Systemwalker

FUJITSU

Systemwalker Service Quality Coordinator

Installation Guide

Windows/Solaris/Linux

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Preface

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 Glossary

  This manual explains Systemwalker Service Quality Coordinator terminology.

Organization of this manual

This manual is organized as follows:

- Chapter 1 Installation Design

  This chapter provides design-related considerations that apply when installing and operating Systemwalker Service Quality Coordinator.

- Chapter 2 Installation Conditions and Resource Estimation

  This chapter explains the hardware environment needed to install Systemwalker Service Quality Coordinator and how to estimate performance database capacity.

- Chapter 3 Installation and Setup

  This chapter explains the various procedures that must be performed when installing Systemwalker Service Quality Coordinator.

- Chapter 4 Pull Type Communication Settings

  This chapter explains the various procedures that must be performed when using Systemwalker Service Quality Coordinator "Pull" type communications.

- Chapter 5 Setting Up the Communication Environment

  This chapter explains how to set up the communication environment.

- Chapter 6 Changing the Installation Environment

  This chapter explains how to migrate from the current environment to a different environment.

- Chapter 7 Upgrade Installations

  This chapter explains how to upgrade from an older version of Systemwalker Service Quality Coordinator to a newer version.

- Chapter 8 Running Different Versions of Systemwalker Service Quality Coordinator Together

  This chapter explains how different versions of Systemwalker Service Quality Coordinator operate together.

- Chapter 9 Uninstallation

  This chapter explains how to uninstall Systemwalker Service Quality Coordinator.

- Chapter 10 Incompatible Items

  This chapter explains incompatibilities that apply when Systemwalker Service Quality Coordinator is upgraded.

- Appendix A Setup Commands and Resident Processes

  This appendix explains the policy commands that are used during setup and the processes that are started.

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 V13.5.0
- Systemwalker Service Quality Coordinator Standard Edition V13.5.0

Abbreviations

- Microsoft® Windows NT® Server network operating system Version 4.0 and Microsoft® Windows NT® Workstation operating system Version 4.0 are abbreviated as "Windows NT®".
- Microsoft® Windows® 2000 Professional operating system, Microsoft® Windows® 2000 Server operating system, and Microsoft® Windows® 2000 Advanced Server operating system are all abbreviated as "Windows® 2000".
- Microsoft® Windows® 98 operating system is abbreviated as "Windows® 98".
- Microsoft® Windows® XP Professional is abbreviated as "Windows® XP".
- Microsoft® Windows Server® 2003 Enterprise Edition, Microsoft® Windows Server® 2003 Standard Edition and Microsoft® Windows Server® 2003 Web Edition are all abbreviated as "Windows® 2003".

- Microsoft® Windows Server® 2008 Enterprise and Microsoft® Windows Server® 2008 Standard are abbreviated as "Windows® 2008".
- Windows Vista® Home Basic, Windows Vista® Home Premium, Windows Vista® Business, Windows Vista® Enterprise and Windows Vista®Ultimate are abbreviated as "Windows Vista®".
- Windows® 7 Home Premium, Windows® 7 Professional, Windows® 7 Enterprise and Windows® 7 Ultimate are abbreviated as “Windows® 7”.
- Microsoft® SQL Server™ is abbreviated as "SQL Server".
- Microsoft® Cluster Server is abbreviated as "MSCS".
- Oracle Solaris might be described as Solaris, Solaris Operating System, or Solaris OS.
- Systemwalker Centric Manager is abbreviated as "Centric Manager".
- Symfoware Server is abbreviated as "Symfoware".
- Interstage Application Server is abbreviated as "Interstage".
- Oracle Database is abbreviated as "Oracle".
- Systemwalker Resource Coordinator is abbreviated as "Resource Coordinator".
- 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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Acknowledgement

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

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Request

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Contents

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 Section 1.2.3, "Installation types corresponding to management types" in the *Technical Guide* and Chapter 1, "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.

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

Refer to Chapter 2, "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 Chapter 4, "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 Chapter 3, "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
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.

Prompt item	Description
Variable file directory	This is the path to the directory where files that change or refer during operation are stored.
Log data (Troubleshoot) retention period	This is a log data (Troubleshoot) retention period. Specify a value between 1 and 30 days. The default period is 7 days.

UNIX

Prompt item	Description
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.
Variable file directory	This is the path to the directory where files that change during operation are stored.
Log data (Troubleshoot) retention period	This is a log data (Troubleshoot) retention period. Specify a value between 1 and 30 days. The default period is 7 days.

1.2.2 Installing an Agent or Proxy Manager

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
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Variable file directory	This is the path to the directory where files that change during operation are stored.
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. Select this item only when installing an Agent.
Manager address	This is the host name or IP address of the Manager that this Agent will connect to.

Prompt item	Description
	Note 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.
Method for sending data to the Manager	Select whether the data collected by the Agent is to be "pushed" to the Manager or "pulled" from the Manager. Normally select "push". Refer to Section 2.9, "Communication Modes" in the *Technical Guide* for information about the different communication modes.
Retention period for troubleshooting information	Specify the retention period for troubleshooting information between 1 and 30 days. The default is 7 days.

UNIX

Prompt item	Description
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.
Variable file directory	This is the path to the directory where files that change during operation are stored.
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. 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. 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.
Manager address	This is the host name or IP address of the Manager that this Agent will connect to. Note 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.
Method for sending data to the Manager	Select whether the data collected by the Agent is to be "pushed" to the Manager or "pulled" from the Manager. Normally select "push". Refer to Section 2.9, "Communication Modes" in the *Technical Guide* for information about the different communication modes
Retention period for troubleshooting information	Specify the retention period for troubleshooting information between 1 and 30 days. The default is 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/UNIX

Prompt item	Description
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Manager address	This is the host name or IP address of the Manager that the operation management client connects to.
Virtual directory	This item relates to the copy of IIS used by the Operation Management Client. Select **Yes** if IIS is to be used. This item is displayed only if IIS is installed.

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
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Variable file directory	This is the path to the directory where files that change during operation are stored.
Retention period for troubleshooting information	Specify the retention period for troubleshooting information between 1 and 30 days. The default is 7 days.

UNIX

Prompt item	Description
Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.

Prompt item	Description
Variable file directory	This is the path to the directory where files that change during operation are stored.
Retention period for troubleshooting information	Specify the retention period for troubleshooting information between 1 and 30 days. The default is 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

Installing a Manager

A Manager cannot be installed in an environment containing a Solaris 10 non-global zone.

Install it in an environment that only contains the global zone.

Installing an Agent or Proxy Manager

An Agent or Proxy Manager can be installed in the Solaris 10 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.

Note when operating under Linux

When the SELinux(Security-Enhanced Linux) function is enabled

This product cannot be installed in the Linux environment in which the SELinux function is enabled. 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

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 Chapter 4, "Data Formats" in the *Reference Guide* for details on the relevant information.

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		- For x86 Intel® Pentium III 1GHz or higher - For x64 Intel® Xeon® processor or higher	
Available disk space	Installation directory	100MB	
	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 "2.1.1.2 Estimating the size of the performance database/archive file" for the formula for estimating the required size of the database and archive files. Refer to "2.1.1.3 How to estimate the amount of space required for the log data ("Troubleshoot" directory)"for the formula for estimating the required size of logs.

Item		Requirement	Remarks
			Note Only the NTFS file system is supported.
Available memory space		- For x86 150MB min. (+ 900MB (*)) *: When using agent for Agentless Monitoring management functions - For x64 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	80MB	
	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 "2.1.1.2 Estimating the size of the performance database/archive file“ for the formula for estimating the required size of the database and archive files. Refer to "2.1.1.3 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		250MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions	

Linux

Item		Requirement	Remarks
CPU		- For x86 Intel® Pentium III 1GHz or higher - For x64 64 bit Intel® Xeon® processor (EM64T) or higher	
Available disk space	Installation directory	80MB	
	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 "2.1.1.2 Estimating the size of the performance database/archive file“ for the formula for estimating the required size of the database and archive files. Refer to "2.1.1.3 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		- For x86 150MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions - For x64 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.

