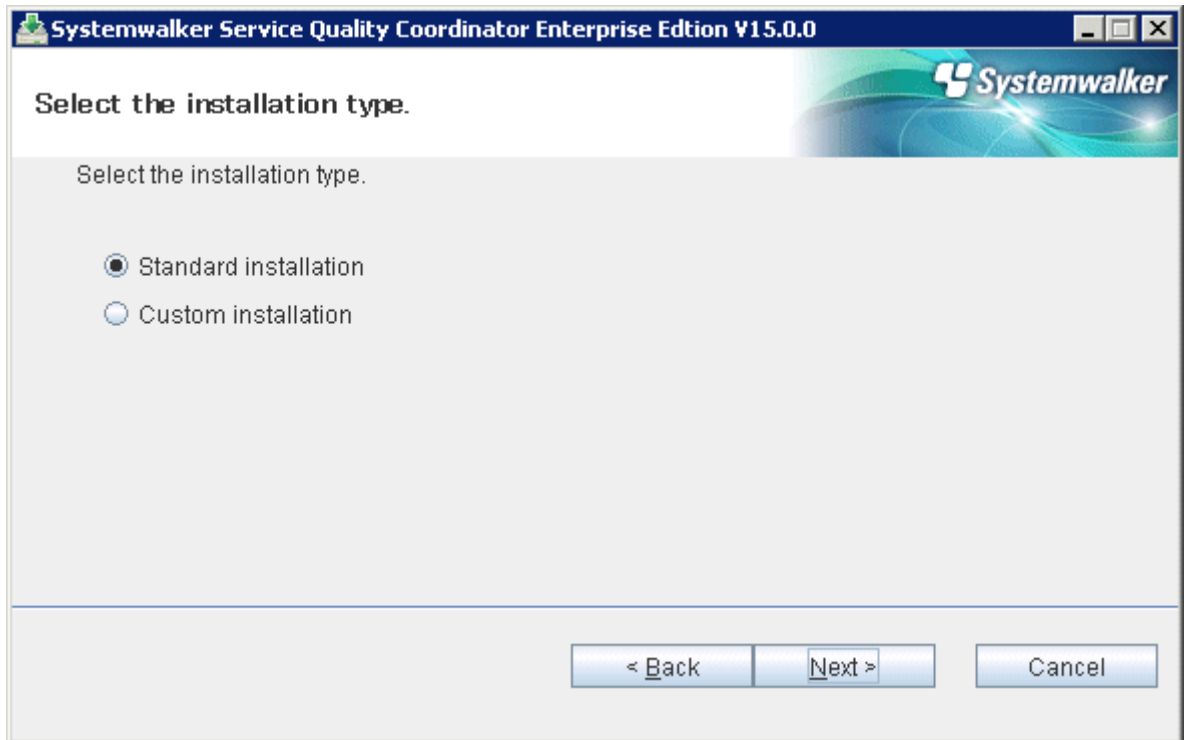
4. The Installation window (Welcome window) is displayed.

Select **Next**.



5. Select the installation type

Select **Standard installation** or **Custom installation** and then select **Next**.



### Note

Specify the disk of the NTFS standard for the installation directory.

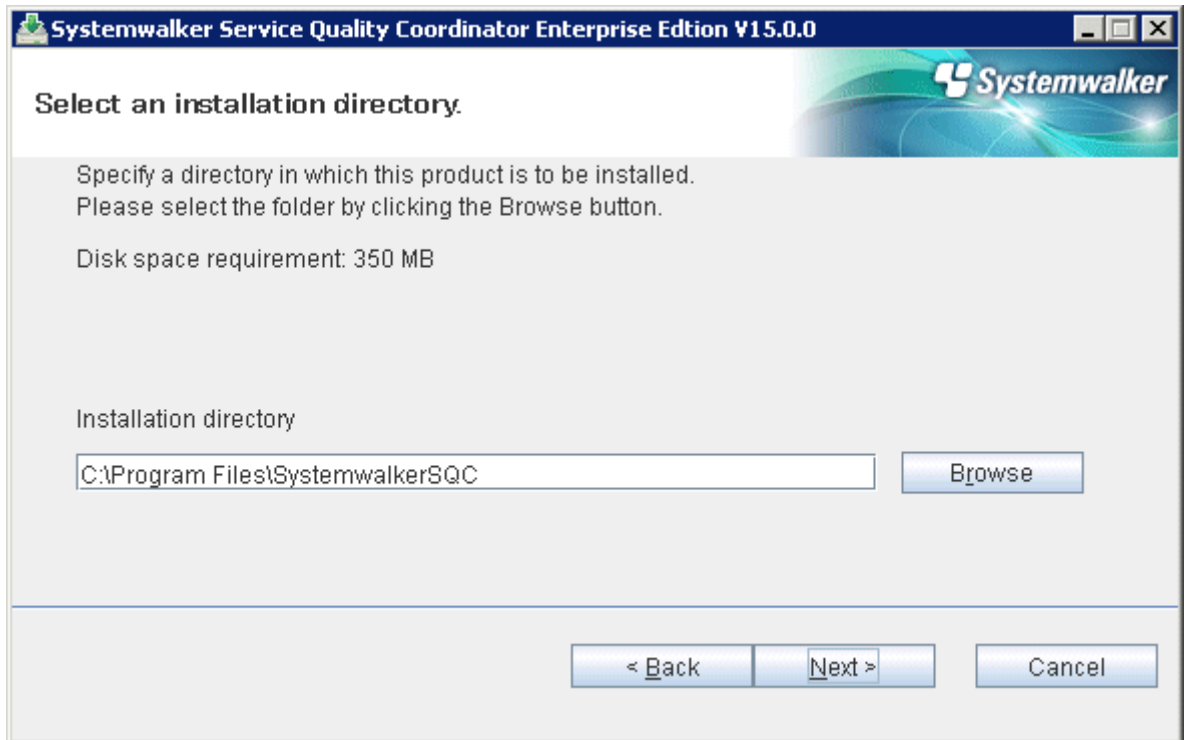
The path starts with "\\\" or relative path cannot be specified.

The character which can be used for directory name is an alphanumeric character, "-"(hyphen), and "\_" (underscore).

### Typical installation

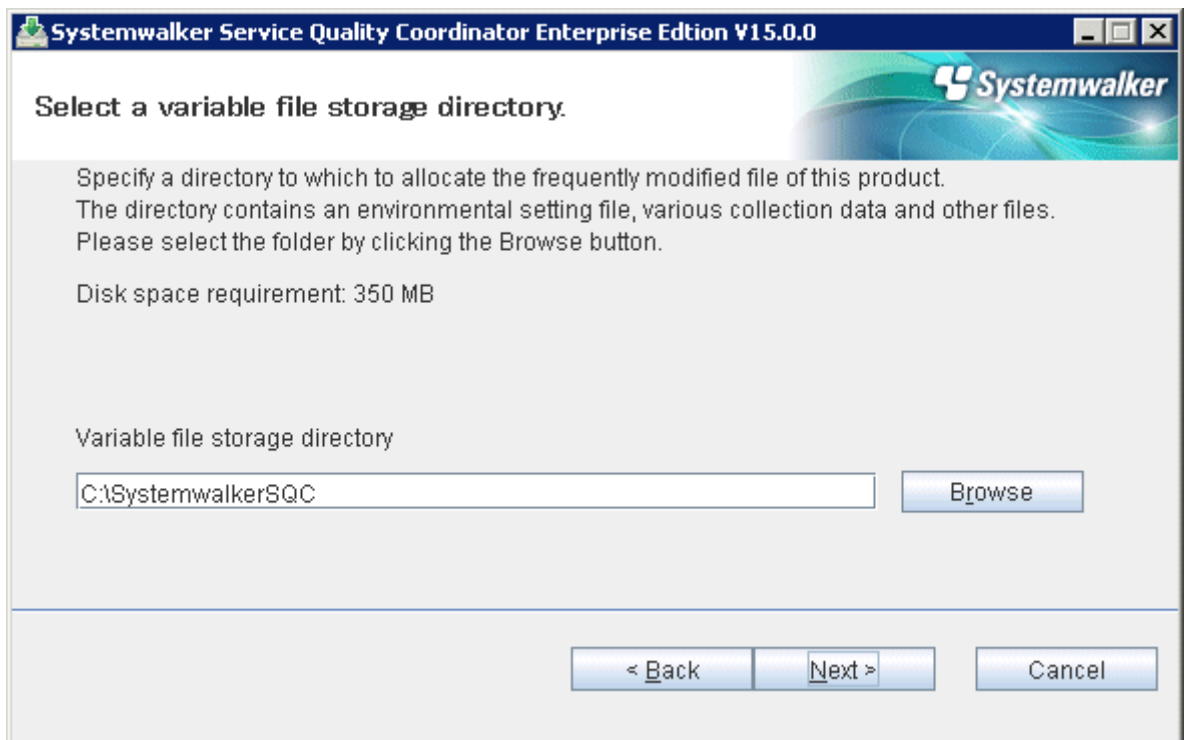
1. Select an installation directory

Enter the installation directory and then select **Next**.



2. Select a variable file storage directory

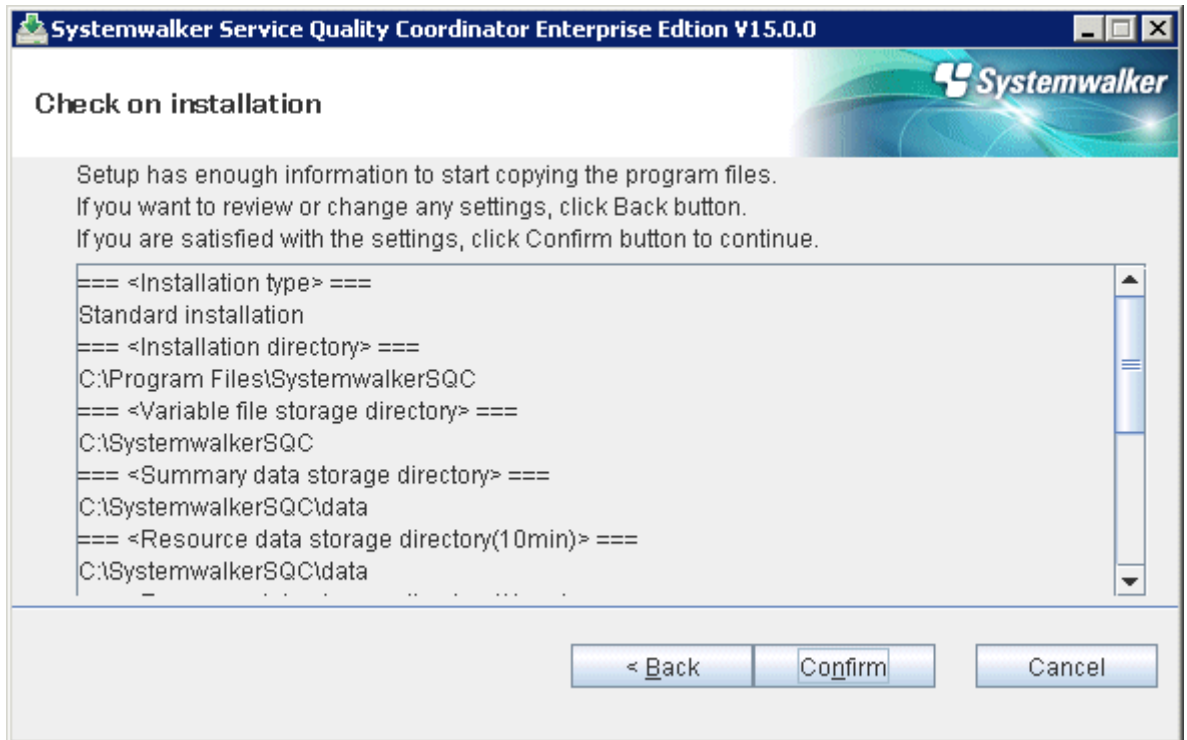
Enter the variable file storage directory and then select **Next**.



3. Check on installation

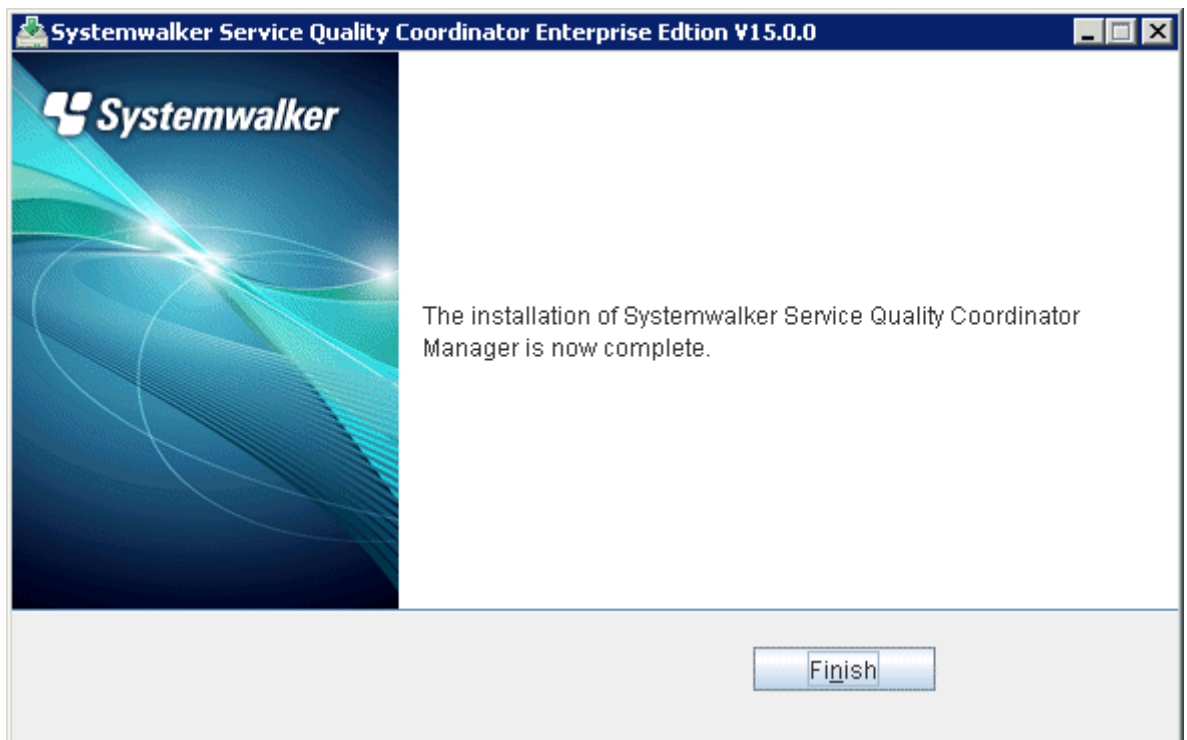
Confirm the settings are correct and then select **Confirm**.





#### 4. Complete

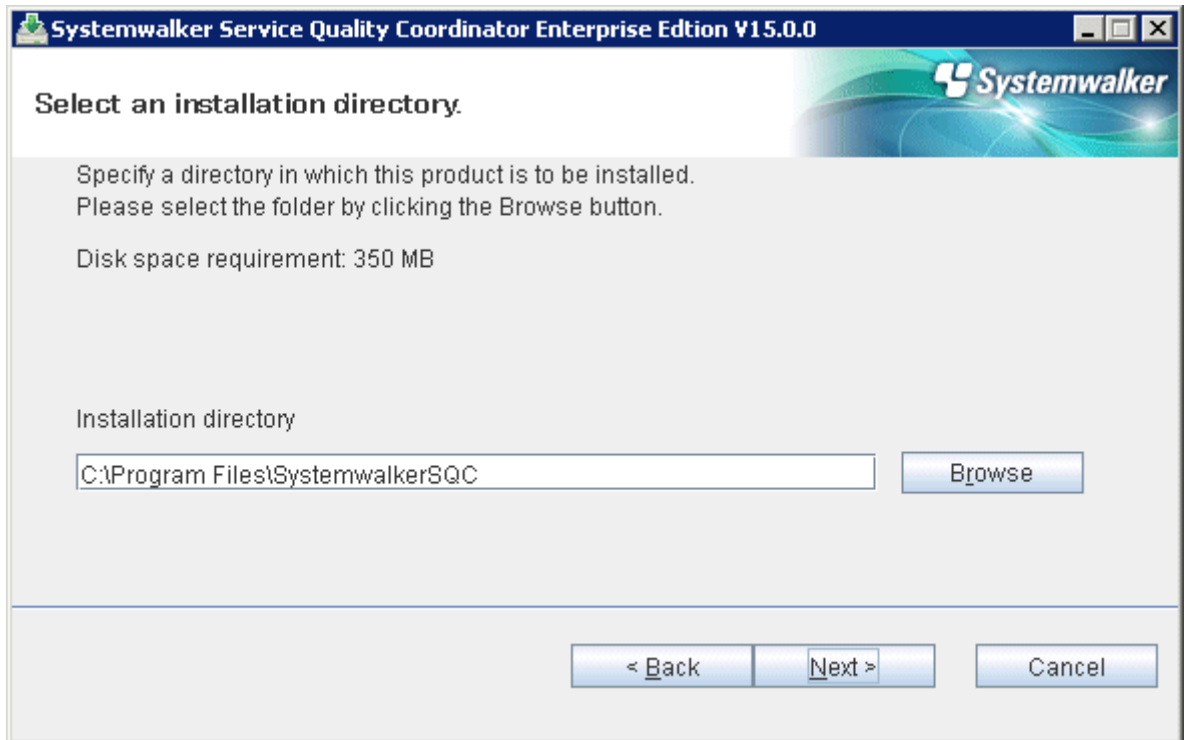
When installation has completed, the following window will be displayed. Select **Finish** to complete the installation.



### Custom installation

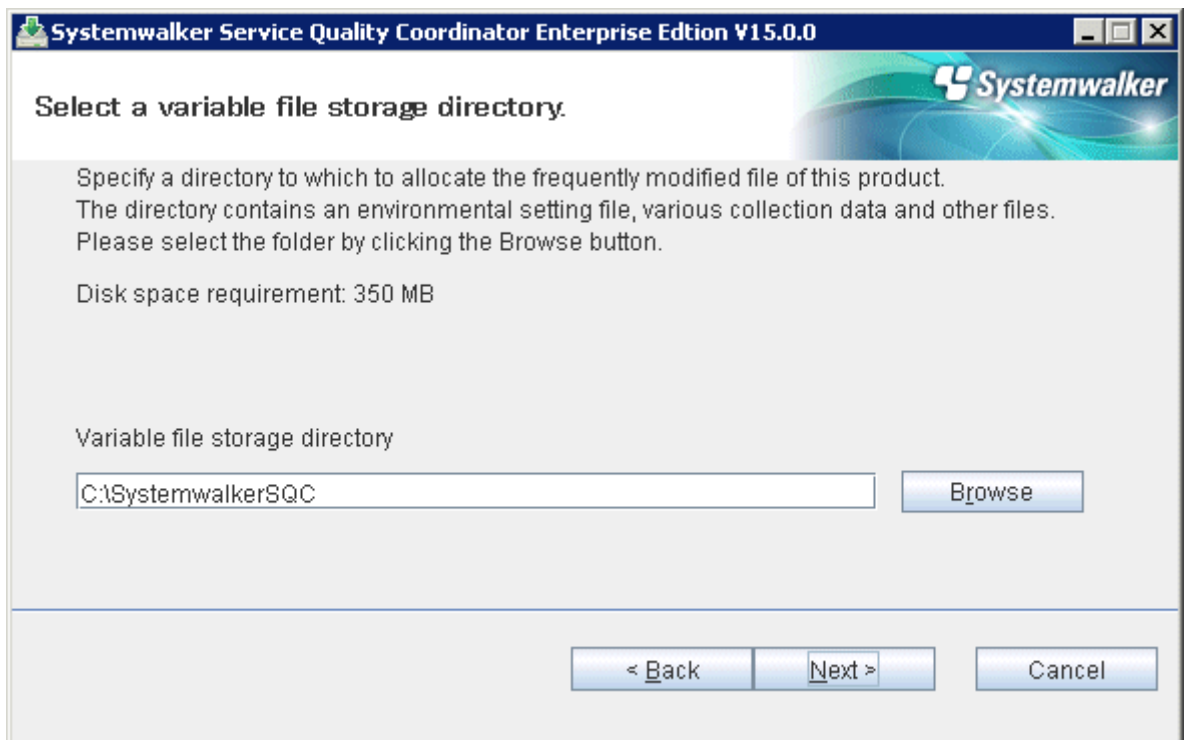
1. Select an installation directory

Enter the installation directory and then select **Next**.



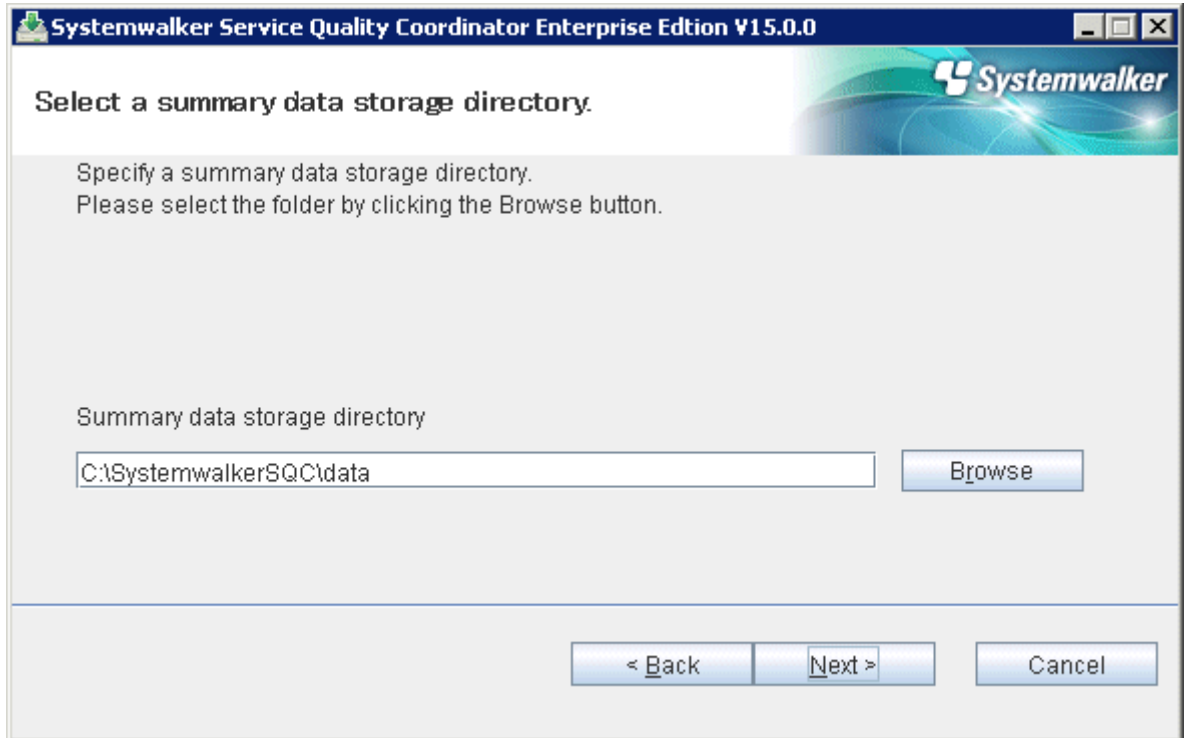
2. Select a variable file storage directory

Enter the variable file storage directory and then select **Next**.



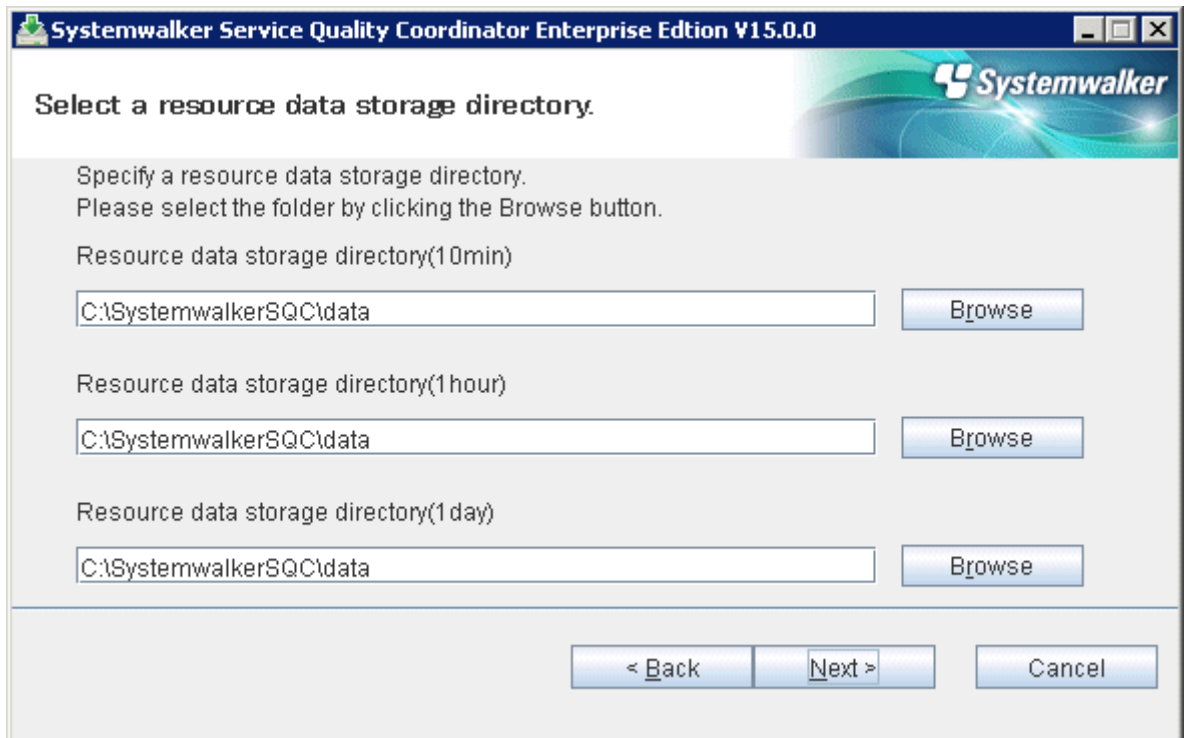
3. Select the storage directory of the performance database (summary data)

Enter the storage directory of the performance database and then select **Next**.



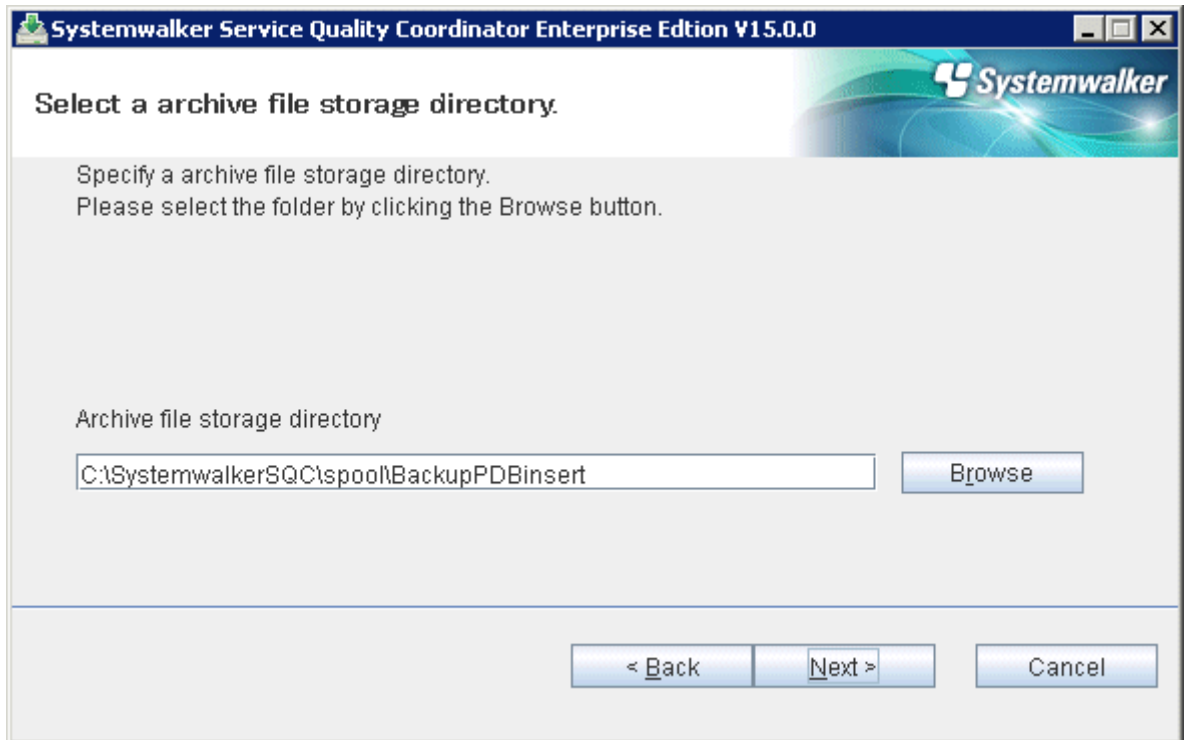
4. Select the storage directory of the performance database (resource data)

Enter the storage directory of the performance database and then select **Next**.



5. Select the storage directory of the archive files.

Enter the storage directory of the archive files and then select **Next**.

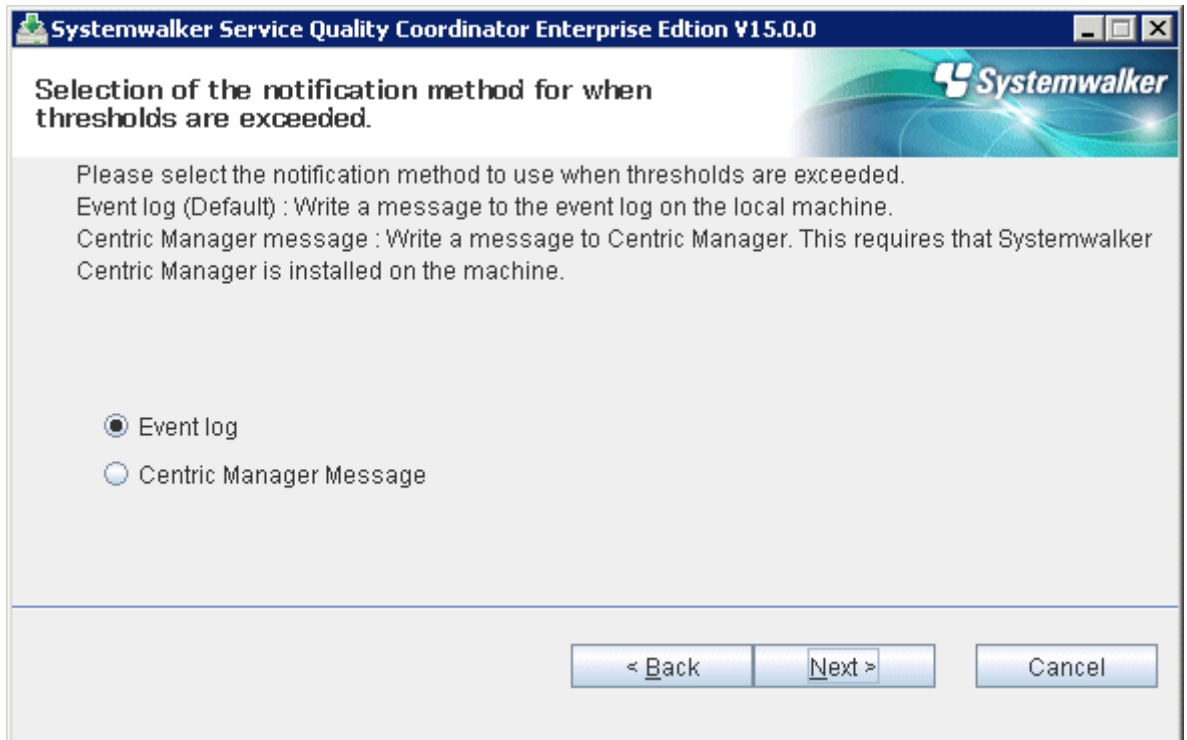


#### Point

By splitting the Manager physical disk into summary data, resource data and archive files, the number of Agents that can be managed by one Manager can be extended to approximately 300.

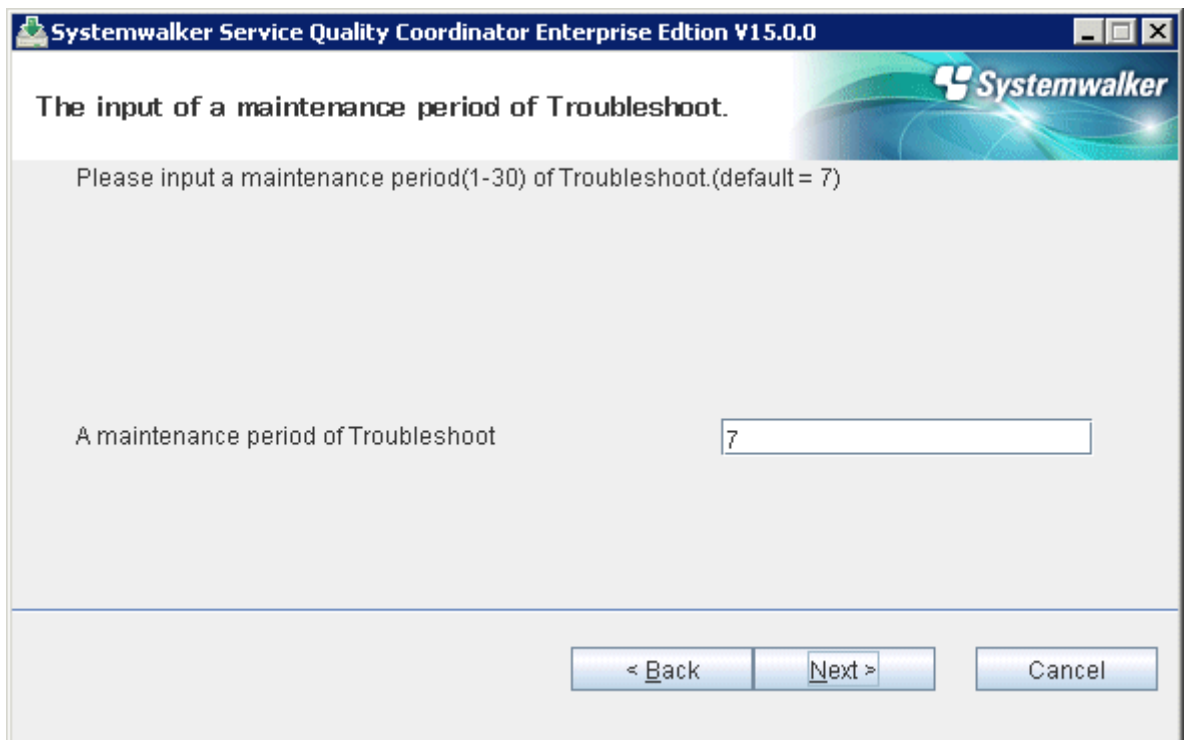
Refer to "Changing the PDB/Archive File Storage Location" in the Installation Guide for details on how to split the disk.

6. Select the threshold violation notification method  
Select the notification method for when thresholds are exceeded and then select **Next**.



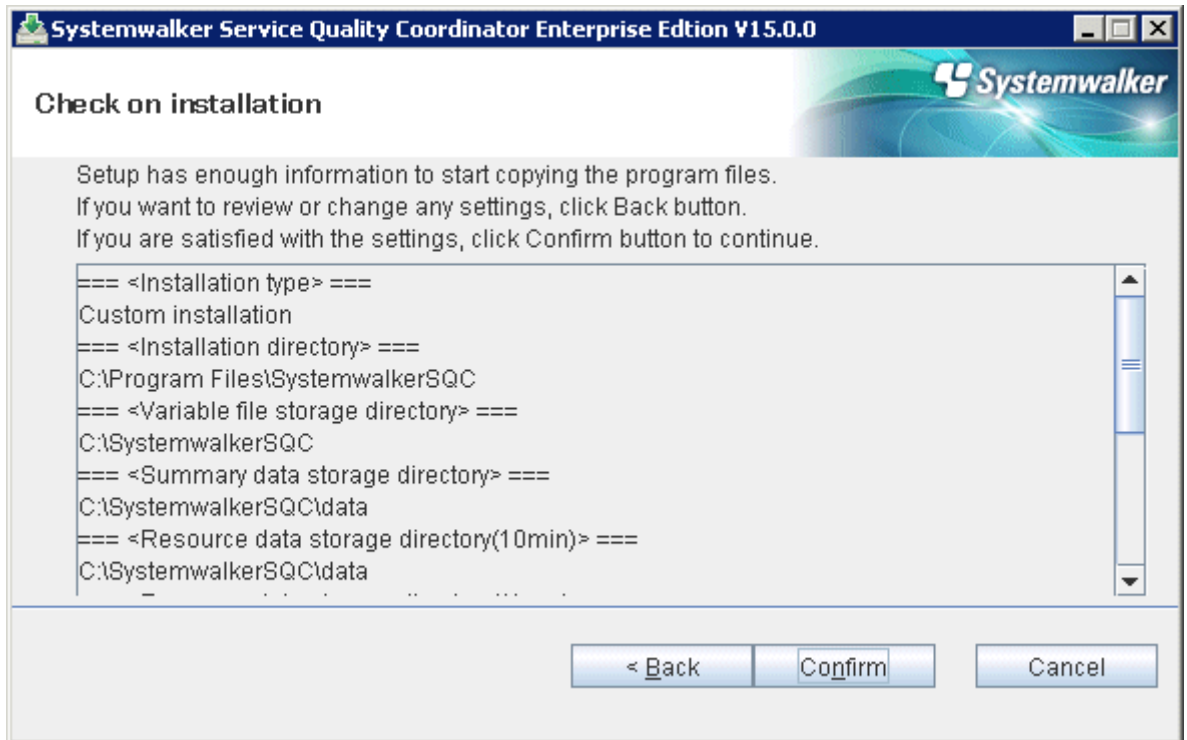
7. Enter the retention period for log data (Troubleshoot)

Enter the retention period for log data (Troubleshoot) and then select **Next**.



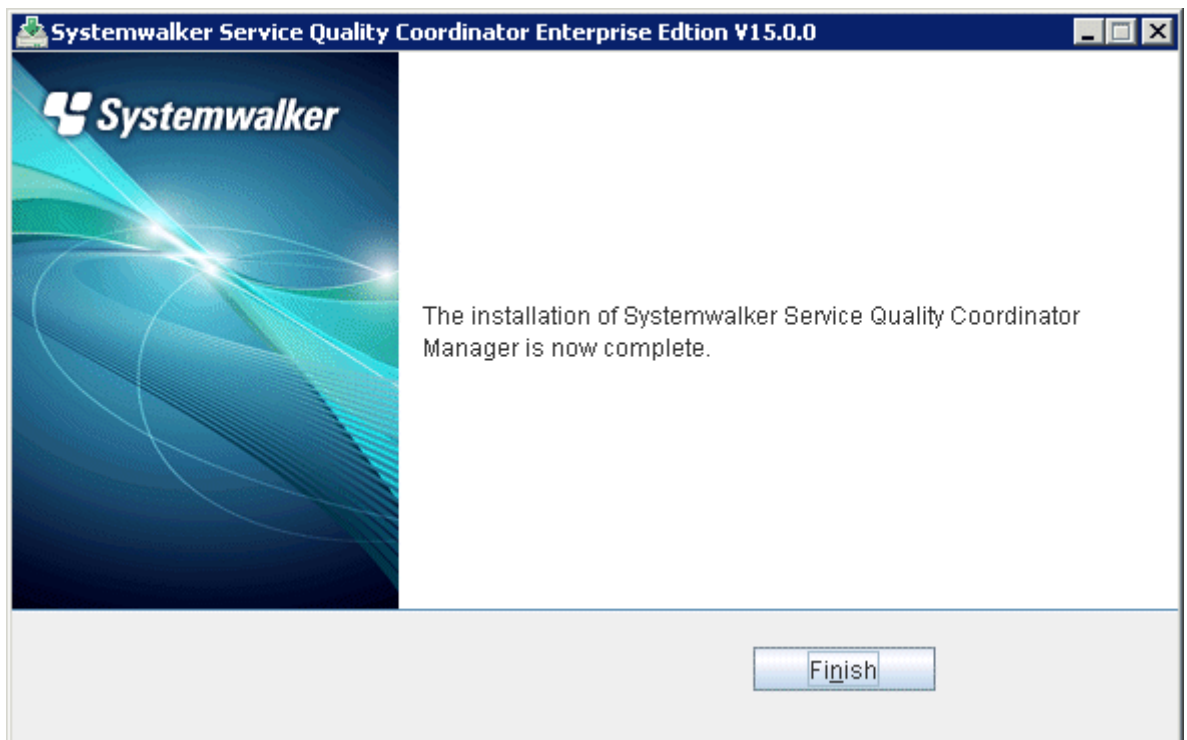
8. Check on installation

Confirm the settings are correct and then select **Confirm**.



#### 9. Complete

When installation has completed, the following window will be displayed. Select **Finish** to complete the installation.



### 3.1.1.2 Installing UNIX Versions

This section explains the procedure for installing Systemwalker Service Quality Coordinator on a Linux/Solaris server.

## Required privileges

The user must have the privileges of the system administrator (superuser).

## Starting the Installer

1. Insert the Systemwalker Service Quality Coordinator DVD-ROM (Server) into the DVD-ROM drive of the UNIX machine.
2. Mount the DVD-ROM.

### Point

The DVD-ROM may be mounted automatically by the volume management daemon, so check the mount status of the DVD-ROM. If it is not mounted, perform the following steps:

#### Solaris

```
# mkdir -p /cdrom/cdrom0 (*1)
# /usr/sbin/mount -F hsfs -o ro /dev/dsk/cntndnsn /cdrom/cdrom0 (*2)
#
```

\*1: This operation is required only when /cdrom/cdrom0 does not exist.

\*2: Change **n** to match the DVD-ROM drive of the machine where the product is being installed.

#### Linux

```
# mount -r -t iso9660 /dev/cdrom /mnt/cdrom (*)
```

\*: If necessary, change the mount point of the DVD-ROM device ("/mnt/cdrom" in the above example) to match the environment.

3. Start the installation shell script.  
An execution example is shown below. The drive mount point is /mnt/cdrom in this example.

```
/mnt/cdrom/swsetup
```

### Note

If the DVD-ROM mounted automatically, the following message may appear due to permission being denied:

```
-bash: <mount point>/swsetup: /bin/sh: bad interpreter: Permission denied
```

If this occurs, unmount the DVD-ROM, and then start again at step 2 to remount it.

4. Start window

Press the Enter key.

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

Welcome to Systemwalker Setup!!
This program installs Systemwalker Service Quality Coordinator on your system.
```

```
Press Enter.
```

## 5. Select components

Enter the numbers corresponding to the components to be installed and press the Enter key.

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

<< Select Installation type >>

1.Enterprise Manager
2.Manager
3.Proxy Manager
4.Agent for Server
5.Agent for Business

-----
Please specify installation type. [?,q] ==> 2
```

## 6. Select the installation type

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

Select installation type
  1.Standard installation
  2.Custom installation
Select installation type (default: 1)[1, 2, ?, q]
> 1
```

Select "1" for typical installation and select "2" for custom installation.

## Typical installation

### 1. Confirm the installation directory

If the installation directory is correct, enter "n" and press the Enter key. If the installation directory needs to be changed, enter "y" and press the Enter key.

```
*****
Default installation information is following:
  Program install directory      : /opt
  Fixed configuration directory  : /etc/opt
  Variable configuration directory : /var/opt
Do you want to change the above information? (default: n)[y, n, ?, q]
```

If "y" is entered, the following window will be displayed to allow the user to change the installation directory.



```
Please specify program install directory. (default: /opt)[?, q]
> /opt2
Please specify fixed configuration directory. (default: /etc/opt)[?, q]
> /etc/opt2
Please specify variable configuration directory. (default: /var/opt)[?, q]
> /var/opt2
```

## Note

The following directory cannot be specified.

- Installation directory  
/opt/FJSVssqc
- Definition file directory  
/etc/opt/FJSVssqc
- Variable file directory  
/var/opt/FJSVssqc

## 2. Confirm installation

```
*****
Current installation information is following:
  Program install directory      : /opt2
  Fixed configuration directory  : /etc/opt2
  Variable configuration directory : /var/opt2
  Summary data location         : /var/opt2/FJSVssqc/PDB
  Resource data(10minutes) location : /var/opt2/FJSVssqc/PDB
  Resource data(1hour) location  : /var/opt2/FJSVssqc/PDB
  Resource data(1day) location   : /var/opt2/FJSVssqc/PDB
  Archive file location         : /var/opt2/FJSVssqc/BackupPDBinsert
  Alert action                   : syslog
  Troubleshoot Cycle            : 7
Do you want to continue with the installation of Systemwalker Service Quality
Coordinator Manager [y,n]
> y
```

Enter "y" and press the Enter key to start the installation.

## 3. Complete

When installation has completed, the following message will be displayed.

```
The installation of Systemwalker Service Quality Coordinator Manager is now complete.
```

## Custom installation

### 1. Confirm the installation directory

If the installation directory is correct, enter "n" and press the Enter key. If the installation directory needs to be changed, enter "y" and press the Enter key.

```
*****
Default installation information is following:
  Program install directory      : /opt
```

```

Fixed configuration directory      : /etc/opt
Variable configuration directory  : /var/opt
Do you want to change the above information? (default: n)[y, n, ?, q]
> y

```

If "y" is entered, the following window will be displayed to allow the user to change the installation directory.

```

Please specify program install directory. (default: /opt)[?, q]
> /opt2
Please specify fixed configuration directory. (default: /etc/opt)[?, q]
> /etc/opt2
Please specify variable configuration directory. (default: /var/opt)[?, q]
> /var/opt2

```

## Note

The following directory cannot be specified.

- Installation directory  
/opt/FJSVssqc
- Definition file directory  
/etc/opt/FJSVssqc
- Variable file directory  
/var/opt/FJSVssqc

## 2. Confirm the performance database storage directory

If the performance database storage directory is correct, enter "n" and press the Enter key. If the performance database storage directory needs to be changed, enter "y" and press the Enter key.

```

*****
Default PDB storage location is following:
  Summary data location           : /var/opt2/FJSVssqc/PDB
  Resource data(10minutes) location : /var/opt2/FJSVssqc/PDB
  Resource data(1hour) location    : /var/opt2/FJSVssqc/PDB
  Resource data(1day) location     : /var/opt2/FJSVssqc/PDB
Do you want to change the above information? (default: n)[y, n, ?, q]
> y

```

If "y" is entered, the following window will be displayed to allow the user to change the performance database storage directory.

```

Please specify summary data location. (default: /var/opt2/FJSVssqc/PDB)[?, q]
> /data1
Please specify resource data(10minutes) location. (default: /var/opt2/FJSVssqc/PDB)
[?, q]
> /data2
Please specify resource data(1hour) location. (default: /var/opt2/FJSVssqc/PDB)[?, q]
> /data2
Please specify resource data(1day) location. (default: /var/opt2/FJSVssqc/PDB)[?, q]
> /data2

```

### 3. Confirm the archive storage directory

If the archive storage directory is correct, enter "n" and press the Enter key. If the archive storage directory needs to be changed, enter "y" and press the Enter key.