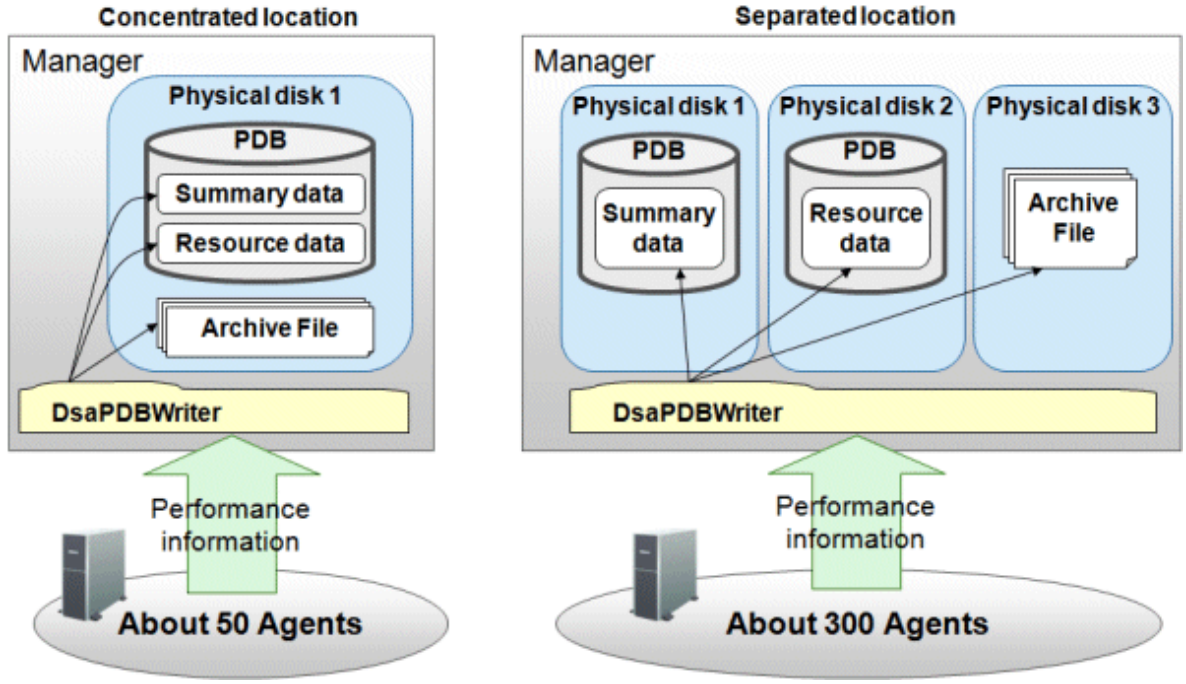
The size of this database/archive file depends on the number of instances of the resources being managed, retention period, and the number of Agents/Proxy Managers.

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).

Point

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)

```
Summary data [KB] = (MR * 50[KB]) * Summary data retention period [days]
```

```
Resource data [KB] = RR * (144 * A + 24 * B + 1 * C) * 0.35[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)

```
Performance database (PDB) volume [KB] = Summary data [KB] + 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.

```
Performance database (PDB) volume of the disk storing the summary data [KB]
= Summary data [KB]
```

```
Performance database (PDB) volume of the disk storing the resource data [KB]
= Resource data [KB]
```

Archive size

```
Summary data [KB] = (MR * 45[KB]) * 4[days]
```

```
Resource data [KB] = (RR * 50[KB]) * 4[days]
```

```
Archive size [MB] = Summary data [MB] + 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)
End user response management	Number of Browser Agents * number of monitored URLs	1
Service operational management	Number of operational monitoring targets	10
Web transaction management	Number of services	2
OS <Agent-based>	1 (fixed value)	30
OS <Agentless>	1 (fixed value)	6
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 (IJServer)	Number of Work Units	2
Interstage Business Application Server/ Application Framework Suite	Number of servers	2
Interstage Service Integrator	Number of sequences	10
	Number of queues	10
Microsoft .NET Server	Number of instances	10
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
SAP	Number of SAP instances	8
VMware	1 (fixed value)	6
	Number of guests	6
Hyper-V <Agent for Agent-based Monitoring>	1 (fixed value)	10
	Number of guests	10
Hyper-V	1 (fixed value)	8

Managed resource	Instance	Summary data Coefficient (MB)
<Agent for Agentless Monitoring>	Number of guests	2
Red Hat virtualization function (Xen) <Agent for Agent-based Monitoring>	Number of guests	10
Red Hat virtualization function (Xen) <Agent for Agentless Monitoring>	1 (fixed value)	6
	Number of guests	6
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 Section 4.2, "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 (Xen) the subject of monitoring. Add the calculation for Red Hat virtualized functions (Xen) and the operating system (Linux).

Managed resource	Instance	Resource Data Coefficient
End user response management	Number of Browser Agents * number of monitored URLs	4
Service operational management	Number of monitored operations	1
Web transaction management	Number of URLs to be analyzed **Note** Total number of inclusion statements specified in the transaction log configuration file (specified in each service statement)	1
OS (Windows) <Agent-based>	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)	1 (fixed value)	17

Managed resource	Instance	Resource Data Coefficient
<Agent-based>	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
	Number of zones	1
OS (Linux)	1 (fixed value)	15
<Agent-based>	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)	1 (fixed value)	1
<Agentless>	Number of CPUs	2
	Number of logical drives	2
	Number of physical drives	1
	Number of page files	2
OS (Solaris)	1 (fixed value)	11
<Agentless>	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	1
OS (Linux)	Fixed value	11
<Agentless>	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
OS (AIX)	1 (fixed value)	11
<Agentless>	Number of CPUs	2
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	2
OS (HP-UX)	1 (fixed value)	11
<Agentless>	Number of CPUs	2

Managed resource	Instance	Resource Data Coefficient
	Number of (mounted) logical disks	1
	Number of physical disks (partitions)	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 (Transaction Breakdown Analysis)	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 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
Microsoft .NET Server	Number of instances	3
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 Centric Manager(Traffic)	Number of network interfaces	7

Managed resource	Instance	Resource Data Coefficient
	Note This is the value if data one-hour's worth of data is continuously stored in the PDB every hour.	
Systemwalker Operation Manager	Number of subsystems + number of projects in all subsystems + number of queues in all subsystems Note 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.	7
Systemwalker Network Manager	Number of nodes + number of interface hosts Note This is the value if data one-hour's worth of data is continuously stored in the PDB every hour.	10
Systemwalker Resource Coordinator(Network)	Number of network interfaces	1
Systemwalker Resource Coordinator(Storage)	Number of RAIDGroups	2
	Number of CMs	1
	Number of CMs(ROEs)	1
	Number of LUNs	1
	Number of Disks	1
	Number of switch ports	1
	Number of NR1000 devices	1
SAP	Number of SAP instances	13
VMware	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
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

Managed resource	Instance	Resource Data Coefficient
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
	Number of physical disks (partitions)	2
	Number of domains	3
	Number of domains * number of virtual network interfaces	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.

```
Log data[MB] = (TR * 0.5[MB]) * (Retention period + 1)[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
	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	Windows® 2000 Server	Service Pack 3/4
	Windows® 2000 Advanced Server	Service Pack 3/4
	Windows® 2000 Datacenter Server	Service Pack 3/4
	Microsoft® Windows Server® 2003, Standard Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Standard x64 Edition	Service Pack: None/2 (*1)

Item	Requirement	Remarks
	Microsoft® Windows Server® 2003, Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Standard(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 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 cannot be installed in environments that have Solaris 10 non-global zones. Use environments that only have a global zone.

Linux (Linux)

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	
	Red Hat Enterprise Linux 5 (for Intel64)	
	Red Hat Enterprise Linux 6 (for x86)	
	Red Hat Enterprise Linux 6 (for Intel64)	

Item	Requirement	Remarks
Package	sysstat	When using Agent functions with the Manager It must be possible to use sar commands in the Agent. This command is included with the operating system, so if it is not installed, install it from the media containing your operating system. Operation is not guaranteed in an environment in which package sysstat is not installed.

Note

This product cannot be installed in Linux environments where the SELinux (Security-Enhanced Linux) function has been enabled.

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	- For x86 Intel® Pentium III 1GHz or higher	

Item		Requirement	Remarks
		- For x64 Intel® Xeon® processor or higher	
Available disk space	Installation directory	100MB	
	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. Note Only the NTFS file system is supported.
Available memory space		- For x86 150MB min. (+ 900MB (*)) *: When using agent for Agentless Monitoring management functions (Proxy Manager) - For x64 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	80MB	
	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)	

Linux

Item		Requirement	Remarks
CPU		- For x86 Intel® Pentium III 1GHz or higher - For x64 64 bit Intel® Xeon® processor (EM64T) or higher	
Available disk space	Installation directory	80MB	
	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		- For x86 100MB min. (+ 600MB (*)) *: When using agent for Agentless Monitoring management functions (Proxy Manager) - For x64 150MB 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:

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.