```
*****
Default archive file location is following:
  Archive file location      : /var/opt2/FJSVssqc/BackupPDBinsert
Do you want to change the above information? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the archive storage directory.

```
Please specify program install directory. (default: /var/opt2/FJSVssqc/
BackupPDBinsert)[?, q]
> /data3
```

### 4. Confirm the threshold violation notification method

If the notification method is correct, enter "n" and press the Enter key. If the notification method needs to be changed, enter "y" and press the Enter key.

```
*****
Default alert action is following:
  Alert action: syslog
Do you want to change the above environment? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the threshold violation notification method.

```
Please specify alert action.
  centric:Message link operation with Centric Manager (default: syslog)[syslog,
centric, ?, q]
> centric
```

### 5. Confirm the retention period for log data (Troubleshoot)

If the retention period for log data is correct, enter "n" and press the Enter key. If the retention period for log data needs to be changed, enter "y" and press the Enter key.

```
*****
Default troubleshoot cycle is following:
  Troubleshoot Cycle: 7
Do you want to change the above environment? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the retention period for log data.

```
Please specify Troubleshoot cycle.
  (default: 7)[1-30, ?, q]
> 10
```

### 6. Confirm installation

```
*****
Current installation information is following:
  Program install directory      : /data3
  Fixed configuration directory  : /etc/opt2
  Variable configuration directory : /var/opt2
  Summary data location         : /data1
```

```
Resource data(10minutes) location : /data2
Resource data(1hour) location      : /data2
Resource data(1day) location       : /data2
Archive file location               : /var/opt2/FJSVssqc/BackupPDBinsert
Alert action                       : centric
Troubleshoot Cycle                 : 10
Do you want to continue with the installation of Systemwalker Service Quality
Coordinator Manager [y,n]
> y
```

Enter "y" and press the Enter key to start the installation.

### 7. Complete

When installation has completed, the following message will be displayed.

```
The installation of Systemwalker Service Quality Coordinator Manager is now complete.
```

## 3.1.2 Installing an Agent/Proxy Manager



### Method of communication with the Manager

At installation, the method of communication with the Manager is set as the Push method.

To use the Pull method, switch to the Pull method after installation. Refer to Pull Type Communication Settings for information on the procedure for switching.

### 3.1.2.1 Installing Windows Versions

This section explains the procedure for installing Systemwalker Service Quality Coordinator on a Windows server.

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Starting the Installer

1. Log onto the Windows machine and insert the product DVD-ROM into the DVD-ROM drive.
2. The installer will start automatically.



The Installer may not start automatically depending on the settings of the machine where the product is to be installed. In this case, the Installer can be started manually as follows:

1. Select Run from the Start menu.
2. When the Run window appears, click the Browse button, select the following file, and then click the OK button:

```
DVD-ROM drive \swSetup.exe
```

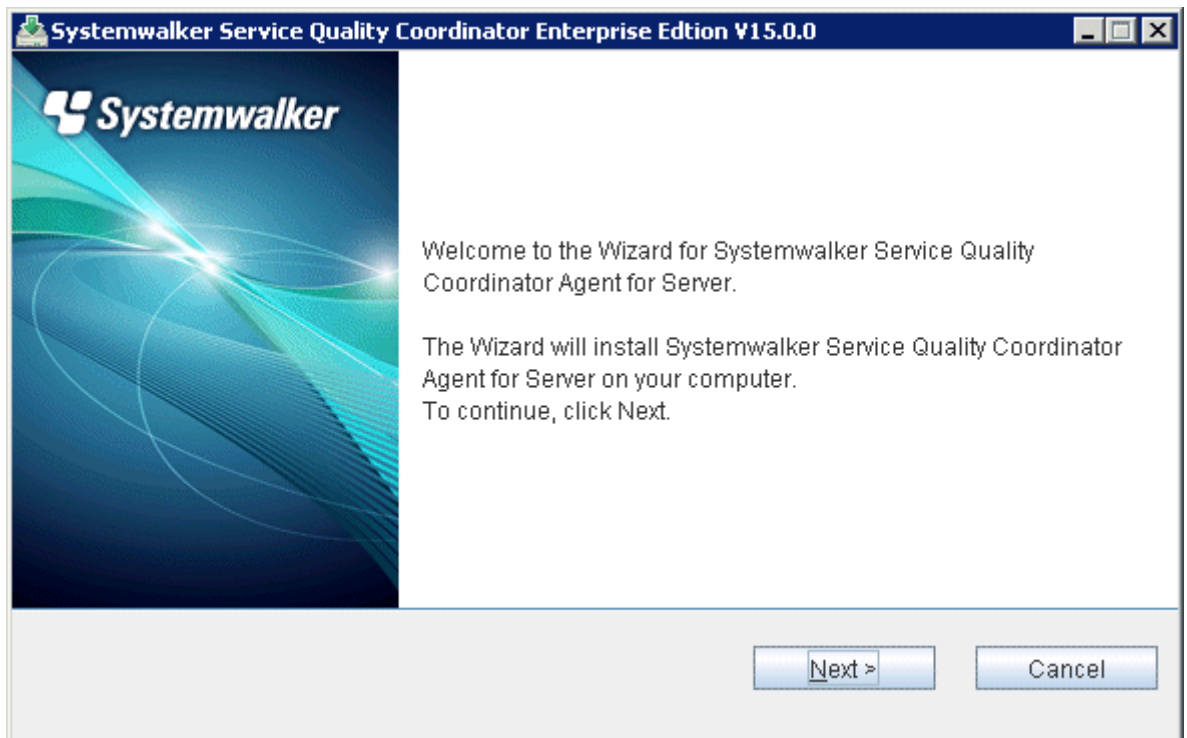
3. Select components

Click **Setup (Server)** and select the components from the list to be installed.



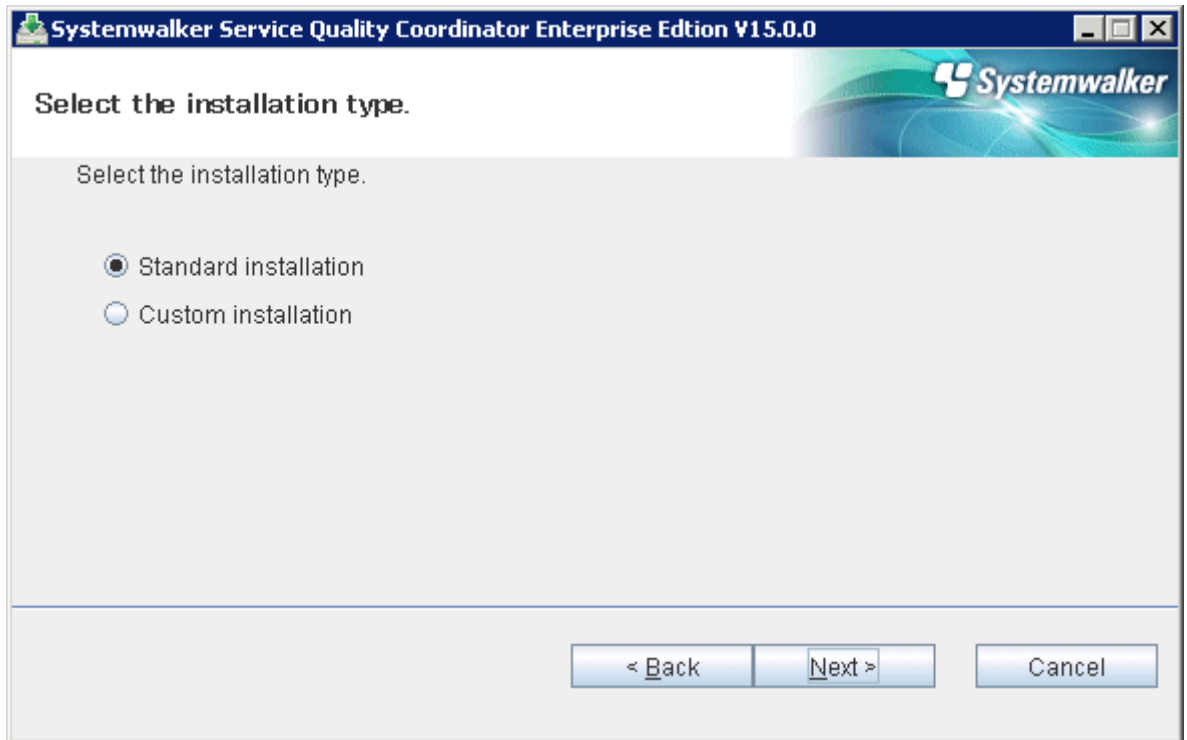
4. The Installation window (Welcome window) is displayed.

Select **Next**.



5. Select the installation type

Select **Standard installation** or **Custom installation** and then select **Next**.



### Note

Specify the disk of the NTFS standard for the installation directory.

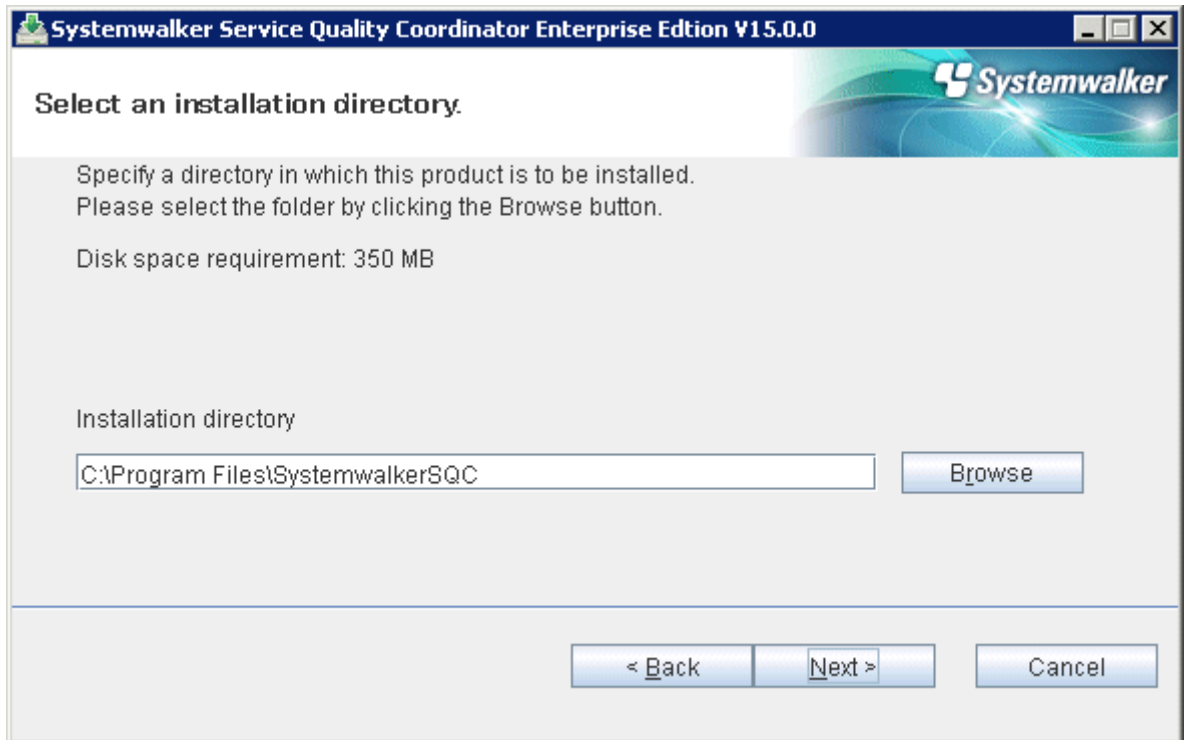
The path starts with "\\\" or relative path cannot be specified.

The character which can be used for directory name is an alphanumeric character, "-"(hyphen), and "\_" (underscore).

### Typical installation

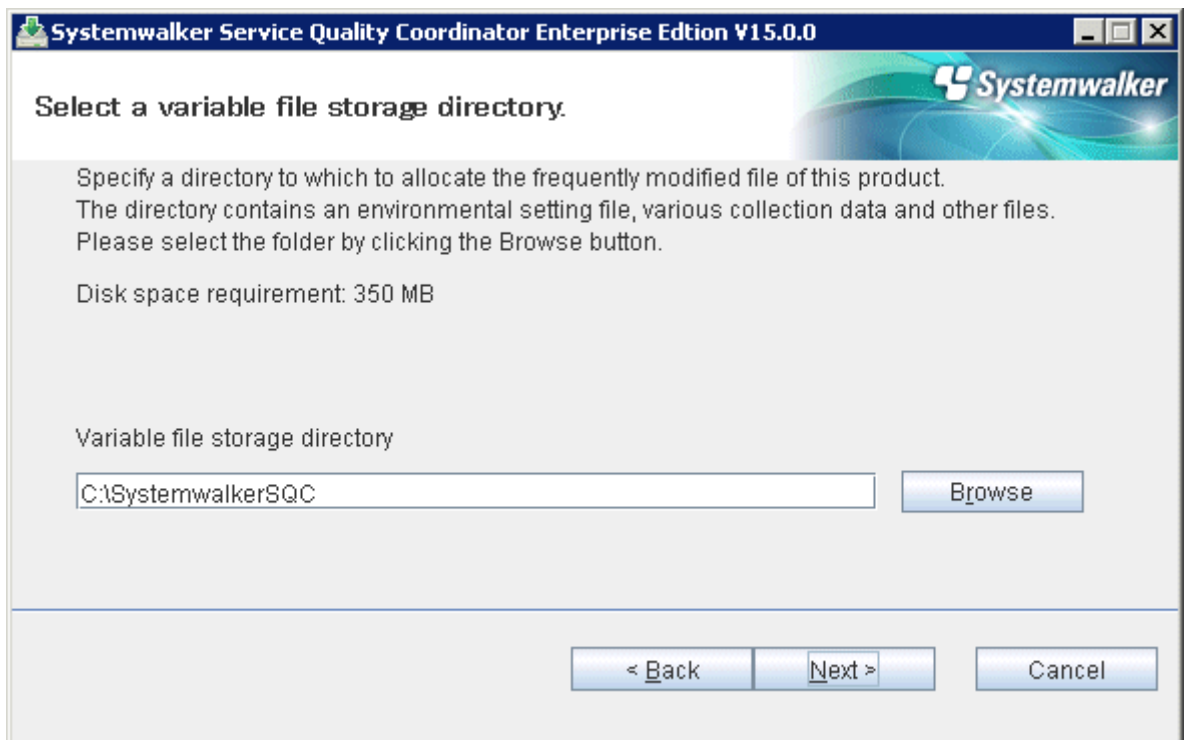
1. Select an installation directory

Enter the installation directory and then select **Next**.



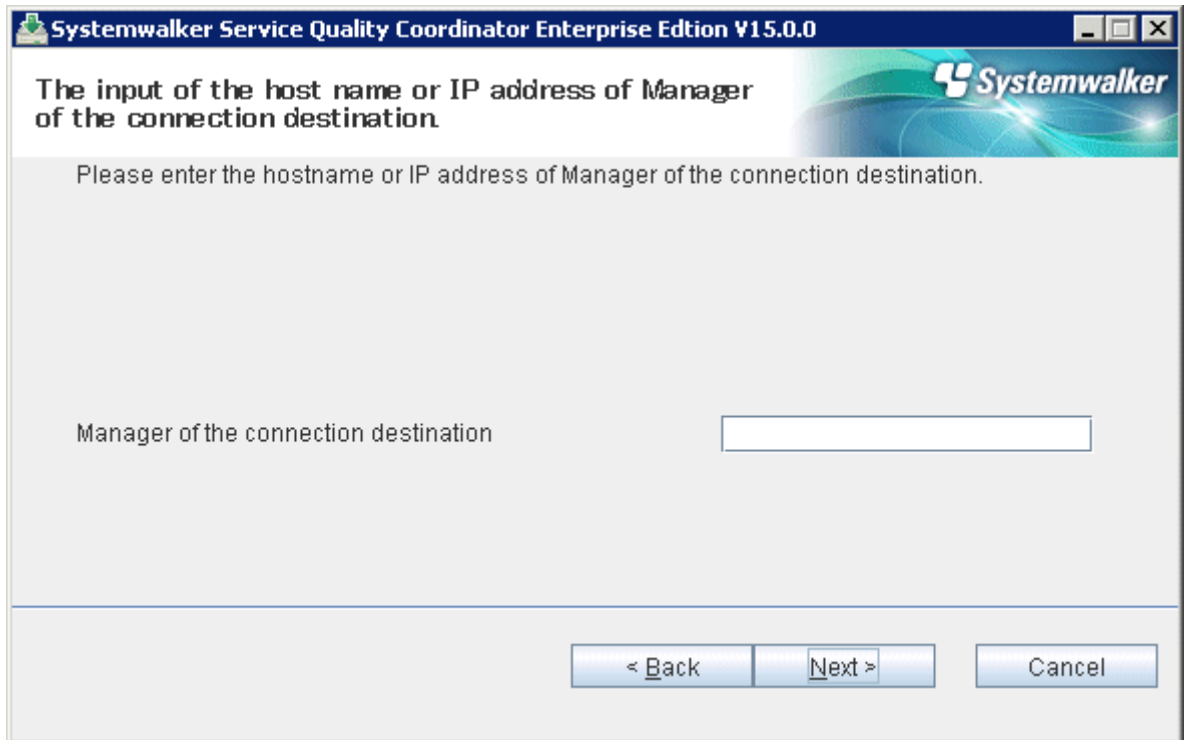
2. Select a variable file storage directory

Enter the variable file storage directory and then select **Next**.



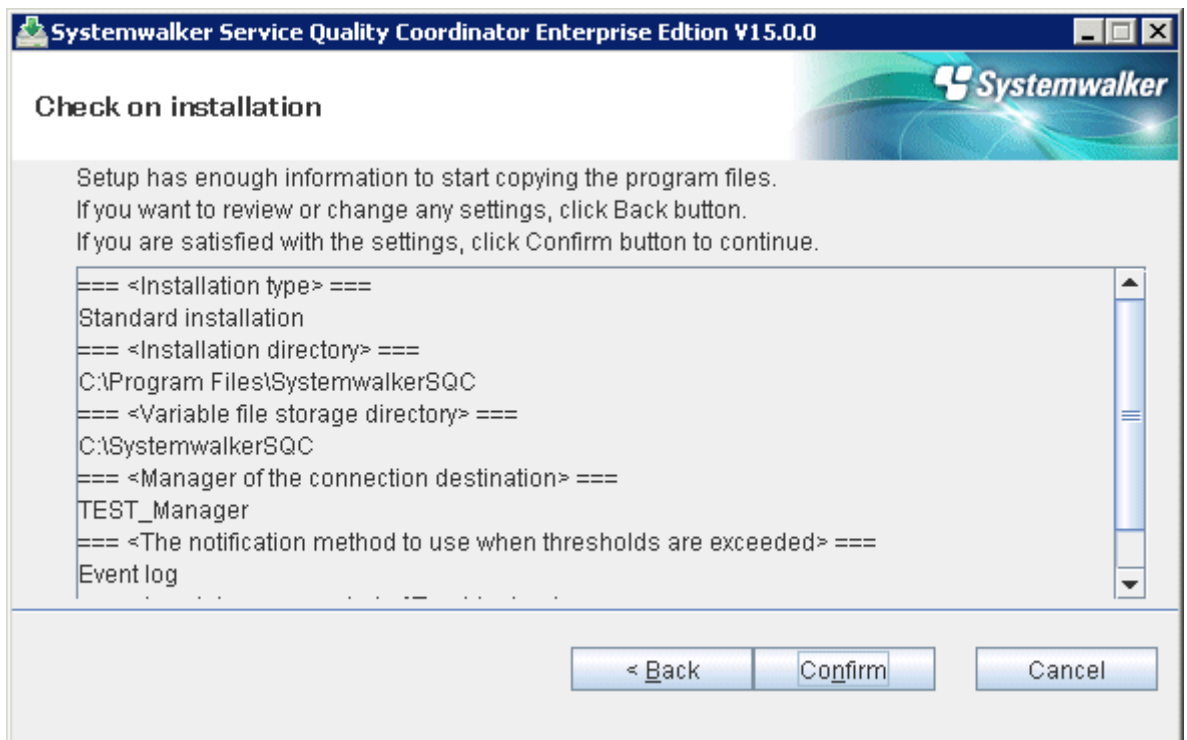
3. Enter the connection destination

Enter the host name or IP address of the Manager to be connected and then select **Next**.



4. Check on installation

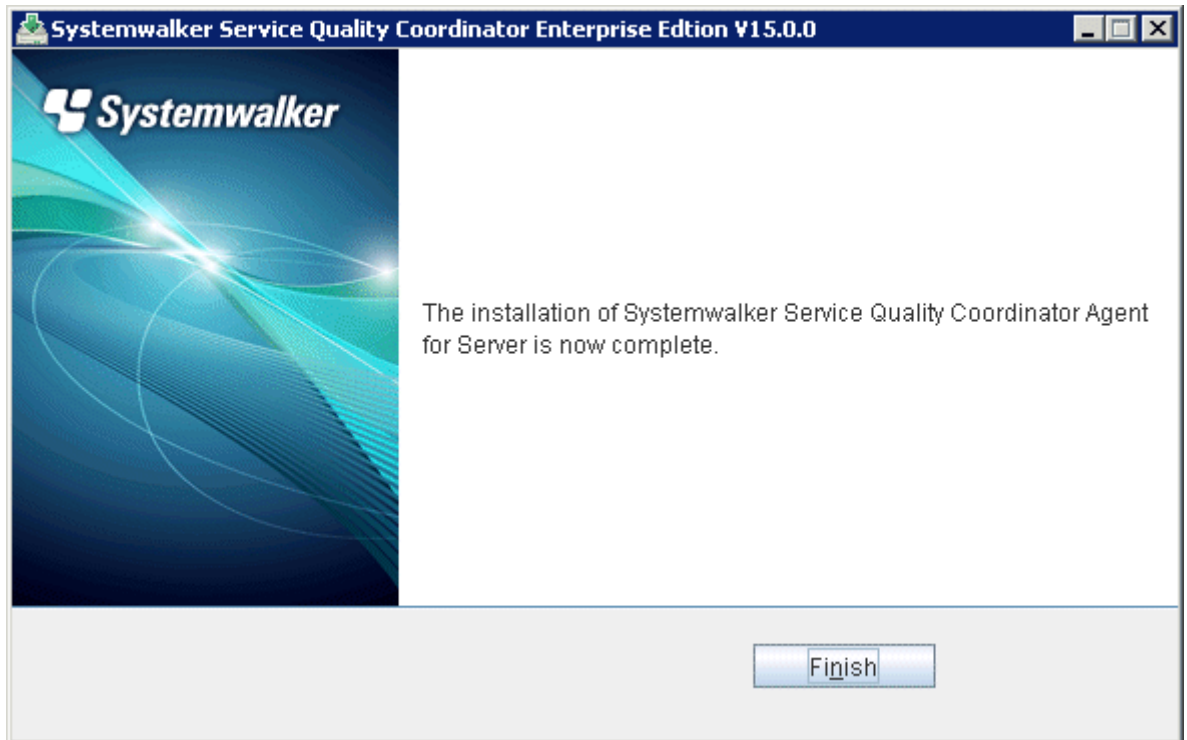
Confirm the settings are correct and then select **Confirm**.



5. Complete

When installation has completed, the following window will be displayed. Select **Finish** to complete the installation.

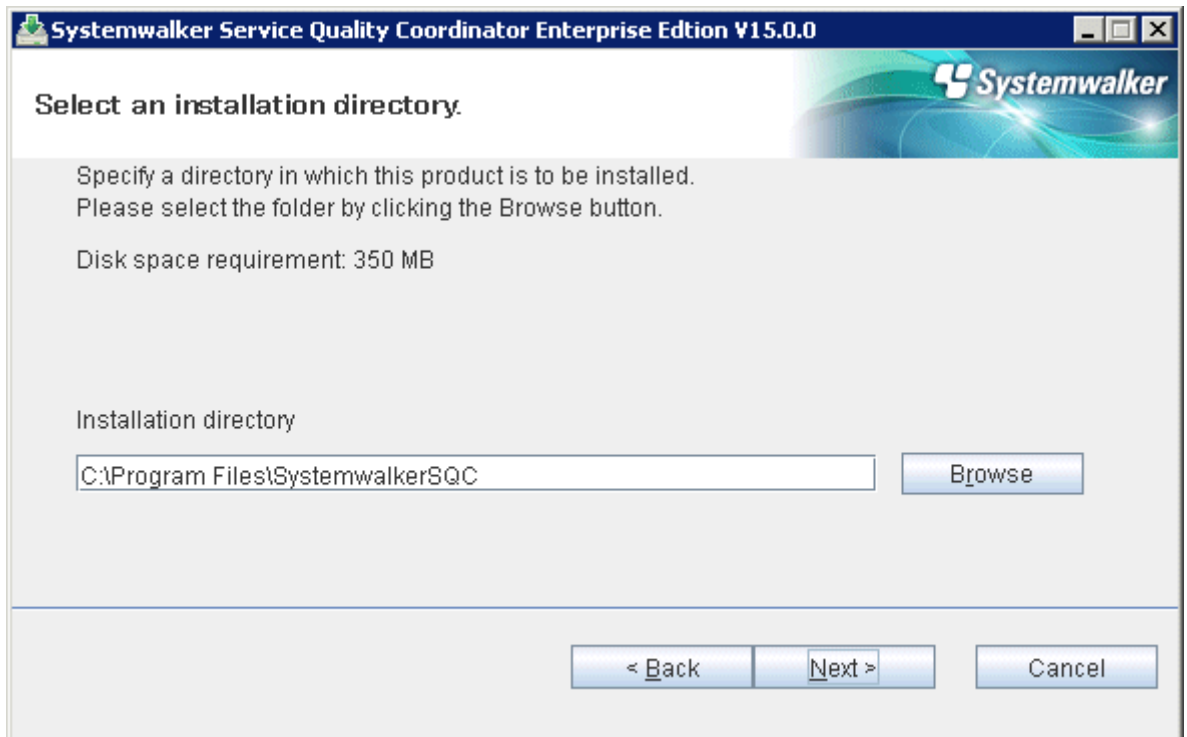




### Custom installation

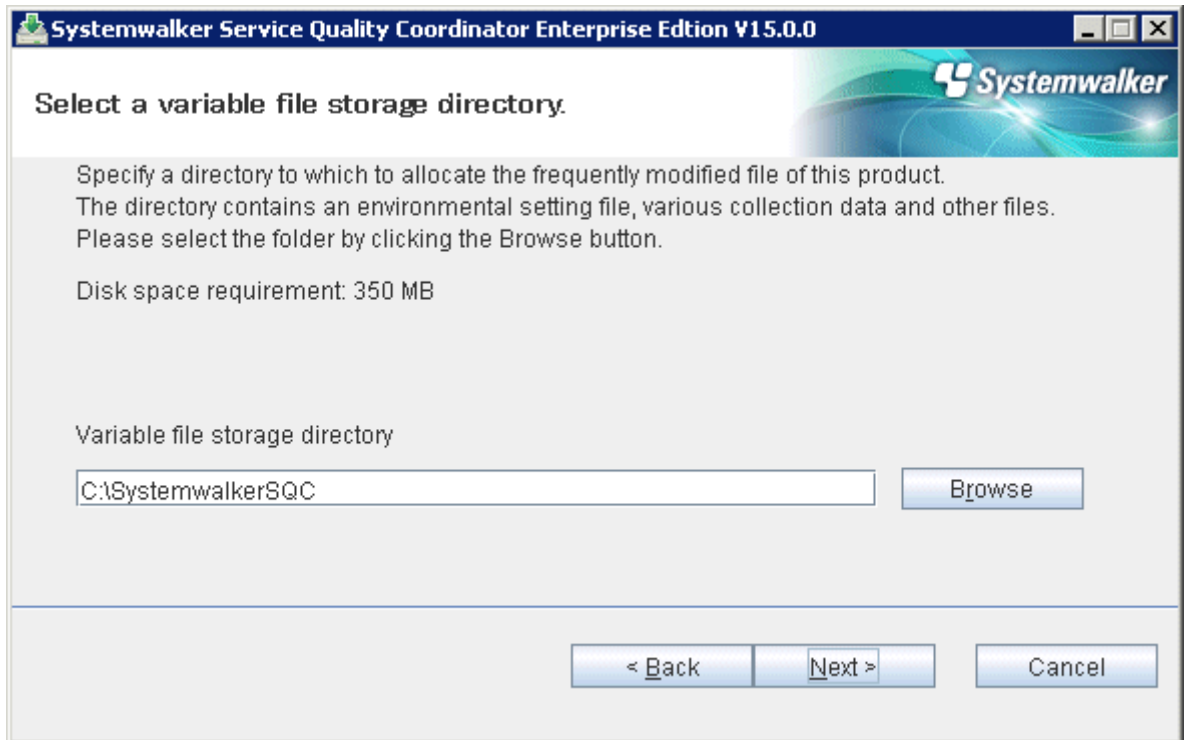
1. Select an installation directory

Enter the installation directory and then select **Next**.



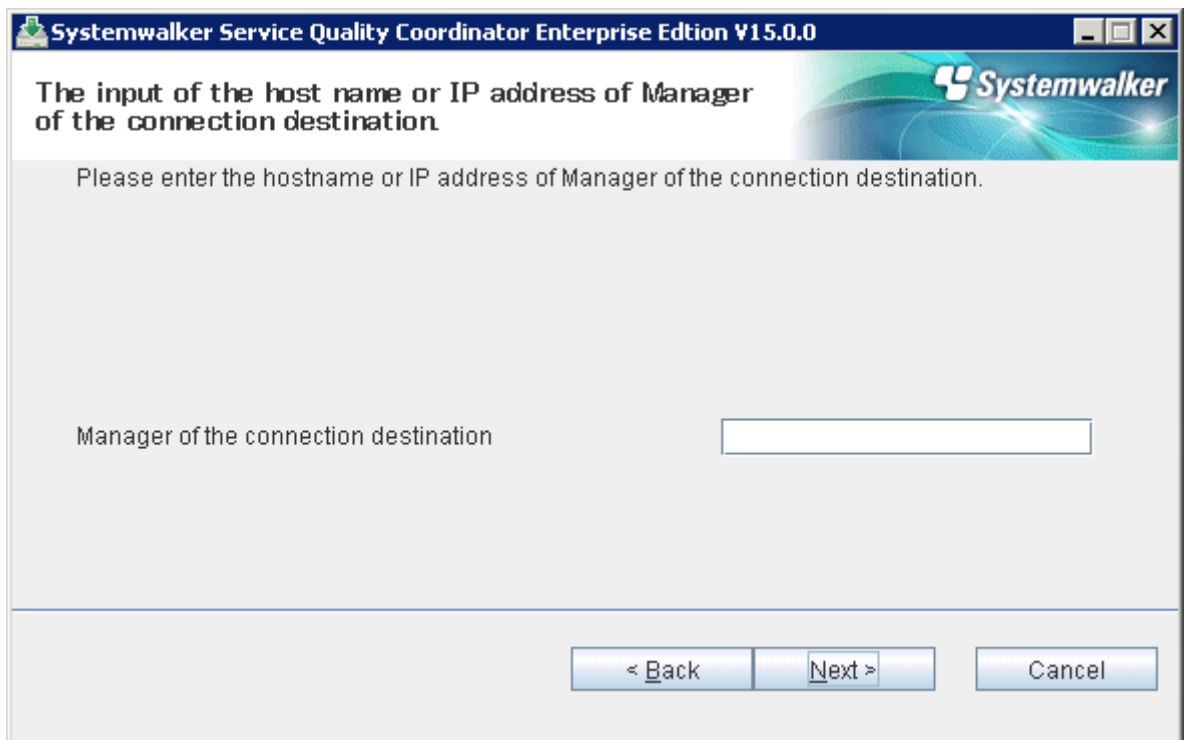
2. Select a variable file storage directory

Enter the variable file storage directory and then select **Next**.



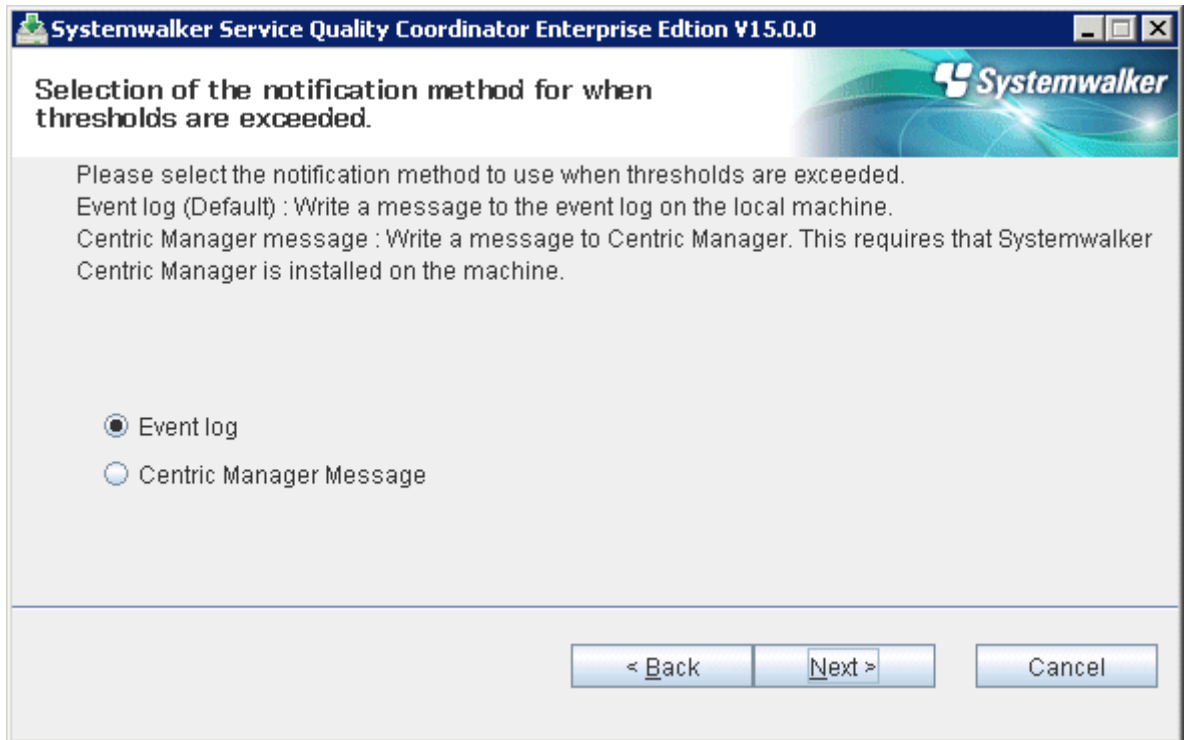
3. Enter the connection destination

Enter the host name or IP address of the Manager to be connected and then select **Next**.



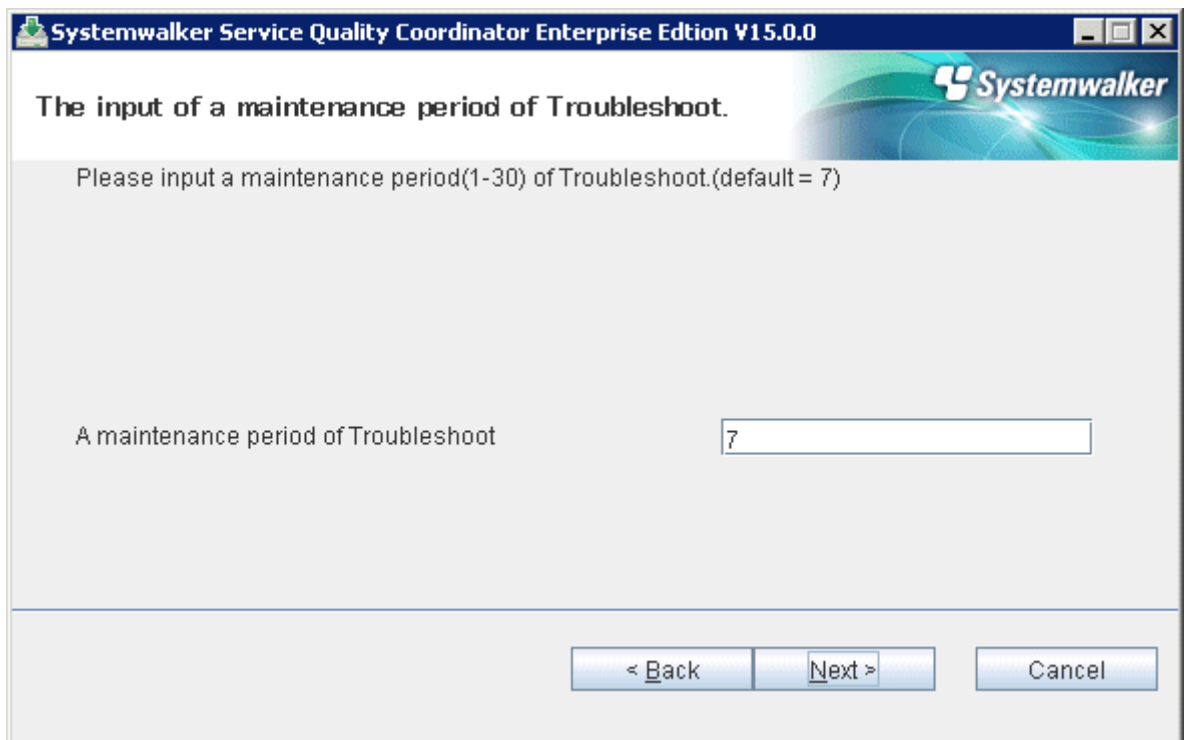
4. Select the threshold violation notification method

Select the notification method for when thresholds are exceeded and then select **Next**.



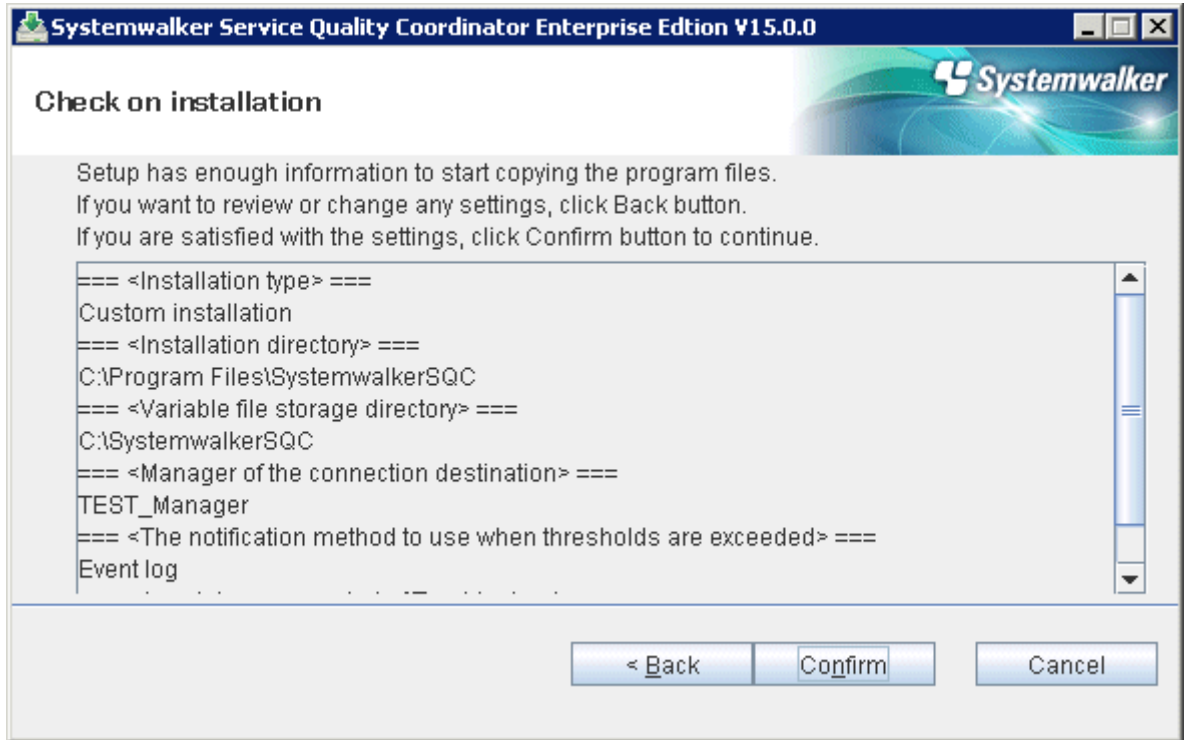
5. Enter the retention period for log data (Troubleshoot)

Enter the retention period for log data (Troubleshoot) and then select **Next**.



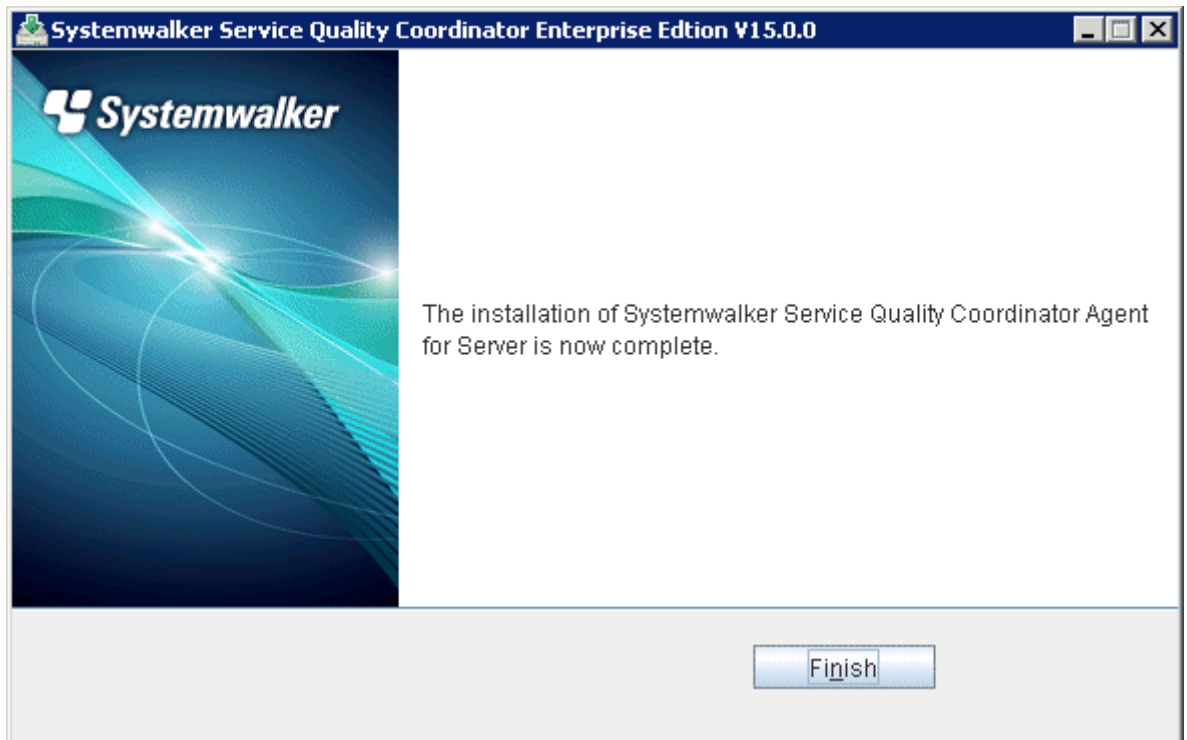
6. Check on installation

Confirm the settings are correct and then select **Confirm**.



#### 7. Complete

When installation has completed, the following window will be displayed. Select **Finish** to complete the installation.



### 3.1.2.2 Installing UNIX Versions

This section explains the procedure for installing Systemwalker Service Quality Coordinator on a Linux/Solaris server.

## Required privileges

The user must have the privileges of the system administrator (superuser).

## Starting the Installer

1. Insert the Systemwalker Service Quality Coordinator DVD-ROM (Server) into the DVD-ROM drive of the UNIX machine.
2. Mount the DVD-ROM.

### Point

The DVD-ROM may be mounted automatically by the volume management daemon, so check the mount status of the DVD-ROM. If it is not mounted, perform the following steps:

#### Solaris

```
# mkdir -p /cdrom/cdrom0 (*1)
# /usr/sbin/mount -F hsfs -o ro /dev/dsk/cntndnsn /cdrom/cdrom0 (*2)
#
```

\*1: This operation is required only when /cdrom /cdrom0 does not exist.

\*2: Change **n** to match the DVD-ROM drive of the machine where the product is being installed.

#### Linux

```
# mount -r -t iso9660 /dev/cdrom /mnt/cdrom (*)
```

\*: If necessary, change the mount point of the DVD-ROM device ("/mnt/cdrom" in the above example) to match the environment.

3. Start the installation shell script.  
An execution example is shown below. The drive mount point is /mnt/cdrom in this example.

```
/mnt/cdrom/swsetup
```

### Note

If the DVD-ROM mounted automatically, the following message may appear due to permission being denied:

```
-bash: <mount point>/swsetup: /bin/sh: bad interpreter: Permission denied
```

If this occurs, unmount the DVD-ROM, and then start again at step 2 to remount it.

4. Start window

Press the Enter key.

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

Welcome to Systemwalker Setup!!
This program installs Systemwalker Service Quality Coordinator on your system.
```

```
Press Enter.
```

## 5. Select components

Enter the numbers corresponding to the components to be installed and press the Enter key.

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

<< Select Installation type >>

1.Enterprise Manager
2.Manager
3.Proxy Manager
4.Agent for Server
5.Agent for Business

-----
Please specify installation type. [?,q] ==> 4
```

## 6. Select the installation type

```
=====
                Systemwalker Service Quality Coordinator Setup
                        V15.0.0
All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                        2003-2012
=====

Select installation type
  1.Standard installation
  2.Custom installation
Select installation type (default: 1)[1, 2, ?, q]
> 1
```

Select "1" for typical installation and select "2" for custom installation.

## Typical installation

### 1. Confirm the installation directory

If the installation directory is correct, enter "n" and press the Enter key. If the installation directory needs to be changed, enter "y" and press the Enter key.

```
*****
Default installation information is following:
  Program install directory      : /opt
  Fixed configuration directory  : /etc/opt
  Variable configuration directory : /var/opt
Do you want to change the above information? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the installation directory.

```
Please specify program install directory. (default: /opt)[?, q]
> /opt2
Please specify fixed configuration directory. (default: /etc/opt)[?, q]
> /etc/opt2
Please specify variable configuration directory. (default: /var/opt)[?, q]
> /var/opt2
```

## Note

The following directory cannot be specified.

- Installation directory  
/opt/FJSVssqc
- Definition file directory  
/etc/opt/FJSVssqc
- Variable file directory  
/var/opt/FJSVssqc

### 2. Enter the connection destination

Enter the host name or IP address of the Manager to be connected and then select Next.

```
Please specify manager host name or IP address. [?, q]
> 192.0.2.10
```

### 3. Confirm installation

```
*****
Current installation information is following:
  Program install directory      : /opt2
  Fixed configuration directory   : /etc/opt2
  Variable configuration directory : /var/opt2
  Manager host name or IP address : 192.0.2.10
  Alert action                   : syslog
  Troubleshoot Cycle             : 7
Do you want to continue with the installation of Systemwalker Service Quality
Coordinator Agent for Server [y,n]
> y
```

Enter "y" and press the Enter key to start the installation.

### 4. Complete

When installation has completed, the following message will be displayed.