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.

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

```
Log data[MB] = (TR * 0.5[MB]) * (Retention period + 1)[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
	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	Windows® 2000 Server	Service Pack 3/4
	Windows® 2000 Advanced Server	Service Pack 3/4
	Windows® 2000 Datacenter Server	Service Pack 3/4 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2003, Standard Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003, R2 Enterprise Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Datacenter Edition	Service Pack: None/1/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2003 R2, Datacenter Edition	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Standard x64 Edition	Service Pack: None /2 (*1)
	Microsoft® Windows Server® 2003, Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2003, Datacenter x64 Edition	Service Pack: None/1/2 Only Enterprise Edition Agents operable (*1)
	Microsoft® Windows Server® 2003 R2, Datacenter x64 Edition	Service Pack: None/2 Only Enterprise Edition Agents operable (*1)
	Microsoft® Windows Server® 2008 Standard(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Enterprise(x86)	Service Pack: None/2

Item	Requirement	Remarks
	Microsoft® Windows Server® 2008 Enterprise(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Datacenter(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Datacenter(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Datacenter(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Datacenter without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Datacenter without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Standard Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Standard without Hyper-V Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Enterprise Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Datacenter Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Datacenter without Hyper-V Server Core(x86)	Service Pack: None/2 Only Enterprise Edition Agents operable
	Microsoft® Windows Server® 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 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 the Solaris 10 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. - The following directories are not inherited: /opt /etc /var /usr **Note** 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.

Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	
	Red Hat Enterprise Linux 5 (for Intel64)	
	Red Hat Enterprise Linux 6 (for x86)	
	Red Hat Enterprise Linux 6 (for Intel64)	
Package	sysstat	It must be possible to use the *sar* command on Agents. This command comes with the operating system, so it must be installed from the product media for the operating system if it has not been installed. Note also that the behavior of this product in environments where the "sysstat" package has not been installed is not guaranteed.

Note

This product cannot be installed in Linux environments where the SELinux (Security-Enhanced Linux) function has been enabled.

2.2.2.2 Products that cannot be installed

Product name	Remarks
SystemWalker TrendView Systemwalker WebMGR	These products are the predecessors to this product.

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

2.3 Operation Management Client

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.

Note

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

2.3.1.1 Hardware requirements

Windows

Item		Requirement	Remarks
CPU		Intel® Pentium III 1GHz or higher	
Available disk space	Installation directory	600MB + Space required for reports	Refer to "2.3.1.2 How to estimate the space required for reports"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
+ 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	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. - Daily reports: 500 KB * 1 (copy) * 365 (days) = 182.5 MB - Weekly reports: 500 KB * 1 (copy) * 53 (weeks) = 26.5 MB - Monthly reports: 500 KB * 1 (copy) * 12 (months) = 6.0 MB Note Scheduled reports are not deleted automatically by default. If necessary, delete scheduled reports by scheduling the scheduled report deletion command.

Reports each normally use about 500KB.

2.3.2 Software

2.3.2.1 Operating system and related software

Item	Requirement	Remarks
Operating system	Windows® 2000 Server	Service Pack 3/4
	Windows® 2000 Advanced Server	Service Pack 3/4
	Windows® 2000 Datacenter Server	Service Pack 3/4
	Windows® 2000 Professional	Service Pack 3/4
	Microsoft® Windows Server® 2003, Standard Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Standard x64 Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard x64 Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise x64 Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise x64 Edition	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 R2 Standard(x64)	Service Pack: None/1

Item	Requirement	Remarks
	Microsoft® Windows Server® 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise(x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 R2 Enterprise(x64)	Service Pack: None/1
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Foundation(x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 R2 Foundation(x64)	Service Pack: None/1
	Microsoft® Windows® XP Professional	Service Pack 2/3
	Windows Vista® Business(x86)	Service Pack: None/1/2
	Windows Vista® Enterprise(x86)	Service Pack: None/1/2
	Windows Vista® Ultimate(x86)	Service Pack: None/1/2
	Windows® 7 Professional(x86)	Service Pack: None/1
	Windows® 7 Enterprise(x86)	Service Pack: None/1
	Windows® 7 Ultimate(x86)	Service Pack: None/1
HTTP server	Microsoft® Internet Information Services 5.0 or later	
	Interstage HTTP Server (bundled with Interstage Application Server) 7.0 or later	
Web browser	Microsoft® Internet Explorer 6.0 or later	This standard also applies when Web pages provided by the operation management client are looked up from other machines. Microsoft® Internet Explorer 8.0 or later is required for using "Resource piling (Windows)" and "Resource piling (UNIX)" of the Categorized diagnostic analysis and report.
Others	Microsoft® Excel 2003 or later	When exporting the analysis and report content to an Excel® file, use the version of Microsoft ® Excel available on your system.

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.

- Windows® 2000 Professional
- Microsoft® Windows® XP Professional
- Windows Vista® Business(x86)
- Windows Vista® Enterprise(x86)
- Windows Vista® Ultimate(x86)
- Windows® 7 Professional(x86)
- Windows® 7 Enterprise(x86)
- Windows® 7 Ultimate(x86)

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

This section explains the installation conditions for Enterprise Managers.

2.4.1 Hardware

2.4.1.1 Hardware requirements

Windows

Item		Requirement	Remarks
CPU		- For x86 Intel® Pentium III 1GHz or higher - For x64 Intel® Xeon® processor or higher	
Available disk space	Installation directory	100MB	

Item		Requirement	Remarks
	Variable file storage directory	100MB + 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 "2.4.1.2 Estimating the size of the performance database/archive file" for the formula for estimating the required size of the database and archive files. Refer to "2.4.1.3 How to estimate the amount of space required for the log data "Troubleshoot" directory"for the formula for estimating the required size of logs. Note Only the NTFS file system is supported.
Available memory space		- For x86 150MB min. - For x64 200MB min.	

Solaris

Item		Requirement	Remarks
CPU		SPARC64 600MHz or higher	
Available disk space	Installation directory	80MB	
	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.	Refer to "2.4.1.2 Estimating the size of the performance database/archive file" for the formula for estimating the required size of the database and archive files. Refer to "2.4.1.3 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		250MB min.	

Linux

Item		Requirement	Remarks
CPU		- For x86 Intel® Pentium III 1GHz or higher - For x64 64 bit Intel® Xeon® processor (EM64T) or higher	
Available disk space	Installation directory	80MB	
	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.	Refer to “2.4.1.2 Estimating the size of the performance database/archive file” for the formula for estimating the required size of the database and archive files. Refer to "2.4.1.3 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		- For x86 100MB min. - For x64 150MB 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)

      ```
      Summary data [KB] = (MR * 50[KB]) * Summary data retention period[days]
      ```

      Point

      Default retention times are as follows:

      - Summary data : 3[days]

      Archive size

      ```
      Archive size [MB] = (MR * 45[KB]) * 4[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
End user response management	Number of Browser Agents * number of monitored URLs	1
Service operational management	Number of operational monitoring targets	10
Web transaction management	Number of services	2
OS <Agent-based>	1 (fixed value)	30
OS <Agentless>	1 (fixed value)	6
Interstage Application Server (EJB application)	Number of applications * number of methods * number of processes * number of threads	2

Managed resource	Instance	Summary data Coefficient
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 (IJServer)	Number of Work Units	2
Interstage Business Application Server /Application Framework Suite	Number of target servers	2
Interstage Service Integrator	Number of sequences	10
	Number of queues	10
Microsoft .NET Server	Number of instances	10
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
SAP	Number of SAP instances	8
VMware	1 (fixed value)	6
	Number of guests	6
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 (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
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 speace 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.

```
Log data[MB] = (TR * 0.5[MB]) * (Retention period + 1)[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

Managed resource	Instance	Log data coefficient
	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

2.4.2 Software

2.4.2.1 Operating system requirements

Windows

Item	Requirement	Remarks
Operating system	Windows® 2000 Server	Service Pack 3/4
	Windows® 2000 Advanced Server	Service Pack 3/4
	Microsoft® Windows Server ® 2003, Standard Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003 , Enterprise Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Standard x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Standard x64 Edition	Service Pack: None/2 (*1)
	Microsoft® Windows Server®, Enterprise x64 Edition	Service Pack: None/1/2 (*1)
	Microsoft® Windows Server® 2003 R2, Enterprise x64 Edition	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Standard(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 R2 Standard(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Enterprise(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise(x64)	Service Pack: None/2 (*1)

Item	Requirement	Remarks
	Microsoft® Windows Server® 2008 R2 Enterprise(x64)	Service Pack: None/1 (*1)
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Enterprise without Hyper-V (x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 2008 Foundation(x64)	Service Pack: None/2 (*1)
	Microsoft® Windows Server® 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 cannot be installed in environments that have Solaris 10 non-global zones. Use environments that only have a global zone.

Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	
	Red Hat Enterprise Linux 5 (for Intel64)	
	Red Hat Enterprise Linux 6 (for x86)	
	Red Hat Enterprise Linux 6 (for Intel64)	
Package	sysstat	When using Agent functions with the Manager It must be possible to use sar commands in the Agent. This command is included with the operating system, so if it is not installed, install it from the media containing your operating system. Operation is not guaranteed in an environment in which package sysstat is not installed.

Note

This product cannot be installed in Linux environments where the SELinux (Security-Enhanced Linux) function has been enabled.

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.

2.5.1 Software

2.5.1.1 Operating System

Windows

Item	Requirement	Remarks
Operating system	Microsoft® Windows Server® 2003, Standard Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Datacenter Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Datacenter Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Standard x64 Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Standard x64 Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Enterprise x64 Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Enterprise x64 Edition	Service Pack: None/2
	Microsoft® Windows Server® 2003, Datacenter x64 Edition	Service Pack: None/1/2
	Microsoft® Windows Server® 2003 R2, Datacenter x64 Edition	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x86)	Service Pack: None/2
	Microsoft® Windows Server® 2008 Standard(x64)	Service Pack: None/2
	Microsoft® Windows Server® 2008 R2 Standard(x64)	Service Pack: None/1

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

Solaris

Item	Requirement	Remarks
Operating system	Solaris 9	
	Solaris 10	

Linux

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for x86)	
	Red Hat Enterprise Linux 5 (for Intel64)	
	Red Hat Enterprise Linux 6 (for x86)	
	Red Hat Enterprise Linux 6 (for Intel64)	
Package	sysstat	It must be possible to use sar commands in the Agent. This command is included with the operating system, so if it is not installed, install it from the media containing your operating system. Operation is not guaranteed in an environment in which package sysstat is not installed.

Note

Monitoring by agents for Agentless Monitoring cannot be performed in Linux environments where the SELinux (Security-Enhanced Linux) function has been enabled.

AIX

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

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 Chapter 2, "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.

This section describes the installer startup and screens.

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).

Starting the Installer

Windows

1. Log onto the Windows machine and insert the product CD-ROM (Server or Client/Documentation) into the CD-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:

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

UNIX

Point

Refer to "Windows" to install Operation Management Client.

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

   Point

   The CD-ROM may be mounted automatically by the volume management daemon, so check the mount status of the CD-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 CD-ROM drive of the machine where the product is being installed.

Linux

```
# mount -r -t iso9660 /dev/cdrom /mnt/cdrom (*1)
```

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

3. Run the installation shell script. An execution example is shown below. The drive mount point is /cdrom/cdrom0 in this example.

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

Note

If the CD-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 CD-ROM, then start again at step 2 to remount it.

Installer screen

Window configuration

It explains the installer screen.

Windows

SETUP

This screen-shot is taken from the Enterprise Edition (Server).

Select the components to install.

Point

If the following exclusion products are already installed in the environment, a message is output when the install type is selected:

- Exclusion products for each install type (for details, refer to "Chapter 2 Installation Conditions and Resource Estimation"
- Products bundled with Systemwalker Service Quality Coordinator
- Each of the install types of Systemwalker Service Quality Coordinator V13.5.0 (except for operation management clients)
- Each of the install types of Systemwalker Service Quality Coordinator versions that are newer than this product (except for operation management clients)

Click "OK", then the installation of this product is ended.

Uninstall all displayed exclusion products before installing this product.

Documentation

This screen-shot is taken from the Client/Documentation.

- Online Manual
  Displays the Online Manual. Refer to the Online Manual from the Client/Documentation Disc.
- Software Release Guide (Windows)/Software Release Guide (Solaris)/Software Release Guide (Linux)
  Displays the Software Release Guide for Windows/Solaris/Linux respectively. Refer to the Software Release Guide from the Client/Documentation Disc.

UNIX

```
================================================================================
               Systemwalker Service Quality Coordinator Setup
                                    V13.5.0
 All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                                   2003-2011
================================================================================

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

Press Enter.
```

Press the **Enter** key.

Setup

```
================================================================================
                Systemwalker Service Quality Coordinator Setup
                                   V13.5.0
 All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                                  2003-2011
================================================================================

<< Select Installation type >>

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

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

This screen-shot is taken from the Enterprise Edition.

Select the type of installation to perform.

Point

If the following exclusion products are already installed in the environment, a message is output when the install type is selected and installation ends:

- Exclusion products for each install type (for details, refer to "Chapter 2 Installation Conditions and Resource Estimation"
- Products bundled with Systemwalker Service Quality Coordinator
- Each of the install types of Systemwalker Service Quality Coordinator V13.5.0 (except for operation management clients)
- Each of the install types of Systemwalker Service Quality Coordinator versions that are newer than this product (except for operation management clients)

Uninstall all displayed exclusion products before installing this product.

- If "?" is entered
  The following text will be displayed:

```
Use the number next to the installation type to select installation type
to install
```

- If "q" is entered
  The following text will be displayed and installation will be cancelled.