```
The installation of Systemwalker Service Quality Coordinator Agent for Server is now
complete.
```

## Custom installation

### 1. Confirm the installation directory

If the installation directory is correct, enter "n" and press the Enter key. If the installation directory needs to be changed, enter "y" and press the Enter key.

```
*****
Default installation information is following:
  Program install directory      : /opt
  Fixed configuration directory  : /etc/opt
  Variable configuration directory : /var/opt
Do you want to change the above information? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the installation directory.

```
Please specify program install directory. (default: /opt)[?, q]
> /opt2
Please specify fixed configuration directory. (default: /etc/opt)[?, q]
> /etc/opt2/
Please specify variable configuration directory. (default: /var/opt)[?, q]
> /var/opt2
```

 **Note**

The following directory cannot be specified.

- Installation directory  
    /opt/FJSVssqc
- Definition file directory  
    /etc/opt/FJSVssqc
- Variable file directory  
    /var/opt/FJSVssqc

2. Enter the connection destination

Enter the host name or IP address of the Manager to be connected and then select Next.

```
Please specify manager host name or IP address. [?, q]
> 192.0.2.10
```

3. Confirm the threshold violation notification method

If the notification method is correct, enter "n" and press the Enter key. If the notification method needs to be changed, enter "y" and press the Enter key.

```
*****
Default alert action is following:
  Alert action: syslog
Do you want to change the above environment? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the threshold violation notification method.

```
Please specify alert action.
  centric:Message link operation with Centric Manager (default: syslog)[syslog,
  centric, ?, q]
> centric
```



4. Confirm the retention period for log data (Troubleshoot)

If the retention period for log data is correct, enter "n" and press the Enter key. If the retention period for log data needs to be changed, enter "y" and press the Enter key.

```
*****
Default troubleshoot cycle is following:
  Troubleshoot Cycle: 7
Do you want to change the above environment? (default: n)[y, n, ?, q]
> y
```

If "y" is entered, the following window will be displayed to allow the user to change the retention period for log data.

```
Please specify Troubleshoot cycle.
(default: 7)[1-30, ?, q]
> 10
```

5. Confirm installation

```
*****
Current installation information is following:
  Program install directory      : /opt2
  Fixed configuration directory  : /etc/opt2
  Variable configuration directory : /var/opt2
  Manager host name or IP address : 192.0.2.10
  Alert action                   : syslog
  Troubleshoot Cycle             : 10
Do you want to continue with the installation of Systemwalker Service Quality
Coordinator Agent for Server [y,n]
> y
```

Enter "y" and press the Enter key to start the installation.

6. Complete

When installation has completed, the following message will be displayed.

```
The installation of Systemwalker Service Quality Coordinator Agent for Server is now
complete.
```

### 3.1.3 Installing an Operation Management Client

This section explains the procedure for installing a Systemwalker Service Quality Coordinator Operation Management Client.

Note that the Operation Management Client is installed on a Windows machine.

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Starting the Installer

1. Log onto the Windows machine and insert the product DVD-ROM into the DVD-ROM drive.
2. The installer will start automatically.



The Installer may not start automatically depending on the settings of the machine where the product is to be installed. In this case, the Installer can be started manually as follows:

1. Select Run from the Start menu.

2. When the Run window appears, click the Browse button, select the following file, and then click the OK button:

**Windows**

DVD-ROM drive:\SwSetup.exe

**UNIX**

/mnt/cdrom/client/SwSetup.exe (\*)

\*: If necessary, change the mount point of the DVD-ROM device ("/mnt/cdrom" in the above example) to match the environment.



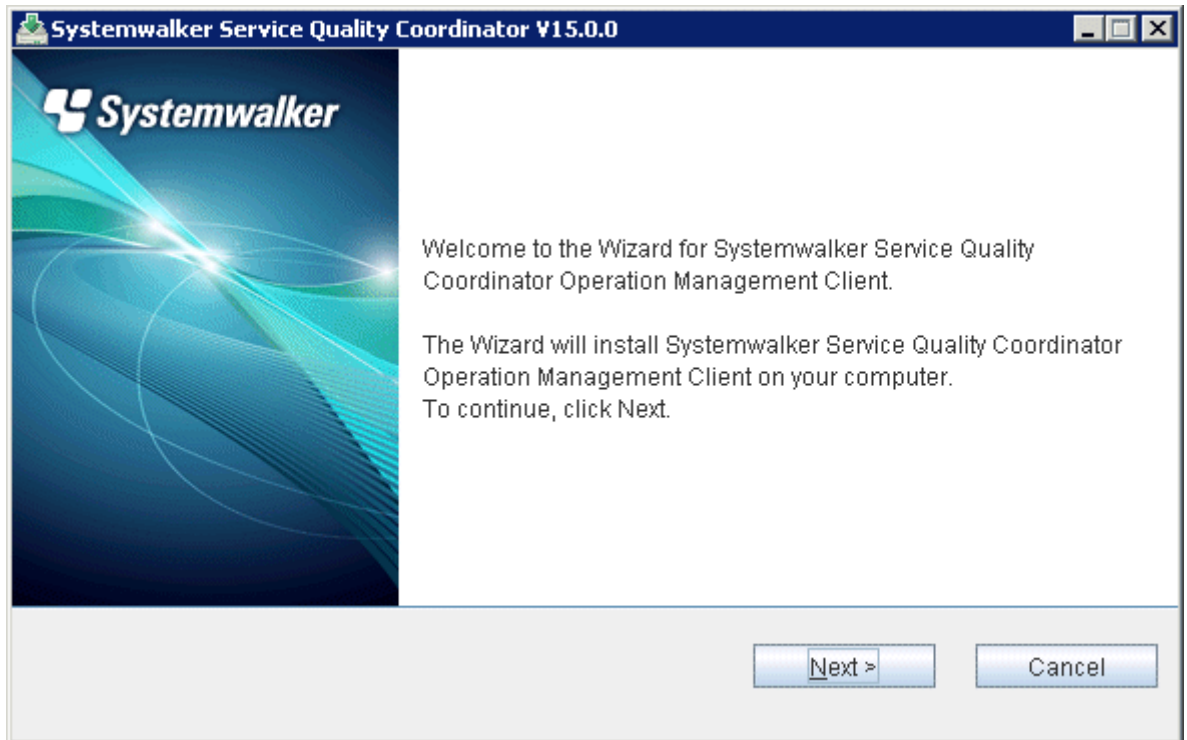
3. Select components

Click **Setup (Client)** and select **Install Operation Management Client**.



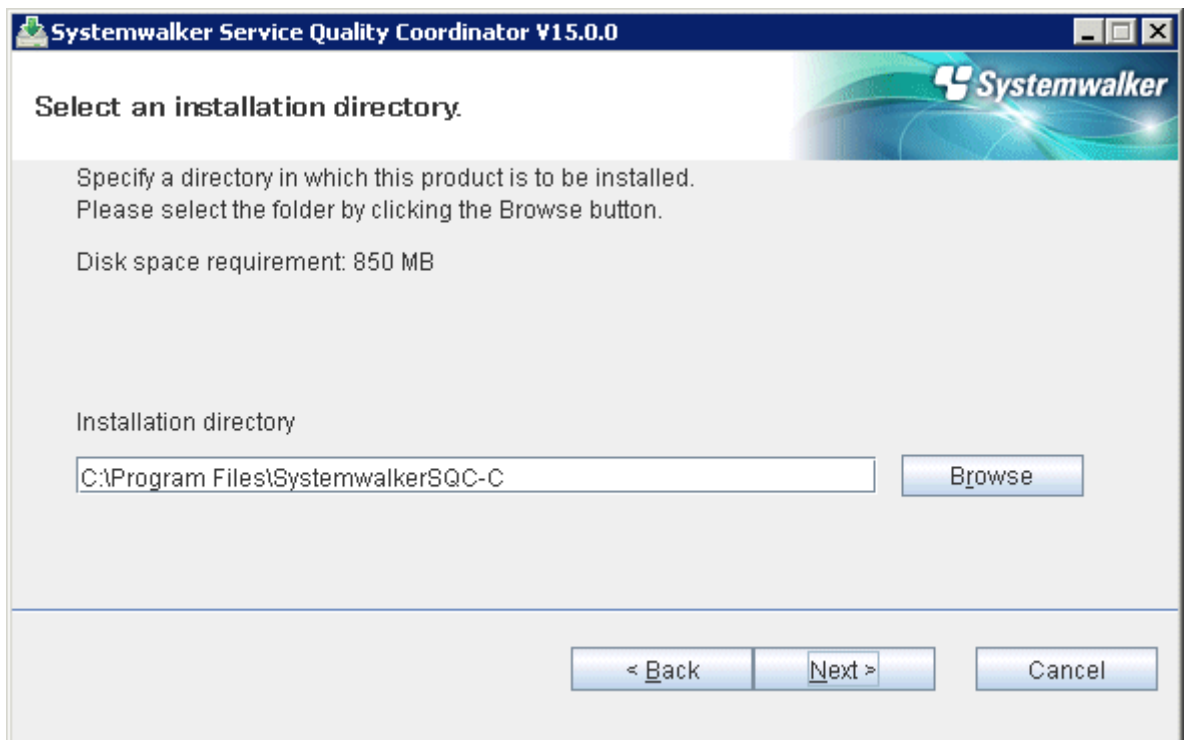
4. The Installation window (Welcome window) is displayed.

Select **Next**.



5. Select an installation directory

Enter the installation directory and then select **Next**.



 **Note**

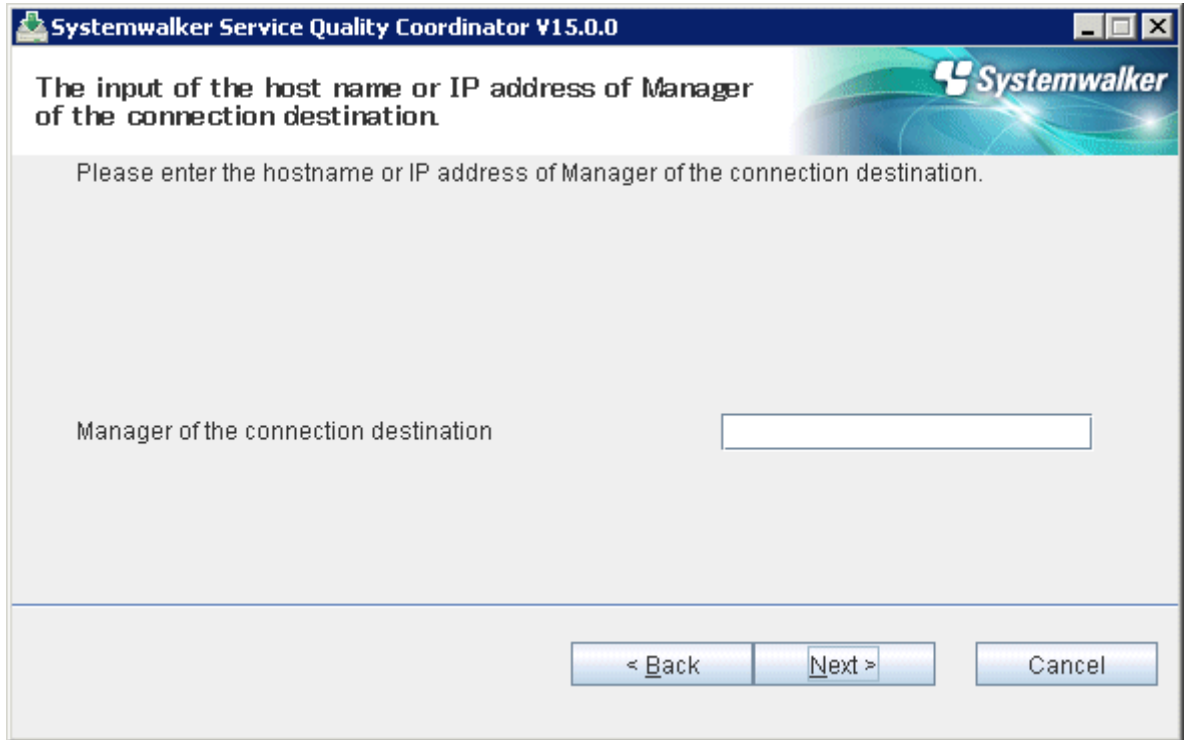
Specify the disk of the NTFS standard for the installation directory.

The path starts with "\\\" or relative path cannot be specified.

The character which can be used for directory name is an alphanumeric character, "-" (hyphen), and "\_" (underscore).

6. Enter the connection destination

Enter the host name or IP address of the Manager to be connected and then select **Next**.



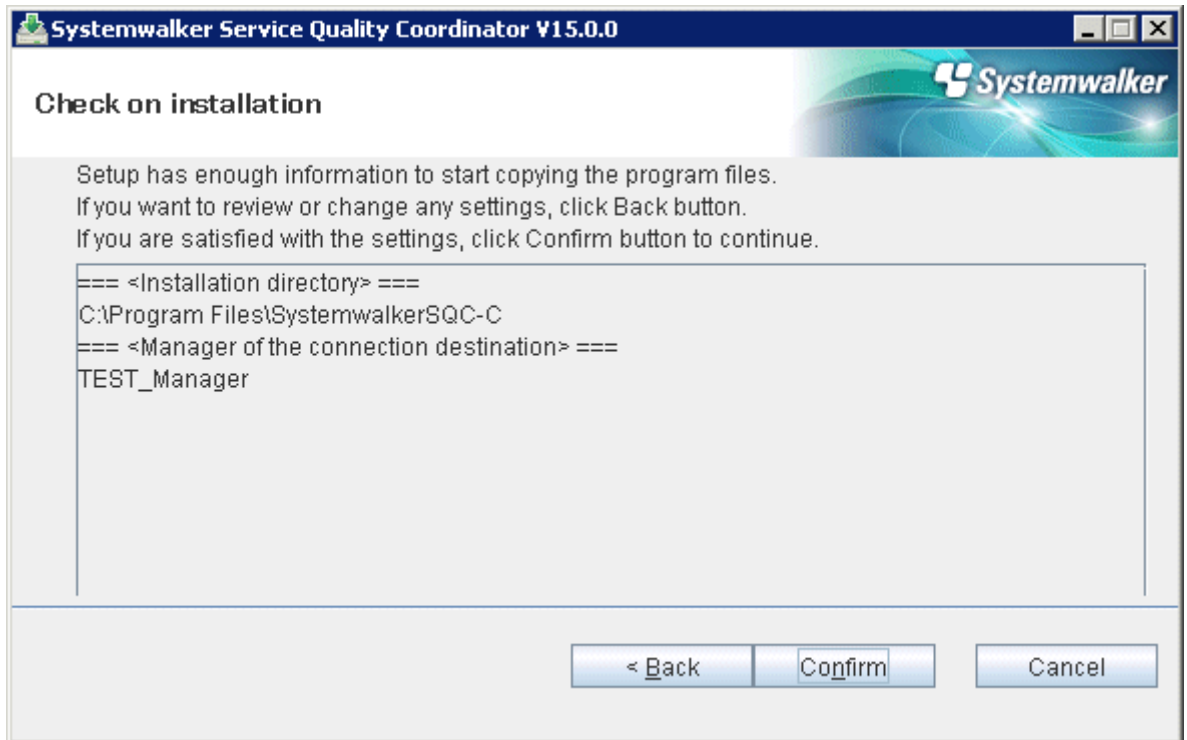
The screenshot shows a Windows-style dialog box titled "Systemwalker Service Quality Coordinator V15.0.0". The main content area contains the text "The input of the host name or IP address of Manager of the connection destination." followed by "Please enter the hostname or IP address of Manager of the connection destination." Below this is a text input field with the label "Manager of the connection destination". At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel".

#### Note

Do not specify "local host" even if the Manager and the Operation Management Client are on the same machine. Enter the host name or IP address of the Manager to be connected is required.

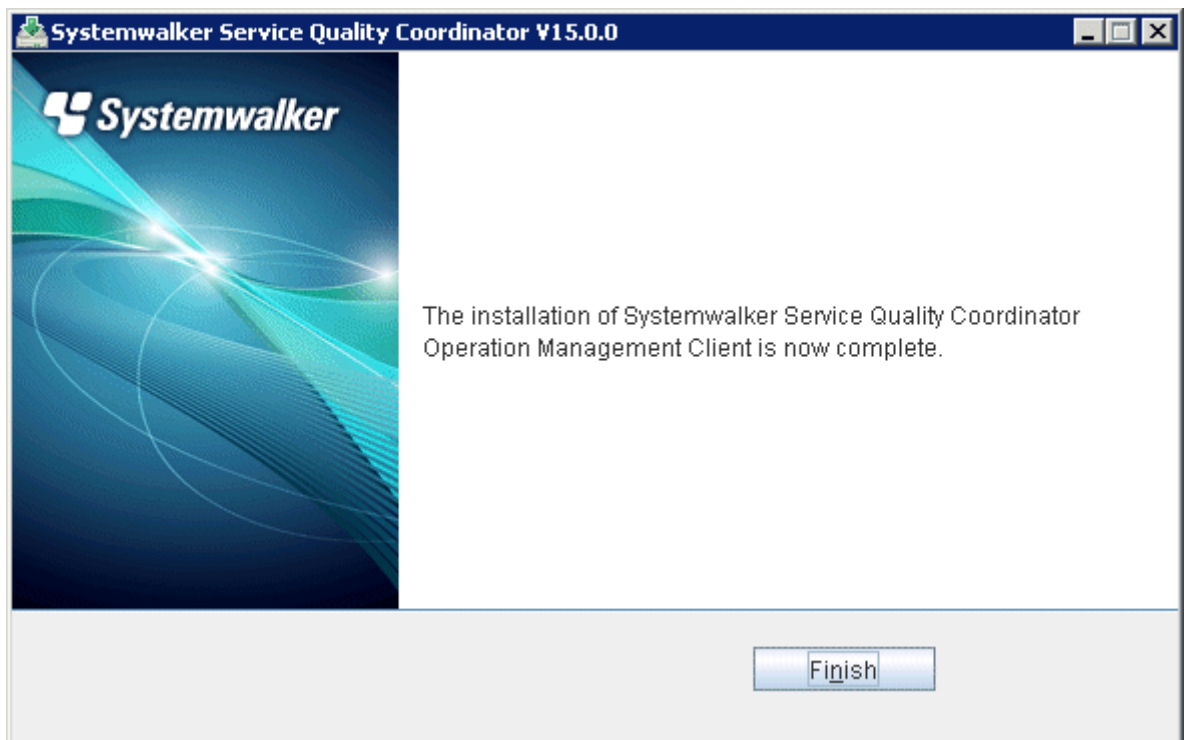
7. Check on installation

Confirm the settings are correct and then select **Confirm**.



#### 8. Complete

When installation has completed, the following window will be displayed. Select **Finish** to complete the installation.



## 3.2 Silent Installation

Silent installation is a method of installing automatically by reading the information required at installation from an installation information file that has been created in advance.

Follow the procedures below to perform silent installation.

- [3.2.1 Create an installation information file](#)
- [3.2.2 Perform silent installation](#)

### 3.2.1 Create an installation information file

Create an installation information file for storing the information required at installation, such as the installation type and the installation directory.

Create the installation information file on the basis of the sample files below.

File Name	Description
sqc_mg_em_win.csv	Sample file for Manager/Enterprise Manager for Windows versions
sqc_ag_pm_win.csv	Sample file for Agent/Proxy Manager for Windows versions
sqc_mg_em_ux.csv	Sample file for Manager/Enterprise Manager for UNIX versions
sqc_ag_pm_ux.csv	Sample file for Agent/Proxy Manager for UNIX versions
sqc_cl_win.csv	Sample file for Operation Management Client

Storage directory of sample files

#### Windows

```
DVD-ROM drive:\tools\Sample\SilentInstall\
```

#### UNIX

```
/mnt/cdrom/tools/Sample/SilentInstall/(*)
```

\*: If necessary, change the mount point of the DVD-ROM device ("/mnt/cdrom" in the above example) to match the environment.

Definition of a sample file

#### Windows

- Manager/Enterprise Manager

```
installInfo,Name,Systemwalker Service Quality Coordinator Install
parameters,sqc.installation.directory,C:\Program Files\SystemwalkerSQC
parameters,sqc.variablefile.directory,C:\SystemwalkerSQC
parameters,sqc.summarydata.location,C:\SystemwalkerSQC\data
parameters,sqc.resourcedata10min.location,C:\SystemwalkerSQC\data
parameters,sqc.resourcedata1hr.location,C:\SystemwalkerSQC\data
parameters,sqc.resourcedata1day.location,C:\SystemwalkerSQC\data
parameters,sqc.archivefile.location,C:\SystemwalkerSQC\spool\BackupPDBinsert
parameters,sqc.alertaction,eventlog
parameters,sqc.troubleshoot.cycle,7
```

- Agent/Proxy Manager

```
installInfo,Name,Systemwalker Service Quality Coordinator Install
parameters,sqc.installation.directory,C:\Program Files\SystemwalkerSQC
```

```

parameters,sql.variablefile.directory,C:\SystemwalkerSQL
parameters,sql.destination.server,127.0.0.1
parameters,sql.alertaction,eventlog
parameters,sql.troubleshoot.cycle,7

```

- Operation Management Client

```


installInfo,Name,Systemwalker Service Quality Coordinator Install
parameters,sql.installation.directory,C:\Program Files\SystemwalkerSQL-C
parameters,sql.destination.server,127.0.0.1

```

The explanation of each item is as follows.

- installInfo

Item to be set for the installInfo parameter is explained below.

Item	Explanation	Default	Required: Yes/ Not Required: No		
			M/ EM(* )	PM/ A(*)	CL(*)
Name	Product name to be installed  <b>Point</b> ..... Specify as Systemwalker Service Quality Coordinator. Error occurs when nothing specified. .....	None (Set required)	Yes	Yes	Yes

\*)

M/EM : Manager/ Enterprise Manager

PM/A : Agent/Proxy Manager

CL : Operation Management Client


- parameters

Items to be set for the parameters parameter are explained below.



.....  
 It is necessary to specify one parameters parameter or more.

Also, when Not Required item is specified, the value is invalid.  
 .....

Item	Explanation	Default	Required: Yes/ Not Required: No		
			M/ EM(* )	PM/ A(*)	CL(*)
sql.installation.directory	Install directory	<b>Excluding the Operation Management Client</b> C:\Program Files\SystemwalkerSQL <b>Operation Management Client</b> C:\ProgramFiles\SystemwalkerSQL-C	Yes	Yes	Yes
sql.variablefile.directory	variable file storage directory	C:\SystemwalkerSQL	Yes	Yes	No
sql.destination.server	The host name or IP address of the connection Manager.   <b>Note</b> ..... Do not specify "local host" even if the Manager and the Operation Management Client are on the same machine. Enter the host name or IP address of the Manager to be connected is required. .....	127.0.0.1	No	Yes	Yes
sql.summarydata.location	Summary data storage directory	C:\SystemwalkerSQL\data	Yes	No	No
sql.resourcedata10min.location	Resource data (10 minutes) storage directory	C:\SystemwalkerSQL\data	Yes	No	No
sql.resourcedata1hr.location	Resource data (1 hour) storage directory	C:\SystemwalkerSQL\data	Yes	No	No
sql.resourcedata1day.location	Resource data (1 day) storage directory	C:\SystemwalkerSQL\data	Yes	No	No
sql.archivefile.location	Archive files storage directory	C:\SystemwalkerSQL\spool\BackupPDBinsert	Yes	No	No
sql.alertaction	Threshold violation notification method. Select from the	eventlog	Yes	Yes	No



Item	Explanation	Default	Required: Yes/ Not Required: No		
			M/ EM(*) )	PM/ A(*)	CL(*)
	following two methods: eventlog Event log centric Centric Manager Message Linkage				
sqc.trouble shoot.cycle	Retention period for log data (Troubleshoot)(day) (1-30).	7	Yes	Yes	No

\*)

M/EM : Manager/ Enterprise Manager

PM/A : Agent/Proxy Manager

CL : Operation Management Client

#### UNIX

- Manager/ Enterprise Manager

```
installInfo,Name,Systemwalker Service Quality Coordinator Install
parameters,sqc.installation.directory,/opt
parameters,sqc.definitionfile.directory,/etc/opt
parameters,sqc.variablefile.directory,/var/opt
parameters,sqc.summarydata.location,/var/opt/FJSVssqc/PDB
parameters,sqc.resourcedata10min.location,/var/opt/FJSVssqc/PDB
parameters,sqc.resourcedata1hr.location,/var/opt/FJSVssqc/PDB
parameters,sqc.resourcedata1day.location,/var/opt/FJSVssqc/PDB
parameters,sqc.archivefile.location,/var/opt/FJSVssqc/BackupPDBinsert
parameters,sqc.alertaction,syslog
parameters,sqc.troubleshoot.cycle,7
```

- Agent/Proxy Manager


```
installInfo,Name,Systemwalker Service Quality Coordinator Install
parameters,sqc.installation.directory,/opt
parameters,sqc.definitionfile.directory,/etc/opt
parameters,sqc.variablefile.directory,/var/opt
parameters,sqc.destination.server,127.0.0.1
parameters,sqc.alertaction,syslog
```

parameters,sql. troubleshoot.cycle,7

The explanation of each item is as follows.

- installInfo

Item to be set for the installInfo parameter is explained below.

Item	Explanation	Default	Required: Yes/ Not Required: No	
			M/EM(*)	PM/A(*)
Name	Product name to be installed  <b>Point</b> ..... Specify as Systemwalker Service Quality Coordinator. Error occurs when nothing specified. .....	None (Set required)	Yes	Yes

\*)

M/EM : Manager/ Enterprise Manager

PM/A : Agent/Proxy Manager


- parameters



Items to be set for the parameters parameter are explained below.

 **Note**

It is necessary to specify one parameters parameter or more.

Also, when Not Required item is specified, the value is invalid.

Item	Description	Default	Required: Yes/ Not Required: No	
			M/EM(*)	PM/A(*)
sql.installation.directory	Install directory  <b>Note</b> ..... The following directory cannot be specified. - /opt/FJSVssql .....	/opt	Yes	Yes
sql.definitionfile.directory	definition file storage directory	/etc/opt	Yes	Yes

Item	Description	Default	Required: Yes/ Not Required: No	
			M/EM(*)	PM/A(*)
	 <b>Note</b> ..... The following directory cannot be specified. - /etc/opt/ FJSVssqc .....			
sqc.variablefile.location	variable file storage directory   <b>Note</b> ..... The following directory cannot be specified. - /var/opt/ FJSVssqc .....	/var/opt	Yes	Yes
sqc.destination.server	The host name or IP address of the connection Manager	127.0.0.1	No	Yes
sqc.summarydata.location	Summary data storage directory	/var/opt/FJSVssqc/PDB	Yes	No
sqc.resource10min.location	Resource data (10 minutes) storage directory	/var/opt/FJSVssqc/PDB	Yes	No
sqc.resource1hr.location	Resource data (1 hour) storage directory	/var/opt/FJSVssqc/PDB	Yes	No
sqc.resource1day.location	Resource data (1 day) storage directory	/var/opt/FJSVssqc/PDB	Yes	No
sqc.archivefile.location	Archive files storage directory	/var/opt/FJSVssqc/ BackupPDBinsert	Yes	No
sqc.alertaction	Threshold violation notification method. Select from the following two methods:  eventlog  Event log  centric	syslog	Yes	Yes

Item	Description	Default	Required: Yes/ Not Required: No	
			M/EM(*)	PM/A(*)
	Centric Manager Message Linkage			
sql.traub eshoot.cyc le	Retention period for log data (Troubleshoot)(day) (1-30).	7	Yes	Yes

\*)

M/EM : Manager/ Enterprise Manager

PM/A : Agent/Proxy Manager

## 3.2.2 Perform silent installation

---

### Information

#### Method of communication with the Manager

At installation, the method of communication with the Manager is set as the Push method.

To use the Pull method, switch to the Pull method after installation. Refer to Pull Type Communication Settings for information on the procedure for switching.

### 3.2.2.1 Installing Windows versions

This section explains the procedure for performing silent installation on a Windows server.

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Performing silent installation

1. Log onto the Windows machine and insert the product DVD-ROM into the DVD-ROM drive.
2. Execute following command.

```
DVD-ROM Drive:\swSilentSetup.bat -t <sql-em| sql-m | sql-pm | sql-a-sv| sql-a-biz |
sql-cl> -f <Installation information file>
```

Refer to "swSilentSetup (command for silent installation) in the *Reference Manual* for more information about this command..

### 3.2.2.2 Installing UNIX versions

This section explains the procedure for performing silent installation on a Linux/Solaris server.

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Performing silent installation

1. Insert the Systemwalker Service Quality Coordinator DVD-ROM (Server) into the DVD-ROM drive of the UNIX machine.

2. Mount the DVD-ROM.
3. Execute following command.

```
/mnt/cdrom/swSilentSetup.sh -t <sqc-em| sqc-m | sqc-pm | sqc-a-sv| sqc-a-biz > -f  
<Installation information file> (*)
```

Refer to "swSilentSetup (command for silent installation)" in the *Reference Manual* for more information about this command.

\*: If necessary, change the mount point of the DVD-ROM device ("/mnt/cdrom" in the above example) to match the environment.

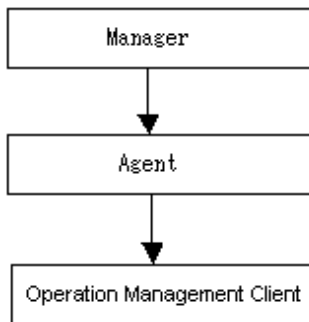
## 3.3 Basic Manager-Agent Model

---

The procedure for constructing a basic model environment made up of a Manager and Agents is explained below.

The explanation assumes that the information to be managed is information about resources within servers and the communication mode is Push mode.

Install and set up the product using the following procedure:



### Procedure

#### - 3.3.1 Tasks to perform on the Manager

1. Install a Manager.
2. Set up the Manager.
3. Start the Manager service or daemon and confirm that it operates normally.

#### - 3.3.2 Tasks to perform on the Agent

1. Install an Agent.
2. Set up the Agent.
3. Start the Agent service or daemon and confirm that it operates normally.

#### - 3.3.3 Tasks to perform on the Operation Management Client

1. Install an Operation Management Client.
2. Set up the communication environment of the Operation Management Client
3. Start the Operation Management Client and confirm that it operates normally.

### 3.3.1 Tasks to perform on the Manager

---

1. **Install a Manager**

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

2. **Set up a Manager**



.....  
Set up the Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
.....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

3. **Start the Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 3.3.2 Tasks to perform on the Agent

---

1. **Installing an Agent**

Install the Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

2. **Set up the Agent**

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

3. **Start the Agent service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 3.3.3 Tasks to perform on the Operation Management Client

---

1. **Install an Operation Management Client**

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)" above.

2. **Set up the communication environment of the Operation Management Client**

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

3. **Start the Operation Management Client and confirm that it operates normally**

Specify the following URL in a Web browser and check that the Console starts normally:

`http://host name of Operation Management Client/SSQC/AdminConsole.html`

Refer to the *User's Guide (Console)* for the environment settings.

### Note

Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

## 3.4 Relay Model Using Proxy Manager

---

This section explains how to construct an environment in which a Proxy Manager is installed as a relay in an extranet and communication with a Manager in the intranet is achieved by the Proxy Manager relaying Agent information.

### Procedure

The procedure is as follows:

- [3.4.1 Tasks to perform on the Manager](#)
  1. Install a Manager.
  2. Set up the Manager.
  3. Start the Manager service or daemon and confirm that it operates normally.
- [3.4.2 Tasks to perform on the Proxy Manager](#)
  1. Install a Proxy Manager.
  2. Set up the Proxy Manager.
  3. Start the Proxy Manager service or daemon and confirm that it operates normally.
- [3.4.3 Tasks to perform on the Agent](#)
  1. Install an Agent.
  2. Set up the Agent.
  3. Start the Agent service or daemon and confirm that it operates normally.
- [3.4.4 Tasks to perform on the Operation Management Client](#)
  1. Install an Operation Management Client.
  2. Set up the communication environment of the Operation Management Client.
  3. Start the Operation Management Client and confirm that it operates normally.

### 3.4.1 Tasks to perform on the Manager

---

#### 1. Install a Manager

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

## 2. Set up the Manager



.....  
Set up the Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
.....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 3. Start the Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

# 3.4.2 Tasks to perform on the Proxy Manager

---

## 1. Install a Proxy Manager

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

## 2. Set up the Proxy Manager



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 3. Start the Proxy Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

# 3.4.3 Tasks to perform on the Agent

---

## 1. Installing an Agent

Install the Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

## 2. Set up the Agent

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 3. Start the Agent service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.



## 3.4.4 Tasks to perform on the Operation Management Client

---

### 1. Installing an Operation Management Client

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)" above.

### 2. Set up the communication environment of the Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

### 3. Start the Operation Management Client and confirm that it operates normally

Specify the following URL in a Web browser and check that the Console starts normally:

`http://host name of Operation Management Client/SSQC/AdminConsole.html`

Refer to the *User's Guide (Console)* for the environment settings.



Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

EE

## 3.5 Two-tier Manager Operation Model

---

The configuration model normally used by this product is a two-tier configuration consisting of a Manager and Agents or Proxy Managers. However, in large-scale systems an Enterprise Manager can be installed as a host server for the Managers in the different departments to enable the entire system to be managed from a central location.

### Execution environment

This function is provided by Systemwalker Service Quality Coordinator Enterprise Edition. To use this function, it is necessary to prepare an Enterprise Manager and use the Enterprise Edition of Manager. The Agent can be either Standard Edition or Enterprise Edition.

The following example shows how an Enterprise Manager is installed in a new Systemwalker Service Quality Coordinator environment.

### Procedure

The procedure is as follows:

- [3.5.1 Tasks to perform on the Enterprise Manager](#)
  1. Install an Enterprise Manager.
  2. Set up the communication environment.

3. Set up the Enterprise Manager.
  4. Start the Enterprise Manager service or daemon and confirm that it operates normally.
- [3.5.2 Tasks to perform on the Manager](#)
    1. Install a Manager.
    2. Set up a two-tier Manager operation
    3. Set up the Manager.
    4. Start the Manager service or daemon and confirm that it operates normally.
  - [3.5.3 Tasks to perform on the Proxy Manager](#)
    1. Install a Proxy Manager.
    2. Set up the Proxy Manager
    3. Start the Proxy Manager service or daemon and confirm that it operates normally.
  - [3.5.4 Tasks to perform on the Agent](#)
    1. Install an Agent.
    2. Set up the Agent.
    3. Start the Agent service or daemon and confirm that it operates normally.
  - [3.5.5 Tasks to perform on the Operation Management Client](#)
    1. Install an Operation Management Client.
    2. Set up the communication environment of the Operation Management Client
    3. Start the Operation Management Client and confirm that it operates normally.

## **3.5.1 Tasks to perform on the Enterprise Manager**

---

### **1. Install an Enterprise Manager**

Install an Enterprise Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

### **2. Set up the Enterprise Manager communication environment**

If a host name cannot be used to communicate with the Manager (such as when the Manager is in a different subnet), specify the host name and IP address of the Manager to be managed in the hosts file.

### **3. Set up an Enterprise Manager**



**Point**

.....  
 Set up the Enterprise Manager if the Agent function is to be used on the Enterprise Manager to collect performance information about the Enterprise Manager itself.  
 .....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### **4. Start the Enterprise Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 3.5.2 Tasks to perform on the Manager

---

### 1. Install a Manager

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

### 2. Set up a two-tier Manager operation

Execute the sqcEmSetup command by referring to "[A.3 Two-tier Manager Operation Setup Command](#)".

#### Point

.....

If the number of managed Agents is more than 50, store the performance data to the Manager by setting the option to "-s on -m off" when executing two-tier Manager Operation Setup Command on Manager.

#### Windows

```
<Installation directory>\bin\sqcEmSetup.exe -h <host name> -s on -m off
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcEmSetup.sh -h <host name> -s on -m off
```

Enter the host name or IP address of the Enterprise Manager to <host name>

.....

### 3. Set up the Manager

#### Point

.....

Set up the Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.

.....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 4. Start the Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 3.5.3 Tasks to perform on the Proxy Manager

---

#### Point

.....

If the Proxy Manager is used to perform end user response management or service operation management, perform the following operations on the Proxy Manager.

Refer to "Managing End User Response" in the *User's Guide* for information about end user response management, and "Service Operation Management" in the *User's Guide* for information about service operation management.

.....

### 1. Install a Proxy Manager

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

## 2. Set up the Proxy Manager



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 3. Start the Proxy Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 3.5.4 Tasks to perform on the Agent

---

#### 1. Install an Agent

Install an Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

#### 2. Set up the Agent

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 3. Start the Agent service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 3.5.5 Tasks to perform on the Operation Management Client

---

#### 1. Install an Operation Management Client

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)" above.

#### 2. Set up the communication environment of the Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

#### 3. Start the Operation Management Client and confirm that it operates normally.

Specify the following URL in a Web browser and check that the Console starts normally:

<code>http://host name of Operation Management Client/SSQC/AdminConsole.html</code>
---

Refer to the *User's Guide (Console)* for the environment settings.

## Note

Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

EE

## 3.6 Redundant Manager Operation Model

- Redundant Manager operation is a function that increases the availability of an entire system by monitoring the system using two Managers.
- Because two Managers with the same functions are used, management information is maintained by both Managers. Even if a problem occurs in one server, monitoring can continue on the other server without the need to perform any switching operations. This minimizes business shutdown time and ensures the system provides high availability.

## Note

Performance information collected cannot be managed by using the agent for Agentless Monitoring function with the Redundant Manager .

### Execution environment

This function is provided by Systemwalker Service Quality Coordinator Enterprise Edition. To use this function, the Manager must be Enterprise Edition, but the Agents can be either Standard Edition or Enterprise Edition.

The following example explains how a redundant Manager system is installed in a new Systemwalker Service Quality Coordinator environment.

### Procedure

The procedure is as follows:

## Point

To use redundant Manager operation, an Operation Management Client must be connected to each Manager.

- [3.6.1 Tasks to perform on the first Manager](#)
  1. Install the first Manager.
  2. Set up the first Manager.
  3. Start the service or daemon of the first Manager and confirm that it operates normally.
- [3.6.2 Tasks to perform on the second Manager](#)
  1. Install the second Manager.
  2. Set up the second Manager.
  3. Start the service or daemon of the second Manager and confirm that it operates normally.
- [3.6.3 Tasks to perform on the Proxy Manager](#)
  1. Install a Proxy Manager.

2. Set up the Proxy Manager for redundant Manager operation.
  3. Set up the Proxy Manager
  4. Start the Proxy Manager service or daemon and confirm that it operates normally.
- [3.6.4 Tasks to perform on the Agent](#)
    1. Install an Agent.
    2. Set up the Agent for redundant Manager operation.
    3. Set up the Agent.
    4. Start the Agent service or daemon and confirm that it operates normally.
  - [3.6.5 Tasks to perform on the first Operation Management Client](#)
    1. Install the first Operation Management Client.
    2. Set up the communication environment of the first Operation Management Client.
    3. Start the first Operation Management Client and confirm that it operates normally.
  - [3.6.6 Tasks to perform on the second Operation Management Client](#)
    1. Install the second Operation Management Client.
    2. Set up the communication environment of the second Operation Management Client.
    3. Start the second Operation Management Client and confirm that it operates normally.

### 3.6.1 Tasks to perform on the first Manager

---

#### 1. Install the first Manager

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

#### 2. Set up the first Manager



Point

.....  
 Set up the first Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
 .....

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 3. Start the service or daemon of the first Manager and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 3.6.2 Tasks to perform on the second Manager

---

#### 1. Install the second Manager

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)" above.

#### 2. Set up the second Manager

### Point

---

Set up the second Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.

---

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 3. Start the service or daemon of the second Manager and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 3.6.3 Tasks to perform on the Proxy Manager

---

### Point

---

If the Proxy Manager is used to perform end user response management or service operation management, perform the following operations on the Proxy Manager.

Refer to Chapter 4, "Managing End User Response" in the *User's Guide* for information about end user response management, and Chapter 5, "Service Operation Management" in the *User's Guide* for information about service operation management.

---

#### 1. Install a Proxy Manager

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

#### 2. Set up the Proxy Manager for redundant Manager operation

Execute the `sqcHaSetup` command by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".

#### 3. Set up the Proxy Manager

### Point

---

Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.

---

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 4. Start the Proxy Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 3.6.4 Tasks to perform on the Agent

---

#### 1. Install an Agent

Install the Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)" above.

## 2. Set up the Agent for redundant Manager operation

Execute the sqcHaSetup command by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".

## 3. Set up the Agent

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 4. Start the Agent service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### **3.6.5 Tasks to perform on the first Operation Management Client**

---

#### 1. Install the first Operation Management Client

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)" above.

#### 2. Set up the communication environment of the first Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

#### 3. Start the first Operation Management Client and confirm that it operates normally

Specify the following URL in a Web browser and check that the Console starts normally:

<code>http://host name of Operation Management Client/SSQC/AdminConsole.html</code>
---

Refer to the *User's Guide (Console)* for the environment settings.



#### Note

Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

### **3.6.6 Tasks to perform on the second Operation Management Client**

---

#### 1. Install the second Operation Management Client

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)" above.



## Point

Specify the IP address of the second Manager as the Manager IP address recognized by the second Operation Management Client.

### 2. Set up the communication environment of the second Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

### 3. Start the second Operation Management Client and confirm that it operates normally

Specify the following URL in a Web browser and check that the Console starts normally:

```
http://host name of Operation Management Client/SSQC/AdminConsole.html
```

Refer to the *User's Guide (Console)* for the environment settings.

## Note

Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

EE

## 3.7 Cluster System Operation Model for MSCS/Failover Clustering

This section explains how to install Systemwalker Service Quality Coordinator on a cluster system that uses MSCS/failover clustering.

Operating a Manager or Enterprise Manager in a cluster system improves management task availability because even if a problem causes one node to fail, management tasks will be simply passed to the remaining normal node.

### Execution environment

This function is available with Systemwalker Service Quality Coordinator Enterprise Edition.

It can only be installed for use with Enterprise Managers and Managers.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group

### Before performing this procedure

Before performing the procedure explained in this section, it is necessary to install MSCS/failover clustering and set up the environment.

If necessary, refer to the MSCS/failover clustering manual for information on installing MSCS/failover clustering and setting up a new cluster environment.

## Note

This section explains the procedure used to construct a Manager/Enterprise Manager environment in a cluster environment that uses MSCS/failover clustering. Because it contains references to MSCS/failover clustering settings, a basic understanding and practical knowledge of MSCS/failover clustering is needed when reading this section.

Note that a Manager cannot be installed on a cluster system in the following situations:

- When it is necessary to install the Manager and the Operation Management Client on the same machine
- When the Manager is in a redundant configuration

The following cluster systems and types are supported.

### [Cluster systems]

Microsoft(R) Cluster Server (referred to below as MSCS) and failover clustering provided by the following:

- Windows Server 2003 Enterprise Edition
- Windows Server 2003 Datacenter Edition
- Windows Server 2008 Enterprise
- Windows Server 2008 Datacenter

### [Cluster types]

- 1:1 active/standby configuration (One node remains on standby for another node)

In this section, the node that runs a management task is referred to as the active node while the node that remains on standby to inherit the task is referred to as the standby node. The process by which the task is passed from the active node to the standby node in the event of an error is referred to as failover. Further, the disk that is shared by both the active and standby nodes is referred to as the shared disk.

## Point

When setting the host name or IP address of a Manager involved in cluster operation (such as the connection destination Manager settings required when installing an Agent, Proxy Manager or Operation Management Client), specify a logical host name or logical IP address. This will enable the operation to be performed without the need to make a distinction between the active node and the standby node.

The following sections explain the Enterprise Manager clustering procedure for two-tier systems, and the Manager clustering procedure:

## 3.7.1 Tasks to perform on an Enterprise Manager

---

Perform this procedure if Enterprise Manager clustering will be used in a two-tier system.

### Procedure

Perform the procedure shown below.

- [3.7.1.1 Before constructing the environment](#)
  1. Prepare the resource group
  2. Set up the shared disk, network and IP addresses
- [3.7.1.2 Installing on the server on the active node](#)
  1. Install an Enterprise Manager on the active server
  2. Set up clustering on the active server
- [3.7.1.3 Installing on the server on the standby node](#)
  1. Install an Enterprise Manager on the standby server
  2. Set up clustering on the standby server
- [3.7.1.4 Registering resources](#)
- [3.7.1.5 Starting services](#)

### 3.7.1.1 Before constructing the environment

This section explains how to prepare the following group and basic resources required for constructing the cluster environment:

- Resource group for registering Systemwalker Service Quality Coordinator  
This resource group is used to enable Systemwalker Service Quality Coordinator to operate in a cluster system.
- Shared disk  
The shared disk is used to store files that are shared by the Enterprise Manager on the active node and the Enterprise Manager on the standby node.  
If the storage location of the performance database (PDB) and the archive files are changed, make sure to configure the storage location physical disks as shared disks.
- Logical IP addresses  
IP addresses that are unique within the network are newly assigned when operating the nodes in a cluster system.
- Logical host names  
These are network host names corresponding to logical IP addresses.

#### 1. Prepare the resource group

Prepare the group to be used by Enterprise Managers. The operation mode of the cluster system determines which of the following two methods is used:

- When Systemwalker Service Quality Coordinator operates in an independent cluster system  
In this case, Failover Cluster Management/Cluster Administrator is used to register the resource group for this product under the following name:  
Systemwalker SQC Group

- When Systemwalker Service Quality Coordinator is added to a Systemwalker Centric Manager cluster system  
To add the resource group to a Systemwalker Centric Manager resource group, create a Systemwalker Centric Manager cluster environment and then prepare a group named "CentricMGR Group".

## 2. Set up the shared disk, network and IP addresses

Register the basic resources with the group.

The physical disk that will store shared files used by the product, the network and the IP addresses are registered with the resource group created in "1. Prepare the resource group" above.

### 3.7.1.2 Installing on the server on the active node

#### 1. Install an Enterprise Manager on the active server

Install an Enterprise Manager Perform the installation process as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



Do not install an Enterprise Manager on the shared disk.

#### 2. Set up clustering on the active server

1. Obtain disk ownership on the active server.

Use Failover Cluster Management/Cluster Administrator to obtain ownership of the following disks:

- Quorum disk
- Shared disk used by the product

2. Vary the shared disk online

Use Failover Cluster Management/Cluster Administrator to vary the shared disk online.

3. Terminate Failover Cluster Management/Cluster Administrator and the registry editor

Close Failover Cluster Management/Cluster Administrator and the registry editor.

4. Execute the cluster setup command on the active server

Execute the cluster setup command "sqcsetupclp" on the active server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
<installation directory>\bin\sqcsetupclp -m <shared disk> -h <logical host name>
```

5. Change the storage location of the performance database (PDB) and the archive files

Refer to "[6.6.1 Changing the PDB/Archive File Storage Location](#)" for details.

6. Set up the Enterprise Manager

If the Agent functions included with the Enterprise Manager are used to collect performance information about the Enterprise Manager itself, create and apply a collection policy by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 3.7.1.3 Installing on the server on the standby node

1. **Install an Enterprise Manager on the standby server**

Perform the installation process as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



.....  
Create the same Enterprise Manager environment (same device name, shared disk and installation path) on both the active and standby nodes.

Do not install an Enterprise Manager on the shared disk.  
.....

2. **Set up clustering on the standby server**

1. Terminate Failover Cluster Management/Cluster Administrator and the registry editor

Close Failover Cluster Management/Cluster Administrator and the registry editor.

2. Execute the cluster setup command on the standby server

Execute the cluster setup command "sqcsetupclp" on the standby server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
<installation directory>\bin\sqcsetupcls -m <shared disk>
```

### 3.7.1.4 Registering resources

Register the Enterprise Manager service as an MSCS resource on the active server.

- Register the following service as an application resource for MSCS/failover clustering with the resource group created in "Prepare resource group":
  - "Systemwalker SQC DCM" service



.....  
If Systemwalker Service Quality Coordinator is installed in the following environments and the [New resource Wizard] is used to add resources, set the "Resource dependencies" shown in the following table after the resources have been added.

- Windows Server 2008 Enterprise
  - Windows Server 2008 Datacenter
- .....

## "Systemwalker SQC DCM" service

Item	Setting
Name	Systemwalker SQC DCM
Resource type	Generic service
Group	Systemwalker SQC Group or CentricMGR Group
Executable owner	Active server and standby server
Resource dependencies	Disk set as the shared disk, IP address
Service name	SQC_DCM

### 3.7.1.5 Starting services

Use Failover Cluster Management/Cluster Administrator to vary the following Systemwalker Service Quality Coordinator service online:

- "Systemwalker SQC DCM" service

This completes the process of setting up the Enterprise Manager environment in a cluster system constructed using MSCS/ failover clustering.

The next step is to install and set up the environment according to the operation model that will be adopted.

- [3.3 Basic Manager-Agent Model](#)
- [3.4 Relay Model Using Proxy Manager](#)
- [3.5 Two-tier Manager Operation Model](#)



If a two-tier operation model environment for a Manager is being constructed, installation of the Enterprise Manager is now complete and the procedure described in "Tasks to be performed on an Enterprise Manager" can be skipped.

## 3.7.2 Tasks to perform on a Manager

---

Perform this procedure if Manager clustering is to be used.

### Procedure

Perform the procedure shown below.

- [3.7.2.1 Before constructing the environment](#)
  1. Prepare the resource group
  2. Set up the shared disk, network and IP addresses

- [3.7.2.2 Installing on the server on the active node](#)
  1. Install a Manager on the active server
  2. Set up clustering on the active server
- [3.7.2.3 Installation on the standby node server](#)
  1. Install a Manager on the standby server
  2. Set up clustering on the standby server
- [3.7.2.4 Registering resources](#)
- [3.7.2.5 Starting services](#)

### 3.7.2.1 Before constructing the environment

This section explains how to prepare the following group and basic resources that will be needed to construct the cluster environment:

- Resource group for registering Systemwalker Service Quality Coordinator  
This resource group is used to operate Systemwalker Service Quality Coordinator in a cluster configuration.
- Shared disk used by the product  
This disk is used to store files that are shared by the Managers on the active and standby nodes.  
If the storage location of the performance database (PDB) and the archive files are changed, make sure to configure the storage location physical disks as shared disks.
- Logical IP address used by this product  
An IP address that is unique within the network is assigned when this product is used in a cluster system.
- Network used by this product  
This is the network that is used when this product is used in a cluster system.

#### 1. Prepare the resource group

Prepare the group that the Manager will use. Use whichever of the following methods suits the operation mode of the cluster system.

- When Systemwalker Service Quality Coordinator operates in an independent cluster system  
Use Failover Cluster Management/Cluster Administrator to register the resource group for this product under the following name:  
"Systemwalker SQC Group"
- When Systemwalker Service Quality Coordinator is added to a Systemwalker Centric Manager cluster system  
If Systemwalker Service Quality Coordinator is to be added to a Systemwalker Centric Manager resource group, create the Systemwalker Centric Manager cluster environment and prepare a group named "CentricMGR Group".

#### 2. Set up the shared disk, network and IP addresses

Register the basic resources with the group.

Register the physical disk that will be used to store the shared files of this product, the network and IP addresses with the resource group prepared in "Prepare resource group".

### 3.7.2.2 Installing on the server on the active node

#### 1. Install a Manager on the active server

Perform the installation process as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



#### Note

Do not install an Enterprise Manager on the shared disk.

#### 2. Set up clustering on the active server

##### 1. Obtain disk ownership on the active server

Use Failover Cluster Management/Cluster Administrator to obtain the ownership of the following disk:

- Quorum disk
- Shared disk used by the product

##### 2. Vary the shared disk online

Use Failover Cluster Management/Cluster Administrator to vary the shared disk online.

##### 3. Terminate Failover Cluster Management/Cluster Administrator and the registry editor

Close Failover Cluster Management/Cluster Administrator and the registry editor.

##### 4. Execute the cluster setup command on the active server

Execute the cluster setup command "sqcsetupclp" on the active server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
<installation directory>\bin\sqcsetupclp -m <shared disk> -h <logical host name>
```

##### 5. Change the storage location of the performance database (PDB) and the archive files

Refer to "[6.6.1 Changing the PDB/Archive File Storage Location](#)" for details.

##### 6. Set up the Manager

If the Agent functions included with the Manager will be used to collect performance information about the Manager itself, create and deploy a collection policy by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".



### 3.7.2.3 Installation on the standby node server

#### 1. Install a Manager on the standby server

Perform the installation by referring to "3.1.1 Installing a Manager/Enterprise Manager[EE]".

#### Point

.....  
Create the same Manager environment (same device name, shared disk and installation path) on both the active and standby nodes.

Do not install an Enterprise Manager on the shared disk.  
.....

#### 2. Set up clustering on the standby server

1. Terminate Failover Cluster Management/Cluster Administrator and the registry editor

Close Failover Cluster Management/Cluster Administrator and the registry editor.

2. Execute the cluster setup command on the standby server

Execute the cluster setup command "sqcsetupclp" on the standby server by referring to "A.6 Cluster Setup Commands".

The command format is as follows:

```
<installation directory>\bin\sqcsetupcls -m <shared disk>
```

### 3.7.2.4 Registering resources

Register the Manager service as an MSCS/failover clustering resource on the active server.

- Register the following services as MSCS/failover clustering application resources with the resource group created in "Prepare resource group":
  - "Systemwalker SQC DCM" service
  - "Systemwalker SQC sqcschdle" service
- Also register the following services if the Web access log analysis function is to be used:
  - "Systemwalker SQC dbrefsv" service
  - "Systemwalker SQC dbregsv" service

#### Note

.....  
If Systemwalker Service Quality Coordinator is installed in the following environments and the [New resource Wizard] is used to add resources, set the "Resource dependencies" shown in the following table after the resources have been added.

- Windows Server 2008 Enterprise
  - Windows Server 2008 Datacenter
- .....

### "Systemwalker SQC DCM" service

Item	Setting
Name	Systemwalker SQC DCM
Resource type	Generic service
Group	Systemwalker SQC Group or CentricMGR Group
Executable owner	Active server and standby server
Resource dependencies	Disk set as the shared disk, IP address
Service name	SQC_DCM

### "Systemwalker SQC sqcschdle" service

Item	Setting
Name	Systemwalker SQC sqcschdle
Resource type	Generic service
Group	Systemwalker SQC Group or CentricMGR Group
Executable owner	Active server and standby server
Resource dependencies	Disk set as the shared disk, IP address
Service name	Sqcschdle

### "Systemwalker SQC dbrefsv" service

Item	Setting
Name	Systemwalker SQC dbrefsv
Resource type	Generic service
Group	Systemwalker SQC Group or CentricMGR Group
Executable owner	Active server and standby server
Resource dependencies	Disk set as the shared disk, IP address
Service name	Systemwalker SQC-A dbrefsv

### "Systemwalker SQC dbregsv" service

Item	Setting
Name	Systemwalker SQC dbregsv
Resource type	Generic service
Group	Systemwalker SQC Group or CentricMGR Group
Executable owner	Active server and standby server
Resource dependencies	Disk set as the shared disk, IP address
Service name	Systemwalker SQC-A dbregsv

### 3.7.2.5 Starting services

Use Failover Cluster Management/Cluster Administrator to vary the following Systemwalker Service Quality Coordinator service online:

- "Systemwalker SQC DCM" service

This completes the process of setting up the Manager environment in a cluster system constructed using MSCS/failover clustering.

The next step is to install and set up the Manager according to the operation model that will be adopted.

The Manager environment settings in an MSCS cluster system are now complete.

The next step is to install and set up the environment according to the operation model that will be adopted.

- [3.3 Basic Manager-Agent Model](#)
- [3.4 Relay Model Using Proxy Manager](#)
- [3.5 Two-tier Manager Operation Model](#)



#### Note

Installation of the Manager is now complete, so the procedure described in "Tasks to be performed on a Manager" can be skipped.



## 3.8 PRIMECLUSTER Cluster System Operation Model

This section explains how to install a Manager or Enterprise Manager on a PRIMECLUSTER cluster system.

Operating a Manager or Enterprise Manager in a cluster system improves management business availability because even if a problem causes one node to fail, management business will simply pass to the remaining normal node.

### Execution environment

This function is available with Systemwalker Service Quality Coordinator Enterprise Edition.

It can only be installed for use with Enterprise Managers and Managers.

### Required privileges

UNIX

System administrator (superuser) privileges are required.

### Before performing this procedure

PRIMECLUSTER must be installed and its environment set up correctly before the procedure described in this section is performed.

For the procedure used to install PRIMECLUSTER and create a new cluster environment, refer to the *PRIMECLUSTER Installation and Operation Guide* as required.

## Note

This section explains how to construct a Manager/Enterprise Manager environment in a PRIMECLUSTER cluster environment, and contains references to PRIMECLUSTER settings. For this reason a basic understanding and practical knowledge of PRIMECLUSTER is required.

Note that a Manager cannot be installed on a cluster system in the following situations:

- When the Manager is in a redundant configuration

The following cluster systems and types are supported.

### [Cluster systems]

#### Solaris

- Fujitsu PRIMECLUSTER Enterprise Edition  
4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00/4.3A10
- Fujitsu PRIMECLUSTER HA Server  
4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00/4.3A10
- Fujitsu PRIMECLUSTER Clustering Base  
4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00/4.3A10

#### Linux

- Fujitsu PRIMECLUSTER Enterprise Edition 4.2A00/4.2A30/4.3A00/4.3A10
- Fujitsu PRIMECLUSTER HA Server 4.2A00/4.2A30/4.3A00/4.3A10
- Fujitsu PRIMECLUSTER Clustering Base 4.2A00/4.2A30/4.3A00/4.3A10

### [Cluster types]

- 1:1 active/standby configuration (One node remains on standby for another node)

In this section, the node where management business is carried out is referred to as the active node, the node that remains on standby to inherit business in the event of a problem is referred to as the standby node, and the process by which the business passes from the active node to the standby node in the event of an error is referred to as failover. Further, the disk that is shared by both the active and standby nodes is referred to as the shared disk.

## Point

When setting the host name or IP address of a Manager involved in cluster operation (such as when installing an Agent, Proxy Manager or Operation Management Client), specify a logical host name or logical IP address. This will enable the operation to be performed without the need to make a distinction between the active node and the standby node.

The following sections explain the Enterprise Manager clustering procedure for two-tier systems, and the Manager clustering procedure:

## 3.8.1 Tasks to perform on an Enterprise Manager

---

Perform this procedure if Enterprise Manager clustering will be used in a two-tier system.

### Procedure

Perform the procedure shown below.

- [3.8.1.1 Before constructing the environment](#)
  1. Set up the shared disk
  2. Assign the IP address and host name
- [3.8.1.2 Installing on the server on the active node](#)
  1. Install an Enterprise Manager on the active server
  2. Set up clustering on the active server
- [3.8.1.3 Installation on the standby node server](#)
  1. Install an Enterprise Manager on the standby server
  2. Set up clustering on the standby server
- [3.8.1.4 Registering resources](#)
  - Registering with the userApplication Configuration Wizard (Solaris versions)
  - Registering with the RMS Wizard (Linux versions)
- [3.8.1.5 Starting the daemon](#)

### 3.8.1.1 Before constructing the environment

This section explains how to prepare the following resources to build the cluster environment:

- Shared disk used by the product  
The shared disk is used to store files that are shared by the Enterprise Manager on the active node and the Enterprise Manager on the standby node.
- Logical IP address used by this product  
IP addresses that are unique within the network are newly assigned when operating the nodes in a cluster system.
- Logical host name used by this product  
This is a name that can be used to resolve the logical IP address.  
It becomes valid when registered with a naming service such as the DNS.

#### 1. Set up the shared disk

Set up a shared disk for storing files shared by the Enterprise Manager on the active node and the Enterprise Manager on the standby node. Note that the shared disk must be set up so that it is owned exclusively by Systemwalker Service Quality Coordinator.

If the storage location of the performance database (PDB) and the archive files are changed, make sure to configure the storage location physical disks as shared disks.

Refer to the PRIMECLUSTER manual for details on shared disk settings.

## 2. Assign the IP address and host name

- When Systemwalker Service Quality Coordinator operates in an independent cluster system Register the IP address and host name by referring to the PRIMECLUSTER manual.
- When Systemwalker Service Quality Coordinator is added to a Systemwalker Centric Manager cluster system For the logical IP address and the logical host name, use resources that have already been set up in the Systemwalker Centric Manager cluster system. There is no need to create new resources.

### 3.8.1.2 Installing on the server on the active node

- 1.
2. **Install an Enterprise Manager on the active server**

Perform the installation process as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



Do not install an Enterprise Manager on the shared disk.

## 3. Set up clustering on the active server

1. Stop cluster applications on the active server  
Use PRIMECLUSTER's Cluster Admin GUI to stop cluster applications.



If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.

2. Enable access to the shared disk from the active server  
Mount the shared disk on the active server.

3. Execute the cluster setup command on the active server  
Execute the cluster setup command "sqcsetupclp" on the active server by referring to "[A.6 Cluster Setup Commands](#)".  
The command format is as follows:

```
/opt/FJSVssqc/bin/sqcsetupclp -m <mount point> -h <logical host name>
```

4. Change the storage location of the performance database (PDB) and the archive files  
Refer to "[6.6.1 Changing the PDB/Archive File Storage Location](#)" for details.

5. Set up the Enterprise Manager

If the Agent functions included with the Enterprise Manager are used to collect performance information about the Enterprise Manager itself, create and apply a collection policy by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 3.8.1.3 Installation on the standby node server

1. **Install an Enterprise Manager on the standby server**

Install an Enterprise Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



.....  
Create the same Enterprise Manager environment (same device name, shared disk and installation path) on both the active and standby nodes.

Do not install an Enterprise Manager on the shared disk.  
.....

2. **Set up clustering on the standby server**

1. Stop cluster applications on the standby server

Use PRIMECLUSTER's Cluster Admin GUI to stop cluster applications.

2. Enable access to the shared disk from the standby server  
Mount the shared disk on the standby server.

3. Execute the cluster setup command on the standby server

Execute the cluster setup command "sqcsetupclp" on the standby server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
/opt/FJSVssqc/bin/sqcsetupcls -m <mount point>
```

### 3.8.1.4 Registering resources

Register the Enterprise Manager daemon as a PRIMECLUSTER resource.

The resource registration method for the active server is explained here.

Register the resource created using the Enterprise Manager cluster setup command as the Enterprise Manager daemon.



.....  
If Systemwalker Service Quality Coordinator is synchronized with Systemwalker Centric Manager, register the Enterprise Manager daemon with the "CentricMGR Group" as an application resource.  
.....

The resource registration method differs according to the platform.

Refer to the registration method that matches the platform being used.

- Registering with the userApplication Configuration Wizard (Solaris versions)

1. Create resources
2. Create cluster applications

- Registering with the RMS Wizard (Linux versions)

1. Create resources
2. Create cluster applications

## Registering with the userApplication Configuration Wizard (Solaris versions)

### 1. Create resources

Select "Create resource" in the PRIMECLUSTER userApplication Configuration Wizard and set the resource type. Refer to the PRIMECLUSTER manual for details.

#### Fsystem

Select a partition for shared resources.

#### Ipaddress

Select "IP Address Takeover" as the network type and set the IP address or host name specified with the cluster setup command option as the IP address or host name.

#### Procedure

Select "Application" as the procedure class and create a procedure resource as a SystemwalkerSQC resource.

### 2. Create cluster applications

Select "Create userApplication" from the top menu of the PRIMECLUSTER's userApplication Configuration Wizard to create the application. Refer to the PRIMECLUSTER manual for details.

- Select "Standby" as the operation mode in the "Set userApplication Name and Operation Mode" window.
- Set the userApplication attributes in the "Set Attributes" window. The following table shows the recommended values that can be specified with each attribute.

Attribute	Value	Overview
AutoStartUp	Yes	userApplication will start automatically when RMS is started.
AutoSwitchOver	HostFailure ResourceFailure	Failover will occur automatically when a problem occurs in a host or resource.
PersistentFault	1	If the status of userApplication is "Faulted", it will continue even after RMS has restarted.
ShutdownPriority	NONE (Default value)	A weight coefficient (priority) will not be assigned to userApplication.
StandbyTransitions	StartUp SwitchRequest	A standby status change will occur when RMS starts up or when the status changes to a different node.
OnlinePriority	0 (Default value)	After RMS has restarted, userApplication will go online on the node with the highest priority. The priority is determined by the node setup



Attribute	Value	Overview
		sequence that is set with "SysNode Settings" when userApplication is created.
HaltFlag	No (Default value)	If a fault occurs while a previous fault is being processed (i.e., a double fault exists), forced termination of the node is not performed. This will prevent userApplication from failing over.

- When selecting resources, select all the resources created in "1. Create resources" and then create applications.

## Registering with the RMS Wizard (Linux versions)

This section explains how to use the PRIMECLUSTER RMS Wizard to create applications.

### 1. Create resources

- Set logical IP address as a resource.

Select "Gls:Global-Link-Services" in the RMS Wizard, and set the logical IP address of PRIMECLUSTER GLS as a resource.

- Set shared logical IP addresses as resources.

### 2. Creating a cluster application

Use the RMS Wizard to create an application.

Refer to the PRIMECLUSTER manual for details.

- Primary/secondary node registration

Register primary and secondary nodes from "Machines+Basics".

- Takeover IP address registration

Select "Gls:Global-Link-Services", and register the address to be used as the takeover IP address set with PRIMECLUSTER GLS.

- Shared disk registration

From "LocalFileSystem", register the mount point of the partition for shared resources.

- Set the Procedure resources

Set Procedure resources (SystemwalkerSQC).

- Other optional settings

From "Machines+Basics", set the options for cluster applications. The following table shows some example option settings with recommended values:

Attribute	Value	Overview
AutoStartUp	Yes	userApplication will start automatically when RMS is started
AutoSwitchOver	HostFailure ResourceFailure	Failover will occur automatically when a problem occurs in a host or resource.

Attribute	Value	Overview
PersistentFault	1	If the status of userApplication is "Faulted", it will continue even after RMS has restarted.
ShutdownPriority	NONE (Default value)	A weight coefficient (priority) will not be assigned to userApplication.
StandbyTransitions	StartUp SwitchRequest	A standby status change will occur when RMS starts up or when the status changes to a different node.
OnlinePriority	0 (Default value)	After RMS has restarted, userApplication will go online on the node with the highest priority. The priority is determined by the node setup sequence that is set with "SysNode Settings" when userApplication is created.
HaltFlag	No (Default value)	If a fault occurs while a previous fault is being processed (i.e., a double fault exists), forced termination of the node is not performed. This will prevent userApplication from failing over.

### 3.8.1.5 Starting the daemon

Use PRIMECLUSTER's Cluster Admin GUI to start the Systemwalker Service Quality Coordinator daemon.

The environment settings of the PRIMECLUSTER cluster system are now complete.

The next step is to install and set up the environment according to the operation model that will be adopted.

- [3.3 Basic Manager-Agent Model](#)
- [3.4 Relay Model Using Proxy Manager](#)
- [3.5 Two-tier Manager Operation Model](#)



If a two-tier operation model environment for a Manager is being constructed, installation of the Enterprise Manager is now complete and the procedure described in "Tasks to be performed on an Enterprise Manager" can be skipped.

## 3.8.2 Tasks to perform on a Manager

---

Perform this procedure if Manager clustering is to be used.

### Procedure

Perform the procedure shown below.

- [3.8.2.1 Before constructing the environment](#)
  1. Set up the shared disk
  2. Assign an IP address and host name

- [3.8.2.2 Installing on the server on the active node](#)
  1. Install a Manager on the active server
  2. Set up clustering on the active server
- [3.8.2.3 Installation on the standby node server](#)
  1. Install a Manager on the standby server
  2. Set up clustering on the standby server
- [3.8.2.4 Registering resources](#)
  - Registering with the userApplication Configuration Wizard
  - Registering with the RMS Wizard
- [3.8.2.5 Starting the daemon](#)

### 3.8.2.1 Before constructing the environment

This section explains how to prepare the following resources to build the cluster environment:

- Shared disk used by the product  
The shared disk is used to store files that are shared by the Enterprise Manager on the active node and the Manager on the standby node.
- Logical IP address used by this product  
IP addresses that are unique within the network are newly assigned when operating the nodes in a cluster system.
- Logical host name used by this product  
This is a name that can be used to resolve the logical IP address.  
It becomes valid when registered with a naming service such as the DNS.

#### 1. Set up the shared disk

Set up a shared disk for storing files shared by the Enterprise Manager on the active node and the Manager on the standby node.

If the storage location of the performance database (PDB) and the archive files are changed, make sure to configure the storage location physical disks as shared disks.

Refer to the PRIMECLUSTER manual for details on shared disk settings.

#### 2. Assign the IP address and host name

- When Systemwalker Service Quality Coordinator operates in an independent cluster system  
Register the IP address and host name by referring to the PRIMECLUSTER manual.
- When Systemwalker Service Quality Coordinator is added to a Systemwalker Centric Manager cluster system  
For the logical IP address and the logical host name, use resources that have already been set up in the Systemwalker Centric Manager cluster system.  
There is no need to create new resources.

## 3.8.2.2 Installing on the server on the active node

### 1. Install a Manager on the active server

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".



Do not install an Enterprise Manager on the shared disk.

### 2. Set up clustering on the active server

#### a. Stop cluster applications on the active server

Use PRIMECLUSTER's Cluster Admin GUI to stop cluster applications.



If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.

#### b. Enable access to the shared disk from the active server

Mount the shared disk on the active server.

#### c. Execute the cluster setup command on the active server

Execute the cluster setup command "sqcsetupclp" on the active server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
/opt/FJSVssqc/bin/sqcsetupclp -m <mount point> -h <logical host name>
```

#### d. Change the storage location of the performance database (PDB) and the archive files

Refer to "[6.6.1 Changing the PDB/Archive File Storage Location](#)" for details.

#### e. Set up the Manager

If the Agent functions included with the Manager will be used to collect performance information about the Manager itself, create and deploy a collection policy by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 3.8.2.3 Installation on the standby node server

### 1. Install a Manager on the standby server

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

## Note

Create the same Manager environment (same device name, shared disk and installation path) on both the active and standby nodes.

Do not install an Enterprise Manager on the shared disk.

### 2. Set up clustering on the standby server

1. Stop cluster applications on the standby server

Use PRIMECLUSTER's Cluster Admin GUI to stop cluster applications.

2. Enable access to the shared disk from the standby server

Mount the shared disk on the standby server.

3. Execute the cluster setup command on the standby server

Execute the cluster setup command "sqcsetupclp" on the standby server by referring to "[A.6 Cluster Setup Commands](#)".

The command format is as follows:

```
/opt/FJSVssqc/bin/sqcsetupclp -m <mount point> -h <logical host name>
```

### 3.8.2.4 Registering resources

Register the Manager daemon as a PRIMECLUSTER resource.

The resource registration method for the active server is explained here.

Register the resource created using the Manager cluster setup command as the Manager daemon.

#### Point

If Systemwalker Service Quality Coordinator is synchronized with Systemwalker Centric Manager, register the Manager daemon with the "CentricMGR Group" as an application resource.

The resource registration method differs according to the platform.

Refer to the registration method that matches the platform being used.

#### - [Registering with the userApplication Configuration Wizard \(Solaris versions\)](#)

1. Create resources
2. Create cluster applications

#### - [Registering with the RMS Wizard \(Linux versions\)](#)

1. Create resources
2. Create cluster applications

## Registering with the userApplication Configuration Wizard (Solaris versions)

### 1. Create resources

Select "Create resource" in the PRIMECLUSTER userApplication Configuration Wizard and set the resource type. Refer to the PRIMECLUSTER manual for details.

#### Fsystem

Select a partition for shared resources.

#### Ipaddress

Select "IP Address Takeover" as the network type and set the IP address or host name specified with the cluster setup command option as the IP address or host name.

#### Procedure

Select "Application" as the procedure class and create a procedure resource as a SystemwalkerSQC resource.

### 2. Create cluster applications

Select "Create userApplication" from the top menu of the PRIMECLUSTER's userApplication Configuration Wizard to create the application. Refer to the PRIMECLUSTER manual for details.

- Select "Standby" as the operation mode in the "Set userApplication Name and Operation Mode" window.
- Set the userApplication attributes in the "Set Attributes" window. The following table shows the recommended values that can be specified with each attribute.

Attribute	Value	Overview
AutoStartUp	Yes	userApplication will start automatically when RMS is started.
AutoSwitchOver	HostFailure ResourceFailure	Failover will occur automatically when a problem occurs in a host or resource.
PersistentFault	1	If the status of userApplication is "Faulted", it will continue even after RMS has restarted.
ShutdownPriority	NONE (Default value)	A weight coefficient (priority) will not be assigned to userApplication.
StandbyTransitions	StartUp SwitchRequest	A standby status change will occur when RMS starts up or when the status changes to a different node.
OnlinePriority	0 (Default value)	After RMS has restarted, userApplication will go online on the node with the highest priority. The priority is determined by the node setup sequence that is set with "SysNode Settings" when userApplication is created.
HaltFlag	No (Default value)	If a fault occurs while a previous fault is being processed (i.e., a double fault exists), forced termination of the node is not performed. This will prevent userApplication from failing over.

- When selecting resources, select all the resources created in "1. Create resources" and then create applications.

## Registering with the RMS Wizard (Linux versions)

This section explains how to use the PRIMECLUSTER RMS Wizard to create applications.

### 1. Create resources

- a. Set logical IP addresses as resources.

Select "Gls:Global-Link-Services" in the RMS Wizard, and set the logical IP address of PRIMECLUSTER GLS as a resource.

- b. Set shared logical IP addresses as resources.

### 2. Create cluster applications

Use the RMS Wizard to create an application.

Refer to the PRIMECLUSTER manual for details.

- Primary/secondary node registration

Register primary and secondary nodes from "Machines+Basics".

- Takeover IP address registration

Select "Gls:Global-Link-Services", and register the address to be used as the takeover IP address set with PRIMECLUSTER GLS.

- Shared disk registration

From "LocalFileSystem", register the mount point of the partition for shared resources.

- Set the Procedure resources

Set Procedure resources (SystemwalkerSQC).

- Other optional settings

From "Machines+Basics", set the options for cluster applications. The following table shows some example option settings with recommended values:

Attribute	Value	Overview
AutoStartUp	Yes	userApplication will start automatically when RMS is started.
AutoSwitchOver	HostFailure ResourceFailure	Failover will occur automatically when a problem occurs in a host or resource.
PersistentFault	1	If the status of userApplication is "Faulted", it will continue even after RMS has restarted.
ShutdownPriority	NONE (Default value)	A weight coefficient (priority) will not be assigned to userApplication.
StandbyTransitions	StartUp SwitchRequest	A standby status change will occur when RMS starts up or when the status changes to a different node.
OnlinePriority	0 (Default value)	After RMS has restarted, userApplication will go online on the node with the highest priority. The priority is determined by the node setup sequence that is set with "SysNode Settings" when userApplication is created.
HaltFlag	No (Default value)	If a fault occurs while a previous fault is being processed (i.e., a double fault exists), forced termination of the node is not performed. This

Attribute	Value	Overview
		will prevent userApplication from failing over.

### 3.8.2.5 Starting the daemon

Use PRIMECLUSTER's Cluster Admin GUI to start the Systemwalker Service Quality Coordinator daemon.

The environment settings of the PRIMECLUSTER cluster system are now complete.

The next step is to install and set up the environment according to the operation model that will be adopted.

- [3.3 Basic Manager-Agent Model](#)
- [3.4 Relay Model Using Proxy Manager](#)
- [3.5 Two-tier Manager Operation Model](#)
- [3.6 Redundant Manager Operation Model](#)

#### Note

Installation of the Manager is now complete in the PRIMECLUSTER cluster system environment settings, so the procedure described in "Tasks to be performed on a Manager" can be skipped.



## Chapter 4 Pull Type Communication Settings

This product usually uses the communication mode in which data is "pushed" from Agents (or Proxy Managers) to the Manager. However, communications using the Push method are not always appropriate, such as with Internet environments where the managed servers are in the DMZ and communications options are limited. In such situations, configure communication environment using the Pull method.

Pull type communications are initiated by the Manager, which polls the Agents (or Proxy Managers) and pulls the results from them. These communications use the HTTP protocol and so require an HTTP communications environment on the Agents (or Proxy Managers).

### Point

- The communication mode is Push when installing Agents (or Proxy Managers). Switch the communication mode in order to use pull communication.
- For push communications, Agents (or Proxy Managers) send data autonomously, and so no particular definitions need to be made. For pull communications, definitions for the Agents and Proxy Managers from which data will be "pulled" must be defined on the Manger.
- Note that push and pull communications cannot be used together on the same Agent or Proxy Manager.

Refer to the following sections for installation methods that are based in configuration models in pull communications mode:

### 4.1 Basic Manager-Agent Model Used in Pull Operation

This section explains how to construct the environment for a basic model made up of a Manager and Agents communicating in Pull mode.

#### Procedure

The procedure is as follows:

- [4.1.1 Tasks to perform on the Manager](#)
  1. Install a Manager.
  2. Make Pull communication definitions for the Manager.
  3. Set up the Manager.
  4. Start the Manager service or daemon and confirm that it operates normally.
- [4.1.2 Tasks to perform on the Agent](#)
  1. Install an Agent.
  2. Switch the Agent from Push to Pull.
  3. Set up Pull communications for the Agent.
  4. Set up the Agent.
  5. Start the Agent service or daemon and confirm that it operates normally.
- [4.1.3 Tasks to perform on the Operation Management Client](#)
  1. Install an Operation Management Client.
  2. Set up the communication environment of the Operation Management Client

3. Start the Operation Management Client and confirm that it operates normally.

## 4.1.1 Tasks to perform on the Manager

---

1. **Install a Manager.**

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

2. **Define Pull communications for the Manager**

Make Pull communication definitions by referring to "[4.4.1 Defining Pull communications](#)".

3. **Set up the Manager.**



Point

.....  
Set up the Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

4. **Start the Manager service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.1.2 Tasks to perform on the Agent

---

1. **Install an Agent.**

Install the Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

2. Switch the Agent from Push to Pull.

Switch the Agent from Push to Pull by referring to "[4.4.3.2 Tasks to perform on the Agent or Proxy Manager](#)".

3. **Set up Pull communications for the Agent.**

Execute the Pull communication setup command by referring to "[4.4.2 Setting up a Pull Communication Environment](#)".

4. **Set up the Agent.**

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

5. **Start the Agent service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.1.3 Tasks to perform on the Operation Management Client

---

### 1. Install an Operation Management Client.

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)".

### 2. Set up the communication environment of the Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

### 3. Start the Operation Management Client and confirm that it operates normally.

Specify the following URL in a Web browser and check that the Console starts normally:

`http://host name of Operation Management Client/SSQC/AdminConsole.html`

Refer to the *User's Guide (Console)* for the environment settings.



Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

## 4.2 Proxy Manager Relay Model Used in Pull Operation

---

This section explains how to construct an environment in which a Proxy Manager is installed as a relay in an extranet and communication with Managers in the intranet is achieved by the Proxy Manager relaying Agent information.

### Procedure

The procedure is as follows:

#### - [4.2.1 Tasks to perform on the Manager](#)

1. Install a Manager.
2. Make Pull communication definitions for the Manager.
3. Set up the Manager.
4. Start the Manager service or daemon and confirm that it operates normally.

#### - [4.2.2 Tasks to perform on the Proxy Manager](#)

1. Install a Proxy Manager
2. Switch the Proxy Manager from Push to Pull.
3. Set up a Pull communication environment for the Proxy Manager.
4. Set up the Proxy Manager
5. Start the Proxy Manager service or daemon and confirm that it operates normally.

- [4.2.3 Tasks to perform on the Agent](#)

1. Install an Agent.
2. Switch the Agent from Push to Pull.
3. Set up a Pull communication environment for the Agent.
4. Set up the Agent.
5. Start the Agent service or daemon and confirm that it operates normally.

- [4.2.4 Tasks to perform on the Operation Management Client](#)

1. Install an Operation Management Client.
2. Set up the communication environment of the Operation Management Client
3. Start the Operation Management Client and confirm that it operates normally.

## 4.2.1 Tasks to perform on the Manager

---

1. **Install a Manager.**

Install a Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

2. **Define Pull communications for the Manager**

Define Pull communications by referring to "[4.4.1 Defining Pull communications](#)".

3. **Set up the Manager.**



Point

.....  
Set up the Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

4. **Start the Manager service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.2.2 Tasks to perform on the Proxy Manager

---

1. **Install a Proxy Manager**

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

2. Switch the Agent from Push to Pull.

Switch the Agent from Push to Pull by referring to "[4.4.3.2 Tasks to perform on the Agent or Proxy Manager](#)".

3. **Set up a Pull communication environment for the Proxy Manager**

Execute the `sqcSetFileSec` command by referring to "[4.4.2 Setting up a Pull Communication Environment](#)".

4. **Set up the Proxy Manager**



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

5. **Start the Proxy Manager service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.2.3 Tasks to perform on the Agent

---

1. **Install an Agent.**

Install an Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

2. Switch the Agent from Push to Pull.

Switch the Agent from Push to Pull by referring to "[4.4.3.2 Tasks to perform on the Agent or Proxy Manager](#)".

3. **Set up Pull communications for the Agent.**

Execute the `sqcSetFileSec` command by referring to "[4.4.2 Setting up a Pull Communication Environment](#)".

4. **Set up the Agent.**

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

5. **Start the Agent service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.2.4 Tasks to perform on the Operation Management Client

---

1. **Install an Operation Management Client**

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)".

## 2. Set up the communication environment of the Operation Management Client

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

## 3. Start the Operation Management Client and confirm that it operates normally

Specify the following URL in a Web browser and check that the Console starts normally:

```
http://host name of Operation Management Client/SSQC/AdminConsole.html
```

Refer to the *User's Guide (Console)* for the environment settings.



Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.



## 4.3 Redundant Manager Operation Model Used in Pull Operation

This section explains how to install the redundant Manager operation model for Pull operation.

### Execution environment

This function is provided by Systemwalker Service Quality Coordinator Enterprise Edition. To use this function, the Manager must be Enterprise Edition, but the Agents can be either Standard Edition or Enterprise Edition.

### Procedure

The procedure is as follows:



To use redundant Manager operation, an Operation Management Client must be connected to each Manager.

#### - 4.3.1 Tasks to perform on the first Manager

1. Install the first Manager.
2. Define Pull communications for the first Manager.
3. Set up the first Manager.
4. Start the service or daemon of the first Manager and confirm that it operates normally.

#### - 4.3.2 Tasks to perform on the second Manager

1. Install the second Manager.
2. Define Pull communications for the second Manager.

3. Set up the Manager for redundant Manager operation.
  4. Set up the second Manager.
  5. Start the service or daemon of the second Manager and confirm that it operates normally.
- [4.3.3 Tasks to perform on the Proxy Manager](#)
    1. Install a Proxy Manager
    2. Switch the Proxy Manager from Push to Pull.
    3. Define Pull communications for the Proxy Manager.
    4. Set up the Proxy Manager for redundant Manager operation.
    5. Set up the Proxy Manager
    6. Start the Proxy Manager service or daemon and confirm that it operates normally.
  - [4.3.4 Tasks to perform on the Agent](#)
    1. Install an Agent.
    2. Switch the Agent from Push to Pull.
    3. Define Pull communications for the Agent.
    4. Set up the Agent for redundant Manager operation.
    5. Set up the Agent.
    6. Start the Agent service or daemon and confirm that it operates normally.
  - [4.3.5 Tasks to perform on the first Operation Management Client](#)
    1. Install the first Operation Management Client.
    2. Set up the communication environment of the first Operation Management Client.
    3. Start the first Operation Management Client and confirm that it operates normally.
  - [4.3.6 Tasks to perform on the second Operation Management Client](#)
    1. Install the second Operation Management Client.
    2. Set up the communication environment of the second Operation Management Client.
    3. Start the second Operation Management Client and confirm that it operates normally.

## 4.3.1 Tasks to perform on the first Manager

---

### 1. Install the first Manager.

Install a Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

### 2. Define Pull communications for the first Manager.

Define Pull communications by referring to "[4.4.1 Defining Pull communications](#)".

### 3. Set up the first Manager.



.....  
 Set up a Manager if the Agent for Business function is to be used by the Manager.  
 .....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

**4. Start the service or daemon of the first Manager and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.3.2 Tasks to perform on the second Manager

---

**1. Install the second Manager.**

Install a Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

**2. Define Pull communications for the second Manager.**

Define Pull communications by referring to "[4.4.1 Defining Pull communications](#)".

**3. Set up the Manager for redundant Manager operation.**

Execute the `sqcHmSetup` command by referring to "[A.4 Manager Setup Command for Redundant Manager Operation](#)".

**4. Set up the second Manager**



.....  
Set up the second Manager if the Agent function is to be used on the Manager to collect performance information about the Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

**5. Start the service or daemon of the second Manager and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.3.3 Tasks to perform on the Proxy Manager

---



.....  
If the Proxy Manager is used to perform end user response management or service operation management, perform the following operations on the Proxy Manager.

Refer to "Managing End User Response" in the *User's Guide* for information about end user response management, and "Service Operation Management" in the *User's Guide* for information about service operation management.  
.....

**1. Install a Proxy Manager**

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".



2. Switch the Agent from Push to Pull.

Switch the Agent from Push to Pull by referring to "[4.4.3.2 Tasks to perform on the Agent or Proxy Manager](#)".

3. **Set up a Pull communication environment for the Proxy Manager**

Execute the `sqcSetFileSec` command by referring to "[4.4.2 Setting up a Pull Communication Environment](#)".

4. **Set up the Proxy Manager for redundant Manager operation.**

Set up the Proxy Manager for redundant Manager operation by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".

5. **Set up the Proxy Manager**



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

6. **Start the Proxy Manager service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.3.4 Tasks to perform on the Agent

---

1. **Install an Agent.**

Install an Agent by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

2. Switch the Agent from Push to Pull.

Switch the Agent from Push to Pull by referring to "[4.4.3.2 Tasks to perform on the Agent or Proxy Manager](#)".

3. **Set up Pull communications for the Agent.**

Execute the `sqcSetFileSec` command by referring to "[4.4.2 Setting up a Pull Communication Environment](#)".

4. **Set up the Agent for redundant Manager operation.**

Execute the `sqcHaSetup` command by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".

5. **Set up the Agent.**

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

6. **Start the Agent service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 4.3.5 Tasks to perform on the first Operation Management Client

---

1. **Install the first Operation Management Client.**

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)".



Point

Specify the IP address of the first Manager as the Manager IP address recognized by the first Operation Management Client.

2. **Set up the communication environment of the first Operation Management Client.**

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

3. **Start the first Operation Management Client and confirm that it operates normally.**

Specify the following URL in a Web browser and check that the Console starts normally:

```
http://host name of Operation Management Client/SSQC/AdminConsole.html
```

Refer to the *User's Guide (Console)* for the environment settings.



Note

Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

### 4.3.6 Tasks to perform on the second Operation Management Client

---

1. **Install the second Operation Management Client.**

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)".



Point

Specify the IP address of the second Manager as the Manager IP address recognized by the second Operation Management Client.

## 2. Set up the communication environment of the second Operation Management Client.

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

## 3. Start the second Operation Management Client and confirm that it operates normally.

Specify the following URL in a Web browser and check that the Console starts normally:

```
http://host name of Operation Management Client/SSQC/AdminConsole.html
```

Refer to the *User's Guide (Console)* for the environment settings.



Before starting the console, perform the procedure in following section to increase the desktop heap size for Windows:

- "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

## 4.4 Pull Operation Settings

---

This section explains how to define Pull operation and how to switch between the Pull and Push communication modes during operation.

### 4.4.1 Defining Pull communications

---

Use the following method to define Pull communications.

#### Execution environment

These settings can be performed on a Manager.

#### Tasks to perform on a Manager

The settings file is stored in the following location:

##### Windows

```
<Variable file storage directory>\control\agentlist.cfg
```

##### UNIX

```
/etc/opt/FJSVssqc/agentlist.cfg
```

Use the following method to edit the above file.

#### Definition method

Add the following entry for each Pull communication:

```
host name[/SQC],port number
```

To use a proxy server, specify as follows:

```
host name[/SQC],port number,proxy host name,proxy port number
```

## Sample definition

The following is a sample agentlist.cfg file:

```
[AgentList]
host.company.co.jp,23440
100.100.100.100,23440
host2.company.co.jp/SQC,80
host3.company.co.jp/SQC,80,proxy.company.co.jp,8080
#100.100.100.100,23440
```

## Point

- Specify a host name that makes communications possible. An IP address can also be used in place of a host name.
- If there are multiple agent servers, specify them on successive lines.
- "/SQC" placed after a host name indicates an alias that is needed when the HTTP communication environment on the Agent or Proxy Manager side uses a general http service such as Apache. It is not required if Systemwalker Service Quality Coordinator's own HTTP function is to be used.

## Tasks to perform on the Agent

The port number is set to 23440 by default to use Systemwalker Service Quality Coordinator's own functions as the HTTP communication environment on the Agent or Proxy Manager side. To change this port number, edit the following definition file (where the port=23440 setting is located) and restart the thttpd service by referring to "[A.8 How to Start and Stop Resident Processes](#)":

### Windows

```
<Variable file storage directory>\control\thttpd.conf
```

### UNIX

```
/etc/opt/FJSVssqc/thttpd.conf
```

### Definition method

```
cgipat=/cgi-bin/*
chroot
dir=C:\Program Files\SystemwalkerSQC\www
port=23440
```



If a target Agent is operating in a cluster system, specify its physical host name or IP address and not its logical host name or IP address.

## 4.4.2 Setting up a Pull Communication Environment

### Execution environment

These settings can be performed on an Agent or a Proxy Manager.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If Agent or Proxy Manager resident processes are running, stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

### Format

#### Windows

Use the following method to set up the Pull communication environment. (This will increase the security risk.)

Execute the following two commands:

```
C:> <Installation directory>\bin\sqcSetFileSec.exe -u <Variable file storage directory>\temp
```

```
C:> <Installation directory>\bin\sqcSetFileSec.exe -u <Variable file storage directory>\spool  
\Delayxfer
```

#### UNIX

Execute the Pull communication setup command shown below. (This will increase the security risk.)

Execute the following command:

```
/opt/FJSVssqc/bin/pullsetup.sh
```

Restart dcm and run thttpd if the thttpd service is to be used.

Refer to "[A.8 How to Start and Stop Resident Processes](#)" for details on how to start dcm and thttpd.

## 4.4.3 Switching from Push to Pull

---

This section explains how to switch from Push mode to Pull mode during operation.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).



If redundant Manager operation is being performed, first cancel the redundant operation, then switch from Push to Pull, and then set up redundant operation again.

To cancel redundancy, use the procedure described in "sqcHaSetup (Agent/Proxy Manager Setup Command for Redundant Manager Operation)" in the *Reference Guide*.

### 4.4.3.1 Tasks to perform on the Manager

Define the agentlist.cfg file by referring to "[4.4.1 Defining Pull communications](#)".

### 4.4.3.2 Tasks to perform on the Agent or Proxy Manager

#### Before performing this procedure

If Agent or Proxy Manager resident processes are running, refer to "[A.8 How to Start and Stop Resident Processes](#)" and stop the service or daemon and the tthttpd service if it is being used. Also check that the resident processes have stopped correctly.

#### Procedure

1. Changing the definition file

The definition file is stored in the following location:

#### Windows

```
< Variable file storage directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

The method used to change the definition file is explained below.

Make a backup copy of DSAconfiguration.txt before making any changes to the file.

- a. Add "\*" (asterisk) to the first letter of a section name in the [DsaForwarder] and [DsaForwarder\_sum] section.

- Before modification

```
[DsaForwarder]
[DsaForwarder_sum]
```

- After modification

```
[*DsaForwarder]
[*DsaForwarder_sum]
```

- b. Delete "\*" (asterisk) from the first letter of a section name in the [DelayXfer] section.

- Before modification

```
[*DelayXfer]
```

- After modification

```
[DelayXfer]
```

## 2. Definition of the using port number

Define the port number which is used for the Pull communication indicated in the ["4.4.1 Defining Pull communications"](#) to following files.

### Windows

```
%SystemRoot%\system32\drivers\etc\services
```

### UNIX

```
/etc/services
```

### Definition method

```
thttpd 23440/tcp
```

## 3. Execute the commands

### Windows

Use the following method to set up the Pull communication environment. (This will increase the security risk.)

Execute the following two commands:

```
C:\> <Installation directory>\bin\sqcSetFileSec.exe -u <Variable file storage directory>\temp
```

```
C:\> <Installation directory>\bin\sqcSetFileSec.exe -u <Variable file storage directory>
\spool\Delayxfer
```

### UNIX

Execute the Pull communication setup command shown below. (This will increase the security risk.)

Execute the following command:

```
/opt/FJSVssqc/bin/pullsetup.sh
```

### Note

- Web server settings are needed when Pull operation is used. Perform the setup procedure by referring to "[Chapter 5 Setting Up the Communication Environment](#)".
- If redundant Manager operation is being performed, first cancel the redundant operation, then switch from Push to Pull, and then set up redundant operation again.

#### 4. Start the Agent/Proxy Manager service or daemon and confirm that it operates normally

Start the service or daemon, and the thttpd service (if it is to be used), by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 4.4.4 Switching from Pull to Push

---

This section explains how to switch from Pull mode to Push mode during operation.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Note

If redundant Manager operation is being performed, first cancel the redundant operation, then switch from Push to Pull, and then set up redundant operation again.

To cancel redundancy, use the procedure described in "sqcHaSetup (Agent/Proxy Manager Setup Command for Redundant Manager Operation)" in the *Reference Guide*.

### 4.4.4.1 Tasks to perform on the Manager

Cancel the agentlist.cfg file by referring to "[4.4.1 Defining Pull communications](#)".

### 4.4.4.2 Tasks to perform on the Agent or Proxy Manager

#### Before performing this procedure

If Agent or Proxy Manager resident processes are running, refer to "[A.8 How to Start and Stop Resident Processes](#)" and stop the service or daemon and the thttpd service if it is being used. Also check that the resident processes have stopped correctly.



## Procedure

### 1. Changing the definition file

The definition file is stored in the following location:

#### Windows

```
< Variable file storage directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

The method used to change the definition file is explained below.