```
Nothing done..
```

The installation procedures used for the different installation types are explained in the next section.

- 3.1 Installation

Refer to the following sections for installation procedures based on different configuration models:

- 3.2 Basic Manager-Agent Model
- 3.3 Relay Model Using Proxy Manager
- 3.4 Two-tier Manager Operation Model (Enterprise Edition only)
- 3.5 Redundant Manager Operation Model (Enterprise Edition only)
- 3.6 Cluster System Operation Model for MSCS/Failover Clustering (Enterprise Edition only)
- 3.7 PRIMECLUSTER Cluster System Operation Model (Enterprise Edition only)

3.1 Installation

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

- 3.1.1 Installing a Manager
- 3.1.2 Installing a Proxy Manager
- 3.1.3 Installing an Agent
- 3.1.4 Installing an Operation Management Client
- 3.1.5 Installing an Enterprise Manager

3.1.1 Installing a Manager

Preparing for installation

Before running the Installer, refer to "1.2.1 Installing a Manager" to check the installation conditions and collect the necessary information.

Prepare the product CD-ROM (Server) and refer to "Chapter 3 Installation and Setup" for information about installer startup and screens.

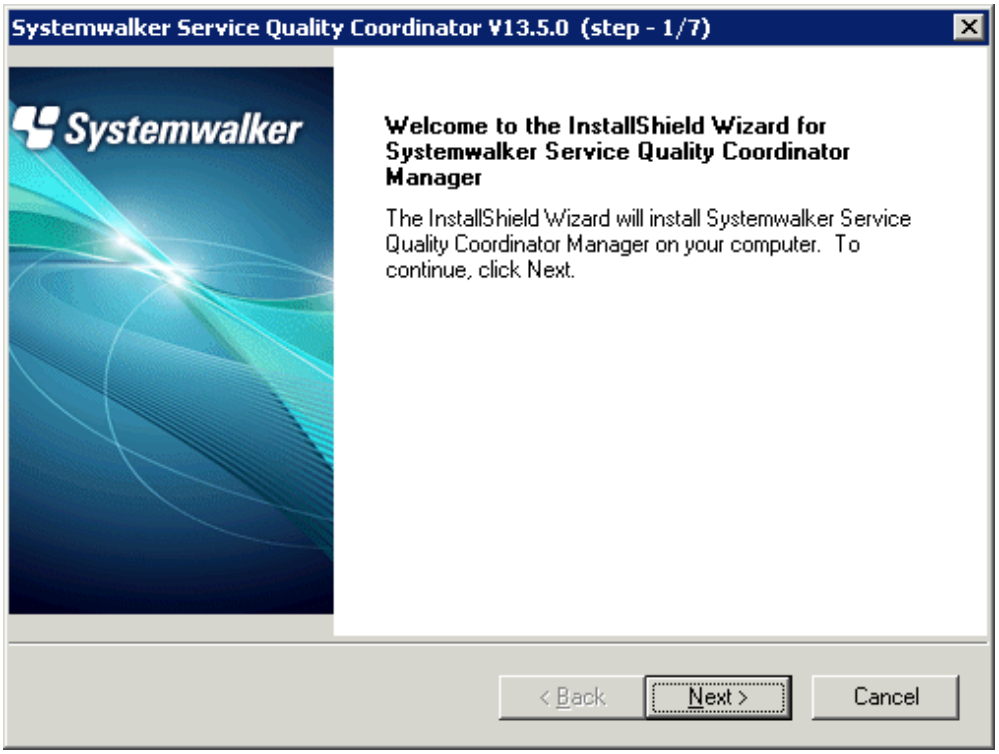
Installation procedure

This section explains the procedure for installing a Manager.

Windows

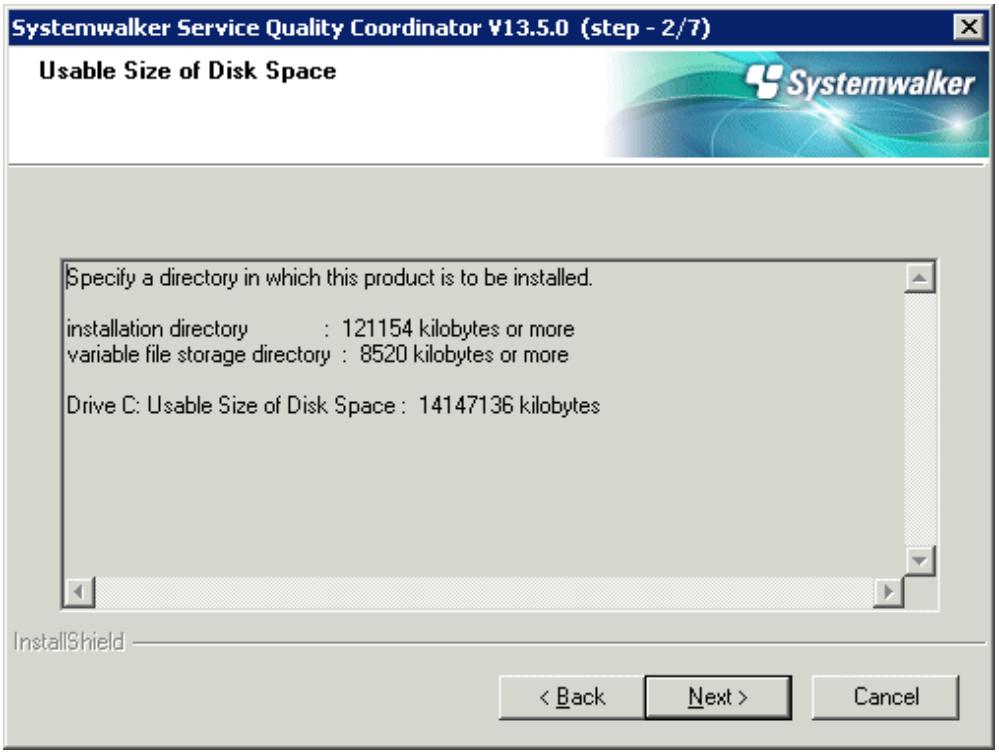
Select **Installation of Manager**.

Installation window



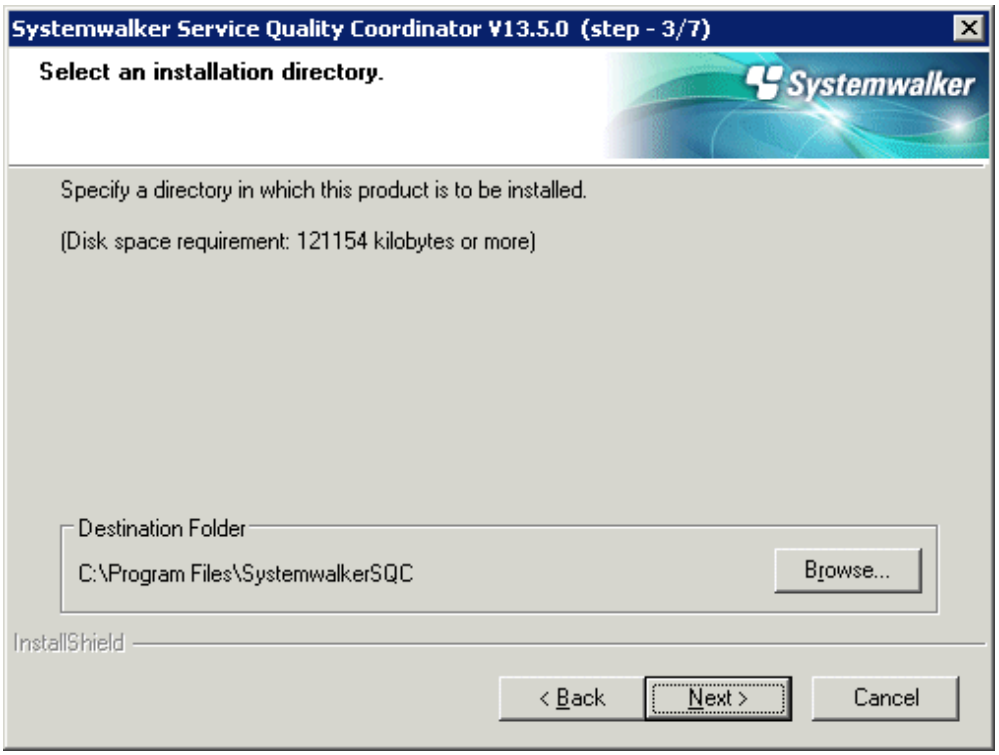
Click **Next**.

Available disk space display



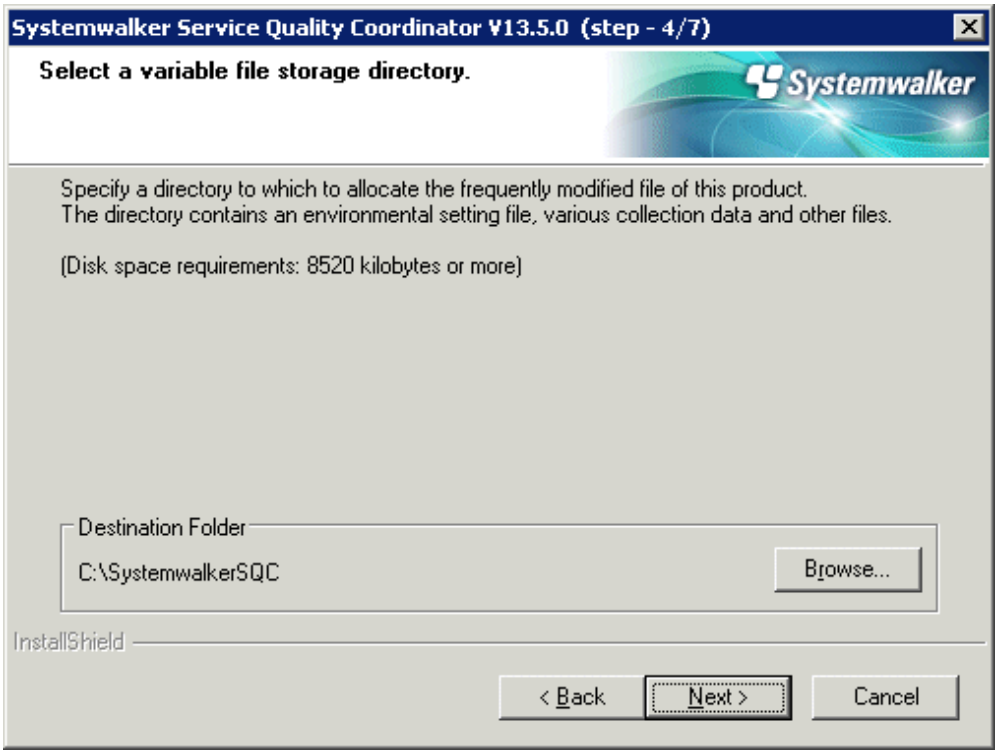
Check the remaining disk space and click **Next**.

Select the installation directory



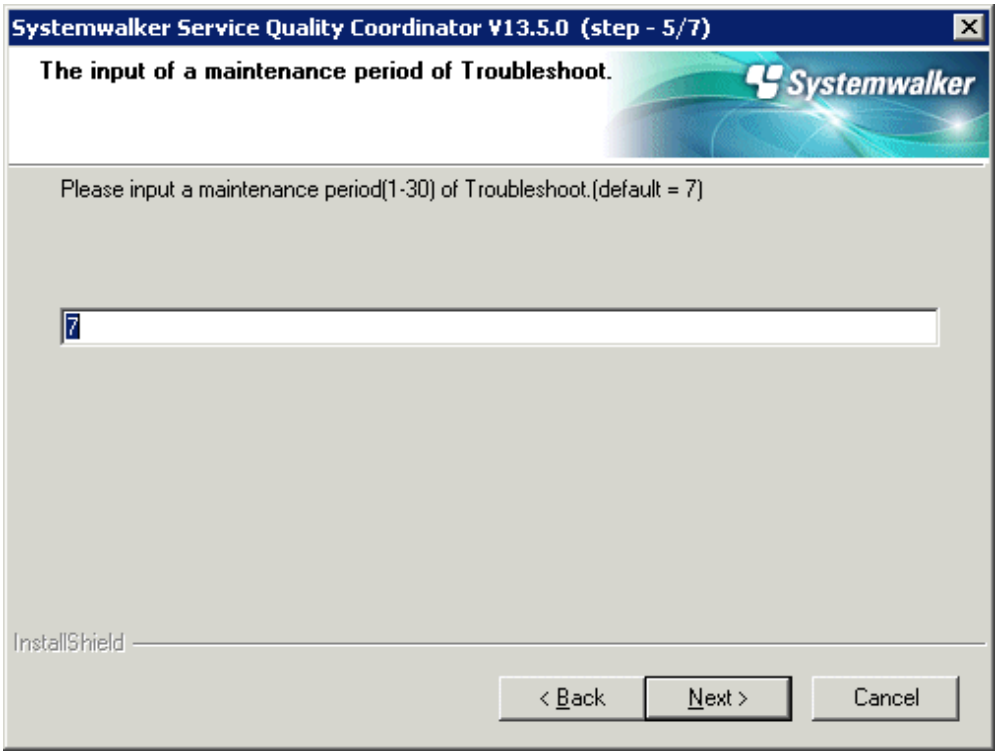
Check the installation directory and click **Next**.

Select the variable file storage directory



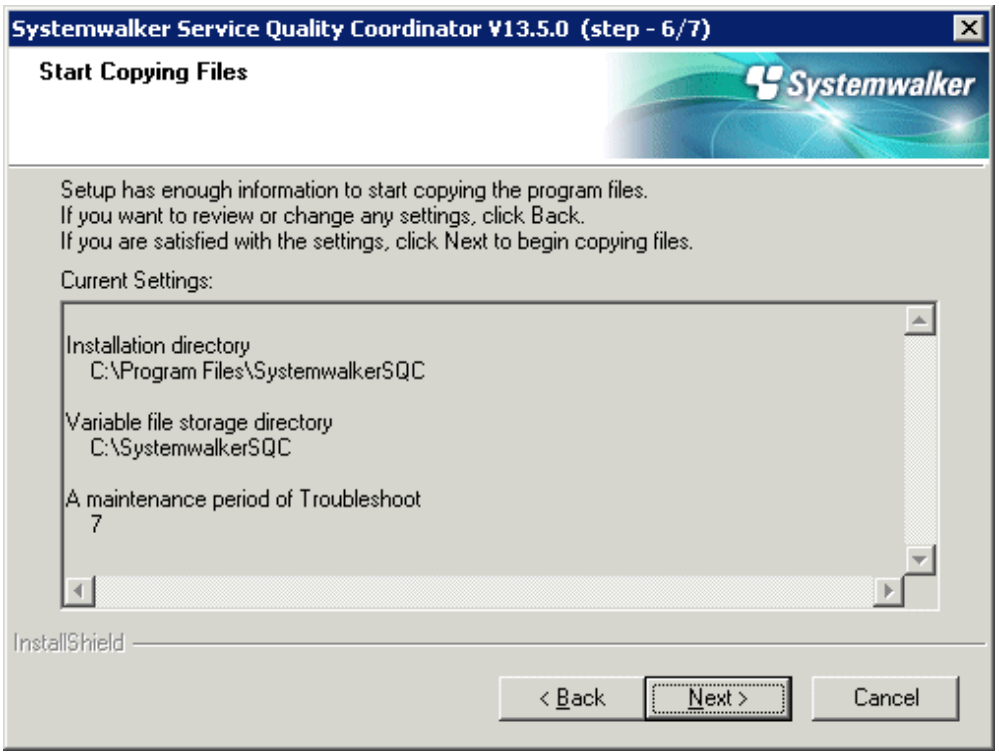
Check the variable file storage directory and click **Next**.

Enter the Troubleshoot retention period



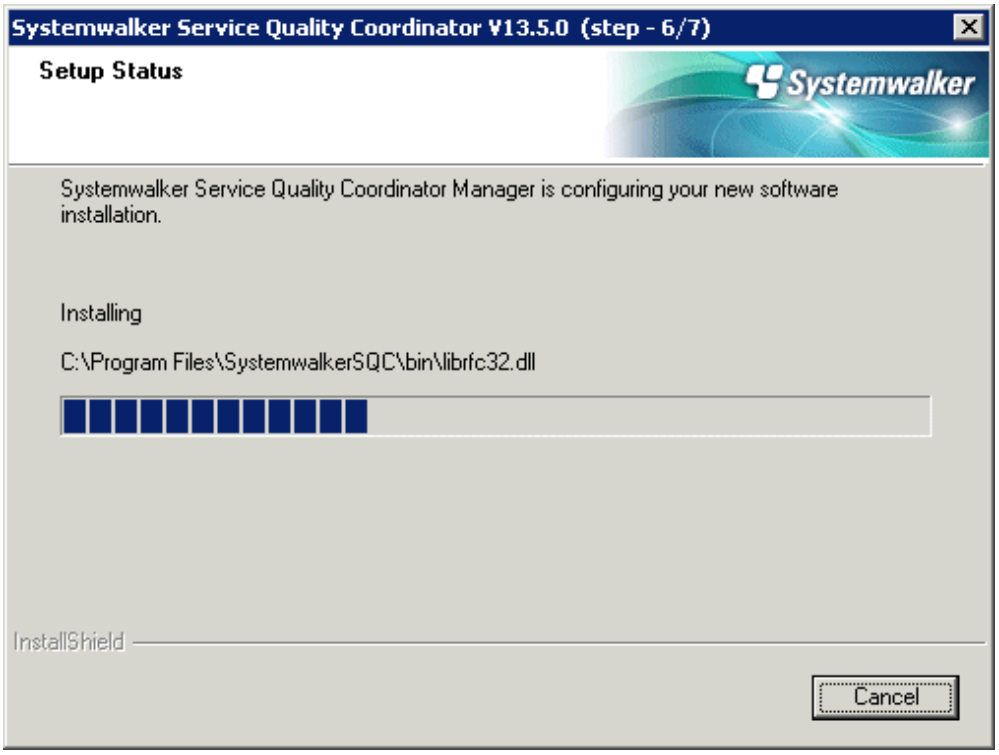
Enter the Troubleshoot retention period and click **Next**.

Check that file copy starts



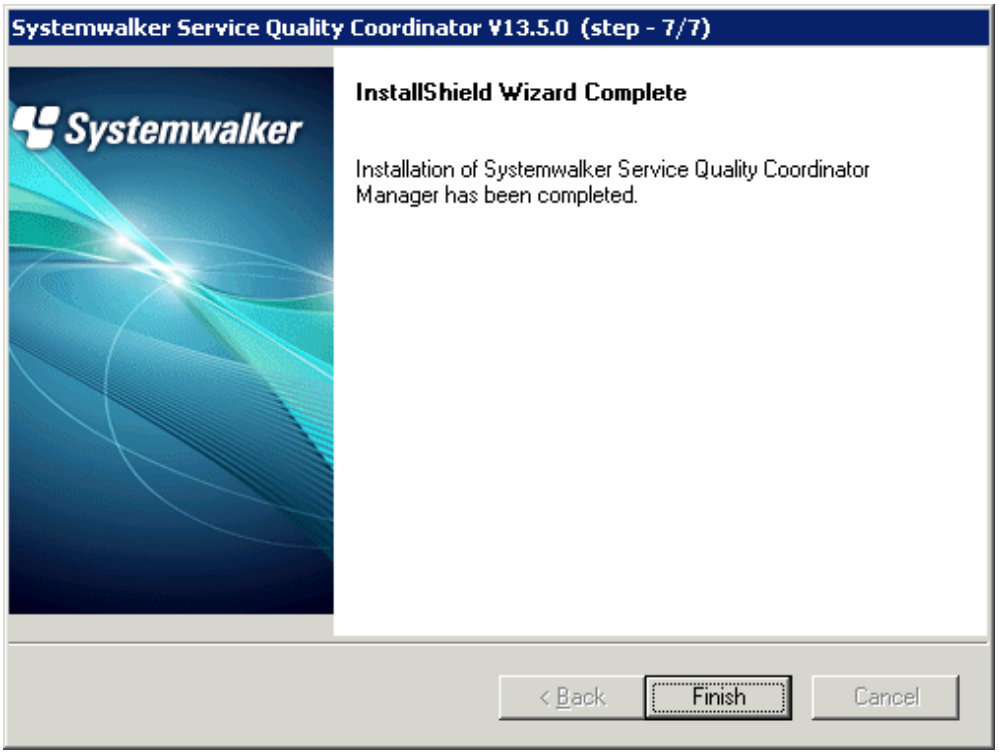
Check the settings and click **Next**.

Setup status



Start installation.

Completion of InstallShield Wizard



Click **Finish** to finish installation.

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

UNIX