Make a backup copy of DSAconfiguration.txt before making any changes to the file.

- a. Add "\*" (asterisk) to the first letter of a section name in the [DsaForwarder] and [DsaForwarder\_sum] section.

- Before modification

```
[DsaForwarder]  
[DsaForwarder_sum]
```

- After modification

```
[*DsaForwarder]  
[*DsaForwarder_sum]
```

- b. Delete "\*" (asterisk) from the first letter of a section name in the [DelayXfer] section.

- Before modification

```
[*DelayXfer]
```

- After modification

```
[DelayXfer]
```

### 2. Execute the commands

#### Windows

Use the following method to switch from the Pull communication environment to the Push communication environment.

Execute the following two commands:

```
C:\> <Installation directory>\bin\sqcSetFileSec.exe < Variable file storage directory>\temp
```

```
C:\> <Installation directory>\bin\sqcSetFileSec.exe < Variable file storage directory> \spool  
\Delayxfer
```

#### UNIX

Use the following method to switch from the Pull communication environment to the Push communication environment.

Execute the following command:

```
/opt/FJSVssqc/bin/pullsetup.sh -u
```



**3. Start the Agent/Proxy Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

# Chapter 5 Setting Up the Communication Environment

Systemwalker Service Quality Coordinator uses HTTP to conduct the communications that are used in management. This chapter explains how to set up the HTTP communication environment.

It is necessary to set up the HTTP communication environment in the following situations:

Install type	Description
Operation Management Client	<p>This is necessary to display the console.</p> <p> <b>Note</b></p> <p>.....</p> <p>If the Web server used to set the virtual directory is Microsoft(R) Internet Information Services, refer to "<a href="#">5.2.1 Microsoft(R) Internet Information Services</a>" flowchart for setting procedures.</p> <p>Note the following points in particular.</p> <ul style="list-style-type: none"> <li>- It is necessary to make the anonymous access settings in "<a href="#">5.2.1.5 Directory security settings</a>" or basic authentication settings in "<a href="#">5.3 How to Set Up Basic Authentication for Operation Management Clients</a>".</li> <li>- The specified user should belong to the Administrators group.</li> </ul> <p>.....</p>
Manager	<p>Required when specifying the information collected by the Browser Agent in the receiving server.</p> <p> <b>Note</b></p> <p>.....</p> <p>When the Manager operates in a cluster system, perform this setup operation at both the current server and the standby server. (Cluster system operation is only available with the Enterprise Edition.)</p> <p>.....</p>
Proxy Manager	<p>Required when specifying the information collected by the Browser Agent in the receiving server.</p> <p>Required when communicating with the Manager using the pull method and using a general HTTP service instead of the thttpd function provided with Systemwalker Service Quality Coordinator.</p>
Agent	<p>Required when communicating with the Manager using the pull method and using a general HTTP service instead of the thttpd function provided with Systemwalker Service Quality Coordinator.</p>

For information on the HTTP servers supported by each installation type, refer to "[Chapter 2 Installation Conditions and Resource Estimation](#)"

## 5.1 Virtual Directories

---

Each server's virtual directory (alias) and its pathname are shown in the following table.

Server type	Alias	Physical path
Operation management client	SSQC	<b>Windows</b> Installation directory\www
Manager	SQC	<b>Windows</b> Installation directory\www <b>UNIX</b> /opt/FJSVssqc/www
Proxy Manager	SQC	<b>Windows</b> Installation directory\www <b>UNIX</b> /opt/FJSVssqc/www
Agent	SQC	<b>Windows</b> Installation directory\www <b>UNIX</b> /opt/FJSVssqc/www

## 5.2 Setting up a Virtual Directory

---

To communicate with a management server, it is necessary to register a virtual directory for a Web server.

In this section, the registration procedure will be explained using the following Web servers as examples:

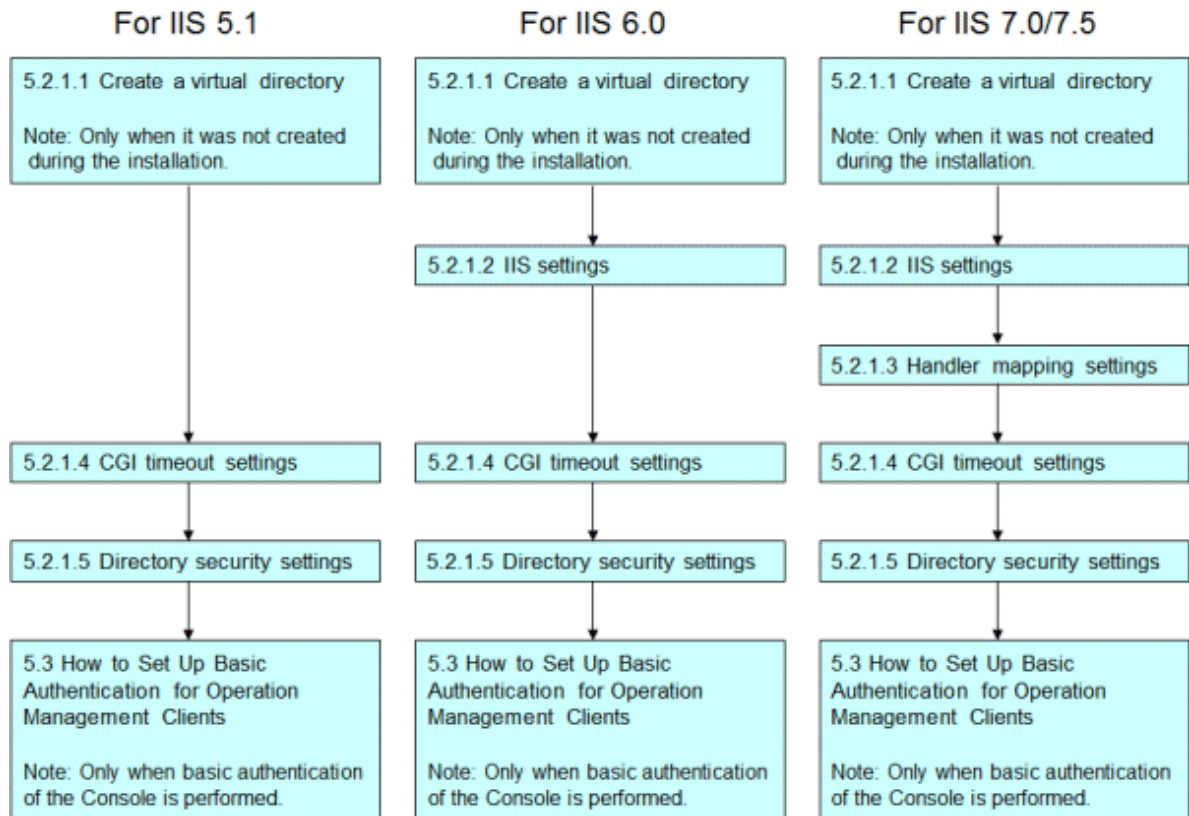
### 5.2.1 Microsoft(R) Internet Information Services

---

This section explains the Microsoft(R) Internet Information Services (IIS) settings that are needed when using Systemwalker Service Quality Coordinator.

Setting procedures depend on the version of IIS being used.

The following is a flowchart of the setting procedure:



 **Point**

The following shows the versions of IIS and the operating systems they are associated with.

**IIS 5.1**

IIS5.1 is a standard installation with Windows XP.

**IIS 6.0**

IIS 6.0 is a standard installation with Windows 2003 Server.

**IIS7.0/7.5**

IIS 7.0 is a standard installation with Windows Server 2008 and Windows Vista. IIS7.5 is a standard installation with Windows Server 2008 R2 and Windows 7.

### 5.2.1.1 Create a virtual directory

This sub-section explains how to create the virtual directories used communicate with the Manager using the Operation Management Client's console and the Pull method.

When installing under the conditions listed below on a Operation Management Client,a virtual directory will be created automatically.

- IIS is installed
- The World Wide Web Publishing Service (WWW Service) is running
- A site has been set as the default web site

## Before performing this procedure

Confirm the following when executing the command to create a virtual directory.

- IIS is installed
- The World Wide Web Publishing Service (WWW Service) is running
- A site has been set as the default web site

## Commands to be executed

Start the command prompt and run the following commands to create a virtual directory.



Run the command after moving the current directory to <Installation directory>\bin.

```
cd <Installation directory>\bin
```

On Windows Vista, Windows Server 2008, and Windows 7, it is necessary to run these commands under an account with administrator privileges. To do so, from the **Start** menu, select **All Programs, Accessories**, then right-click **Command Prompt** and select **Run as administrator**. Now run the commands described below in the command prompt that appears.

- Operation management client:

```
sqcSetIISreg.exe -c
```

- Manager:

```
sqcSetIISreg.exe -m
```

- Proxy Manager:

```
sqcSetIISreg.exe -pm
```

- Agent:

```
sqcSetIISreg.exe -a
```



The commands referred to below may produce an error in the following situations:

- IIS is not installed
- Windows Scripting Host is not assigned (IIS 5.1 or 6.0)
- The command line management tool (appCmd.exe) is not installed (IIS 7.0, 7.5)
- The setting has already been specified

### 5.2.1.2 IIS settings

IIS settings are necessary if you are using IIS 6.0 or later.

Microsoft(R) Internet Information Services (IIS) 6.0:

If IIS version 6.0 is used, execute the following command after starting the command prompt.

## Note

Run the command after moving the current directory to <Installation directory>\bin.

```
C:\> cd <Installation directory>\bin
```

- Operation management client:

```
sqccsetc.bat
```

- Manager:

```
sqcmsetc.bat
```

- Proxy Manager:

```
sqcpsetc.bat
```

- Agent for Server:

```
sqcasetc.bat
```

- Agent for Business:

```
sqcwsetc.bat
```

## Microsoft(R) Internet Information Services (IIS) 7.0/7.5

If IIS 7.0/7.5 is used, execute the following command after starting the command prompt.

## Note

Execute the command after switching to the installation directory.

```
C:\> cd <Installation directory>\bin
```

On Windows Vista, Windows Server 2008, and Windows 7, it is necessary to run these commands under an account with administrator privileges. Select **Programs** and then **Accessories** from the **Start** menu. Then, right-click on **Command Prompt** and select **Run as Administrator** from the pop-up menu to display the Command Prompt window. Then, execute the following command.

- Operation management client:

```
sqccsetc_iis7.bat
```

- Manager:

```
qcmsetc_iis7.bat
```

- Proxy Manager:

```
sqcpsetc_iis7.bat
```

- Agent for Server:

```
sqcasetc_iis7.bat
```

- Agent for Business:

```
sqcwsetc_iis7.bat
```

### Note

CGI is registered as an extension in Microsoft(R) Internet Information Service when this command is run. If the command has already been run, then the following error message may be output, but this is not a problem because CGI has already been registered.

```
"* appcmd.exe C:\Program Files\SystemwalkerSQC-C\www\cgi-bin\Rep_mk_history.cgi Failed."
```

```
ERROR (message: New add object missing required attributes. Cannot add duplicate collection entry of type 'add' with unique key attribute 'path' set to 'C:\Program Files\SystemwalkerSQC-C\www\cgi-bin\rmmperform.cgi'.)
```

## 5.2.1.3 Handler mapping settings

Handler mapping settings are needed when IIS 7.0/7.5 is used.

### Before performing this procedure

Before handler mapping can be set up, **CGI function** must be enabled under **Application Development Function** in the **World Wide Web Service** section of the IIS.

### Note

"CGI" functionality is disabled in the default installation. Before doing the following procedure, enable "CGI" functionality.

### Procedure

In Server Core environments

Run the following command in the command prompt to add a map to the module.

- Requested path: \*.cgi
- Module: CgiModule
- Name: CGI-.cgi

```
%windir%\system32\inetsrv\appcmd set config /section:handlers /+[name='CGI-.cgi',path='*.cgi',verb='*',modules='CgiModule']
```

In other than Server Core environments

1. Select the following virtual directory name in the settings window of IIS.
  - With Operation Management Client  
Virtual directory name: SSQC
  - With Manager/Proxy Manager/Agent  
Virtual directory name: SQC



2. Double-click **Handler mapping** in the function pane on the right.
3. Select **Add Module Mapping** from the operation menu on the right.
4. Set the following information in the **Add Module Mapping** dialog box and click the **OK** button:
  - Request path: \*.cgi
  - Module: CgiModule
  - Name: CGI-.cgi

#### 5.2.1.4 CGI timeout settings

The IIS timeout value must be extended to 3600 seconds.

##### Procedure

Microsoft(R) Internet Information Services (IIS) 5.1:

Change the IIS timeout as follows:

1. Right-click the computer icon on the IIS settings window, and then click **Properties** in the shortcut menu to open the properties sheet.
2. In the **Master Properties** drop-down list box select **WWW Service**, and then click **Edit**.
3. Click the **Home Directory** tab.
4. Click the **Configuration** button.
5. Click the **Process Options** tab and change the **CGI script timeout** field to 3600.

Change the IIS connection timeout as follows:

1. Right-click the icon of an existing website on the IIS settings window, and then click **Properties** in the shortcut menu to open the properties sheet.
2. Click the **Web Site** tab.
3. Set the **Connection timeout** field to 3600.

Microsoft(R) Internet Information Services (IIS) 6.0:



Before performing this procedure, use **Configuration Backup/Restore** to back up the configuration.

Change the IIS timeout as follows:

1. Stop the IIS services.  
From the command prompt, execute "IISRESET /STOP" to stop the following:
  - World Wide Web Publishing service
  - IIS Admin service
2. Open the file below:  
`<system drive>:\Windows\System32\inetrv\MetaBASE.XML`
3. In the file, change **CGItimeout** to 3600.

4. Start the IIS services.  
From the command prompt, execute "IISRESET /START" to start the following:
  - World Wide Web Publishing service
  - IIS Admin service

Microsoft(R) Internet Information Services (IIS) 7.0/7.5:

Change the IIS timeout as follows:

1. Expand <server name>, expand **Web sites**, then click **Default Website > SSQC > cgi-bin**, and then double-click **CGI**.
2. Set the **Timeout (hh:mm:ss)** field to one hour (01:00:00), and then press ENTER.
3. On the **Tools** window, click **Apply**.

### 5.2.1.5 Directory security settings

**Procedure**

Microsoft(R) Internet Information Services (IIS) 5.1/6.0:

Set up IIS 5.1 and 6.0 as follows:

1. Select the following virtual directory name from the IIS settings window.
  - With Operation Management Client  
Virtual directory name: SSQC
  - With Manager/Proxy Manager/Agent  
Virtual directory name: SQC
2. Click the **Directory Security** tab in the **Properties** window of the above virtual directory.
3. Set an account with administrator privileges (the account used when the Operation Management Client was installed) as the account to use for anonymous access.
4. Clear the **Basic authentication** check box for authenticated access.



Add following MIME types definition when MIME types relating to .xlsx and .xlsm do not exist.

- IIS 5.1

Define MIME for IIS with following procedure.

1. Right-click **Web Site** on the IIS setting window and click **Properties** in the short cut menu to open the **properties** sheet.
2. Select **HTTP Header** in **Properties of the default web site** and click **File Type** in the MIME map section.
3. Add following definition with **Add of File Type**.

Associate d extension	Contents Type (MIME)
.xlsx	application/vnd.openxmlformats-officedocument.spreadsheetml.sheet

Associated extension	Contents Type (MIME)
.xlsm	application/vnd.ms-excel.sheet.macroEnabled.12

- IIS 6.0

Define MIME for IIS with following procedure.

1. Right-click the computer icon on the IIS settings window, and then click **Properties** in the shortcut menu to open the **properties** sheet.
2. Click **MIME Type** in the MIME type section in **Internet Information Services**.
3. Add following definition with **New of MIME Type**.

Extension	MIME Type
.xlsx	application/vnd.openxmlformats-officedocument.spreadsheetml.sheet
.xlsm	application/vnd.ms-excel.sheet.macroEnabled.12

## Microsoft(R) Internet Information Services (IIS) 7.0/7.5

Set up IIS 7.0/7.5 as follows:

1. Select following virtual directory name in the settings window of IIS.
  - With Operation Management Client  
Virtual directory name: SSQC
  - With Manager/Proxy Manager/Agent  
Virtual directory name: SQC
2. Double-click **Authentication** in the function view.
3. Check that the status of **Anonymous authentication** is **Enabled**, then click **Anonymous authentication** and select **Edit** from the operation menu on the right.
4. When the **Edit Anonymous Authentication Qualification Information** dialog box appears, select **Specific user** and click the **Set** button.
5. Set the user name and password of a user with administrator privileges in the **Set Qualification Information** dialog box.



**Point**

Refer to "[5.3 How to Set Up Basic Authentication for Operation Management Clients](#)" if it is necessary to restrict access to the Management Console.

## 5.2.2 Apache HTTP Server 1.3

### Procedure

#### Windows

1. **Edit the configuration file**

Open the configuration file from the **Start** menu as follows:

Start

-> Programs

-> [Apache HTTP Server]

-> [Configure Apache Server]

-> [Edit the Apache httpd.conf Configuration File]

If the environment differs from the above, open the configuration file "httpd.conf" in an editor directly.

## 2. Set the virtual directory

Add the following lines to the end of the file.

```
ScriptAlias /alias/cgi-bin/"installation directory/www/cgi-bin/"
<Directory "installation directory/www/cgi-bin">
Options ExecCGI
AllowOverride None
Order allow,deny
Allow from all
</Directory>
Alias /alias/"installation directory/www/"
<Directory "installation directory/www">
Options None
AllowOverride None
Order allow,deny
Allow from all
</Directory>
```



### Note

- If necessary, change the access permission settings, etc., to more appropriate values.
- Virtual directory settings vary according to the version of Apache that is used. Refer to the Apache manual for details.

## 3. Save the settings

Overwrite the previous file and close the editor. Restart Apache HTTP Server if it is running.

## UNIX

### 1. Edit the configuration file

Open the configuration file in the editor.

### 2. Set the virtual directory

Set up the virtual directory.

Add the following lines to the end of the file:

```
ScriptAlias /alias/cgi-bin/ "installation directory/www/cgi-bin/"
<Directory "installation directory/www/cgi-bin">
Options ExecCGI
AllowOverride None
Order allow,deny
Allow from all
</Directory>
Alias /alias/ "installation directory/www/"
<Directory "installation directory/www">
Options None
AllowOverride None
Order allow,deny
Allow from all
</Directory>
```

 **Note**

- If necessary, change the access permission settings, etc., to more appropriate values.
- Virtual directory settings vary according to the version of Apache that is used. Refer to the Apache manual for details.
- Since character transformation may be caused in the state of the early stages of Apache2.0, please set it as the following state if needed.

AddDefaultCharset Off

**3. Save the settings**

Overwrite the previous file and close the editor. Restart Apache HTTP Server if it is running.

## 5.2.3 Netscape(R) Enterprise Server 3.0

---

### Procedure

#### Windows

**1. Display the Server Manager Page**

Open the Server Administration Page by selecting the following items from the **Start** menu:

Start

-> Programs

-> [Netscape SuiteSpot]

-> [Administration]

If the user's environment differs from that shown above, adjust accordingly.

## 2. Add the virtual directory

Select the server to which a virtual directory is to be added and display the Server Manager Page.

Create the virtual directory.

Click the **Content Management** button located at the top of the page and then click the link to **Additional Document Directories** in the list in the left-hand column to display the **Additional Document Directories** page.

Enter the following settings and click the **OK** button. When the **Save and Apply Changes** page appears, click the **Save and Apply** button.

URL Prefix: Alias

Map To Directory: Installation directory/www

## 3. Set up CGI program execution

Set the execution permissions for CGI programs in the "cgi-bin" subdirectory of the newly created virtual directory.

Click the **Programs** button located at the top of the page and then click **CGI Directory** in the left-hand column to display the **CGI Directory** page.

Enter the following settings and click the **OK** button. When the **Save and Apply Changes** page appears, click the **Save and Apply** button.

URL Prefix: Alias/cgi-bin

CGI Directory: Installation directory\www\cgi-bin

## 5.2.4 Interstage HTTP Server (bundled with Interstage Application Server)

---

### Procedure

#### Windows

##### 1. Edit the environment Interstage HTTP Server environment definition file.

Use the editor to open the Interstage HTTP Server environment definition file.

Edit the environment definition file stored at the following location.

- Interstage Application Server V8.x or earlier

```
C:\Interstage\F3FMihs\conf\httpd.conf
```

Note: When the default installation path is used

- Application Server V9.x or later

```
C:\Interstage\F3FMihs\servers\FJapache\conf\httpd.conf
```

Note: When the default installation path is used

##### 2. Setting up a Virtual Directory

With other than the Operation Management Client

- Delete the "#" from the start of the following line to enable CGI.

```
LoadModule cgi_module "C:/Interstage/F3FMihs/modules/mod_cgi.so"
```

- Add the following lines to the end of the file:

```
ScriptAlias/SQC/cgi-bin/ "Installation directory/www/cgi-bin/"
```

```
<Directory "Installation directory/www/cgi-bin">
```

```
Options ExecCGI
```

```
AllowOverride None
```

```
Order allow,deny
```

```
Allow from all
```

```
</Directory>
```

```
Alias /SQC/ "Installation directory/www/"
```

```
<Directory "Installation directory/www">
```

```
Options None
```

```
AllowOverride None
```

```
Order allow,deny
```

```
Allow from all
```

```
</Directory>
```

#### With Operation Management Client

- a. Delete the "#" from the start of the following line to enable CGI.

```
LoadModule cgi_module "C:/Interstage/F3FMihs/modules/mod_cgi.so"
```

- b. Add following definition as MIME setting.

```
AddType application/vnd.openxmlformats-officedocument.spreadsheetml.sheet .xlsx
```

```
AddType application/vnd.ms-excel.sheet.macroEnabled.12 .xlsm
```

- c. Add the following lines to the end of the file.

```
Alias /SSQC/cgi-bin/js/ "<Installation directory>/www/cgi-bin/js/"
```

```
<Directory "<Installation directory>/www/cgi-bin/js">
```

```
Options None
```

```
AllowOverride None
```

```
Order allow,deny
```

```
Allow from all
```

```
</Directory>
```

```
Alias /SSQC/cgi-bin/image/ "<Installation directory>/www/cgi-bin/image/"
```

```
<Directory "<Installation directory>/www/cgi-bin/image">
```

```
Options None
```

```
AllowOverride None
```

```
Order allow,deny
```

```
Allow from all
```

```
</Directory>
```

```
Alias /SSQC/cgi-bin/style/ "<Installation directory>/www/cgi-bin/style/"
```

```

<Directory "<Installation directory>/www/cgi-bin/style">
Options None
AllowOverride None
Order allow,deny
Allow from all
</Directory>
ScriptAlias /SSQC/cgi-bin/ "<Installation directory>/www/cgi-bin/"
<Directory "<Installation directory>/www/cgi-bin">
Options ExecCGI
AllowOverride None
Order allow,deny
Allow from all
</Directory>
Alias /SSQC/ "<Installation directory>/www/"
<Directory "<Installation directory>/www">
Options None
AllowOverride None
Order allow,deny
Allow from all
</Directory>

```



### Note

Change the settings for access privileges and so on if necessary.

### 3. Save the settings

Overwrite the previous file and close the editor. Restart Interstage HTTP Server if it is running.

## UNIX

### 1. Edit the Interstage HTTP Server environment definition file

Use the editor to open the Interstage HTTP Server environment definition file.

Edit the environment definition file stored at the following location.

- Interstage Application Server V8.x or earlier

```
/etc/opt/FJSVihs/conf/httpd.conf
```

Note: When the default installation path is used

- Interstage Application Server V9.x or later

```
/var/opt/FJSVihs/servers/FJapache/conf/httpd.conf
```

Note: When the default installation path is used



## 2. Set the virtual directory

- a. Delete the "#" from the start of the following line to enable CGI.

```
LoadModule cgi_module "/opt/FJSVihs/modules/mod_cgi.so"
```

- b. Add the following lines to the end of the file:

```
ScriptAlias /Alias/cgi-bin/ "installation directory/www/cgi-bin/"
<Directory "installation directory/www/cgi-bin">
Options ExecCGI
AllowOverride None
Order allow,deny
Allow from all
</Directory>
Alias /Alias/ "installation directory/www/"
<Directory "installation directory/www">
Options None
AllowOverride None
Order allow,deny
Allow from all
</Directory>
```



Change the settings for access privileges and so on if necessary.

## 3. Save the settings

Overwrite the previous file and close the editor. Restart Interstage HTTP Server if it is running.

## 5.2.5 For InfoProvider Pro (bundled with Interstage Application Server)

---

### Procedure

#### Windows

##### 1. Edit the InfoProvider Pro environment definition file

Use the editor to open the InfoProvider Pro environment definition file.

##### 2. Set the virtual directory

Add the following lines to the end of the file:

```
cgi-path-ident: Installation directory\www\cgi-bin Alias/cgi-bin
```

link: *Alias Installation directory*\www

### 3. Save the settings

Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

#### Note

If the version of InfoProvider Pro is earlier than the version bundled with Interstage Standard Edition V2.0L20, it will not be possible to use the above setup method due to functional limitations. Use the following method instead:

#### 1. Create a virtual directory

Create a new directory named *Alias* in the highest directory that is made available by the Web server, then copy to this directory everything in Systemwalker Service Quality Coordinator installation directory\www except the "cgi-bin" directory. Use the editor to open the file named "viewer.html" in the Alias directory and insert the <PARAM> tag between the <APPLET> tags, as in the following example:

```
<APPLET codebase="./classes/" archive="viewer.jar" code="Viewer.class" width=950
height=512>
<PARAM name="CGI" value=http://xxx.yyy.com/Alias-cgi-bin/dbref.cgi>
</APPLET>
```

#### Note

"xxx.yyy.com" in the above example represents the host address of the Web server. Change this to the correct address.

#### 2. Add settings

Use the editor to open the environment definition file of InfoProvider Pro and append the following line to the end of the file:

```
cgi-path-ident: Installation directory\www\cgi-bin Alias-cgi-bin
```

#### 3. Save the settings

Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

## UNIX

#### 1. Edit the InfoProvider Pro environment definition file

Use the editor to open the InfoProvider Pro environment definition file.

#### 2. Set the virtual directory

Add the following lines to the end of the file:

```
cgi-path-ident: Installation directory/www/cgi-bin Alias/cgi-bin
link: Alias Installation directory/www/cgi-bin
```

### 3. Save the settings

Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

#### Note

If the version of InfoProvider Pro is earlier than the version bundled with Interstage Standard Edition 3.0, it will not be possible to use the above setup method due to functional limitations. Use the following method instead:

#### 1. Create a virtual directory

Create a new directory named *Alias* in the highest directory that is made available by the Web server, then copy to this directory everything in *Systemwalker Service Quality Coordinator installation directory*\www except the "cgi-bin" directory. Use the editor to open the file named "viewer.html" in the *Alias* directory and insert the <PARAM> tag between the <APPLET> tags, as in the following example.

```
<APPLET codebase="./classes/" archive="viewer.jar" code="Viewer.class" width=950
height=512>
<PARAM name="CGI" value=http://xxx.yyy.com/Alias-cgi-bin/dbref.cgi>
</APPLET>
```

#### Note

"xxx.yyy.com" in the above example represents the host address of the Web server. Change this to the correct address.

#### 2. Add settings

Use the editor to open the environment definition file of InfoProvider Pro and append the following line to the end of the file:

```
cgi-path-idnt: Installation directory/www/cgi-bin Alias-cgi-bin
```

#### 3. Save the settings

Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

## 5.3 How to Set Up Basic Authentication for Operation Management Clients

---

This section explains how to set up basic authentication for the following files on operation management clients.

- The launch HTML for the Admin Console
- The launch HTML for users (created using the **User Definitions** tab of the **Admin Console** window)

## Point

- Before setting up basic authentication here, set up anonymous access as explained in "5.2.1 Microsoft(R) Internet Information Services" and "5.2.1.5 Directory security settings".

## Note

When using basic authentication settings, the policy distribution function cannot be used.

Basic authentication settings are made in three steps: registering a user account with Windows, setting up access control to files, and making file security settings for Microsoft(R) Internet Information Services(IIS).

## Procedure

### 1. Registering a user account with Windows

Register a user account for accessing the Admin Console launch HTML or a user launch HTML file.

- The user that accesses the Admin Console can either be a newly created account or the account with Administrator privileges that is usually used.
- No specifications need to be made if the account type (access permissions) for the account created here (for accessing the Admin Console or a user launch HTML file) is the same as the account that can allow read permissions for the file that is set up in Step 2 "Making access control settings to files" below.

Register a user by running **User Accounts** from the Control Panel.

Refer to the Windows Help for details on how to register users.

### 2. Setting up access control to files

For Windows XP, select **Folder Options** from the **Tools** menu of **Explorer**, select the **View** tab, and then cancel the **Use simple file sharing** checkbox in the **Advanced Settings** section.

## Note

Simple file sharing is enabled by default with Windows XP, but the change above means that simple file sharing cannot be performed. Make absolutely sure that this change will not affect how the system operates, by referring to the Help files for Windows(R) XP.

Reference: Extract from the Help information for the Folder Options dialog box

By using simple file sharing, folders can be shared with all of the members of the work group or network that you belong to, or user profile folders can be made private.

1. Open the following folder using **Explorer**:

operation management client installation folder\www

2. Select either "AdminConsole.html" or "*user name*.html", and open the **Properties** window by clicking the right mouse button and then selecting **Properties** from the context menu that appears.
3. Select the **Security** tab, and register users that are allowed to access the file in the **Group or user name** box. At this point, remove any registered users that should not be allowed to access the file.
4. Allow at least **Read** permissions for users that are to be allowed to access the file

5. Apply these definitions by clicking the **OK** button.
- 

### 3. Making file security settings with IIS

The method for making file security settings with IIS is as follows:

1. Select the "SSQC" virtual directory name from the settings window for Microsoft(R) Internet Information Services.
2. Select either "AdminConsole.html" or "*user name.html*" in the window area on the right-hand side, and open the **Properties** window by clicking the right mouse button and then selecting **Properties** from the context menu that appears.
3. Select the **File Security** tab, and then click the **Edit** button under **Anonymous access and authentication control**.
4. Cancel the **Anonymous access** checkbox and select the **Basic authentication** checkbox for **Authenticated access**. At this point, cancel the checkboxes for any other authentication methods that may have been selected.
5. Apply these definitions by clicking the **OK** button.

Set as follows for IIS 7.0/7.5.

1. Select **SSQC** as the virtual directory name from the IIS settings window.
2. Click **Permissions** in the function view.
3. If the status of **Basic Authentication** is **Disabled**, right-click on **Basic Authentication** and select **Enabled** from the context menu.  
  
Note that if the **Basic Authentication** item does not appear, then **Basic Authentication** has not been installed. Go to **Server Manager >> Web Server >> Add Role Services** and check **Security >> Basic Authentication**. This installs **Basic Authentication**.
4. Disable other authentications if they are enabled.
5. When you open the console window, a window for entering a user name and password appears. Enter the name of a user with Administrator privileges.

This completes the settings for basic authentication.

# Chapter 6 Changing the Installation Environment

This chapter explains how to change the configuration model and the Manager IP address.

## 6.1 Changing to a Relay Model Based on Proxy Manager

This procedure is used to migrate to a relay model based on Proxy Manager from an environment already set up according to "3.3 Basic Manager-Agent Model".

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Procedure

The procedure is as follows:

- [6.1.1 Tasks to perform on the Proxy Manager](#)
  1. Install a Proxy Manager
  2. Set up the Proxy Manager
  3. Start the Proxy Manager service or daemon and confirm that it operates normally
- [6.1.2 Tasks to perform on the Agent](#)

### 6.1.1 Tasks to perform on the Proxy Manager

---

#### 1. Install a Proxy Manager

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

#### 2. Set up the Proxy Manager



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 3. Start the Proxy Manager service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.1.2 Tasks to perform on the Agent

---

Change the IP address of the Manager recognized by Agents to the IP address of the Proxy Manager by referring to "[6.4.1 Changing the IP Address/Host Name of the Manager that Is Recognized by Agents and Proxy Managers](#)".



## 6.2 Changing to a Two-tier Manager Operation Model

---

This procedure is used to migrate to a two-tier Manager operation model from an environment already set up according to "[3.3 Basic Manager-Agent Model](#)".

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Procedure

The procedure is as follows:

- [6.2.1 Tasks to perform on the Enterprise Manager](#)
  1. Install an Enterprise Manager
  2. Set up the communication environment
  3. Start the Enterprise Manager service or daemon and confirm that it operates normally
- [6.2.2 Tasks to perform on the Manager](#)
  1. Set up a two-tier Manager operation
  2. Start the Manager service or daemon and confirm that it operates normally
- [6.2.3 Tasks to perform on the Proxy Manager](#)
  1. Install a Proxy Manager
  2. Set up the Proxy Manager
  3. Start the Proxy Manager service or daemon and confirm that it operates normally
- [6.2.4 Tasks to perform on the Operation Management Client](#)

### 6.2.1 Tasks to perform on the Enterprise Manager

---

#### 1. Install a Proxy Manager

Install an Enterprise Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

#### 2. Set up the Enterprise Manager communication environment

If a host name cannot be used to communicate with the Manager (such as when the Manager is in a different subnet), specify the host name and IP address of the Manager to be managed in the hosts file.

3. **Set up the Enterprise Manager.**



Set up the Enterprise Manager if the Agent function is to be used on the Enterprise Manager to collect performance information about the Enterprise Manager itself.

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

4. **Start the Enterprise Manager service or daemon and confirm that it operates normally.**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.2.2 Tasks to perform on the Manager

---

1. **Set up a two-tier Manager operation**

Execute the `sqcEmSetup` command by referring to "[A.3 Two-tier Manager Operation Setup Command](#)".

2. **Start the Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.2.3 Tasks to perform on the Proxy Manager

---



If the Proxy Manager is used to perform end user response management or service operation management, perform the following operations on the Proxy Manager.

Refer to "Managing End User Response" in the *User's Guide* for information about end user response management, and "Service Operation Management" in the *User's Guide* for information about service operation management.

1. **Install a Proxy Manager**

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

2. **Set up the Proxy Manager**



Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".



3. **Start the Proxy Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.2.4 Tasks to perform on the Operation Management Client

Change the IP address of the Manager recognized by the operation management client by referring to "[6.4.2 Changing the IP Address/Host Name of the Manager that Is Recognized by Operation Management Clients](#)".



For Manager registration in the environment settings, register the Enterprise Manager as a Manager.



## 6.3 Changing to a Redundant Manager Operation Model

This procedure is used to migrate to a redundant Manager operation model from an environment already set up according to "[3.3 Basic Manager-Agent Model](#)".

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Procedure

The procedure is as follows:



To use redundant Manager operation, an Operation Management Client must be connected to each Manager.

- [6.3.1 Tasks to perform on the second Manager](#)

1. Install the second Manager
2. Set up the Manager for redundant Manager operation
3. Set up the second Manager
4. Start the service or daemon of the second Manager and confirm that it operates normally

- [6.3.2 Tasks to perform on the Proxy Manager](#)

1. Install a Proxy Manager
2. Set up the Proxy Manager for redundant Proxy Manager operation
3. Set up the Proxy Manager
4. Start the Proxy Manager service or daemon and confirm that it operates normally

- [6.3.3 Tasks to perform on the Agent](#)
  1. Set up the Agent for redundant Manager operation
  2. Start the Agent service or daemon and confirm that it operates normally.
- [6.3.4 Tasks to perform on the second Operation Management Client](#)
  1. Install the second Operation Management Client
  2. Set up the communication environment of the second Operation Management Client
  3. Start the second Operation Management Client and confirm that it operates normally

## 6.3.1 Tasks to perform on the second Manager

---

### 1. Install the second Manager

Install the Manager by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

### 2. Set up the Manager for redundant Manager operation



Note

Set up a Manager for redundant Manager operation only when using Pull operation.

Execute the `sqcHmSetup` command by referring to "[A.4 Manager Setup Command for Redundant Manager Operation](#)".

### 3. Set up the second Manager



Point

If Manager setup has been performed on the first Manager, set up the second Manager as well.

Execute the `sqcRPolicy` and `sqcSetPolicy` commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 4. Start the service or daemon of the second Manager and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.3.2 Tasks to perform on the Proxy Manager

---



Point

If the Proxy Manager is used to perform end user response management or service operation management, perform the following operations on the Proxy Manager.

Refer to "Managing End User Response" in the *User's Guide* for information about end user response management, and "Service Operation Management" in the *User's Guide* for information about service operation management.

### 1. Install a Proxy Manager

Install a Proxy Manager by referring to "[3.1.2 Installing an Agent/Proxy Manager](#)".

### 2. Set up the Proxy Manager for redundant Manager operation.

Run the sqcHaSetup command by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".

### 3. Set up the Proxy Manager



.....  
Set up the Proxy Manager if the Agent function is to be used on the Proxy Manager to collect performance information about the Proxy Manager itself.  
.....

Execute the sqcRPolicy and sqcSetPolicy commands by referring to "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 4. Start the Proxy Manager service or daemon and confirm that it operates normally.

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.3.3 Tasks to perform on the Agent

---

### 1. Set up the Agent for redundant Manager operation.

1. Run the sqcHaSetup command by referring to "[A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation](#)".
2. Execute the sqcSetPolicy command.

#### Windows

```
<Installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

#### UNIX

```
/opt/FJSSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details on sqcSetPolicy.

### 2. Start the Agent service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.3.4 Tasks to perform on the second Operation Management Client

---

### 1. Install the second Operation Management Client

Install an Operation Management Client by referring to "[3.1.3 Installing an Operation Management Client](#)".

 **Point**

Specify the IP address of the second Manager as the Manager IP address recognized by the second Operation Management Client.

**2. Set up the communication environment of the second Operation Management Client**

It will be necessary to enter HTTP virtual directory settings and virtual directory property settings on the Operation Management Client. Perform these settings by referring to "[Chapter 5 Setting Up the Communication Environment](#)".

**3. Start the second Operation Management Client and confirm that it operates normally**

Specify the following URL in a Web browser and check that the Console starts normally:

```
http://host name of Operation Management Client/SSQC/AdminConsole.html
```

Refer to the *User's Guide (Console)* for the environment settings.

## 6.4 Changing the IP Address/Host Name of a Manager

The following tasks must be performed to change the IP address/host name of a Manager.

The procedure is explained below.

### 6.4.1 Changing the IP Address/Host Name of the Manager that Is Recognized by Agents and Proxy Managers

Change the IP address/host name of the Manager using commands on the Agents and Proxy Managers.

 **Point**

- This modification is required for "push" operations only. For "pull" operations, there is no need to modify this definition file. Refer to "[Chapter 4 Pull Type Communication Settings](#)" for details on "pull" operations.
- Please refer to "[6.5 Migrating Managers](#)" when shifting Manager to another machine by replacing.

#### Before performing this procedure

If Agent or Proxy Manager DCM services or dcmd processes are running, stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the DCM services or dcmd processes have stopped correctly.

#### Procedure

1. Execute sqcSetMgrInfo (for Agent/Proxy Manager) command.

**Windows**

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
```

```
C:\Program Files\SystemwalkerSQL\bin>sqlSetMgrInfo.bat -h <host name or IP address>
```

#### UNIX

```
/opt/FJSVssqc/bin/sqlSetMgrInfo.sh -h <host name or IP address>
```

Refer to "sqlSetMgrInfo (for Agent/Proxy Manager)" on *Reference Guide* for more information.

### 2. Creating server resource information collection policy

Refer to "[A.1 Server Resource Information Collection Policy Creation Command](#)" and execute sqlRPolicy and sqlSetPolicy.

### 3. Start and confirm the service or daemon

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.4.2 Changing the IP Address/Host Name of the Manager that Is Recognized by Operation Management Clients

---

The IP address/host name of the Manager can be changed by executing the following command on an operation management client:

#### Windows

```
Installation directory\bin\sqlSetMgrInfo.exe -p IPaddress\host name
```

Refer to "sqlSetMgrInfo (for Operation Management Client)" on *Reference Guide* for more information.

#### Note

In Windows Vista, Windows Server 2008, and Windows 7, this command must be executed by a user with administrator privileges. Click the Windows **Start** button and select **Programs** and then **Accessories**. Then right-click on **Command Prompt** and select **Run as Administrator** from the pop-up menu. Execute the command "sqlSetMgrInfo.exe" when the window appears.

#### Note

Do not specify "local host" even if the Manager and the Operation Management Client are on the same machine. Enter the host name or IP address of the Manager to be connected is required.

## 6.5 Migrating Managers

---

The following two modes can be used to transfer a Manager in an existing operating environment to a different Manager:

- Inheriting only the configuration information for the source Manager

In this case, a new PDB will be created, but configuration information for Agents in the previous environment will be inherited.

- Inheriting the PDB from the source Manager as well

In this case, the PDB will be migrated from the source Manager to the destination Manager, and both the performance information that has been collected from Agents and configuration information for Agents will be inherited.

## Required privileges

### Windows

The user must have the privileges of a member of the Administrators group.

### UNIX

The user must have the privileges of the system administrator (superuser).

## Before performing this procedure

If any resident processes of the source Manager are running, stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

The Manager migration methods in the following situations are explained below.

## 6.5.1 Inheriting only the configuration information for the source Manager

---

Perform the following procedure:

### Procedure

#### 1. Obtain configuration information from the source Manager PDB

Execute the following command to output a configuration information file from the source Manager. When executing the command, use the `-n` option to specify the host name of the destination Manager.

#### Windows

```
Installation directory\bin\sqcPDBexport.bat -o folder_path [-n host_name]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcPDBexport.sh -o folder_path [-n host_name]
```

#### Options

`-o folder_path`

Specifies the path of the folder where the configuration information data file (agententry.tmp) will be output.

`-n host_name`

Specifies the host name of the Manager where the configuration information will be transferred. If this option is omitted, the actual host name will be used.

Refer to "sqcPDBexport (Configuration Information Export Command)" in the *Reference Guide* for details on sqcPDBexport.

## 2. Install the destination Manager

Install the destination Manager from scratch by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

## 3. Import configuration information into the destination Manager

Place the configuration information file output in "1. Obtain configuration information from the source Manager PDB" above into the following folder on the destination Manager:

### Windows

```
Variable file directory\transfer\DsaPDBWriter
```

### UNIX

```
/var/opt/FJSVssqc/temp/DsaPDBWriter
```

It will take approximately 60 seconds to store the configuration information in the PDB. After the information has been stored, the "agententry.tmp" file will be deleted.

## 4. Change the IP address of the Manager

Perform this task by referring to "[6.4 Changing the IP Address/Host Name of a Manager](#)".

## 5. Start the service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.5.2 Inheriting the PDB from the source Manager as well

---

Perform the following procedure:

### Procedure

#### 1. Back up the PDB from the source Manager

Back up the PDB file from the source Manager by referring to "PDB file" in the *User's Guide*.

#### 2. Obtain configuration information from the source Manager PDB

Execute the following command to output a configuration information file from the source Manager. When executing the command, use the -n option to specify the host name of the destination Manager.

### Windows

```
Installation directory\bin\sqcPDBexport.bat -o folder_path [-n host_name]
```

### UNIX

```
/opt/FJSVssqc/bin/sqcPDBexport.sh -o folder_path [-n host_name]
```

### Options

-o folder\_path

Specifies the path of the folder where the configuration information data file (agententry.tmp) will be output.

-n host\_name

Specifies the host name of the Manager where the configuration information will be transferred.

Refer to "sqlPDBexport (Configuration Information Export Command)" in the *Reference Guide* for details on sqlPDBexport.

### 3. Install the destination Manager

Install the destination Manager from scratch by referring to "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

### 4. Copy the PDB of the source Manager to the destination Manager

Copy the source PDB backed up in "1. Back up the PDB from the source Manager" above to the same path on the destination Manager.

### 5. Copy the configuration information of the source Manager to the destination Manager

Place the configuration information file output in "2. Obtain configuration information from the source Manager PDB" above into the following folder on the destination Manager:

#### Windows

```
Variable file directory\transfer\DsaPDBWriter
```

#### UNIX

```
/var/opt/FJSVssqc/temp/DsaPDBWriter
```

### 6. Start the service or daemon of the destination Manager and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

### 7. Changing the IP Address of a Manager

If the IP address of the Manager has changed, change the IP address settings at this point. Perform this task by referring to "[6.4 Changing the IP Address/Host Name of a Manager](#)".

## 6.6 Performance Database (PDB)/Archive File

---

### 6.6.1 Changing the PDB/Archive File Storage Location

---

By splitting the Manager physical disk into summary data, resource data and archive files, the number of Agents that can be managed by one Manager can be extended to approximately 300.

Refer to "[6.6.1.1.2 Summary Data and Resource Data](#)" to store the summary data and resource data into the separated disk, and refer to "[6.6.1.2 Changing the Archive File Location](#)" to store the archive files into the separated disk.



## 6.6.1.1 Changing the PDB Storage Location

The performance database consists of the file types described in the sections below.

To distribute disk I/O and disk space, the performance database location can be changed according to file type - the procedure to do that depends on the file type.

File name	Description	Procedure
pdb.dat	This is a single file for storing management data. Basically, it does not need to move to other places.	<a href="#">6.6.1.1.1 Management Data</a>
pdb_SUMMARY_yyyymmdd.dat	These files store summary data. A new file is created each day, and the "yyymmdd" part of the file name indicates the date when the file was created.	<a href="#">6.6.1.1.2 Summary Data and Resource Data</a>  (If the Management Data has moved on operation of the old edition, refer to " <a href="#">6.6.1.1.1 Management Data</a> ", too.)
pdb_10MIN_yyyymmdd.dat	These files store resource data (which is collected at 10 minute intervals). A new file is created each day, and the "yyymmdd" part of the file name indicates the date when the file was created.	
pdb_1HR_yyyymmdd.dat	These files store resource data (which is collected at hourly intervals). A new file is created each week, and the "yyymmdd" part of the file name indicates the date of the Sunday in the week when the file was created.	
pdb_1DAY_yyyymmdd.dat	These files store resource data (which is collected at daily intervals). A new file is created each month, and the "yyymmdd" part of the file name indicates the date of the first day of the month when the file was created.	

### 6.6.1.1.1 Management Data

This section explains the procedure for changing the default location of performance database. The location of Management Data (pdb.dat) is the default location of performance database.

Use the following procedure to move the PDB (Management Data) default location to another location:

#### Note

If setup for cluster operations has been performed using sqcsetupclp/sqcsetupcls (the cluster setup commands), the variable file directory changes to the shared disk.

#### Information

Basically, performance database default location does not need to move to other places. If the database has moved on operation of the old edition, there is no problem as it is.

#### 1. Stop and confirm the service or daemon

When moving the PDB, if Enterprise Manager/Manager services or daemons are running, stop the services or daemons, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have stopped correctly.

#### 2. Moving PDB files

Move the PDB files (pdb.dat, summary data and resource data) stored in the following directory to a selected location. Immediate after the installation, PDB file is not existed. Create directory only:

#### Windows

```
<variable file storage directory>\data\
```

#### UNIX

```
/var/opt/FJSVssqc/PDB/
```

### 3. Changing the DSAconfiguration.txt file

When settings of the "Management data" and initial value of the storage location for performance database have been changed, change the database path in the following definitions file :

#### Windows

```
<variable file storage directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Change the following database path in red in the above definition file to the new path:

#### Sample definition

#### Windows

```
[DsaPDBWriter]
database=D:\SQL\data\pdb.dat
[DsaPDBWriter_sum]
database=D:\SQL\data\pdb.dat
[DsaPDBReader]
database=D:\SQL\data\pdb.dat
[PDBMANAGE]
command=pdb_manage.exe -d "D:\SQL\data\pdb.dat"
```

### 4. Changing the pdbmgr.txt file

Change the database path in the following definitions file:

#### Windows

```
<Installation directory>\setup\pdbmgr.txt
```

#### UNIX

```
/opt/FJSVssqc/setup/pdbmgr.txt
```

Change the following database path in red in the above definition file to the new path:

#### Sample definition

#### Windows

```
[PDBMANAGE]
```

```
command=pdb_manage.exe -d "D:\SQL\data\pdb.dat"
```

### 5. Start and confirm the service or daemon

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.6.1.1.2 Summary Data and Resource Data

To move the performance database (summary and resource data) to another location from the default location, perform the procedure below.