```
================================================================================
               Systemwalker Service Quality Coordinator Setup
                                    V13.5.0
 All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                                  2003-2011
================================================================================

<< 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
```

Enter "2" and press the **Enter** key.

Confirm the installation directory

```
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]
> n
```

If the installation directory is correct, enter "n" and press the **Enter** key.

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
```

Confirm the Troubleshoot retention period

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

If the Troubleshoot retention period is correct, enter "n" and press the **Enter** key.

If "y" is entered
The following window will be displayed to allow the user to change the Troubleshoot retention period:

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

Confirm the commencement of installation

```
Do you want to continue with the installation of Systemwalker SQC Manager [y,n] y
```

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

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

3.1.2 Installing a Proxy Manager

Preparing for installation

Before running the Installer, refer to "1.2.2 Installing an Agent or Proxy Manager" to check the installation conditions and collect the necessary information.

Prepare the product CD-ROM (Server) and refer to "Chapter 3 Installation and Setup" for information about installer startup and screens.

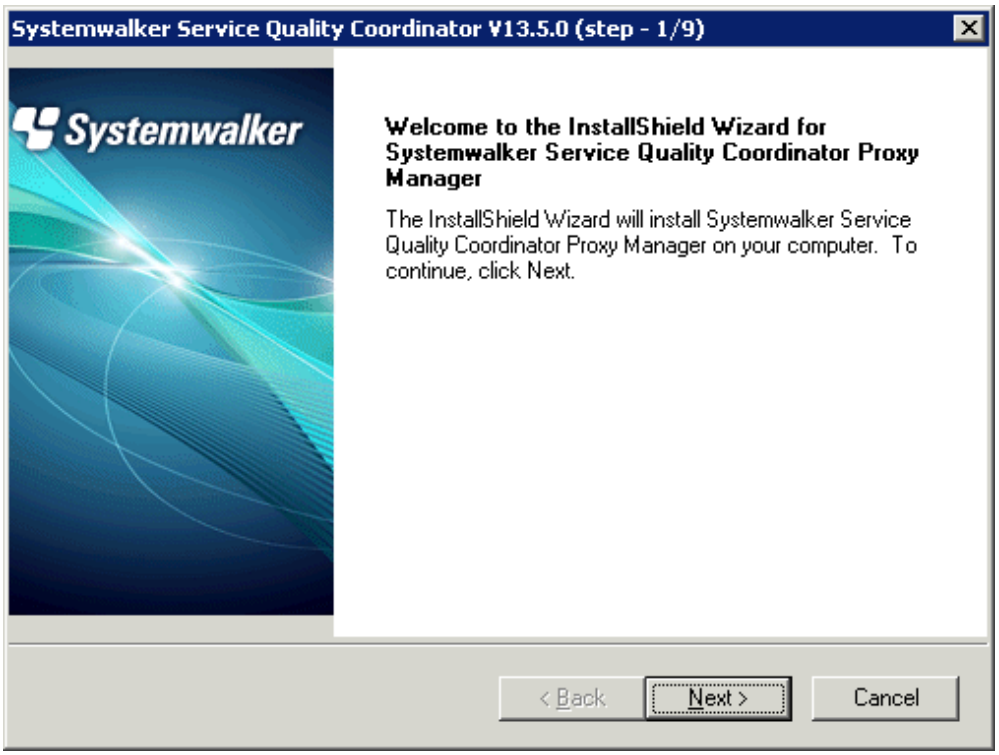
Installation procedure

This section explains the procedure for installing a Proxy Manager.

Windows

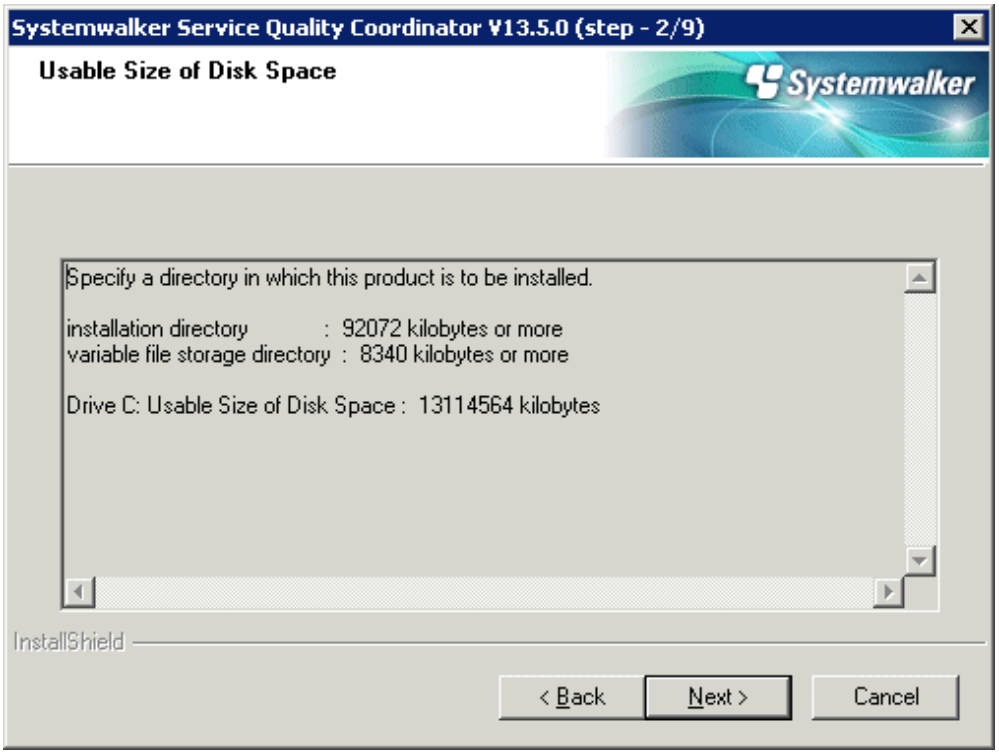
Select **Installation of Proxy Manager**.

Installation window



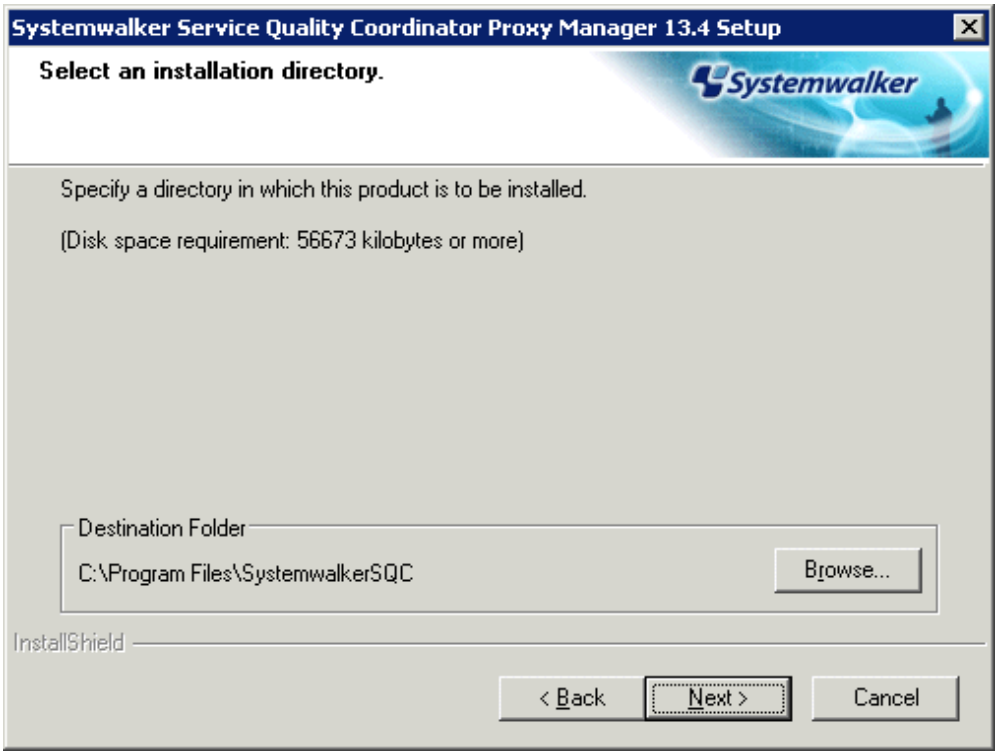
Click **Next**.