If setup for cluster operations has been performed using sqcsetupclp/sqcsetupcls (the cluster setup commands), the variable file directory changes to the shared disk.

### 1. Stop the Service and Daemon

If the Enterprise Manager/Manager service/daemon are running, then stop them (refer to "[A.8 How to Start and Stop Resident Processes](#)" for details). Additionally, make sure that the resident processes have stopped correctly.

### 2. Move the PDB files

Move following directory to a selected location. (If the storage location of the performance database (management data) is changed by following the steps described in the "[6.6.1.1.1 Management Data](#)", following directory means destination location of the management data)

Immediate after the installation, PDB file is not existed. Create directory only.

#### Windows

```
<variable file storage directory>\data\
```

#### UNIX

```
/var/opt/FJSVssqc/PDB/
```

The names of the PDB files are shown below (then location can be changed according to file type):

- When summary data PDB files are moved:  
pdb\_SUMMARY\_yyyymmdd.dat
- When resource data (10 min) PDB files are moved:  
pdb\_10MIN\_yyyymmdd.dat
- When resource data (1 hr) PDB files are moved:  
pdb\_1HR\_yyyymmdd.dat
- When resource data (1 day) PDB files are moved:  
pdb\_1DAY\_yyyymmdd.dat

### 3. Change the PDB file location

Execute the following command with the destination directory-name. Refer to "[sqcSetPDBStore \(PDB File Location Change Command\)](#)" in the *Reference Guide* for details on the command.

## Point

---

Assign the directory on the separated physical disk for the summary data and the resource data (10 minutes/1 hour/1 day) with `sqcSetPDBStore` (PDB File Location Change Command), when splitting the Manager physical disk into summary data, resource data and archive files to extended the number of Agents that can be managed by one Manager to approximately 300.

---

### Format

#### Windows

```
<installation directory>\bin\sqcSetPDBStore.bat -M|-m|-h|-d -S directory-name
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPDBStore.sh -M|-m|-h|-d -S directory-name
```

### Options

**-M**

Executes summary data PDB file operations.

**-m**

Executes resource data (10 minutes) PDB file operations.

**-h**

Executes resource data (1 hour) PDB file operations.

**-d**

Executes resource data (1 day) PDB file operations.

**-S <directory path>**

Changes the PDB file location to the specified directory path.

Specify the **-M**, **-m**, **-h**, and **-d** options together to change the location of the PDB files for each option.

Specify the absolute path.

## 4. Start the Service and Daemon

Refer to "[A.8 How to Start and Stop Resident Processes](#)" for details. Additionally, make sure that the resident processes have started correctly.

## Point

---

- When moving back the storage location of the PDB file to the default location (if the storage location of the performance database (management data) has been changed by following the steps described in the "[6.6.1.1.1 Management Data](#)", following directory means destination location of the management data), according to the following procedures as well as above-mentioned.

1. Stop and confirm the service/daemon
2. Move the PDB file to the default storage location

3. Execute the change location command of the PDB file.  
Specify -R option instead of -S option.
4. Start and confirm the service/daemon.

- The storage location of the PDB file can be confirmed by specifying -V option with -M, -m, -h, or -d option.

### 6.6.1.2 Changing the Archive File Location

To move the archive files to another location, perform the procedure below.

#### Note

If setup for cluster operations has been performed using sqcsetupclp/sqcsetupcls (the cluster setup commands), the variable file directory changes to the shared disk.

#### 1. Stop the Service and Daemon

If the Enterprise Manager/Manager service/daemon are running, then stop them (refer to "A.8 How to Start and Stop Resident Processes" for details). Additionally, make sure that the resident processes have stopped correctly.

#### 2. Move the archive files

##### Windows

Move the archive files other than BackupPDBinsert\_state.dat stored in the directory below to another directory. Immediate after the installation, PDB file is not existed. Create directory only.

```
<variable file directory>\spool\BackupPDBinsert\
```

#### Note

Please do not move BackupPDBinsert\_state.dat.

##### UNIX

Move all files in the directory below to another directory. Immediate after the installation, PDB file is not existed. Create directory only.

```
/var/opt/FJSVssqc/BackupPDBinsert/
```

#### 3. Change the DSAconfiguration.txt file

##### Windows

```
<variable file storage directory>\control\DSAconfiguration.txt
```

##### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Change the content of the [BackupPDBinsert] section out\_dir parameter to the new path in the definition file. The parts that will need to be changed are shown below in red.

### Parts that will need to be changed

```
[BackupPDBinsert]
execute_style=on
path=dsa_file.exe
~Omitted~
# dsa_file specific parameters
out_dir=%WORKING_DIRECTORY\BackupPDBinsert
out_file=pdbinsert_%c_%n.txt
check_interval=60
operation=CYCLE
cycle_num=3
new_file_interval=86400
new_file_start=0
```

### Definition example

#### Windows

```
[BackupPDBinsert]
execute_style=on
path=dsa_file.exe
~Omitted~
# dsa_file specific parameters
out_dir=D:\BackupPDBinsert
out_file=pdbinsert_%c_%n.txt
check_interval=60
operation=CYCLE
cycle_num=3
new_file_interval=86400
new_file_start=0
```

#### 4. Start the Service and Daemon

Refer to "[A.8 How to Start and Stop Resident Processes](#)" for details. Additionally, make sure that the resident processes have started correctly.

## 6.6.2 Changing the PDB Retention Time

---

This section explains the procedure used to change the period of time that summary/resource data is stored in the PDB.

## 6.6.2.1 Changing the retention period for summary data

This section explains the procedure used to change the retention period for monitor data. To change the summary data retention period, a number of tasks must be performed on both the Agent and Manager environments.

### Point

Note that if the summary data retention period is extended, there will be a proportional increase in the time needed to display information in the summary window.

Refer to "[2.1.1.2 Estimating the size of the performance database/archive file](#)" when determining the retention period.

### Required privileges

#### Windows version

The user must belong to the Administrators group.

#### UNIX version

The user must be a system administrator (superuser).

### Procedure

#### Tasks to perform on the Agent

1. **Stop the Agent service/daemon and confirm that it has stopped**

Stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

2. **Edit the definition file**

#### Storage location

The definition file is in the ini format.

#### Windows version

```
< Variable file storage directory >\control\template.dat
```

#### UNIX version

```
/etc/opt/FJSVssqc/template.dat
```

Change the following definition in the [TIS] section:

#### Before adjustment:

```
#####  
[TIS]  
RETENTION=3 <- Edit here  
:  
#####
```

The specified value indicates the retention period in days (default = 3).

Specify the summary data retention period using an integer between 1 and 31.

### 3. Execute the Policy Application Command (sqcSetPolicy)

#### Windows

```
<installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details on sqcSetPolicy.

### 4. Start the Agent service or daemon and confirm that it operates normally

Start the service or daemon by referring to "A.8 How to Start and Stop Resident Processes". Also check that the resident processes have started correctly.

## Tasks to perform on the Manager

### 1. Execute sqcSetPDBManage

Execute sqcSetPDBManage (PDB Retention Period Modification Command).

Refer to "sqcSetPDBManage (PDB Retention Period Modification Command)" in the *Reference Guide* for details.

#### Format

#### Windows

```
<Installation directory>\bin\sqcSetPDBManage.bat [-M <retention period>]-s
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPDBManage.sh| -s
```

#### Options

-M <retention period>

Set the summary data retention period as an integer between 1 and 31. (Unit: days)

-s

Displays the current retention period.



Set the summary data retention period for all Agents. If different retention periods are specified for different Agents, the system may malfunction.



## 6.6.2.2 Changing the retention period for resource data

This section explains the procedure used to change the retention period for resource data (10-minute data, hourly data and daily data).

The default retention period settings for performance data stored in the PDB are as follows:

- Resource data (10-minute data): 7 days
- Resource data (hourly data): 6 weeks
- Resource data (daily data): 13 months

Use the procedure described below when it is necessary to change the retention period.



Note that if the retention period is extended, there will be a proportional increase in disk usage. Refer to "[2.1.1.2 Estimating the size of the performance database/archive file](#)" for information on how to estimate changes in the amount of data that result from changes to the retention period.

### Required privileges

#### Windows version

The user must belong to the Administrators group.

#### UNIX version

The user must be a system administrator (superuser).

### Execution environment

This procedure is performed on a Manager.

### Procedure

#### Execute sqcSetPDBManage

Execute sqcSetPDBManage (PDB Retention Period Modification Command).

Refer to "sqcSetPDBManage (PDB Retention Period Modification Command)" in the *Reference Guide* for details.

#### Format

##### Windows

```
<Installation directory>\bin\sqcSetPDBManage.bat -m <retention period> | -h <retention period> | -d <retention period> | -s
```

##### UNIX

```
/opt/FJSVssqc/bin/sqcSetPDBManage.sh -m <retention period> | -h <retention period> | -d <retention period> | -s
```

#### Options

There is no maximum limit to the values that can be specified.

-m <retention period>

Set the retention period for Resource data (10-minute data) as an integer of 1 or more. (Unit: days)

-h <retention period>

Set the retention period for Resource data (hourly data) as an integer of 1 or more. (Unit: weeks)

-d <retention period>

Set the retention period for Resource data (daily data) as an integer of 1 or more. (Unit: months)

-s

Displays the current retention period setting.

## 6.6.3 Changing Archive File Switch Time

---

Change the switch time in the following definitions file to change the switch time for archive files.

### Procedure

#### 1. Stop and confirm the service or daemon

Stop the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have stopped correctly.

#### 2. Edit template.dat

##### Windows

```
<variable file storage directory>\control\template.dat
```

##### UNIX

```
/etc/opt/FJSVssqc/template.dat
```

The [SWITCHTIME] value takes the "hh:mm" format in the above definitions file. The default value is "00:00".

#### Sample definition

##### Windows

```
[BCKPDBINS]  
SWITCHTIME=00:00
```

##### UNIX

```
[BCKPDBINS]  
SWITCHTIME=00:00
```

#### 3. Apply the policy

Execute sqcSetPolicy to apply the changes.

##### Windows

```
<Installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details about sqcSetPolicy.

#### 4. Start and confirm the service or daemon

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.7 Log Data (Troubleshoot)

---

This section explains the procedure for changing log data (Troubleshoot).

### 6.7.1 Changing the Output Destination for Log Data (Troubleshoot)

---

To move log data ("Troubleshoot" directory) to a different location, it is necessary to change the log data output path in the definition file named "template.dat".

#### Procedure

##### 1. Stop and confirm the service or daemon

Stop the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have stopped correctly.

##### 2. Edit template.dat

###### Windows

```
Variable file directory\control\template.dat
```

###### UNIX

```
/etc/opt/FJSVssqc/template.dat
```

Change the log data output path [OUTDIR1] in the above definition file to a selected directory. (The following example is for Windows.)

#### Sample definition

##### Windows

```
[TRS]  
DCAID="TRS"  
EXECUTESTYLE1=ON  
INTERVAL1=5
```

```
CYCLENUM1=7
OUTDIR1=%WORKING_DIRECTORY\Troubleshoot1
SWITCHTIME=00:00
```

"%WORKING\_DIRECTORY" is a macro that points to the location "*variable file storage directory*\spool", which was specified at the time of installation.

#### UNIX

```
[TRS]
DCAID="TRS"
EXECUTESTYLE1=ON
INTERVAL1=5
CYCLENUM1=7
OUTDIR1= %VARIABLE_DIRECTORY/Troubleshoot1
SWITCHTIME=00:00
```

"%VARIABLE\_DIRECTORY" is a macro that points to the variable file storage directory specified during installation.

#### Point

With this procedure, old log files will be left unchanged in the old directory, and new log files will be created in the new directory. Delete the old log files if they are no longer required.

### 3. Apply the policy

Execute the `sqcSetPolicy` command to apply the change.

#### Windows

```
<Installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details on SetPolicy.

### 4. Start and confirm the service or daemon

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.7.2 Changing the retention period of log data (Troubleshoot)

To change the log data (Troubleshoot) retention period specified at installation time, it is necessary to change the retention period in the following definition file.

## Note

Before changing the log data ("Troubleshoot" directory) retention period, verify that there is sufficient space on the disk by referring to ["2.2.1.2 How to estimate the amount of space required for the log data \("Troubleshoot" directory\)"](#).

### Procedure

#### 1. Stop the service or daemon and confirm that it has stopped normally

Stop the service or daemon by referring to ["A.8 How to Start and Stop Resident Processes"](#). Also check that the relevant resident processes have stopped correctly.

#### 2. Save the files in the "Troubleshoot" directory

Move the files in the "Troubleshoot" directory to another location, or delete them if they are no longer necessary.

#### 3. Edit template.dat

##### Windows

```
<Variable file storage directory>\control\template.dat
```

##### UNIX

```
/etc/opt/FJSVssqc/template.dat
```

Specify the retention period in days (an integer between 1 and 30) as the value of retention period [CYCLENUM1] in the above definition file. The default is "7" days.

### Sample definition

#### Windows

```
[TRS]
DCAID="TRS"
EXECUTESTYLE1=ON
INTERVAL1=5
CYCLENUM1=7
OUTDIR1=%WORKING_DIRECTORY\Troubleshoot1
SWITCHTIME=00:00
```

#### UNIX

```
[TRS]
DCAID="TRS"
EXECUTESTYLE1=ON
INTERVAL1=5
CYCLENUM1=7
OUTDIR1=%VARIABLE_DIRECTORY/Troubleshoot1
```

```
SWITCHTIME=00:00
```

#### 4. Apply the policy

To apply this change, execute "sqcSetPolicy".

##### Windows

```
<Installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

##### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details on sqcSetPolicy.

#### 5. Start and confirm the service or daemon

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.7.3 Changing Log Data (Troubleshoot) Switch Time

---

Change the switch time in the following definitions file to change the switch time for log data (Troubleshoot).

### Procedure

#### 1. Stop the service or daemon and confirm that it has stopped normally

Stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

#### 2. Edit template.dat

##### Windows

```
<variable file storage directory>\control\template.dat
```

##### UNIX

```
/etc/opt/FJSVssqc/template.dat
```

The [SWITCHTIME] value takes the "hh:mm" format in the above definitions file. The default value is "00:00".

### Sample definition

#### Windows

```
[TRS]  
DCAID="TRS"  
EXECUTESTYLE1=ON  
INTERVAL1=5  
CYCLENUM1=7
```

```
OUTDIR1=%WORKING_DIRECTORY\Troubleshoot1  
SWITCHTIME=00:00
```

#### UNIX

```
[TRS]  
DCAID="TRS"  
EXECUTESTYLE1=ON  
INTERVAL1=5  
CYCLENUM1=7  
OUTDIR1= %VARIABLE_DIRECTORY/Troubleshoot1  
SWITCHTIME=00:00
```

### 3. Apply the policy

Execute sqcSetPolicy to apply changes.

#### Windows

```
<Installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details about sqcSetPolicy.

### 4. Start and confirm the service or daemon

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.8 Dividing Report Storage Locations

---

This section explains the procedure used to divide report management folders by console definitions.

Dividing report locations leads to the following benefits in operation:

- In large scale systems such as data centers, reports can be divided by customer or by department.

#### Procedure

Use the following procedure:

As the report storage locations are based on the console definitions, you will need to create console definitions in advance. Refer to "Console Definitions Window" in the *User's Guide (Console Edition)* for details on how to create definitions.

#### 1. Preparing report management folders

Create the directory you want to use for the report management folder in Explorer.

Note: You cannot use characters other than ASCII in the path name of the report management folder.

## 2. Creating the definitions file to change the report management folder

Refer to the following definition format and specification example, and make the necessary adjustments to the alias and path of the report management folder in the sample file (sqcSetcondir.sample) to create the sqcSetcondir.ini file:

Created file name and storage location

```
<Installation directory of the Operation Management Client>\www\control  
\sqcSetcondir.ini
```

Sample file

```
<Installation directory of the Operation Management Client>\www\control  
\sqcSetcondir.sample
```

Definition format

```
[Console definition name]  
Alias = alias_name  
LocalPath = local_path
```

- [Console definition name]

For the section name, specify the console definition name that changes the report management folder.

- alias\_name

Specify the console definition name.

- local\_path

Specify the full path of the report management folder.

Note: You cannot use characters other than ASCII in the path name of the report management folder.

Specification example (if the DefaultConsole report management folder is changed to "D:\SQC\_REPORT")

```
[DefaultConsole]  
Alias = DefaultConsole  
LocalPath = "D:\SQC_REPORT"
```

## 3. Virtual directory settings

Make settings for the virtual directory. This shows how to make the settings with the following two Web servers.

<Using IIS>

Make sure World Wide Web Publishing Service is running before executing the following command. Execute the following commands to make the settings:

```
<Installation directory of the Operation Management Client>\bin\sqcSetIISreg.exe -e  
"alias_name" -d "local_path"
```

Note: Use the strings specified in step 2 above for the alias\_name and local\_path.

Example

```
"C:\Program Files\SystemwalkerSQC-C\bin\sqcSetIISreg.exe" -e  
DefaultConsole -d D:\SQC_REPORT
```

<Using Interstage HTTP Server (included with Interstage Application Server)>

a. Editing the Interstage HTTP Server environment definition file

Open the Interstage HTTP Server environment definition file with the editor.



Edit the environment definition file stored in the following location:

- Interstage Application Server V8.x or earlier

```
C:\Interstage\F3FMihs\conf\httpd.conf
```

Note: This is the location for the default installation path.

- Interstage Application Server V9.x or later

```
C:\Interstage\F3FMihs\servers\FJapache\conf\httpd.conf
```

Note: This is the location for the default installation path.

b. Virtual directory settings

Add the following lines to the end of the file:

```
Alias /<alias>/"<full path of the folder where the reports are stored>"  
<Directory "<full path of the folder where the reports are stored>">  
Options None  
AllowOverride None  
Order allow,deny  
Allow from all  
</Directory>
```

c. Saving the settings

Save the file and exit the editor. If you did this while Interstage HTTP Server was running, restart it.



Change access privileges and other parameters as necessary.

4. Copying history and definition files

Copy or move the following directory into the report management folder.

```
<Installation directory of the Operation Management Client> \www\html  
\ConsoleEnvironments\console definition name
```

## 6.9 Deleting Unsent Agent/Proxy Manager Data

The DsaForwarder and DsaForwarder\_sum directories are used to temporarily store data that is to be sent from an Agent or Proxy Manager to a Manager.

The DsaForwarder directory contains resource data and the DsaForwarder\_sum directory contains summary data. Note that if Manager redundancy is being used, directories named DsaForwarder2 and DsaForwarder\_sum2 will also be used.

If communication with a Manager is interrupted, data will accumulate in these directories until communication resumes.



If data transmission remains suspended for a long time, the unsent data can put pressure on disk space. If the amount of free space on the disk becomes too small, warning events and error events will start to occur and the Agent will ultimately stop running.

To reduce the disk usage, once the number of unsent data files exceeds a specified number (approximately 30,000 files), the oldest files will automatically start being deleted at 60-minute intervals. Once files are deleted, all the performance data corresponding to the deleted files will be lost.

.....

If warning messages or error messages occur so frequently that they affect normal business, change the monitored value by referring to "[6.10 Monitoring Available Disk Space](#)".

If the accumulated files are no longer necessary, they can be deleted manually using the procedure described below.

### Before performing this procedure

If Agent or Proxy Manager resident processes are running, stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

### Storage location

#### Windows

```
<Variable file storage directory>\transfer\DsaForwarder
<Variable file storage directory>\transfer\DsaForwarder_sum
```

#### UNIX

```
/var/opt/FJSVssqc/temp/DsaForwarder
/var/opt/FJSVssqc/temp/DsaForwarder_sum
```

### Procedure

**1. Check the IP address of the Manager recognized by Agents and Proxy Managers**

Refer to "[6.4.1 Changing the IP Address/Host Name of the Manager that Is Recognized by Agents and Proxy Managers](#)" for the checking method.

**2. Check the Agent/Proxy Manager service or daemon**

Check that the resident processes of the Agent/Proxy Manager are running.

Refer to "[A.8 How to Start and Stop Resident Processes](#)" section for details on how to confirm that the processes are stopped.

**3. Delete the files in the DsaForwarder and DsaForwarder\_sum directories**

Delete the files in the DsaForwarder and DsaForwarder\_sum directories.



.....

Do not delete the DsaForwarder and DsaForwarder\_sum directories.

.....

**4. Start the Agent or Proxy Manager service or daemon and confirm that it operates normally**

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.10 Monitoring Available Disk Space

---

Systemwalker Service Quality Coordinator normally uses the following conditions to monitor the available disk space in the variable file storage directory:

- A warning message will be output if the available space drops below 50 MB.
- An error message will be output and operation will stop if the available space drops below 10 MB.

Perform the following procedure if warning events or error events occur so frequently that they affect business, or if the status of the system makes it desirable to change the monitored value.

### Before performing this procedure

If DCM services or dcmd processes are running, stop the services or daemons, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the DCM services or dcmd processes have stopped correctly.

### Procedure

1. Adjust DSAconfiguration.txt.

#### Storage location

##### Windows

```
< Variable file storage directory > \control\DSAconfiguration.txt
```

##### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Adjust monitor\_free in the [spacemon] section.

#### Before adjustment:

```
#####  
[spacemon]  
execute_style=on  
path=%BASE_DIRECTORY/bin/dsa_spacemon  
# dsa_spacemon specific parameters  
check_interval=10  
warn_interval=5  
record_type=SQC3CONTROL  
monitor_free=50,10,%VARIABLE_DIRECTORY <- Default monitoring settings  
#####
```

By default, the warning value is set to 50 MB and the error value is set to 10 MB. These values can be changed to suit the situation of the system.

2. Start the service or daemon and confirm that it operates normally.

Start the service or daemon, refer to "[A.8 How to Start and Stop Resident Processes](#)" section for more information. Also check that the resident processes have started correctly.

## 6.11 Secure Communications

---

In Push mode communications, it is possible to restrict the communicating parties to improve security.

The procedure is explained below.



The content explained here is only applicable to Push mode communications. Note that it cannot be used in conjunction with Pull mode communications.

### 6.11.1 Restricting the parties to a communication

---

For Managers, Proxy Managers or Enterprise Managers, the following procedure can be used to restrict the Manager, Proxy Manager or Agent that will become the other party to a communication.

#### Procedure

1. **Stop the Manager service or daemon and confirm that it has stopped normally**

Stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

2. **Edit DSAconfiguration.txt**

#### Windows

```
< Variable file storage directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Specify the IP addresses of the parties that will be permitted to communicate in the `grant_access` key in the `[DsaListener]` section. The following is an example:

```
[DsaListener]
:
grant_access=100.100.100.100
grant_access=100.100.100.101,100.100.100.102
:
```

## Point

- More than one grant\_access key can be specified.
- IP addresses can contain wildcards, as in "grant\_access=100.100.100.\*, \*.100.100.100".
- A range of IP addresses can be specified, as in "grant\_access=100.100.100.100-100.100.100.200".
- Wildcards and ranges can be used together, as in "grant\_access=100.100.100.\*-100.100.200\*".
- Specify "grant\_access=\*" to grant access to all parties. Access will also be granted to all parties if the "grant\_access" key is omitted.
- Specify "grant\_access=" to deny access to all parties.

## Note

The communication restriction imposed by this definition also applies to definition-related communications from operation management clients. Therefore, if this server will be connected to an operation management client, do not forget to specify the IP address of the operation management client in the grant\_access key.

### 3. Start the service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

## 6.12 syslog settings

---

### UNIX

SSQC error messages are output to syslog using two syslog facilities.

In order to log messages, /etc/syslog.conf must be set up so that daemon.log and user.log are collected.

Refer to the syslog.conf(4) and syslogd(1M) manuals for details on syslogd and how to set up syslog.conf.

facility.level	process
daemon.err	dcmd
user.err	dsa_*

A settings example for syslog.conf is shown below.

```
daemon.err /var/adm/messages
user.err /var/adm/messages
```

## 6.13 Operation setting under IPv6 environment

---

This section explains the setup steps about operation under IPv6 environment.

## 6.13.1 Adding a connection with Managers under IPv6 environment

When managing Agent and Proxy Managers under IPv6 environment, Managers are required to be able to connect with IPv6 environment in addition to a connection with normal IPv4 environment.

### Before performing this procedure

Stop the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

### Procedure

1. Changing the definition file

The definition file is stored in the following location:

#### Windows

```
<Variable file directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

The method used to change the definition file is explained below.

Make a backup copy of DSAconfiguration.txt before making any changes to the file.

- a. Delete "\*" (asterisk) from the first letter of a section name in the [DsaListenerIPv6], [DsaPDBReaderIPv6] section.

- Before modification

```
[*DsaListenerIPv6]  
[*DsaPDBReaderIPv6]
```

- After modification

```
[DsaListenerIPv6]  
[DsaPDBReaderIPv6]
```

2. Changing the DSAconfiguration.txt file

When settings of the "Management data" and initial value of the storage location for performance database have been changed, change the database path in the following definitions file :

#### Windows

```
<variable file storage directory>\control\DSAconfiguration.txt
```

#### UNIX

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Change the following database path in red in the above definition file to the new path:

### Sample definition

#### Windows

```
[DsaPDBReaderIPv6]
```

```
database=D:\SQL\data\pdb.dat
```

3. Start the service or daemon and confirm that it operates normally

Start the service or daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have started correctly.

# Chapter 7 Upgrade Installations

This section explains the installation method used to upgrade this product from the previous version to the current version.

## Note

- Upgrade installation from 32-bit version to 64-bit version cannot be done.
- If an upgrade installation is performed, two-tier Manager operation, redundant Manager operation, and Pull/Push communication mode settings performed after installation will be canceled and will have to be reset after the upgrade installation is complete.
- To upgrade a Manager in a cluster system, first cancel the cluster settings, perform the upgrade, and then set up a cluster system again.
- If upgrade has been done from V11 or V12, monitor data which collected before the upgrade cannot be referred after the upgrade.
- If upgrade has been done from versions from V13.0.0 to V13.4.0, summary data which collected before the upgrade cannot be referred after the upgrade, but the data output as archive files can be referred by restoring.
- When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPalrtmon.ini) of SAP NetWeaver cooperation.  
Refer to "Connection parameters definition file" in the *User's Guide*.
- When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS of the [ORA] section in the correction template (template.dat) for management settings for Oracle Database Server.  
Refer to "How to Set up Oracle Database Server" in the *User's Guide*.
- Refer to "[Chapter 10 Incompatible Items](#)" to check items that are incompatible with the older version.

## 7.1 Tasks to Perform at the Manager or Enterprise Manager[EE]

The procedure for performing an upgrade installation of a Manager or Enterprise Manager is provided below.

### 7.1.1 Upgrade Procedure for Windows Versions

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Before performing this procedure

If any Manager or Enterprise Manager resident processes are running, stop the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

## Point

When upgrade Managers which are operating as cluster system, cancel the cluster operation first.

Refer to "[9.3 Uninstallation under a MSCS/Failover Clustering Cluster System](#)" for information how to cancel the cluster operations, and follow the procedure until execution of the cluster unsetup command.



## Procedure (to migrate from V13)

When migrating from V13, the procedure is as follows:

### 1. Create backup of archive files

If upgrade has been done from V13.4.0 and earlier, PDB file conversion will be performed, so it will not be possible to view summary data and monitor data that are from before the upgrade installation, but the data output as archive files can be referred

Refer to "Archive files" in the *User' Guide* as necessary, and backup archive files.



Backup while the services of the Manager or Enterprise Manager are stopping.

### 2. Perform upgrade installation of Manager or Enterprise Manager

Start installing the Manager in the same way as for the initial installation, as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes (as a precaution)
- Performs an overwrite installation, inheriting the information that was entered for the prompts during the previous installation
- Backs up definition files that are not overwritten



If upgrade has been done from V13.2.0 or earlier on Enterprise Managers, retention period for log (Troubleshoot) is set as default (7 days).

Refer to "[6.7.2 Changing the retention period of log data \(Troubleshoot\)](#)" when the retention period needs to be changed.

### 3. Apply user definitions to definition files that were not overwritten

Files that cannot be overwritten are backed up using the following file names under <variableFileStorageDir>\SystemwalkerSQC\control and <installDir>\SystemwalkerSQC\bin:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"  
(Where the VnnLnn part indicates the version and level prior to the upgrade)

These backed up files are as follows. If corrections have been added to the following files, perform the editing again using the backup files as the base:

- DSAconfiguration.txt
- template.dat
- threshold.bat
- udataconf.ini



Backup files are created regardless of whether they have been edited.

#### 4. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.

- Two-tier Manager operation

Execute setup for Two-tier Manager operation again.

#### Information

Refer to "1. Set up a two-tier Manager operation" in the "6.2.2 Tasks to perform on the Manager" for detailed procedure.

- Cluster system operation

Execute cluster setup for cluster system operation and resource registration on Managers and Enterprise Managers again.

#### Information

Refer to "3.7 Cluster System Operation Model for MSCS/Failover Clustering" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier

When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPalertmon.ini) of SAP NetWeaver cooperation.

#### Information

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

#### Information

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

- Initial value of the storage location of the performance database has been changed.

Execute steps for changing initial value of the storage location of the performance database again.

#### Information

Refer to "6.6.1.1.1 Management Data" for detailed procedure.

#### 5. Set up a Manager/Enterprise Manager

## Point

Set up the Manager/Enterprise Manager if the Agent function is to be used on the Manager/Enterprise Manager to collect performance information about the Manager/Enterprise Manager itself.

Execute `sqcRPolicy` and `sqcSetPolicy` as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

### 6. Start the Manager/Enterprise Manager service and confirm that it has started normally

Start the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

### 7. Restore the archive files

If referring a data which was output as archive files before the PDB files conversion, refer to "Archive File" in the User's Guide and restore the archive files backed up in step 1.

## Procedure (to migrate from V11 and V12)

When migrating from V11 and V12, the procedure is as follows:

### Note

Summary data which collected before the upgrade cannot be referred after the upgrade.

#### 1. Perform upgrade installation of Manager or Enterprise Manager

Start installing Manager or Enterprise Manager in the same way as for the initial installation, as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes
- Performs an overwrite installation, inheriting the information that was entered for the prompts during the previous installation.
- Backs up definition files that are not overwritten
- Modifications to the file name of the PDB file

The file name has been modified as follows:

- V11.0L10 : `pdbV11L10.dat`
- V12.0L10 : `pdbV12L10.dat`
- V12.0L11 : `pdbV12L11.dat`

### Note

If upgrade has been done from V11 or V12 on Managers, retention period for log (Troubleshoot) is set as default (7 days).

Refer to "[6.7.2 Changing the retention period of log data \(Troubleshoot\)](#)" when the retention period needs to be changed.

**2. Start the Manager/Enterprise Manager service and confirm that it has started normally**

Start the "Systemwalker SQC DCM" service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

**3. Check the PDB file (pdb.dat)**

Check the PDB file (pdb.dat) exists in the following directory:

```
variable file storage directory\data
```

**4. Stop the Manager/Enterprise Manager service and confirm that it has stopped normally**

Stop the "Systemwalker SQC DCM" service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

**5. Execute the pdb\_convert.exe command**

```
Installation directory\bin\pdb_convert.exe -f variable file storage directory\control  
\ConvertV13.opt
```



Specify the following parameters in the ConvertV13.opt file:

- -o Specifies the path to the old (V11, V12) PDB file
- -n Specifies the path to the V13 PDB file
- -s Specifies the path to the SYSTEM SQL CREATE file

An example showing how these parameters are specified in the ConvertV13.opt file is provided below.

When specifying parameters for the following options, do not leave a space between the option and the parameter.

The file already has default values specified. These values do not need to be changed if they are suitable for the operating environment.

```
-oC:\SystemwalkerSQC\data\pdbV12L10.dat  
-nC:\SystemwalkerSQC\data\pdb.dat  
-sC:\SystemwalkerSQC\control\createpdb_data.sql
```

**Example**

An example showing the execution of pdb\_convert.exe is shown below. (This example shows how to upgrade from V12.0L10.)

```
C:\Program Files\SystemwalkerSQC\bin>pdb_convert.exe -f C:  
\SystemwalkerSQC\control\ConvertV13.opt  
Processing:  
Old PDB: "C:\SystemwalkerSQC\data\pdbV12L10.dat"  
New PDB: "C:\SystemwalkerSQC\data\pdb" Extension: ".dat"  
create sql file: "C:\SystemwalkerSQC\control\createpdb_data.sql"  
Converting system tables  
Converting table "system"  
Converting table "system_route"  
Converting other tables  
Converting table "compound_data"
```

```
Converting table "ryg_data"  
Converting consolidated tables  
Converting table "consumer_data"  
Converting table "conres_data"  
Converting table "resource_data"  
Converting table "resource_data_wide"  
Converting table "resource_data_vwide"  
Converting table "resource_data_uwide"  
Converting table "resource_data_uuwide"  
Converting table "resource_data_twide"  
Converting table "resource_data_ttwide"  
OK
```

## Note

- The PDB will be converted when upgrading from V11 or V12. The time needed for this conversion depends on the I/O performance of the disk. As a guide, it usually takes approximately one hour to convert a 5-GB PDB on an internal disk.
- When a PDB has been converted, summary data and resource data (collected at 10 minute intervals) will not be converted, so after an upgrade is performed, it will not be possible to view the data prior to the upgrade in the Summary window, Drilled-Down window, or 10-minute reports.
- To ensure that resource data (collected at 10 minute intervals) are converted, specify the following option in ConvertV13.opt. Note, however, that this will increase the conversion time by two or three times.
- To add summary data (collected at 10 minute intervals): -i600

## 6. Executing the sqcPDBupgrade.bat command

```
<Installation directory>\bin\sqcPDBupgrade.bat -pdb <variable file storage directory>  
\data\pdb.dat
```

The following is an example of results after sqcPDBupgrade.bat is executed

```
C:\Program Files\SystemwalkerSQL\bin>sqcPDBupgrade.bat -pdb "C:  
\SystemwalkerSQL\data\pdb.dat"  
"sqcPDBupgrade succeeded."
```

## Note

After conversion, the PDB file for the older version summary data (pdb\_SUMMARY.dat) cannot be viewed from the screen, and must be manually deleted.

## 7. Apply user definitions to definition files that were not overwritten

Apply the user definitions that have been made to the definition files that were not overwritten.

Files that cannot be overwritten are backed up using the following file names under <variableFileStorageDir>\SystemwalkerSQL\control and <installDir>\SystemwalkerSQL\bin:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"

(Where the VnnLnn part indicates the version and level prior to the upgrade)

These backed up files are as follows. If corrections have been added to the following files, perform the editing again using the backup files as the base:

- DSAconfiguration.txt
- template.dat
- threshold.bat
- tsconfig.txt

### Point

Backup files are created regardless of whether they have been edited.

## 8. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.

- Two-tier Manager operation

Execute setup for Two-tier Manager operation again.

### Information

Refer to "1. Set up a two-tier Manager operation" in the "[6.2.2 Tasks to perform on the Manager](#)" for detailed procedure.

- Redundant Manager operation

Execute setup for redundant Manager setup on Agent or Proxy Manager again.

### Information

Refer to "2. Set up the Agent for redundant Manager operation" in the "[3.6.4 Tasks to perform on the Agent](#)", or "2. Set up the Proxy Manager for redundant Manager operation" in the "[3.6.3 Tasks to perform on the Proxy Manager](#)" for detailed procedure.

- If Pull/Push communication is switched during operation after installation

Switch Pull/Push communication method on Agent or Proxy Manager again.

### Information

Refer to "[4.4.3 Switching from Push to Pull](#)" and "[4.4.4 Switching from Pull to Push](#)" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier

When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPalrtmon.ini) of SAP NetWeaver cooperation.

### Information

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

### Information

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

## 9. Set up a Manager/Enterprise Manager

### Point

Set up the Manager/Enterprise Manager if the Agent function is to be used on the Manager/Enterprise Manager to collect performance information about the Manager/Enterprise Manager itself.

Execute `sqlRPOLICY` and `sqlSETPOLICY` as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

## 10. Start the Manager/Enterprise Manager service and confirm that it has started normally

Start the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

## 7.1.2 Upgrade Procedure for UNIX Versions

---

### Required privileges

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If any Manager or Enterprise Manager resident processes are running, stop the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

### Point

When upgrade Managers which are operating as cluster system, cancel the cluster operation first.

Refer to "[9.4 Uninstalling from a PRIMECLUSTER Cluster System](#)" for information how to cancel the cluster operations, and follow the procedure until execution of the cluster unsetup command.

### Procedure (to migrate from V13)

When migrating from V13, the procedure is as follows:

## 1. Back up files in /var/opt/FJSVssqc/

Back up the files in the /var/opt/FJSVssqc/ directory



- Backup while the daemons of the Manager or Enterprise Manager are stopping.
- The PDB is included in these files. Note the size of the backup destination, as the amount of data can become quite large.

## 2. Perform upgrade installation of Manager or Enterprise Manager

Start installing the Manager or Enterprise Manager in the same way as for the initial installation, as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes (as a precaution)
- Backs up other definition files (in the /etc/opt/FJSVssqc/ directory)
- Uninstalls the package for the previous version
- Performs an upgrade installation, inheriting the information that was entered for the prompts during the previous installation
- Restores the other definition files that have been backed up

## 3. Write the files back to /var/opt/FJSVssqc/

Return the files backed up in "1. Back up files in /var/opt/FJSVssqc/" above to their original path except following files.

- Backup directory/var/opt/FJSVssqc/PDB/pdb.dat

## 4. Apply user definitions to definition files that were not rewritten

Files that cannot be rewritten automatically are backed up to /etc/opt/FJSVssqc/ and /opt/FJSVssqc/bin with the name as follows:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"

(Where the VnnLnn part indicates the version and level prior to the upgrade)

If a file that was edited prior to the upgrade has been backed up, use the backup file as a basis for editing the file again. The following files are backed up:

- DSAconfiguration.txt
- template.dat
- threshold.sh
- udataconf.ini
- pdbmanage.txt

## 5. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.



- Two-tier Manager operation

Execute setup for Two-tier Manager operation again.

 **Information**

Refer to "1. Set up a two-tier Manager operation" in the "6.2.2 Tasks to perform on the Manager" for detailed procedure.

- Cluster system operation

Execute cluster setup for cluster system operation and resource registration on Managers and Enterprise Managers again.

 **Information**

Refer to "3.8 PRIMECLUSTER Cluster System Operation Model" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier

When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPAlertmon.ini) of SAP NetWeaver cooperation.

 **Information**

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

 **Information**

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

- Initial value of the storage location of the performance database has been changed.

Execute steps for changing initial value of the storage location of the performance database again.

 **Information**

Refer to "6.6.1.1.1 Management Data" for detailed procedure.

## 6. Set up a Manager/Enterprise Manager

 **Point**

Set up the Manager/Enterprise Manager if the Agent function is to be used on the Manager/Enterprise Manager to collect performance information about the Manager/Enterprise Manager itself.

Execute sqcRPolicy and sqcSetPolicy as explained in "A.1 Server Resource Information Collection Policy Creation Command".

## 7. Start the Manager/Enterprise Manager daemons and confirm that it has started normally

Start the daemons by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

## 8. Restore the archive files

If referring a data which was output as archive files before the PDB files conversion, refer to "Archive File" in the User's Guide and restore the archive files backed up in step 1.

## Procedure (to migrate from V11 and V12)

When migrating from V11 and V12, the procedure is as follows:

### Note

Summary data which collected before the upgrade cannot be referred after the upgrade.

#### 1. Back up files in /var/opt/FJSVssqc/

Back up the files in the /var/opt/FJSVssqc/ directory

### Note

- Backup while the daemons of the Manager or Enterprise Manager are stopping.
- The PDB is included in these files. Note the size of the backup destination, as the amount of data can become quite large.
- When upgrading from V11 or V12, change the name of the PDB file (/var/opt/FJSVssqc/PDB/pdb.dat) to "pdbold.dat" and then back it up.

#### 2. Perform upgrade installation of Manager or Enterprise Manager

Start installing the Manager or Enterprise Manager in the same way as for the initial installation, as described in "[3.1.1 Installing a Manager/Enterprise Manager\[EE\]](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes (as a precaution)
- Backs up other definition files (in the /etc/opt/FJSVssqc/ directory)
- Uninstalls the package for the previous version
- Performs an upgrade installation, inheriting the information that was entered for the prompts during the previous installation
- Restores the other definition files that have been backed up

#### 3. Write the files back to /var/opt/FJSVssqc/

Return the files backed up in "1. Back up files in /var/opt/FJSVssqc/" above to their original path except following files.

- Backup directory/var/opt/FJSVssqc/PDB/pdb.dat

#### 4. Start the Manager/Enterprise Manager daemons and confirm that it has started normally

Start the daemons by referring to "A.8 How to Start and Stop Resident Processes". Also check that the relevant resident processes have started correctly.

#### 5. Check pdb.dat

Check that pdb.dat exists in the following directory:

```
/var/opt/FJSVssqc/PDB/
```

#### 6. Stop the Manager/Enterprise Manager daemon and confirm that it has stopped normally

Stop the daemon by referring to "A.8 How to Start and Stop Resident Processes". Also check that the relevant resident processes have stopped correctly.

#### 7. Execute the ConvPDBV13 command

```
/opt/FJSVssqc/bin/ConvPDBV13 -f/etc/opt/FJSVssqc/ConvertV13.opt
```



#### Point

Specify the following parameters in the ConvertV13.opt file:

- -o Specifies the path to the old (V11, V12) PDB file
- -n Specifies the path to the V13 PDB file
- -s Specifies the path to the SYSTEM SQL CREATE file

#### Example

When specifying parameters for the following options, do not leave a space between the option and the parameter.

```
#cd /opt/FJSVssqc/bin
./ConvPDBV13 -f/etc/opt/FJSVssqc/ConvertV13.opt
Processing:
Old PDB: "/var/opt/FJSVssqc/PDB/pdbold.dat"
New PDB: "/var/opt/FJSVssqc/PDB/pdb" Extension: ".dat"
create sql file: "/etc/opt/FJSVssqc/createpdb_data.sql"
Converting system tables
Converting table "system"
Converting table "system_route"
Converting other tables
Converting table "compound_data"
Converting table "ryg_data"
Converting consolidated tables
Converting table "consumer_data"
Converting table "conres_data"
Converting table "resource_data"
Converting table "resource_data_wide"
Converting table "resource_data_vwide"
Converting table "resource_data_uwide"
Converting table "resource_data_uuwide"
Converting table "resource_data_twide"
```

```
Converting table "resource_data_ttwide"  
OK
```

## Note

- The time needed for this conversion depends on the I/O performance of the disk. As a guide, it usually takes approximately one hour to convert a 5-GB PDB on an internal disk.
- When a PDB conversion is performed, the summary data and resource data (collected at 10 minute intervals) will not be converted, so it will not be possible to view this data after an upgrade.
- To ensure that resource data (collected at 10 minute intervals) are converted, specify the following option in ConvertV13.opt. Note, however, that this will increase the conversion time by two or three times.

To add resource data (collected at 10 minute intervals): -i600

## 8. Executing the sqcPDBUpgrade.sh command

```
/opt/FJSVssqc/bin/sqcPDBUpgrade.sh -pdb /var/opt/FJSVssqc/PDB/pdb.dat
```

The following is an example of results after sqcPDBUpgrade.bat is executed

```
#cd /opt/FJSVssqc/bin  
./sqcPDBUpgrade.sh -pdb /var/opt/FJSVssqc/PDB/pdb.dat  
sqcPDBUpgrade succeeded.
```

## Note

After conversion, the PDB file for the older version summary data (pdb\_SUMMARY.dat) cannot be viewed from the screen, and must be manually deleted.

## 9. Apply user definitions to definition files that were not rewritten

Files that cannot be rewritten automatically are backed up to /etc/opt/FJSVssqc/ and /opt/FJSVssqc/bin with the name as follows:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"

(Where the VnnLnn part indicates the version and level prior to the upgrade)

If a file that was edited prior to the upgrade has been backed up, use the backup file as a basis for editing the file again. The following files are backed up:

- DSAconfiguration.txt
- template.dat
- threshold.sh
- tsconfig.txt
- pdbmanage.txt

## 10. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.

- Two-tier Manager operation

Execute setup for Two-tier Manager operation again.

 **Information**

Refer to "1. Set up a two-tier Manager operation" in the "6.2.2 Tasks to perform on the Manager" for detailed procedure.

- Redundant Manager operation

Execute setup for Redundant Manager operation on Agent and Proxy Manager again.

 **Information**

Refer to "2. Set up the Agent for Redundant Manager operation" in the "3.6.4 Tasks to perform on the Agent", or "2. Set up the Proxy Manager for Redundant Manager operation" in the "3.6.3 Tasks to perform on the Proxy Manager" for detailed procedure.

- If Pull/Push communication is switched during operation after installation

Switch Pull/Push communication method on Agent or Proxy Manager again.

 **Information**

Refer to "4.4.3 Switching from Push to Pull" and "4.4.4 Switching from Pull to Push" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier

When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPalertmon.ini) of SAP NetWeaver cooperation.

 **Information**

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

 **Information**

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

## 11. Set up a Manager/Enterprise Manager

 **Point**

Set up the Manager/Enterprise Manager if the Agent function is to be used on the Manager/Enterprise Manager to collect performance information about the Manager/Enterprise Manager itself.

Execute sqcRPolicy and sqcSetPolicy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

**12. Start the Manager/Enterprise Manager daemons and confirm that it has started normally**

Start the daemons by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

## 7.2 Tasks to Perform at the Agent or Proxy Manager

---

The procedure for upgrade installation for an Agent or Proxy Manager is described below.



.....  
If V11 or V12 of Agent for Web Server or Agent for DB Server is to be upgraded, use an Agent for Business.  
.....

### 7.2.1 Upgrade Procedure for Windows Versions

---

#### Required privileges

The user must have the privileges of a member of the Administrators group.

#### Before performing this procedure

If Agent or Proxy Manager resident processes are running, stop the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

#### Procedure

The procedure is as follows:

**1. Perform upgrade installation of Agent/Proxy Manager**

Start installing the Agent/Proxy Manager in the same way as for the initial installation, as described in "[3.1.2 Installing an Agent/Proxy Manager](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes (as a precaution)
- Performs an overwrite installation, inheriting the information that was entered for the prompts during the previous installation
- Backs up definition files that are not overwritten



.....  
If upgrade has been done from V11 or V12, retention period for log (Troubleshoot) is set as default (7 days).

Refer to "[6.7.2 Changing the retention period of log data \(Troubleshoot\)](#)" when the retention period needs to be changed.  
.....

2. **Apply the user definitions that have been made to the definition files that were not overwritten.**

Files that cannot be overwritten are backed up using the following file names under <variableFileStorageDir>\SystemwalkerSQC\control and <installDir>\SystemwalkerSQC\bin:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"

(Where the VnnLnn part indicates the version and level prior to the upgrade)

These backed up files are as follows.If corrections have been added to the following files, perform the editing again using the backup files as the base:

- DSAconfiguration.txt
- template.dat
- threshold.bat
- udataconf.ini

 **Point**

Backup files are created regardless of whether they have been edited.

3. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.

- Two-tier Manager operation  
Execute setup for Two-tier Manager operation again.

 **Information**

Refer to "2. Set up the Agent for two-tier Manager operation" in the "3.6.4 Tasks to perform on the Agent", or "2. Set up the Proxy Manager for two-tier Manager operation" in the "3.6.3 Tasks to perform on the Proxy Manager" for detailed procedure.

- If Pull/Push communication is switched during operation after installation  
Switch Pull/Push communication method on Agent or Proxy Manager again.

 **Information**

Refer to "4.4.3 Switching from Push to Pull" and "4.4.4 Switching from Pull to Push" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier  
When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPalertmon.ini) of SAP NetWeaver cooperation.

 **Information**

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.



### Information

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

#### 4. Set up the Agent/Proxy Manager

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

#### 5. Start the Agent/Proxy Manager service and confirm that it has started normally

Start the service/daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

## 7.2.2 Upgrade Procedure for UNIX Versions

---

### Required privileges

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If any Manager or Enterprise Manager resident processes are running, stop the service by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

### Procedure

The procedure is as follows:

1. The procedure is as follows:**Back up files in /var/opt/FJSVssqc/**

Back up the files in the /var/opt/FJSVssqc/ directory.

2. **Perform upgrade installation of Agent/Proxy Manager**

Start installing the Agent in the same way as for the initial installation, as described in "[3.1.2 Installing an Agent/Proxy Manager](#)".

Note that the upgrade installation performs the following steps automatically:

- Stops resident processes (as a precaution)
- Backs up other definition files (in the /etc/opt/FJSVssqc/ directory)
- Uninstalls the package for the previous version
- Performs an upgrade installation, inheriting the information that was entered for the prompts during the previous installation
- Restores the other definition files that have been backed up



## Note

If upgrade has been done from V11 or V12, retention period for log (Troubleshoot) is set as default (7 days).

Refer to "[6.7.2 Changing the retention period of log data \(Troubleshoot\)](#)" when the retention period needs to be changed.

### 3. Write the files back to /var/opt/FJSVssqc/

Return the files backed up in "1. Back up files in /var/opt/FJSVssqc/" above to their original path.

### 4. Apply the user definitions that have been made to the definition files that were not overwritten.

Files that cannot be rewritten automatically are backed up to /etc/opt/FJSVssqc/ and /opt/FJSVssqc/bin with the name as follows:

- "*file nameVnnLnn.extension*" or "*file nameVnnn.extension*"

(Where the VnnLnn part indicates the version and level prior to the upgrade)

If a file that was edited prior to the upgrade has been backed up, use the backup file as a basis for editing the file again. The following files are backed up:

- DSAconfiguration.txt
- template.dat
- threshold.sh
- udataconf.ini

## Point

Backup files are created regardless of whether they have been edited.

### 5. Settings after upgrade installation

Execute the setting again when the environment that does the upgrade installation corresponds to the following conditions.

- Two-tier Manager operation

Execute setup for Two-tier Manager operation on Agent/Proxy Manager again.

## Information

Refer to "2. Set up the Agent" in the "[3.6.4 Tasks to perform on the Agent](#)" or "2. Set up the Proxy Manager" in the "[3.6.3 Tasks to perform on the Proxy Manager](#)" for detailed procedure.

- If Pull/Push communication is switched during operation after installation

Switch Pull/Push communication method on Agent or Proxy Manager again.

## Information

Refer to "[4.4.3 Switching from Push to Pull](#)" and "[4.4.4 Switching from Pull to Push](#)" for detailed procedure.

- Collecting SAP NetWeaver performance information after upgrade from V13.4 or earlier

When upgrade installation from V13.4.0 or earlier has been done under the environment that collects SAP NetWeaver performance information, encrypt the password defined in PASSWORD in the connection parameters definition file (sqcGetSAPAlertmon.ini) of SAP NetWeaver cooperation.

 **Information**

Refer to "Connection parameters definition file" in the *User's Guide* for detailed procedure.

- Collecting Oracle Database Server performance information after upgrade from V13.5 or earlier

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

 **Information**

Refer to "How to Set up Oracle Database Server" in the *User's Guide* for detailed procedure.

**6. Set up the Agent/Proxy Manager**

Create and deploy a collection policy as explained in "[A.1 Server Resource Information Collection Policy Creation Command](#)".

**7. Start the Agent/Proxy Manager daemon and confirm that it has started normally**

Start the daemon by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have started correctly.

## **7.3 Tasks to perform on the Operation Management Client**

The procedure for upgrading an Operation Management Client is described below.

Note that the upgrading an Operation Management Client is on Windows machine.

### **Required privileges**

The user must have the privileges of a member of the Administrators group.

### **Procedure**

The procedure is as follows:

1. Performing an upgrade installation of an Operation Management Client

Start installing the Operation Management Client in the same way as for the initial installation, as described in "[3.1.3 Installing an Operation Management Client](#)".

2. Setting up the communications environment

If you used either Microsoft(R) Internet Information Services 6 or Microsoft(R) Internet Information Services 7 as the communication environment for the Operation Management Client, run the following command:

**Microsoft(R) Internet Information Services 6**

## Note

Run the command after moving the current directory to <Installation directory>\bin.

```
<Installation directory>\bin\squccsetc.bat
```

## Microsoft(R) Internet Information Services 7

### Note

Run the command after moving the current directory to <Installation directory>\bin.

On Windows Vista, Windows Server 2008, and Windows 7 it is necessary to run these commands under an account with administrator privileges. To do so, from the **Start** menu, select **All Programs, Accessories**, then right-click **Command Prompt** and select **Run as administrator**. Now run the commands described below in the command prompt that appears.

```
<Installation directory>\bin\squccsetc_iis7.bat
```

### Point

If the CGI of the Operation Management Client is already registered with Microsoft(R) Internet Information Services, the following error message may be output.

```
"* appcmd.exe C:\Program Files\SystemwalkerSQL-C\www\cgi-bin\Rep_mk_history.cgi
Failed."
ERROR ( message:New add object missing required attributes. Cannot add duplicate
collection entry of type 'add' with unique key attribute 'path' set to 'C:\Program
Files\SystemwalkerSQL-C\www\cgi-bin\rmmperform.cgi'. )
```

## 3. Upgrading from V11 or V12

If upgrading from V11 or V12, execute following procedure. If upgrading from V13, execution is not required.

1. Execute the Operation Management Client Upgrade command

Execute the following command after the Manager has been installed and started:

```
C:\Program Files\SystemwalkerSQL-C\bin\squcv13shift.exe
```

Example

```
C:\Program Files\SystemwalkerSQL-C\bin>squcv13shift.exe
Squcv13shift succeeded.
```

2. Obtain Agent and Proxy Manager configuration information again

Obtain the configuration information of the Agent and Proxy Manager again.

Refer to "Management configuration definition (ConfigurationSettings)" in the *User's Guide (Console)* for details.

## Note

If regular reports were being generated in V12, it will be necessary to change the information registered with the scheduler.

In this version, a new mandatory option, "-c console\_define", has been added to the scheduled report creation command and the scheduled report deletion command. Because this option cannot be omitted, it must be added when upgrading from V12.

Refer to "Scheduled Report Operation Commands" in the *Reference Guide* for details.

#### 4. Migration of the registered report created under the V13.5.0 and earlier

Reports created under the V13.5.0 and earlier (On-demand Report when V13.3 and earlier, and Analysis when V13.4/V13.5) can migrate. If migrated, reports are displayed as "Migration Report" category in the "My category" of the "Analysis/Planning" screen.

```
Install Direcorey\bin\sqcMigrationReports.bat -c console_define
```

Example

```
C:\Program Files\SystemwalkerSQC-C\bin>sqcMigrationReports.bat -c  
DefaultConsole
```

Refer to the "sqcMigrationReports.bat (Migration Command for Registered Report)" for detail about the command.

## Note

Report which created by On-demand Report or Analysis under V13.5.0 and earlier are displayed as "Registered Name" in the "Report Name" column in the history display of the console.

Report which registered in the Scheduled Report and created under V13.5.0 and earlier are displayed as "Registered Name" in the "Report Name" column in the Scheduled Report List display.

Report which created after upgrade to V15.0 is displayed as "Registered Name" in the "Report Name" column. To display "Report Name" in the "Report Name" column, select registered report in the "Scheduled Report Registration View" of the "Setting View" and "Replace Registration".

Note that report name which created before overwrite save in the "Report Name" column is stay as "Registered Name", and cannot change.

# Chapter 8 Running Different Versions of Systemwalker Service Quality Coordinator Together

This section explains operations where V13 and after of this product is mixed with V11 or V12 of this product.

## 8.1 Environment that mixes both V11/12 and V13 and after

The following table lists the previous versions and levels of the different editions for Versions 11, 12 and 13 and after of this product:

### Product list (previous versions and levels)

V11
Windows edition of V11.0L10
Linux edition of V11.0L10
Solaris edition of 11.0

V12
Windows edition of V12.0L10
Linux edition of V12.0L10
Solaris edition of 12.0
Linux for Itanium edition of V12.0L10
Solaris edition of 12.1
Windows edition of V12.0L11
Windows for Itanium edition of V12.0L11

V13
Windows edition of V13.0.0
Linux edition of V13.0.0
Solaris edition of V13.0.0
Linux for Itanium edition of V13.0.0
Windows for Itanium edition of V13.0.0
Windows edition of V13.2.0
Linux edition of V13.2.0
Solaris edition of V13.2.0
Linux for Itanium edition of V13.2.0
Windows for Itanium edition of V13.2.0
Windows edition of V13.3.0
Linux edition of V13.3.0
Solaris edition of V13.3.0

V13
Linux for Itanium edition of V13.3.0
Windows for Itanium edition of V13.3.0
Windows edition of V13.4.0
Linux edition of V13.4.0
Solaris edition of V13.4.0
Linux for Itanium edition of V13.4.0
Windows for Itanium edition of V13.4.0
Windows edition of V13.5.0
Linux edition of V13.5.0
Solaris edition of V13.5.0

### Point

- When data is sent from a V11 or V12 product to a V13 or after product via "Push" communications, they can connect without any problems.
- When data is sent from a V13 or after product to a V11 or V12 product via "Push" communications, they can connect if certain actions are taken.
- Use the same version level for operation management clients and their Managers/Enterprise Managers. Note that the new support information available with this version and level (Agents, Proxy Managers, or Managers) cannot be displayed with the previous version and level of the Operation Management Clients and the following message appears.
  - Summary and Report View:  
There is no data for the selected criteria.
  - Drilled-Down View:  
Cannot display the performance information.

To display the new support information, match the version and level of the Enterprise Manager, Manager, Agent, or Operation Management Client with this version and level.

### Note

- The following mixed version operations are not possible: V13 or after Manager and V11 or V12 Enterprise Manager; and V11 or V12 Manager and V13 or after Enterprise Manager.
- Connections between V13 or after Agents and V11 or V12 Managers via "Pull" communications are not possible.

The following sections explain the actions that are required in order to send data from V13 or after to V11 or V12.

## **8.2 Actions needed to send data from V13 and after to V11**

The following actions are required on the V11 Manager that receives V13 and after data:

### **Required privileges**

#### **Windows**

The user must have the privileges of a member of the Administrators group.

## UNIX

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If the Manager service or daemon is running, stop it using the procedure described in "[A.8 How to Start and Stop Resident Processes](#)" for Systemwalker Service Quality Coordinator V11. Also check that the relevant resident processes have stopped correctly.

### Procedure

The procedure is as follows:

#### 1. Apply **Program Emergency Fixes**

Apply following Program Emergency Fixes.

##### **Windows**

TP08278 and after

##### **Solaris**

T0137S-07 and after

##### **Linux**

T00405-06 and after

##### **Operation Management Client**

TP17393 and after

#### 2. Apply **V13 support components**

Apply V13 support components in order to receive V13 and after information.

These components are stored as archive files on the DVD-ROM for each Windows and UNIX platform.

The storage locations and archive files names are shown below.

#### Storage location

```
<DVD-ROM Drive>
+-tools
|
+-V11Manager
|
+-linux
| |
|   +-V11M_Lin.tar.Z
|
+-solaris
| |
|   +-V11M_Sol.tar.Z
|
+-windows
|
+-V11M_Win.exe
```

#### Archive file name

## Windows

Archive file name for Windows edition Managers

V11M\_Win.exe

Note: This is a self-extracting file.

## Solaris

Archive file name for Solaris edition Managers

V11M\_Sol.tar.Z

## Linux

Archive file name for Linux edition Managers

V11M\_Lin.tar.Z

Copy the archive file for the platform being used to an arbitrary directory, and decompress the archive file.

The directory tree that is created when the archive file is decompressed and the list of components are shown below.

## Windows

- Directory tree

```
<Selected Location>
|
|--bin
|   |
|   |--ConvertV13toV11.cmd
|   |
|--control
|   |
|   |--ConvertV13toV11.trd
|   |
|   |--ConvertV13toV11.ttd
```

- List of components

Component	Application location
ConvertV13toV11.cmd	Installation directory\bin
convertV13toV11.trd	Variable file directory\control
convertV13toV11.ttd	

## UNIX

- Directory tree

```
<Selected Location>
|
|--etc
```





- List of components

Component	Application location
ConvertV13toV11	/opt/FJSVssqc/bin
convertV13toV11.trd	
convertV13toV11.ttd	/etc/opt/FJSVssqc

Use the components from the directory tree that is created when the archive file is decompressed to overwrite the files in the application locations shown in the list of components above.

At this point, there is no need to overwrite these files if a patch has been applied and the creation dates for the existing files are more recent than the decompressed files.

### 3. Edit the "DSAconfiguration.txt" file.



#### Note

In the following example, specify values for *installation directory* and *variable file directory* that match the installation environment.

#### Windows

The storage location for this file is as follows:

```
Variable file directory\control\DSAconfiguration.txt
```

Add the following section to this file.

```
[convertv13]
path=installation directory\bin\dsa_file.exe
out_dir=variable file directory\log
out_file=ConvertV13toV11.txt
check_interval=60
operation=swap
```

```
new_file_interval=86400
# DS PDB registration
input=SQC3PDBSREG
# PDB consolidation
input=SQC3PDBCONSOL
# Summary
input=SQC3PDBSUMMARY
# ES PDB registration
input=SQC3PDBESREG
# XML Configuration
input=SQC3PDBXML
```

## UNIX

Specify the installation directory and variable directory sections in

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Add the following section to this file.

```
[convertv13]
path=/opt/FJSVssqc/bin/dsa_file
out_dir=/var/opt/FJSVssqc/log
out_file=ConvertV13toV11.txt
check_interval=60
operation=swap
new_file_interval=86400
# DS PDB registration
input=SQC3PDBSREG
# PDB consolidation
input=SQC3PDBCONSOL
# Summary
input=SQC3PDBSUMMARY
# ES PDB registration
input=SQC3PDBESREG
# XML Configuration
input=SQC3PDBXML
```

#### 4. Edit the "collect.txt" file.

##### Windows

The storage location for this file is as follows:

```
Variable file directory\control\collect.txt
```

Add the following lines to this file.

```
CONVERTV13TOV11|0|0|0|127|1|NULL|DCA_CMD.DLL|-c"ConvertV13toV11.cmd" -  
rconvertV13toV11.trd -tconvertV13toV11.ttd
```

## UNIX

The storage location for this file is as follows:

```
/opt/FJSVssqc/control/collect.txt
```

Add the following line to this file.

```
CONVERTV13TOV11|0|0|0|127|1|NULL|dca_cmd|-c"ConvertV13toV11" -rconvertV13toV11 -  
tconvertV13toV11
```



It is necessary to add this line again after the execution of the sqcSetPolicy (policy application command) because this line is deleted.

### 5. Start the Manager service or daemon and confirm that it operates normally.

Start the Manager service or daemon using the procedure described in "[A.8 How to Start and Stop Resident Processes](#)" for Systemwalker Service Quality Coordinator V11. Also check that the relevant resident processes have started correctly.

## 8.3 Actions needed to send data from V13 and after to V12

The following actions are required on the V12 Manager that receives V13 and after data:

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If the Manager service or daemon is running, stop it using the procedure described in "[A.8 How to Start and Stop Resident Processes](#)" for Systemwalker Service Quality Coordinator V12. Also check that the relevant resident processes have stopped correctly.

## Procedure

The procedure is as follows:

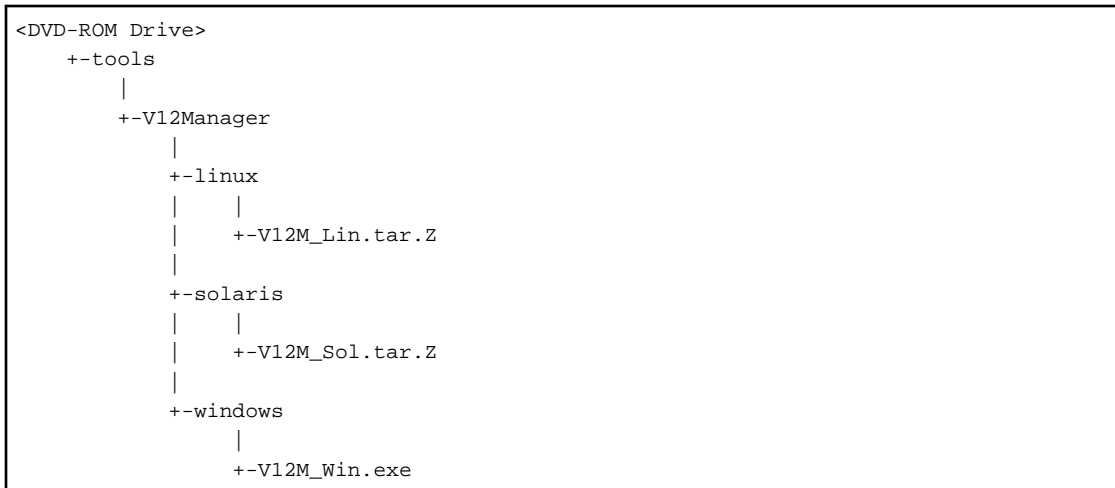
### 1. Apply V13 support components

Apply V13 support components in order to receive V13 and after information.

These components are stored as archive files on the DVD-ROM for each platform (Windows, Solaris, and Linux).

The storage locations and archive files names are shown below.

#### Storage location



#### Archive file name

##### Windows

Archive file name for Windows edition Managers

V12M\_Win.exe

Note: This is a self-extracting file.

##### Solaris

Archive file name for Solaris edition Managers

V12M\_Sol.tar.Z

##### Linux

Archive file name for Linux edition Managers

V12M\_Lin.tar.Z

Copy the archive file for the platform being used to an arbitrary directory, and decompress the archive file.

The directory tree that is created when the archive file is decompressed and the list of components are shown below.

##### Windows

- Directory tree

```
<Selected Location>
|
+-control
|
+-ConvertV13toV12.trd
|
+-ConvertV13toV12.ttd
```

- List of components

Component	Application location
convertV13toV12.trd	<i>Variable file directory</i> \control
convertV13toV12.ttd	

## UNIX

- Directory tree

```
<Selected Location>
|
+-etc
|
+-opt
|
+-FJSVssqc
|
+-ConvertV13toV12.trd
|
+-ConvertV13toV12.ttd
```

- List of components

Component	Application location
convertV13toV12.trd	/etc/opt/FJSVssqc
convertV13toV12.ttd	

Use the components from the directory tree that is created when the archive file is decompressed to overwrite the files in the application locations shown in the list of components above.

### Note

If a correction patch has already been applied, check the creation dates of the existing files and the decompressed files. If the files with the most recent date have already been stored, there is no need to overwrite them.

2. Edit the "DSAconfiguration.txt" file.

### Note

Specify the *installation directory* and *variable directory* sections in the following example to match the installation environment.

## Windows

The storage location for this file is as follows:

```
Variable file directory\control\DSAconfiguration.txt
```

Add the following section to this file.

```
[convertv13]
execute_style=on
path=dsa_tis.exe
bad_file_dir=%TRACE_DIRECTORY
bad_file_name=%c_convertv13.bad
execute_retry_max=0
# DS PDB registration
input=SQC3PDBSREG
# PDB consolidation
input=SQC3PDBCONSOL
# Summary
input=SQC3PDBSUMMARY
# ES PDB registration
input=SQC3PDBESREG
# XML Configuration
input=SQC3PDBXML
# tis specific parameters
tis_output_stream=0
tis_record_definition=%CONTROL_DIRECTORY\convertV13toV12.trd
tis_script=%CONTROL_DIRECTORY\convertV13toV12.ttd
tis_arg=PDBDS=19200
tis_arg=PDBCONSOL10=19201
tis_arg=PDBCONSOL60=19202
tis_arg=PDBCONSOL1440=19203
tis_arg=PDBSUMMARY=19204
tis_arg=PDBRYG=19205
tis_arg=PDBXML=19206
tis_arg=PDBES=19207
```

## UNIX

The storage location for this file is as follows:

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

Add the following section to this file.

```
[convertv13]
execute_style=on
path=%BASE_DIRECTORY/bin/dsa_tis
bad_file_dir=%TRACE_DIRECTORY
bad_file_name=%c_convertv13.bad
execute_retry_max=0
# DS PDB registration
input=SQC3PDBSREG
# PDB consolidation
input=SQC3PDBCONSOL
# Summary
input=SQC3PDBSUMMARY
# ES PDB registration
input=SQC3PDBESREG
# XML Configuration
input=SQC3PDBXML
# tis specific parameters
tis_output_stream=0
tis_record_definition=%CONTROL_DIRECTORY/convertV13toV12.trd
tis_script=%CONTROL_DIRECTORY/convertV13toV12.ttd
tis_arg=PDBDS=19200
tis_arg=PDBCONSOL10=19201
tis_arg=PDBCONSOL60=19202
tis_arg=PDBCONSOL1440=19203
tis_arg=PDBSUMMARY=19204
tis_arg=PDBRYG=19205
tis_arg=PDBXML=19206
tis_arg=PDBES=19207
```

### 3. Start the Manager service or daemon and confirm that it operates normally

Start the Manager service or daemon using the procedure described in "[A.8 How to Start and Stop Resident Processes](#)" for Systemwalker Service Quality Coordinator V12. Also check that the relevant resident processes have started correctly.

# Chapter 9 Uninstallation

This section explains the procedure used to uninstall this software.

## 9.1 Uninstallation (Windows Versions)

This chapter explains how to uninstall this software.

### Required privileges

The user must have the privileges of a member of the Administrators group.



Backing up user assets

Before uninstalling this product, back up any user assets that need to be kept. Refer to "Backup and Restore" in the *User's Guide* for the backup procedure.

### Procedure

This procedure is common to the following install types.

- "Systemwalker Service Quality Coordinator Enterprise Manager"
- "Systemwalker Service Quality Coordinator Manager"
- "Systemwalker Service Quality Coordinator Proxy Manager"
- ""Systemwalker Service Quality Coordinator Agent for Business"
- Systemwalker Service Quality Coordinator Agent for Server"
- "Systemwalker Service Quality Coordinator Operation Management Client"

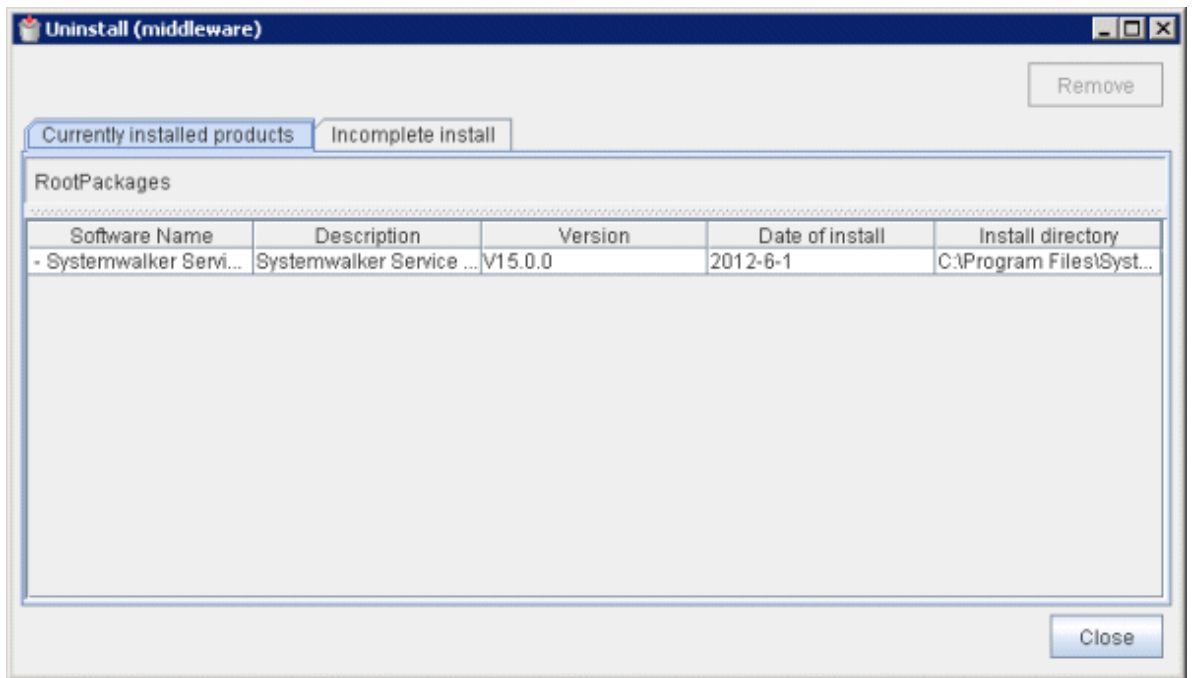
#### 1. Log in

Log in to the system with a user that has the privileges of a member of the Administrators group.



## 2. Executing uninstaller

From the **Start** menu, select **Program** or **All Programs, Fujitsu, Uninstallation and Management (middleware)**.



[**Software Name**] : Installation type

[**Version**] : V15.0.0

[**Date of Install**] : The date of installation

[**Install Directory**] : <Installed Directory>



### Information

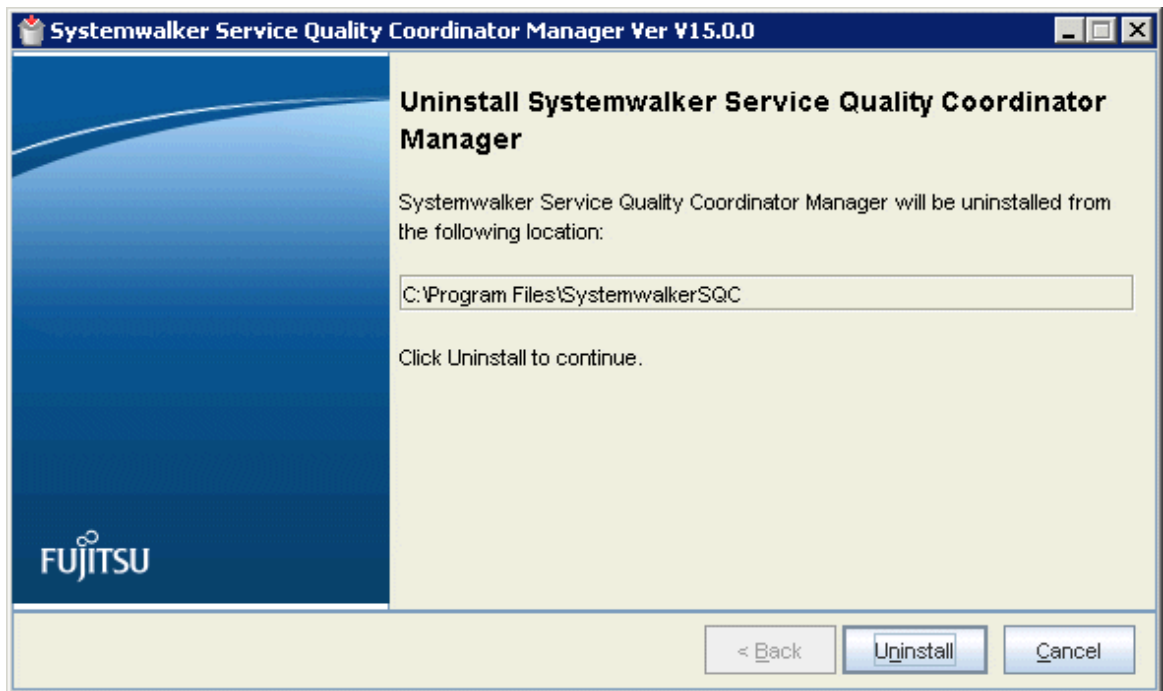
When uninstallation is to be performed due to a failed installation, Systemwalker Service Quality Coordinator may be displayed in the **Incomplete install** tab. If this occurs, select [Systemwalker Service Quality Coordinator (Install type)] in the **Incomplete install** tab, click **Remove** button.

## 3. Selection of software to uninstall

Select software to uninstall on the above-mentioned screen, and then click **Remove** button.

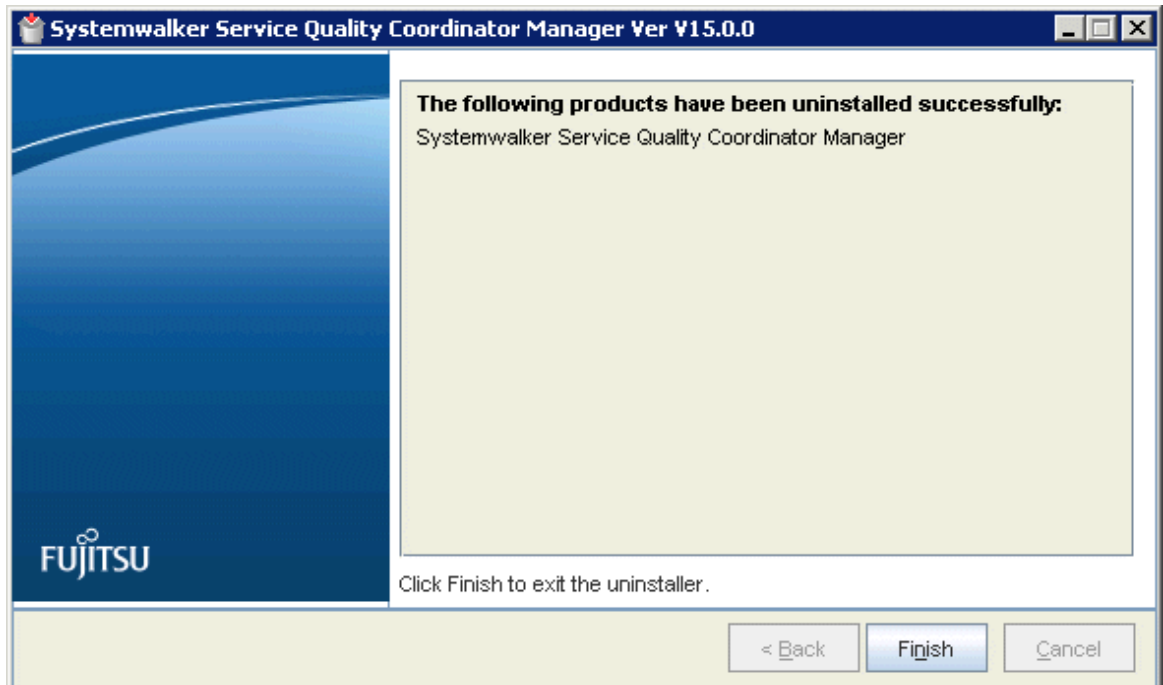
4. Executing uninstallation

Click **Uninstall** button.



5. Finish

Click **Finish** button when uninstallation completed.



6. After uninstallation, following directories might be undeleted. In that case, delete following directories manually.

- Installation directory

- Variable file directory (except Operation Management Client)

### Note

.....  
If the PDB storage location has been changed (refer to "6.6.1.1 Changing the PDB Storage Location"), then the destination directory needs to be deleted manually.  
.....

- Report management folders (when dividing the report management folder in the operation management client)

### Note

.....  
If the report management folder has been divided, then the virtual directory allocated to the report management folder also need to be deleted manually.  
.....

### Point

.....  
About the uninstallation of the redistributable packages:

If the installers are installed on a system that does not have the following redistributable packages already installed, then these are automatically installed for you:

#### **Windows**

- Microsoft Visual C++ 2005 Redistributable
- Microsoft Visual C++ 2005 Redistributable (x64) Note: When installed on a Windows x64 machine

When uninstalling each environment, these packages are not automatically uninstalled.  
.....

### Note

#### **Uninstalling Systemwalker Service Quality Coordinator from an environment that also contains Systemwalker Centric Manager's Report function**

If the computer contains both Systemwalker Centric Manager's Report function and a Systemwalker Service Quality Coordinator Operation Management Client, the Operation Management Client and the Report function will share library settings that are used for displaying graphs. If the Operation Management Client is subsequently uninstalled, some of the libraries used by Systemwalker Centric Manager's Report function will be deregistered from the system and it will no longer be possible to create graphs.

In such cases, run the "regfxdll.bat" batch file provided with Systemwalker Centric Manager's Report function to reregister the relevant libraries and enable graphs to be displayed.

This problem can occur when using the Report function of Systemwalker Centric Manager 13.0 or later.

Use the following procedure to run "regfxdll.bat":

1. Open a Command Prompt and change the current directory to the following:

```
<Systemwalker Centric Manager installation directory>\mpwalker\mpreport
```

In a standard installation, the installation directory is as follows:

```
<C:\Win32APP>
```

Example

```
C:\> cd Win32APP\mpwalker\mpreport
```

2. Execute "regfxdll.bat".

Example

```
C:\Win32APP\mpwalker\mpreport> regfxdll.bat
```

---

## 9.2 Uninstallation (UNIX Version)

---

This section explains the uninstallation procedure that is used for UNIX versions of Systemwalker Service Quality Coordinator.

### Required privileges

The user must have the privileges of the system administrator (superuser).



Backing up user assets

When uninstalling this product, any files added after installation will also be deleted, so back up any user assets that need to be kept. Refer to "Backup and Restore" in the *User's Guide* for the backup procedure.

### Procedure

The procedure is a common content to the following installation types.

- Systemwalker Service Quality Coordinator Enterprise Manager
- Systemwalker Service Quality Coordinator Manager
- Systemwalker Service Quality Coordinator Proxy Manager
- Systemwalker Service Quality Coordinator Agent for Business
- Systemwalker Service Quality Coordinator Agent for Server

1. Log in

Log in to the system as a superuser.

2. Executing uninstaller

Execute following command.

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

### 3. Selecting Software

Select **Systemwalker Service Quality Coordinator (Install Type)**.

```
Uninstallation and Management (Middleware) is loading ...

Currently installed products
1. Systemwalker Service Quality Coordinator Manager V15.0.0

Type [number] to select the software you want to uninstall.
[number,q]
=>1
```

Uninstaller ends when "q" is selected.

### 4. Executing uninstallation

Select "y" and execute uninstallation.

```
Systemwalker Service Quality Coordinator Manager
  Description: Systemwalker Service Quality Coordinator Manager
  Version: V15.0.0
  Manufacturer: Fujitsu Limited.
  Install directory: /opt/FJSVssqc
  Date of install: 2012-5-31

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

Return to the previous screen when "b" is selected.

Uninstaller ends when "q" is selected.

### 5. Finish

When uninstallation has been completed, following screen is displayed.

```
The following software was uninstalled:
  Systemwalker Service Quality Coordinator Manager

Uninstallation and Management (Middleware) is ended.
```



## 9.3 Uninstallation under a MSCS/Failover Clustering Cluster System

This section explains the procedure used to uninstall a Manager or Enterprise Manager from a cluster system.

- [9.3.1 Tasks to perform on the Enterprise Manager](#)
- [9.3.2 Tasks to perform on a Manager](#)

### 9.3.1 Tasks to perform on the Enterprise Manager

---

## Procedure

Perform the procedure shown below.

### - 9.3.1.1 Preparing for uninstallation

1. Verify the active node
2. Stop the services managed by the cluster system
3. Delete resources

### - 9.3.1.2 Uninstalling an Enterprise Manager

1. Run the cluster setup cancellation command on the standby server
2. Uninstall the Enterprise Manager from the standby server
3. Run the cluster setup cancellation command on the active server
4. Uninstall the Enterprise Manager from the active server

### - 9.3.1.3 Delete resources

1. Delete unnecessary files from the shared directory
2. Remove the shared disk for the Enterprise Manager
3. Delete resource groups
4. Starting services

## 9.3.1.1 Preparing for uninstallation

### 1. Verify the active node

If the standby server has become an active node, treat that currently active server as the active node.

### 2. Stop the services managed by the cluster system

Use Cluster Administrator to vary the following Enterprise Manager service offline:

- "Systemwalker SQC DCM" service



.....  
If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.  
.....

### 3. Delete resources

Use Cluster Administrator to delete resources.

Delete the Enterprise Manager cluster service and application resources registered in "[3.7.1.4 Registering resources](#)".

## 9.3.1.2 Uninstalling an Enterprise Manager

### 1. Execute the cluster setup cancellation command on the standby server

Execute the cluster setup cancellation command on the standby server, as follows:

```
<Installation directory>\bin\sqcunsetcl
```

#### 2. Uninstall the Enterprise Manager from the standby server

Uninstall the Enterprise Manager from the standby server.

Refer to "9.1 Uninstallation (Windows Versions)" for details on the uninstallation procedure.

#### 3. Execute the cluster setup cancellation command on the active server

Execute the cluster setup cancellation command on the active server, as follows:

```
<Installation directory>\bin\sqcunsetcl
```

#### 4. Uninstall the Enterprise Manager from the active server

Uninstall the Enterprise Manager from the active server.

Refer to "9.1 Uninstallation (Windows Versions)" for details on the uninstallation procedure.

### 9.3.1.3 Delete resources

#### 1. Delete unnecessary directories from the shared disk

Delete the following directory from the shared disk. This directory was created by Systemwalker Service Quality Coordinator's cluster setup command.

```
<shared disk drive>\SystemwalkerSQC
```

If the storage location of the performance database (PDB) and archive files are changed, then you must delete the migration target directories.

#### 2. Remove the shared disk for the Enterprise Manager

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Use Cluster Administrator to delete the shared disk that was registered as a cluster resource with the resource group named "Systemwalker SQC Group".
  
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Remove the shared disk that was registered with the Systemwalker Centric Manager resource group named "CentricMGR Group".

#### 3. Delete resource groups

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Use Cluster Administrator to delete the resource group named "Systemwalker SQC Group".
  
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
No resource groups are to be deleted.

#### 4. Starting services

- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system: Start the Systemwalker Centric Manager service that was stopped in Step 2, "Stop the services managed by the cluster system" in ["9.3.1.1 Preparing for uninstallation"](#).

## 9.3.2 Tasks to perform on a Manager

---

### Procedure

Perform the procedure shown below.

#### - [9.3.2.1 Preparing for uninstallation](#)

1. Verify the active node
2. Stop the services managed by the cluster system
3. Delete resources

#### - [9.3.2.2 Uninstalling a Manager](#)

1. Run the cluster setup cancellation command on the standby server
2. Uninstall the Manager from the standby server
3. Run the cluster setup cancellation command on the active server
4. Uninstall the Manager from the active server

#### - [9.3.2.3 Delete resources](#)

1. Delete unnecessary files from the shared directory
2. Remove the shared disk for the Manager
3. Delete resource groups
4. Starting services

### 9.3.2.1 Preparing for uninstallation

#### 1. **Verify the active node**

If the standby server has become an active node, treat that currently active server as the active node.

#### 2. **Stop the services managed by the cluster system**

Use Cluster Administrator to vary the following Manager/Enterprise Manager services offline:

- "Systemwalker SQC DCM" service
- "Systemwalker SQC sqcschdle" service

If the Web access log analysis function is used, vary the following services offline as well:

- "Systemwalker SQC dbrefs" service
- "Systemwalker SQC dbregsv" service



If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.

---



### 3. Delete resources

Use Cluster Administrator to delete resources.

Delete the Manager cluster service and application resources registered in "[3.7.2.4 Registering resources](#)".

## 9.3.2.2 Uninstalling a Manager

### 1. Execute the cluster setup cancellation command on the standby server

Execute the cluster setup cancellation command on the standby server, as follows:

```
<Installation directory>\bin\sqcunsetcl
```

### 2. Uninstall the Manager from the standby server

Uninstall the Manager from the standby server.

Refer to "[9.1 Uninstallation \(Windows Versions\)](#)" for details on the uninstallation procedure.

### 3. Execute the cluster setup cancellation command on the active server

Execute the cluster setup cancellation command on the active server, as follows:

```
<Installation directory>\bin\sqcunsetcl
```

### 4. Uninstall the Manager from the active server

Uninstall the Manager from the active server.

Refer to "[9.1 Uninstallation \(Windows Versions\)](#)" for details on the uninstallation procedure.

## 9.3.2.3 Delete resources

### 1. Delete unnecessary directories from the shared disk

Delete the following directory from the shared disk. This directory was created by Systemwalker Service Quality Coordinator's cluster setup command.

```
<shared disk>\SystemwalkerSQC
```

If the storage location of the performance database (PDB) and archive files are changed, then you must delete the migration target directories.

### 2. Remove the shared disk for the Manager

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Use Cluster Administrator to delete the shared disk that was registered as a cluster resource with the resource group named "Systemwalker SQC Group".
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Remove the shared disk that was registered with the Systemwalker Centric Manager resource group named "CentricMGR Group".

### 3. Delete resource groups

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Use Cluster Administrator to delete the resource group named "Systemwalker SQC Group".
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
No resource groups are to be deleted.

### 4. Starting services

- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Start the Systemwalker Centric Manager service that was stopped in Step 2, "Stop the services managed by the cluster system" in "9.3.2.1 Preparing for uninstallation".



## 9.4 Uninstalling from a PRIMECLUSTER Cluster System

This section explains the procedure used to uninstall a Manager or Enterprise Manager from a cluster system.

- [9.4.1 Tasks to perform on the Enterprise Manager](#)
- [9.4.2 Tasks to perform on a Manager](#)

### 9.4.1 Tasks to perform on the Enterprise Manager

#### Procedure

Perform the procedure shown below.

- [9.4.1.1 Preparing for uninstallation](#)
  1. Stop the cluster application
  2. Delete applications and resources
- [9.4.1.2 Uninstalling an Enterprise Manager](#)
  1. Run the cluster setup cancellation command on the standby server
  2. Run the cluster setup cancellation command on the active server
  3. Uninstall the Enterprise Manager from the active and standby servers.
- [9.4.1.3 Delete resources](#)
  1. Delete unnecessary directories from the shared disk
  2. Delete the shared disk device used for the Enterprise Manager from the cluster application.
  3. Delete the cluster application for the Enterprise Manager.
  4. Start the cluster application

#### 9.4.1.1 Preparing for uninstallation

##### 1. Stop the cluster application

Use PRIMECLUSTER's Cluster Admin GUI to shut down the Systemwalker Service Quality Coordinator service.

Refer to the PRIMECLUSTER manual for the shutdown procedure.



## Note

If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.

### 2. Delete applications and resources

Delete the Enterprise Manager applications and resources registered with the cluster system in "[3.8.1.4 Registering resources](#)".

## 9.4.1.2 Uninstalling an Enterprise Manager

### 1. Execute the cluster setup cancellation command on the standby server

Vary the shared disk online and execute the cluster setup cancellation command "sqcunsetcl" on the standby server, as follows:

```
/opt/FJSVssqc/bin/sqcunsetcl
```

### 2. Execute the cluster setup cancellation command on the active server

Execute the cluster setup cancellation command "sqcunsetcl" at the active server, as follows:

```
/opt/FJSVssqc/bin/sqcunsetcl
```

### 3. Perform uninstallation on the active and standby servers

Uninstall the Enterprise Managers from the active server and the standby server.

Refer to "[9.2 Uninstallation \(UNIX Version\)](#)" for the uninstallation method.

## 9.4.1.3 Delete resources

### 1. Delete unnecessary directories from the shared disk device

Delete the following directory from the shared disk device. This directory was created by Systemwalker Service Quality Coordinator's cluster setup command.

```
<mount point>/SystemwalkerSQC
```

If the storage location of the performance database (PDB) and archive files are changed, then you must delete the migration target directories.

### 2. Delete the shared disk device for the Enterprise Manager from the cluster application

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Delete the shared disk device registered in "[3.8.1.1 Before constructing the environment](#)" from the Systemwalker Service Quality Coordinator cluster application.
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Delete the shared disk device registered in "[3.8.1.1 Before constructing the environment](#)" from the Systemwalker Centric Manager cluster application.

### 3. Delete the cluster application for the Enterprise Manager.

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Delete the cluster application for the Enterprise Manager.
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
No cluster applications are to be deleted.

### 4. Start the cluster application

- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Start the Systemwalker Centric Manager cluster application that was stopped in Step 1, "Stop the cluster application" in ["9.4.1.1 Preparing for uninstallation"](#).

## 9.4.2 Tasks to perform on a Manager

---

### Procedure

Perform the procedure shown below.

#### - [9.4.2.1 Preparing for uninstallation](#)

1. Stop the cluster application
2. Delete applications and resources

#### - [9.4.2.2 Uninstalling a Manager](#)

1. Run the cluster setup cancellation command on the standby server
2. Run the cluster setup cancellation command on the active server
3. Uninstall the Managers from the active and standby servers

#### - [9.4.2.3 Delete resources](#)

1. Delete unnecessary directories from the shared disk
2. Delete the shared disk device from the cluster application
3. Delete the cluster application for the Manager
4. Start the cluster application

### 9.4.2.1 Preparing for uninstallation

#### 1. Stop the cluster application

Use PRIMECLUSTER's Cluster Admin GUI to shut down the Systemwalker Service Quality Coordinator service.  
Refer to the PRIMECLUSTER manual for the shutdown procedure.



.....  
If Systemwalker Service Quality Coordinator is linked to Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well  
.....

#### 2. Delete applications and resources

Delete the Manager applications and resources registered with the cluster system in ["3.8.2.4 Registering resources"](#).

## 9.4.2.2 Uninstalling a Manager

### 1. Execute the cluster setup cancellation command on the standby server

Vary the shared disk online and execute the cluster setup cancellation command "sqcunsetcl" on the standby server, as follows:

```
/opt/FJSVssqc/bin/sqcunsetcl
```

### 2. Execute the cluster setup cancellation command on the active server

Execute the cluster setup cancellation command "sqcunsetcl" at the active server, as follows:

```
/opt/FJSVssqc/bin/sqcunsetcl
```

### 3. Perform uninstallation on the active and standby servers

Uninstall the Managers from the active server and the standby server.

Refer to "[9.2 Uninstallation \(UNIX Version\)](#)" for the uninstallation method.

## 9.4.2.3 Delete resources

### 1. Delete unnecessary directories from the shared disk device

Delete the following directory from the shared disk device. This directory was created by Systemwalker Service Quality Coordinator's cluster setup command.

```
<mount point>/SystemwalkerSQC
```

If the storage location of the performance database (PDB) and archive files are changed, then you must delete the migration target directories.

### 2. Delete the shared disk device for the Manager from the cluster application

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Delete the shared disk device registered in "[3.8.2.1 Before constructing the environment](#)" from the Systemwalker Service Quality Coordinator cluster application.
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
Delete the shared disk device registered in "[3.8.2.1 Before constructing the environment](#)" from the Systemwalker Centric Manager cluster application.

### 3. Delete the cluster application for the Enterprise Manager.

- If Systemwalker Service Quality Coordinator is operating in an independent cluster system:  
Delete the cluster application for the Enterprise Manager.
- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system:  
No cluster applications are to be deleted.

#### 4. Start the cluster application

- If Systemwalker Service Quality Coordinator was added to a Systemwalker Centric Manager cluster system: Start the Systemwalker Centric Manager cluster application that was stopped in Step 1, "Stop the cluster application" in "9.4.2.1 Preparing for uninstallation".

## 9.5 Uninstalling the Uninstallation and Management (middleware)

---

This section describes how to uninstall the Uninstallation and Management (middleware).

- This tool has managed another Fujitsu middleware products even if Systemwalker Service Quality Coordinator. Do not uninstall this tool, unless you really need it. If you have accidentally uninstalled it, re-install it following the steps below.

#### [Windows]

1. Log in as a user who belongs to the Administrators group on the installed machine, change management authority use account.
2. Insert the product DVD-ROM in the drive.
3. Execute the install command.

```
DVD-ROM drive:\CIR\cirinst.exe
```

#### [UNIX]

1. Log in as a user who belongs to the Administrators group on the installed machine, change management authority use account.
2. Insert the product DVD-ROM in the drive.
3. Execute the install command.

The following is an example in case of the mount point is /mnt/cdrom.

```
# /mnt/cdrom/CIR/cirinst.sh
```

- If you uninstall this tool, execute as following steps.

1. Start the tool and check whether there are any other Fujitsu middleware products left on the system.

#### [Windows]

**Start** menu:

Select **Start** >> **All Programs** >> **Fujitsu** >> **Uninstall (middleware)**

#### [UNIX]

```
/opt/FJSVcir/cir/bin/cimanager.sh [-c]
```

-c: Command interface



#### Note

Note: The command will fail if its path includes spaces, so do not move it to a directory with spaces in its name.

2. If no Fujitsu middleware products have been installed, then issue the command below:

**[Windows]**

```
%SystemDrive%\FujitsuF4CR\bin\cirremove.exe
```

**[Linux]**

```
# /opt/FJSVcir/bin/cirremove.sh
```

3. At the uninstallation confirmation prompt, enter "y":

```
"This software is a tool that is shared with other Fujitsu products. Are you sure  
you want to remove this software? [y/n]"
```

4. Uninstallation will start.

The process will take a few seconds.

5. Uninstallation will complete.

The directories below and its files will still remain, and must be manually deleted:

**[Windows]**

```
%SystemDrive%\FujitsuF4CR
```

**[UNIX]**

```
/var/opt/FJSVcir
```

# Chapter 10 Incompatible Items

This chapter explains the incompatible items when upgrading the Systemwalker Service Quality Coordinator.

## 10.1 Modification at Installation/Uninstallation

Method of communication with the Manager

In V13.5.0 and earlier, either the Push or Pull method of communication with the Manager was selected at installation. In V15.0.0 and later, however, the default communication method is now the Push method, so selecting a communication method at installation is no longer necessary.

To use the Pull method, switch to the Pull method after installation.

Refer to "[Chapter 4 Pull Type Communication Settings](#)" for information on the procedure for switching after installation.

Method of uninstallation

The method of starting the uninstaller was changed.

### Windows

V13.5.0 or earlier:

```
[Start] - [Control Panel] - [Add or Remove Applications] or [Add or Remove Programs]
```

V15.0.0 or later:

```
[Start] - [Programs] or [All Programs] - [Fujitsu] - [Uninstallation and Management (middleware)]
```

### UNIX

V13.5.0 or earlier:

```
/opt/FJSVssqc/bin/uninstall.sh
```

V15.0.0 or later:

```
/opt/FJSVcir/cir/bin/cimanager.sh -c
```

Refer to "[Chapter 9 Uninstallation](#)" for detail information.

## 10.2 Changes to the Data

### Performance information collected at the Symfoware Server

The Symfoware Server collection items listed below (information collected using the rdbps command) are collected differently from V13.2.0. Until V13.0.0 of this product, cumulative values were collected for these items, but from V13.2.0 and onwards differential values are collected for each collection interval.

- SUM\_RDBPS
- RDBPS\_S
- RDBPS\_R
- RDBPS\_IA

Refer to "Data Formats" in the *Reference Guide* for detail information about collection items.



## Performance information collected by Browser Agent function

Following collection items collected by Browser Agent function are not collected as default from V13.3.0 and later of this product.

- WEBSLM\_URL
- WEBSLM\_TCP
- WEBSLM\_DNS

Refer to "The ResponseCondition folder / End user response reports" in the *Reference Guide* for detail information about collection items.

## Required size for disk space information in file system

Because calculation method has been changed, required size for disk space information in file system in V15.0.0 is different from the size in V13.5.0 and earlier.

Fields that the calculation method has been changed are as follows.

Record ID	Field Name	Description
UX_DISKSPACE	dusebyts	Required size in byte in file system when mounted
	dusembs	Required size in Mbyte in file system when mounted

Refer to "[Appendix C How to change the calculation method of required size for disk space information in file system \(for compatibility\)](#)" when it is required to calculate same method as V13.5.0 and earlier.

## 10.3 Changes to the Definition

---

### Environmental definition file

Compatibility information of the environmental definition file is as shown below.

		Creation version		
		V11.0	V12.0	V13.0 and later
Read Version	V11.0	x	z	z
	V12.0	y(*)	x	x
	V13.0 and later	y(*)	y(*)	x

x : Compatible

y : Partially incompatible

z : Incompatible

(\*) : If V11.0/V12.0 operates with V13.0 or later, refer to "[Chapter 8 Running Different Versions of Systemwalker Service Quality Coordinator Together](#)" for more information.

### Connection parameter definition file of the SAP NetWeaver linkage

From V13.5.0 and later, define PASSWORD in the connection parameter definition file (sqcGetSAPAlertmon.ini) for the SAP NewWeaver linkage with encrypted password.

If the upgrade installed from the version of V13.4.0 or earlier, encrypt the password which is defined as the PASSWORD in the connection parameter definition file (sqcGetSAPAlertmon.ini) for the SAP NewWeaver linkage.

Refer to "Connection parameters definition file" in the *User's Guide* for how to define the password.

## Management settings for Oracle Database Server

Encrypted password define in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server on V15.0.0 and later.

When upgrade installation from V13.5.0 or earlier has been done under the environment that collects Oracle Database Server performance information, encrypt the password defined in PASS in the [ORA] section in the collection template (template.dat) for management settings of Oracle Database Server.

## 10.4 Changes to the PDB File Name

---

PDB file for summary data (pdb\_SUMMARY.dat) is renamed to pdb\_SUMMARY\_yyyymmdd.dat (yyymmdd : year month day) in V13.5.0

## 10.5 Changes to the Treatment of the Summary Data when the Upgrading Installation

---

When an upgrade is installed, the handling of summary data has been changed under V13.5.0.

Upgrading to V13.4.0 or earlier	<ul style="list-style-type: none"><li>- When upgrading from V11 or V12, it was possible to specify PDB conversion options so that the pre-upgrade summary data could be referenced after the upgrade.</li><li>- When upgrading from versions between V13.0.0 and V13.3.0, the pre-upgrade summary data could be referenced after the upgrade.</li></ul>
Upgrading to V13.5.0 or later	The pre-upgrade summary data cannot be referenced after the upgrade.

## 10.6 Changes to Messages

---

### Message for the Threshold Value Monitoring

The host name is added to Threshold Value Monitoring messages with V13.4.0.

Changes to the messages are as follows:

#### Target event ID

- 6101 (Error)
- 6102 (Warning)
- 6103 (Information)

#### Changes

Message text

	Change
V13.3.0 or earlier	"Resource ID" is displayed in Device Name:%2.
V13.4.0 or later	"Host Name: Resource ID" is displayed in Device Name:%2.

Refer to "Common Messages" in the *Reference Guide* for more information.

### Incompatibility of message output

Following messages (messages that the user do not need to do any action) are not output from V13.4.0 and later.

#### Target event ID

0550, 1201, 1203, 1204, 1254, 1300, 1301, 1305, 1306, 1307, 1309, 1311, 1470, 1473, 1552, 1553, 1554, 1555, 1904, 1905, 2003, 2200, 2303, 2504, 2900, 3000, 3060, 3062, 3132, 3605, 5308

(If the message is for UNIX versions, "DSA" or "OCM" is attached before above number, and "E", "W", or "I" is attached after the number.)

### Change of message output frequency

Following message output frequency is changed with V13.5.0.

#### Target event ID

- 2700/DSA2700E

#### Change

V13.4.0 or earlier

Message is output immediately after the detection of the state that the Agent is unable to connect with Manager.

V13.5.0 or later

Message is output when the Agent is unable to connect with Manager for 60 minutes.

## 10.7 Changing the Display Name and Operation Method

- Window names and operations have been improved in version 13.4.0 and V15.0.0.

Changes to the window names of major functions are as follows:

Label up to V13.3.0	Label from V13.4.0	Label from V15.0.0
Monitor	Summary	Summary
Drilled Down	Detail	Detail
On-Demand Report	Analysis	Analysis/Planning

Refer to the User's Guide (Console Edition) for details.

- The following console improvements have been made under V13.5.0:
  - The display names and display sequence in the summary tree have been changed.
  - The type display sequence has been changed in the analysis window and the periodic report registration window.

Refer to the User's Guide (Console) for details.

- The following console change has been made under V13.5.0:
  - The Storage folder under the StorageResource folder in the details tree has been changed to SAN Storage.
  - Graph of the total memory in the "MS-SQL Server MEMORY" report is changed from line graph to piling graph.
- When Excel(R) format files are created from chronological order report and from summary data chronological report, the output method has changed under V13.5.0. and V15.0.0

V13.4.0	The performance information graph and table for one type are output in one sheet.
V13.5.0	The performance information graphs and tables are output in separate sheets.
V15.0.0 and later	The performance information graph and table for one type are output in one sheet.

- Reports under V13.5.0 and earlier are categorized as Full system inspection, Categorized diagnostic, and Detailed. Under V15.0.0, the categorization method has been changed so they are now categorized by purpose of operation (scenario). Some report titles have also been changed.
  - Refer to "[Appendix B Changes in Report](#)" for a list of the report titles and categories that have been changed between V13.5.0 and earlier and V15.0.0 and later.

- Full system inspection analysis, Categorized diagnostic analysis, and Detailed analysis reports that were registered under V13.5.0 and earlier will be displayed under the category of "Migration report".
- Full system inspection analysis, Categorized diagnostic analysis, and Detailed analysis scheduled reports that were registered under V13.5.0 and earlier will be displayed in "Scheduled report registered name".
- Report which created by On-demand Report or Analysis under V13.5.0 and earlier are displayed as "Registered Name" in the "Report Name" column in the history display of the console.
- Report which registered in the Scheduled Report and created under V13.5.0 and earlier are displayed as "Registered Name" in the "Report Name" column in the Scheduled Report List display. Report which created after upgrade to V15.0 is displayed as "Registered Name" in the "Report Name" column. To display report name in the "Report Name" column, select registered report in the "Scheduled Report Registration View" of the "Setting View" and "Replace Registration". Note that report name which created before overwrite save in the "Report Name" column is stay as "Registered Name", and cannot change.
- Under V15.0.0, the expressions for the Solaris container in the monitor/report have been changed as shown below.

	<b>V13.5.0 and earlier</b>	<b>V15.0.0 and later</b>
For Solaris 10	Solaris zone	Solaris zone (Solaris 10)
For Solaris 11	None	Solaris zone

Remarks: From Solaris 11, the monitoring of system resources that have been consumed in Solaris zones using the zonestat command has been enhanced. In the Solaris containers in Solaris 10 and Solaris 11, the monitoring methods have been changed.

As a result, the name used in the monitor/report for Solaris 10 has been changed from "Solaris zone" to "Solaris zone (Solaris 10)", and a Monitor/Report for Solaris 11 has been added using the expression "Solaris zone".

- When contents of the report output in Excel(R) format files under V13.5.0 and earlier, Microsoft(R) Excel is required to be installed in the Operation Management Console, but the installation is no more required from V15.0.0 and later.
- When contents of the report output in Excel(R) format files under V13.5.0 and earlier, the extension of the file is .xls, but it is .xlsx or .xlsm under V15.0.0 and later.



## 10.8 Migration of the Dashboard Server

- Dashboard server cannot migrate from old version.
- Under V13.5.0, the name of the Monitoring Designer dashboard component has been changed to Analytics Studio.
- As for the dashboard function of the Solaris version and the Linux version, operation OS became Windows
- 
- From V15.0.0, following products are excluded from the bundle products.
  - Interstage Application Server
  - Symfoware Server
  - Configuration Management DataBase (CMDB)

# Appendix A Setup Commands and Resident Processes

This appendix explains the various setup commands and how to start and stop resident processes.

Refer to the *Reference Guide* for details.

## A.1 Server Resource Information Collection Policy Creation Command

This section explains the Server Resource Information Collection Policy Creation Command.

Refer to "sqcRPolicy (Server Resource Information Collection Policy Creation Command)" and " sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for more information.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

#### Windows

For Windows systems, to collect disk-related performance information, the *diskperf*Windows command must be executed beforehand to enable information to be collected. This command is used as follows:

```
diskperf -y
```

Refer to the Windows help for details on the *diskperf* command. Before using this command, be sure to enable both physical drives and logical drives.



- The system must be restarted after settings are made using the diskperf command.
- The diskperf command must be executed before the Systemwalker Service Quality Coordinator DCM service starts (before performance information starts being collected).

### Format

1. Create a server resource information collection policy

#### Windows

```
Installation directory\bin\sqcRPolicy.exe
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcRPolicy.sh
```

## 2. Apply the policy

### Windows

```
Installation directory\bin\sqcSetPolicy.exe [-h host name] [-p <IP address>]
```

### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

### Point

From Systemwalker Service Quality Coordinator V13.3.0 or later, the service or daemon no longer needs to be stopped before executing the Policy Application Command.

However, when using the "-h" or "-p" option, stop the service or daemon first by referring to "[A.8 How to Start and Stop Resident Processes](#)".

If the services or daemons are running and performance data for various middleware is being collected when the Policy Application Command is executed, then the collection of this performance data will be temporarily suspended while policies are applied. Collection of this performance data will start again after the policies have been finished being applied.

## Options of sqcSetPolicy (Policy Application Command)

-h <host name>

Use this option to specify a system name to change the managed system name.

Also, use this option to specify a system name for the managed system in the following kinds of cluster operations:

- Where the server is a Manager and information about resources within the server is to be collected.  
=> Specify the inheritance node.
- Where the server is an Agent in a cluster system that uses node name inheritance.  
=> Specify node name of each Agent.

If this option is omitted, host name which is set at the installation or the system name which was set at the last -h option will be used as system name.

Host name will not be updated automatically, so use this option to change the host name.

### Note

If this command is re-executed or an Agent is reinstalled where an operating environment for this product already exists and an Agent has already been registered, then use the same system name as was used before if the -h option is specified.

If the system name has to be changed for some reason, first delete the previous system name information from the PDB using the data deletion command explained in "sqcPDBerase (Data Deletion Command)" in the *Reference Guide* for more information. However, in this case, performance information that has already been collected cannot be displayed.

-p <IP address>

In the dashboard, management target is managed by using IP address.

When using the dashboard, be sure to specify IP address of the management target by using this option after installation. Specify the IP address of the connection Manager or Enterprise Manager which is available for connection.

Specify the inheritance node if the cluster system is being used.

If this option is omitted, IP address which was set at the last -p option will be used.

IP address will not be updated automatically, so use this option to change the IP address.

## Note

If this command is executed at the first time after the installation, and if this option is omitted, IP address will be set by the address which is automatically collected. However, if multiple IP addresses are existed, IP address which can communicate with the connection Manager or Enterprise Manager might not be acquired. Be sure to specify IP address of the management target by using -p option.

## Point

When the Server Resource Information Collection Policy Creation Command (sqcRPolicy) or Remote Policy Operation Command (sqcCtrlPolicy.exe -e RP) is executed, a file named "MiddlewareConf.xml" is created. To delete a managed object, edit the content of MiddlewareConf.xml by referring to "Resource Configuration Information (MiddlewareConf.xml)" in the *Reference Guide*.

## A.2 Response/Operation Information Collection Policy Setup Command

---

This section explains the Response/Operation Information Collection Policy Setup Command.

Refer to "sqcAPolicy (Response/Operation Information Collection Policy Setup Command)" and " sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for more information.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### 1. Create response/operation information collection policy

#### Windows

```
Variable file directory\control\ServiceConf.xml
```

#### UNIX

```
/etc/opt/FJSVssqc/ServiceConf.xml
```

### 2. Apply the policy

#### Windows

```
Installation drectory\bin\sqcSetPolicy.exe [-h host name] [-p <IP address>]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

## Point

---

From Systemwalker Service Quality Coordinator V13.3.0 or later, the service or daemon no longer needs to be stopped before executing the Policy Application Command.

However, when using the "-h" or "-p" option, stop the service or daemon first by referring to "[A.8 How to Start and Stop Resident Processes](#)".

If the services or daemons are running and performance data for various middleware is being collected when the Policy Application Command is executed, then the collection of this performance data will be temporarily suspended while policies are applied. Collection of this performance data will start again after the policies have been finished being applied.

---

### Options of sqcSetPolicy (Policy Application Command)

-h <host name>

Use this option to specify a system name to change the managed system name.

Also, use this option to specify a system name for the managed system in the following kinds of cluster operations:

- Where the server is a Manager and information about resources within the server is to be collected.  
=> Specify the inheritance node.
- Where the server is an Agent in a cluster system that uses node name inheritance.  
=> Specify node name of each Agent.

If this option is omitted, host name which is set at the installation or the system name which was set at the last -h option will be used as system name.

Host name will not be updated automatically, so use this option to change the host name.

### Note

---

If this command is re-executed or an Agent is reinstalled where an operating environment for this product already exists and an Agent has already been registered, then use the same system name as was used before if the -h option is specified.

If the system name has to be changed for some reason, first delete the previous system name information from the PDB using the data deletion command explained in "sqcPDBerase (Data Deletion Command)" in the *Reference Guide* for more information. However, in this case, performance information that has already been collected cannot be displayed.

---

-p <IP address>

In the dashboard, management target is managed by using IP address.

When using the dashboard, be sure to specify IP address of the management target by using this option after installation. Specify the IP address of the connection Manager or Enterprise Manager which is available for connection.

Specify the inheritance node if the cluster system is being used.

If this option is omitted, IP address which was set at the last -p option will be used.

IP address will not be updated automatically, so use this option to change the IP address.

### Note

---

If this command is executed at the first time after the installation, and if this option is omitted, IP address will be set by the address which is automatically collected. However, if multiple IP addresses are existed, IP address which can communicate with the connection Manager or Enterprise Manager might not be acquired. Be sure to specify IP address of the management target by using -p option.

---



## A.3 Two-tier Manager Operation Setup Command

To centrally manage an entire system using an Enterprise Manager, it is necessary to run the Two-tier Manager Operation Setup Command on each Manager after each Manager has been installed.

The specifications of the Two-tier Manager Operation Setup Command "sqcEmSetup" are explained below.

Refer to "sqcEmSetup (Two-tier Manager Operation Setup Command)" in the *Reference Guide* for more information, such as how to cancel two-tier Manager operation.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Before performing this procedure

If the Manager service or daemon is running, stop it by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the relevant resident processes have stopped correctly.

### Syntax

#### Windows

```
Installation directory\bin\sqcEmSetup.exe -h host name [-s on|off] [-m on|off]
Installation directory\bin\sqcEmSetup.exe -u
Installation directory\bin\sqcEmSetup.exe -d
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcEmSetup.sh -h <host name> [-s on|off] [-m on|off]
/opt/FJSVssqc/bin/sqcEmSetup.sh -u
/opt/FJSVssqc/bin/sqcEmSetup.sh -d
```

### Options

-h <host name>

Specify either the host name or the IP address of the Enterprise Manager. This option cannot be specified at the same time as the "-u" or "-d" option.

-s on|off

If the "-h" option has been specified, this option specifies whether an operation management client will connect to this Manager in order to perform management operations for each department. If this option is not specified, the default value is "off".

- on: Connects an operation management client to this Manager.
- off: Does not connect an operation management client to this Manager.



.....  
If "on" is specified for this option, the Enterprise Manager can be used to manage the entire system while each Manager can be used to perform management operations for each section.  
.....

**-m on|off**

Specify whether to save summary data in the Manager when the operation management client is connected to the Manager and management is performed by Manager.

This option is available when the "-h" option and "-s on" options are specified.

If this option is not specified, then the default value is "on".

- on: Summary data stored in the Enterprise Manager.
- off: Summary data stored in each Manager.

The number of Managers to be managed by the Enterprise Manager can be increased if the "-m off" option is specified.

When the "-m off" option is specified, the summary data displayed in the Operation Management Client while connecting to the Enterprise Manager is collected from each Manager.

**-u**

This option cancels the two-tier Manager operation. This option cannot be specified at the same time as the "-h" or "-d" option.

**-d**

This option displays the Enterprise Manager that is currently set up. This option cannot be specified at the same time as the "-h" or "-u" option.

**Usage example**

To set up an environment for two-tier Manager operations, execute this command as shown below.

**Windows**

```
C:\>cd C:\Program Files\SystemwalkerSQL\bin
C:\Program Files\SystemwalkerSQL\bin>sqlEmSetup.exe -h hostname
Command Succeeded.
C:\Program Files\SystemwalkerSQL\bin>
```

**UNIX**

```
# cd /opt/FJSVssqc/bin/
# ./sqlEmSetup.sh -h hostname
Command Succeeded.
#
```



## A.4 Manager Setup Command for Redundant Manager Operation

To perform redundant Manager operation, it is necessary to execute the Manager Setup Command for Redundant Manager Operation on the Manager and the Agent or Proxy Manager.

The specifications of the Manager Setup Command for Redundant Manager Operation are described below.

Refer to "sqcHmSetup (Manager Setup Command for Redundant Manager Operation)" in the *Reference Guide* for more information, such as how to cancel redundant Manager operation.

### Point

Execute this command on only the second Manager for "pull" operations as described in "4.3.2 Tasks to perform on the second Manager".

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Syntax

#### Windows

```
Installation directory\bin\sqcHmSetup.exe [-u]
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcHmSetup.exe [-u]
```

### Options

-u

This option cancels the redundant Manager operations.

### Usage example

To make a Manager redundant, execute this command as follows:

#### Windows

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
C:\Program Files\SystemwalkerSQC\bin>sqcHmSetup.exe
Command Succeeded.
C:\Program Files\SystemwalkerSQC\bin>
```

#### UNIX

```
# cd /opt/FJSVssqc/bin/  
# ./sqcHmSetup.exe  
Command Succeeded.  
#
```



## A.5 Agent/Proxy Manager Setup Command for Redundant Manager Operation

To perform redundant Manager operation, it is necessary to execute the Manager Setup Command for Redundant Manager Operation on the Manager and the Agent or Proxy Manager.

The specifications of the Agent/Proxy Manager Setup Command for Redundant Manager Operation are explained below.

Refer to "sqcHaSetup (Agent/Proxy Manager Setup Command for Redundant Manager Operation)" in the *Reference Guide* for more information, such as how to cancel redundant Manager operation.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Syntax

#### Windows

```
Installation directory\bin\sqcHaSetup.exe -h host name  
Installation directory\bin\sqcHaSetup.exe -u  
Installation directory\bin\sqcHaSetup.exe -d
```

#### UNIX

```
/opt/FJSVssqc/bin/sqcHaSetup.sh -h <host name>  
/opt/FJSVssqc/bin/sqcHaSetup.sh -u  
/opt/FJSVssqc/bin/sqcHaSetup.sh -d
```

### Options

-h <host name>

Specify either the host name or the IP address of the Manager that had not been set up when the Agent was first installed. This option cannot be specified together with other options.

-u

This option cancels the redundant Manager operations. This option cannot be specified together with other options.

-d

This option displays the Manager that is currently specified as the connection destination. This option cannot be specified together with other options.

### Note

This option can only be specified with "push" operations.

## Usage example

To add a second Manager, execute this command as follows:

### Windows

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
C:\Program Files\SystemwalkerSQC\bin>sqcHaSetup.exe -h hostname
Command succeeded.
C:\Program Files\SystemwalkerSQC\bin>
```

### UNIX

```
# cd /opt/FJSVssqc/bin/
# ./sqcHaSetup.sh -h hostname
Command succeeded.
#
```

EE

## A.6 Cluster Setup Commands

The cluster setup commands are used to create cluster environments.

The cluster setup commands for the active and standby servers are explained below.

Refer to "sqcsetupcl/sqcsetupcls (Cluster Setup Commands)" in the *Reference Guide* for more information about the cluster setup commands.

### Required privileges

#### Windows

The user must have the privileges of a member of the Administrators group.

#### UNIX

The user must have the privileges of the system administrator (superuser).

### Execution environment

These commands can be executed on a Manager or Enterprise Manager.

## Before performing this procedure

If the Manager/Enterprise Manager service or daemon is running, stop it by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the service or daemon has stopped correctly.

## Syntax

### Windows

#### (Active server)

```
Installation directory\bin\sqcsetupclp.exe -m shared disk -h logical host name
```

#### (Standby server)

```
Installation directory\bin\sqcsetupcls.exe -m shared disk
```

### UNIX

#### (Active server)

```
/opt/FJSVssqc/bin/sqcsetupclp -m mount point -h logical host name
```

#### (Standby server)

```
/opt/FJSVssqc/bin/sqcsetupcls -m mount point
```

## Options

### Windows

**-m <shared disk drive>**

Specifies the drive for the shared disk device to be used by the cluster operation.

**-h logical host name**

Specifies the logical host name or logical IP address to be used by the cluster operation.

### UNIX

**-m <mount point>**

Specifies the mount point for the shared disk device to be used by the cluster operation.

**-h *logical host name***

Specifies the logical host name or logical IP address to be used by the cluster operation.

## Usage example

### Windows

(Active server: sqcsetupclp)

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
C:\Program Files\SystemwalkerSQC\bin>sqcsetupclp -m F:\ -h hostname
126 files copied.
0 files copied.
```

```
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
0 files copied.  
Cluster setup succeeded  
C:\Program Files\SystemwalkerSQL\bin>
```

(Standby server: sqcsetupcls)

```
C:\>cd C:\Program Files\SystemwalkerSQL\bin  
C:\Program Files\SystemwalkerSQL\bin>sqcsetupcls.exe -m F:\  
Cluster setup succeeded  
C:\Program Files\SystemwalkerSQL\bin>
```

**UNIX**

(Active server: sqcsetupclp)

```
# cd /opt/FJSVssqc/bin/  
# ./sqcsetupclp -m /share -h hostname  
Cluster setup succeeded  
#
```

(Standby server: sqcsetupcls)

```
# cd /opt/FJSVssqc/bin/  
# ./sqcsetupcls -m /share  
Cluster setup succeeded  
#
```



## A.7 Cluster Cancellation Command

The cluster cancellation command is used to cancel a cluster environment.

The cluster cancellation command is explained below.

Refer to "sqcunsetcl (Cluster Cancellation Command)" in the *Reference Guide* for more information about the cluster cancellation Command.

## Required privileges

### Windows

The user must have the privileges of a member of the Administrators group.

### UNIX

The user must have the privileges of the system administrator (superuser).

## Execution environment

These commands can be executed on a Manager or Enterprise Manager.

## Before performing this procedure

If Manager/Enterprise Manager resident processes are running, stop them by referring to "[A.8 How to Start and Stop Resident Processes](#)". Also check that the resident processes have stopped correctly.

## Format

### Windows

```
<Installation directory>\bin\sqcunsetcl
```

### UNIX

```
/opt/FJSVssqc/bin/sqcunsetcl
```

## Options

None.

# A.8 How to Start and Stop Resident Processes

---

This section explains how to start and stop resident processes.

Refer to "Starting and Stopping Resident Processes" in the *Reference Guide* for more information about processes, etc.

## Manager

### Windows

Start/stop the following service:

- Systemwalker SQC DCM



Start/stop the following service when using Pull-mode communications.

- Systemwalker SQC sqcschdle

Start/stop the following service when using the policy distribution function:

- Systemwalker SQC thttpd



Refer to "A.9 Starting the tthttpd Service/Daemon Automatically" for details on how to start the tthttpd service automatically.

### Note

When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the Windows **Services** window.

First execute "Stop the service", then, after waiting a while, execute "Start the service".

## UNIX

Confirm the current status using the following script:

```
/etc/rc2.d/S99ssqcdcm
```

Use the following scripts to start and stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqcdcm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdcm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdcm stop_wait
```

### Point

If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop\_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop\_wait), and after command completion, start option (start) to start the process.

### Point

Start/stop the following script when using Pull-mode communications. If you are communicating using the Pull method, the following scripts are also started or stopped:

To start the processes:

```
/etc/rc2.d/S99ssqcsch start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcsch stop
```

When using the policy distribution function, the following scripts are also started or stopped:

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```

Refer to "[A.9 Starting the thttpd Service/Daemon Automatically](#)" for details on how to start the thttpd daemon automatically.

## Agent/Proxy Manager

### Windows

Start/stop the following service:

- Systemwalker SQC DCM



If you are communicating using the Pull method or are using the policy distribution function, the following services are also started or stopped:

- Systemwalker SQC thttpd

Refer to "[A.9 Starting the thttpd Service/Daemon Automatically](#)" for details on how to start the thttpd service automatically.



When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the Windows **Services** window..

First execute "Stop the service", then after waiting a while execute "Start the service".

### UNIX

Confirm current status with the following script:

```
/etc/rc2.d/S99ssqcdcm
```

Use the following scripts to start and stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqcdcm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdcm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdcm stop_wait
```

 **Point**

.....  
If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop\_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop\_wait), and after command completion, start option (start) to start the process.

.....  
 **Point**

When using the policy distribution function, the following scripts are also started or stopped:

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```

Refer to "[A.9 Starting the thttpd Service/Daemon Automatically](#)" for details on how to start the thttpd daemon automatically.

.....  
**Enterprise Manager**

**Windows**

Start/stop the following service:

- Systemwalker SQC DCM

 **Point**

.....  
When using the policy distribution function, the following services are also started or stopped:

Systemwalker SQC thttpd

Refer to "[A.9 Starting the thttpd Service/Daemon Automatically](#)" for details on how to start the thttpd service automatically.

.....  
 **Note**

When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the Windows **Services** window.

First execute "Stop the service", then after waiting a while execute "Start the service".

.....  
**UNIX**

Confirm current status with the following script:

```
/etc/rc2.d/S99ssqcdm
```

Use the following scripts to start and stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqcdm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdm stop_wait
```

### Point

.....  
If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop\_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop\_wait), and after command completion, start option (start) to start the process.

### Point

.....  
When using the policy distribution function, the following scripts are also started or stopped.

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```

.....  
Refer to "[A.9 Starting the thttpd Service/Daemon Automatically](#)" for details on how to start the thttpd daemon automatically.

## **A.9 Starting the thttpd Service/Daemon Automatically**

---

Thttpd service/daemon is the service/daemon that is started when using Pull mode communications and the policy distribution function.

### **Required privileges**

#### **Windows**

The user must have the privileges of a member of the Administrators group.

## UNIX

The user must have the privileges of the system administrator (superuser).

### Procedure

#### Windows

1. Open the Control Panel and select **Administrative Tools** and then **Services**.
2. Right-click on **Systemwalker SQC thttpd** and select **Properties** from the pop-up menu.
3. Change the value in the **Startup type** field to **Automatic**.

## UNIX

Execute the following commands to set up the startup script:

```
# cd /etc/rc2.d
# ln -s /opt/FJSVssqc/bin/ssqchttp S99ssqchttp
```

Execute the following commands to set up the shutdown script:

```
# cd /etc/rc0.d
# ln -s /opt/FJSVssqc/bin/ssqchttp K00ssqchttp
```



## A.10 Systemwalker Service Quality Coordinator Installation Command (for the server core environment)

When installing Agent to Microsoft(R) Windows Server(R) 2008 Server Core environment, prepare the product DVD-ROM and do following procedure.

### Required privileges/Execution environment

The user must belong to the Administrators group.

### Procedure

1. Create an installation information file for storing the information required at installation, such as the installation type and the installation directory.



#### Information

Refer to "[3.2.1 Create an installation information file](#)" for more information.

2. Make sure that cimanager.exe file is existing in the following directory.

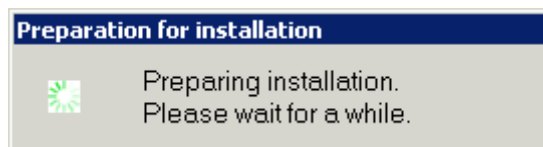
```
1. System Drive\FujitsuF4CR\cir\bin\cimanager.exe
```

3. If cimanager.exe file is not existed, execute the following command and prepare for the installation. If cimanager.exe file is existed, skip to step 4.

1. <DVD-ROM Drive>\CIR\cirinst.exe

### Point

When command is executed, following message is displayed. This message is closed automatically when the command is finished.



This command returns immediately after execution, confirm the completion of the command whether the display of the message is closed.

4. Execute following command.

Agent for Business

```
cscript DVD-ROM drive:\agentforbiz\setup.vbs -s <Installation information file>
-m UNLIMITED
```

Agent for Server

```
cscript DVD-ROM drive:\agentforsrv\setup.vbs -s <Installation information file>
-m UNLIMITED
```



## A.11 Systemwalker Service Quality Coordinator Uninstallation Command (for the server core environment)

This command is used for uninstalling Agent from Windows Server 2008 Server Core environment.

### Required privileges/Execution environment

The user must belong to the Administrators group.

### Procedure

1. Execute following command.

```
<System Drive>\FujitsuF4CR\cir\bin\cimanager.exe
```

2. When uninstaller starts, uninstall Agent by referring "9.1 Uninstallation (Windows Versions)" for procedure.

## Appendix B Changes in Report

A list of the report names and categories that have been changed between V13.5.0 and earlier and V15.0.0 and later is shown below.

	Name in V13.5.0 or earlier	Name in V15.0.0 or later	Category	Remarks
Full System Inspection	Windows server	Same as on the left	Windows Hyper-V	
	UNIX server	Same as on the left	UNIX  Linux Virtualization function (KVM) Linux Virtualization function (Xen) Solaris Zone	
	Disk space	Same as on the left	OS common	
	VMware(Physical)	VMware (Host)	VMware	
	HyperV(Physical)	HyperV (Host)	Hyper-V	
	Solaris Zone	Solaris Zone(Solaris 10)	Solaris Zone(Solaris 10)	
	HTTP service	Same as on the left	Service operational information	
	SMTP service	Same as on the left	Service operational information	
	DNS service	Same as on the left	Service operational information	
	PORT service	Same as on the left	Service operational information	
	End user response	Same as on the left	End user response	
	Web transaction	Same as on the left	Web transaction	
	Interstage(EJB)	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage(TD)	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage(CORBA)	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage(IJServer)	Same as on the left	Interstage Application Server(Work Unit)	
	ISI Sequence	Same as on the left	Interstage Service Integrator	
	ISI Queue	Same as on the left	Interstage Service Integrator	
	Operation Manager	Same as on the left	Systemwalker Operation Manager	
	MS-.NET	Same as on the left	Microsoft .NET	
	SAP	Same as on the left	SAP NewWeaver	
Symfoware	Same as on the left	Symfoware Server		

	Name in V13.5.0 or earlier	Name in V15.0.0 or later	Category	Remarks
	Oracle	Same as on the left	Oracle Database	
	MS-SQL	Same as on the left	Microsoft SQL Server	
	Distribution of rsc. usage cond. (Windows)	-	P2V(Physical to Virtual)	Merged with Server distribution by rsc. usage cond. (Summary)
	Distribution of rsc. usage cond. (UNIX)	-	P2V(Physical to Virtual)	Merged with Server distribution by rsc. usage cond. (Summary)
	List of rsc. usage cond. (Windows)	-	P2V(Physical to Virtual)	Merged with List of rsc. usage cond. (Detail)
	List of rsc. usage cond. (UNIX)	-	P2V(Physical to Virtual)	Merged with List of rsc. usage cond. (Detail)
Categorized Diagnostic	Windows CPU	Same as on the left	Windows	
	Windows physical disk	Same as on the left	Windows	
	Windows disk space	Same as on the left	Windows	
	Windows memory	Same as on the left	Windows	
	Windows process	Same as on the left	Windows	
	Windows CPU(Contour)	Same as on the left	Windows	
	Windows physical disk(Contour)	Same as on the left	Windows	
	Windows memory(Contour)	Same as on the left	Windows	
	UNIX CPU	Same as on the left	UNIX	
	UNIX physical disk	Same as on the left	UNIX	
	UNIX disk space	Same as on the left	UNIX	
	UNIX memory	Same as on the left	UNIX	
	UNIX process	Same as on the left	UNIX	
	UNIX CPU(Contour)	Same as on the left	UNIX	
	UNIX physical disk(Contour)	Same as on the left	UNIX	
	UNIX memory(Countour)	Same as on the left	UNIX	
	VMware(Virtual)	VMware (Virtual machine)	VMware	
HyperV(Virtual)	HyperV (Virtual machine)	Hyper-V		



	Name in V13.5.0 or earlier	Name in V15.0.0 or later	Category	Remarks
	Xen(Virtual)	Xen (Virtual machine)	Linux Virtualization function (Xen)	
	Solaris Zone CPU	Solaris Zone(Solaris 10) CPU	Solaris Zone(Solaris 10)	
	Solaris Zone memory	Solaris Zone(Solaris 10) memory	Solaris Zone(Solaris 10)	
	Solaris Zone CPU(Contour)	Solaris Zone(Solaris 10) CPU(Contour)	Solaris Zone(Solaris 10)	
	Solaris Zone memory(Countour)	Solaris Zone(Solaris 10) memory(Countour)	Solaris Zone(Solaris 10)	
	Web transaction Request	Web transaction request	Web transaction	
	Web transaction hitserver	Same as on the left	Web transaction	
	Web transaction hitclient	Same as on the left	Web transaction	
	Web transaction hitremote	Same as on the left	Web transaction	
	Web transaction Traffic	Web transaction traffic	Web transaction	
	Web transaction Error	Web transaction error	Web transaction	
	TcpNetwork	Same as on the left	TcpNetwork	
	Centric Manager traffic	Same as on the left	Systemwalker Centric Manager (Network)	
	Centric Manager packet	Same as on the left	Systemwalker Centric Manager (Network)	
	Network Manager network traffic	Same as on the left	Systemwalker Network Manager	
	Network Manager CPU load	Same as on the left	Systemwalker Network Manager	
	Network Manager collision	Same as on the left	Systemwalker Network Manager	
	Network Manager CRC error	Network Manager CRC Error	Systemwalker Network Manager	
	Network Manager drop packet	Same as on the left	Systemwalker Network Manager	
	Network Manager transfer packet	Same as on the left	Systemwalker Network Manager	
	Network Manager discard packet	Same as on the left	Systemwalker Network Manager	
	Network Manager error packet	Same as on the left	Systemwalker Network Manager	
	Network Manager IP operating rates	Same as on the left	Systemwalker Network Manager	
	Network Manager RTT	Same as on the left	Systemwalker Network Manager	
	Storage CM CPU usage rate	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	

	<b>Name in V13.5.0 or earlier</b>	<b>Name in V15.0.0 or later</b>	<b>Category</b>	<b>Remarks</b>
	Storage CM(ROE) CPU usage rate	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	Storage disk busy	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	Storage throughput	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	Storage IOPS	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	Storage response time	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	Storage cache hit rate	Same as on the left	ETERNUS SF Storage Cruiser(SAN Storage)	
	NAS CPU usage rate	Same as on the left	ETERNUS SF Storage Cruiser(NAS)	
	NAS NFS OPS	Same as on the left	ETERNUS SF Storage Cruiser(NAS)	
	NAS CIFS OPS	Same as on the left	ETERNUS SF Storage Cruiser(NAS)	
	NAS HTTP OPS	Same as on the left	ETERNUS SF Storage Cruiser(NAS)	
	NAS network traffic	Same as on the left	ETERNUS SF Storage Cruiser(NAS)	
	NAS DISK R/W data amount	NAS Amount of DISK R/W data	ETERNUS SF Storage Cruiser(NAS)	
	NAS tape R/W data amount	NAS Amount of tape R/W data	ETERNUS SF Storage Cruiser(NAS)	
	Workload	Same as on the left	Workload	
	Interstage EJB application	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage CORBA application	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage transaction application	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer JVM	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer JTA	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer JDBC	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer SERVLET CONTAINER	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer SERVLET WEBMODULE	Same as on the left	Interstage Application Server(Work Unit)	
	Interstage IJServer EVENT SERVICE	Same as on the left	Interstage Application Server(Work Unit)	

	Name in V13.5.0 or earlier	Name in V15.0.0 or later	Category	Remarks
	ISI Sequence	Same as on the left	Interstage Service Integrator	
	ISI Queue	Same as on the left	Interstage Service Integrator	
	Operation Manager Subsystem	Operation Manager subsystem	Systemwalker Operation Manager	
	Operation Manager Queue	Operation Manager queue	Systemwalker Operation Manager	
	Operation Manager Project	Operation Manager project	Systemwalker Operation Manager	
	MS-.NET ASP.NET	Same as on the left	Microsoft .NET	
	MS-.NET Applications	Same as on the left	Microsoft .NET	
	MS-.NET Remote procedure	Same as on the left	Microsoft .NET	
	SAP Enqueue(Request)	Same as on the left	SAP NetWeaver	
	SAP Enqueue(QueLength)	Same as on the left	SAP NetWeaver	
	SAP Dialog	Same as on the left	SAP NetWeaver	
	SAP Spool	Same as on the left	SAP NetWeaver	
	SAP Background	Same as on the left	SAP NetWeaver	
	SAP Update	Same as on the left	SAP NetWeaver	
	SAP Roll Paging	Same as on the left	SAP NetWeaver	
	SAP Memory	Same as on the left	SAP NetWeaver	
	SAP Buffers	Same as on the left	SAP NetWeaver	
	Symfoware shared buffer	Same as on the left	Symfoware Server	
	Symfoware log area	Same as on the left	Symfoware Server	
	Symfoware disk I/O	Same as on the left	Symfoware Server	
	Symfoware database space usage rate	Same as on the left	Symfoware Server	
	Oracle SGA	Same as on the left	Oracle Database	
	Oracle PGA	Same as on the left	Oracle Database	
	Oracle disk I/O	Same as on the left	Oracle Database	
	Oracle resource conflict	Same as on the left	Oracle Database	
	Oracle tablespace	Oracle table space usage rate	Oracle Database	
	MS-SQL ACCESS METHOD	Same as on the left	Microsoft SQL Server	
	MS-SQL Server BUFFER	Same as on the left	Microsoft SQL Server	
	MS-SQL Server CMGR	Same as on the left	Microsoft SQL Server	
	MS-SQL Server DATABASES	Same as on the left	Microsoft SQL Server	

	Name in V13.5.0 or earlier	Name in V15.0.0 or later	Category	Remarks
	MS-SQL Server GENERALSTATISTICS	Same as on the left	Microsoft SQL Server	
	MS-SQL Server LOCKS	Same as on the left	Microsoft SQL Server	
	MS-SQL Server MEMORY	Same as on the left	Microsoft SQL Server	
	MS-SQL Server STATISTICS	Same as on the left	Microsoft SQL Server	
	Resource piling(Windows)	-	P2V(Physical to Virtual)	Merged with P2V simulation
	Resource piling(UNIX)	-	P2V(Physical to Virtual)	Merged with P2V simulation
	Estimated response time(Requests)	Response simulation (Request count)	Response simulation	
	Estimated response time(Servers)	Response simulation (Adding servers)	Response simulation	
Detailed	Time-series display	Time-series	Generic report	
	Summary data time-series display	Summary data time series display	Generic report	
	Regression analysis display	Future forecast display	Generic report	
	Correlation display	Same as on the left	Generic report	
	Contour display	Same as on the left	Generic report	
	Past/present time-series display	Comparison display of the past	Generic report	
	Transition comparison display	Transition comparison display according to day	Generic report	
	Composite display	Same as on the left	Generic report	

# Appendix C How to change the calculation method of required size for disk space information in file system (for compatibility)

If displaying required size for disk space information record (UX\_DISKSPACE) in file system (dusebyts and dusembs) in same values under V13.5.0 and earlier in Solaris version and Linux version, perform the following procedure.

## C.1 Definition method

### Environment

Perform on Agent.

### Definition File

Storage location of the file to be edited is as follows.

#### UNIX

```
/opt/FJSVssqc/setup/df.txt
```

### Backup before editing

To prepare the case of returning the definition to the default status of V15.0.0 and after, backup the file before editing to the selected location.

### Modification point

Modify the following points marked with (\*).

```
[DSA_DF]
execute_style=sample
sample_interval=1
path=%BASE_DIRECTORY/bin/dsa_cmd
bad_file_dir=%TRACE_DIRECTORY
bad_file_name=%c_diskspace.bad

# tis parameters
tis_record_definition=%CONTROL_DIRECTORY/ssqc2.trd
tis_record_definition=%CONTROL_DIRECTORY/dc_dsa_cmd.trd
tis_record_definition=%CONTROL_DIRECTORY/df.trd
tis_script=%CONTROL_DIRECTORY/routing.ttd
tis_script=%CONTROL_DIRECTORY/df.ttd
tis_arg=ROUTE,RECORDPROCESS,SQC3RAW

# dsa_cmd specific parameters
command=cmd_df -d | tr ',' ';' (*)
#command=cmd_df | tr ',' ';' (*)
execute_at=end
execute_timeout=90
max_errors=0
```

### Contents to be modified

Change the position of "#" that shows the comment line on the line marked with "\*".

#### [Before modification]

```
:
# dsa_cmd specific parameters
command=cmd_df -d | tr ',' ';' "*" This line is enabled.
```

```
#command=cmd_df | tr ',' ';' "*" This line is commented out.  
:
```

[After modification]

```
:  
# dsa_cmd specific parameters  
#command=cmd_df -d | tr ',' ';' "*" Comment out by marking with "#".  
command=cmd_df | tr ',' ';' Enable this line by deleting "#".  
:
```

Backup after editing

To prepare the case of contingency, back up the file to the selected location.

## C.2 Setup

---

After editing the definition file described above, setup the agent by doing following steps.

1. Stop Agent

Stop the daemon by referring to the "[A.8 How to Start and Stop Resident Processes](#)".

2. Apply policy

Execute sqcSetPolicy

**UNIX**

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Manual* for more information about sqcSetPolicy.

3. Start Agent

Start the daemon by referring to the "[A.8 How to Start and Stop Resident Processes](#)".