Available disk space display



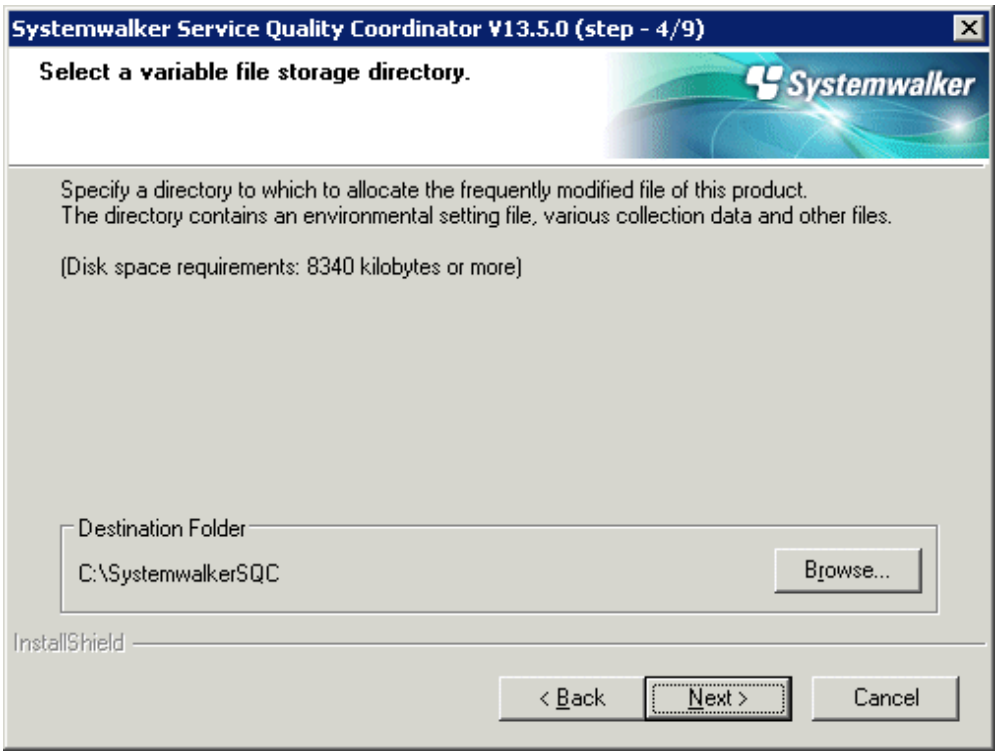
Click **Next** if the available disk space is sufficient.

Select the installation directory



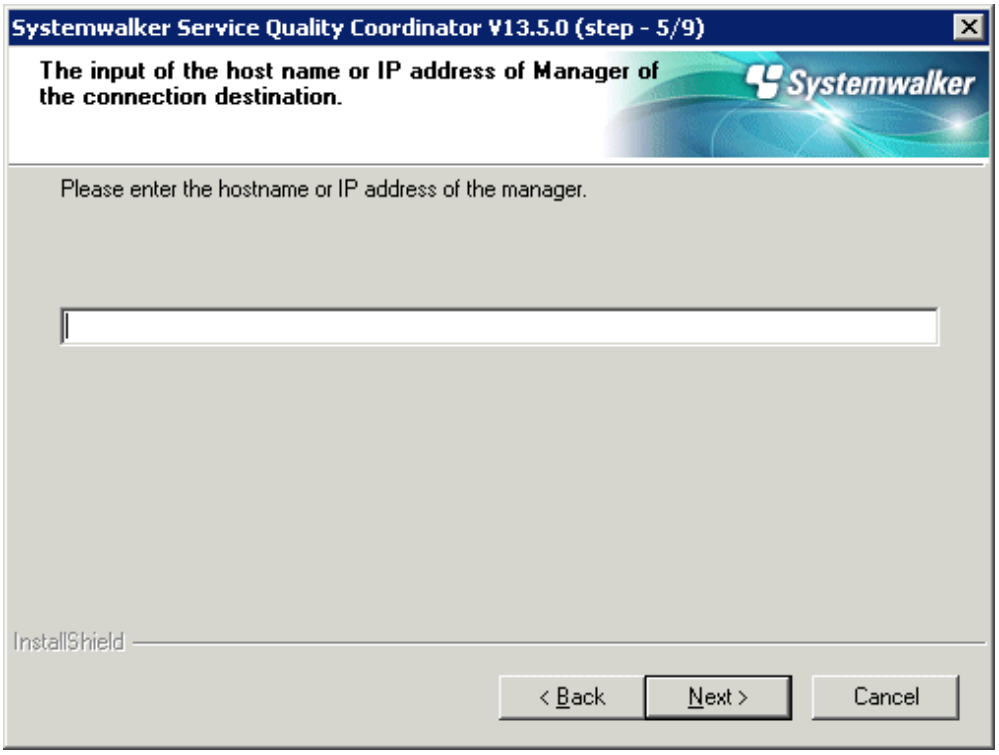
Check that the installation directory is correct and click **Next**.

Select the variable file storage directory



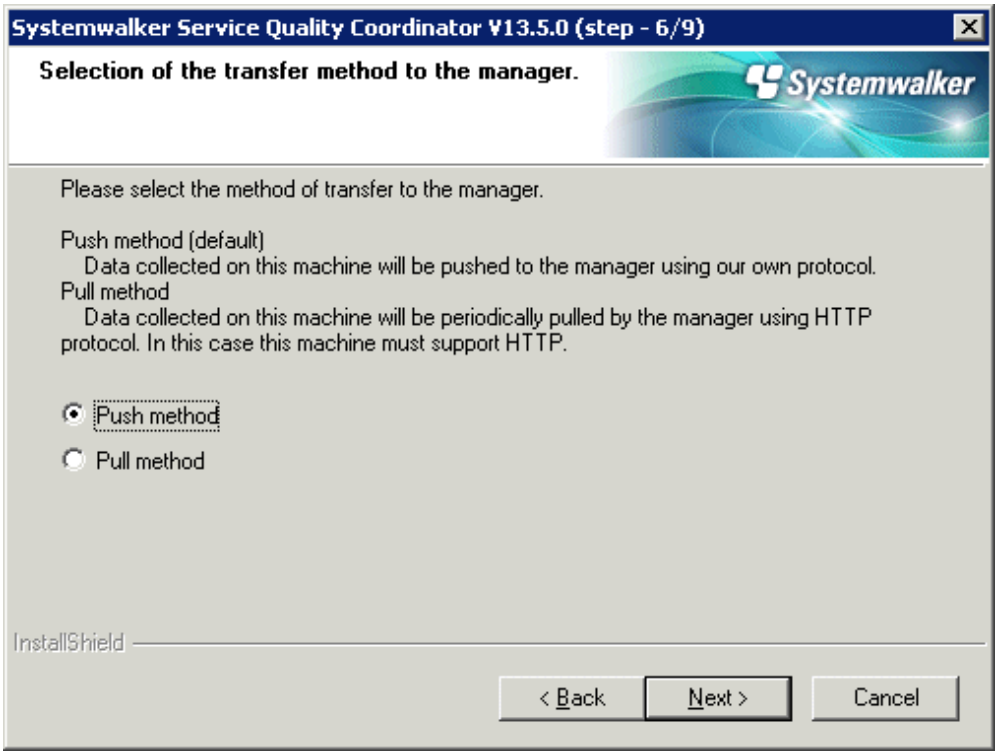
Confirm that the variable file storage directory is correct and click **Next**.

Enter the host name or IP address of the Manager to connect to



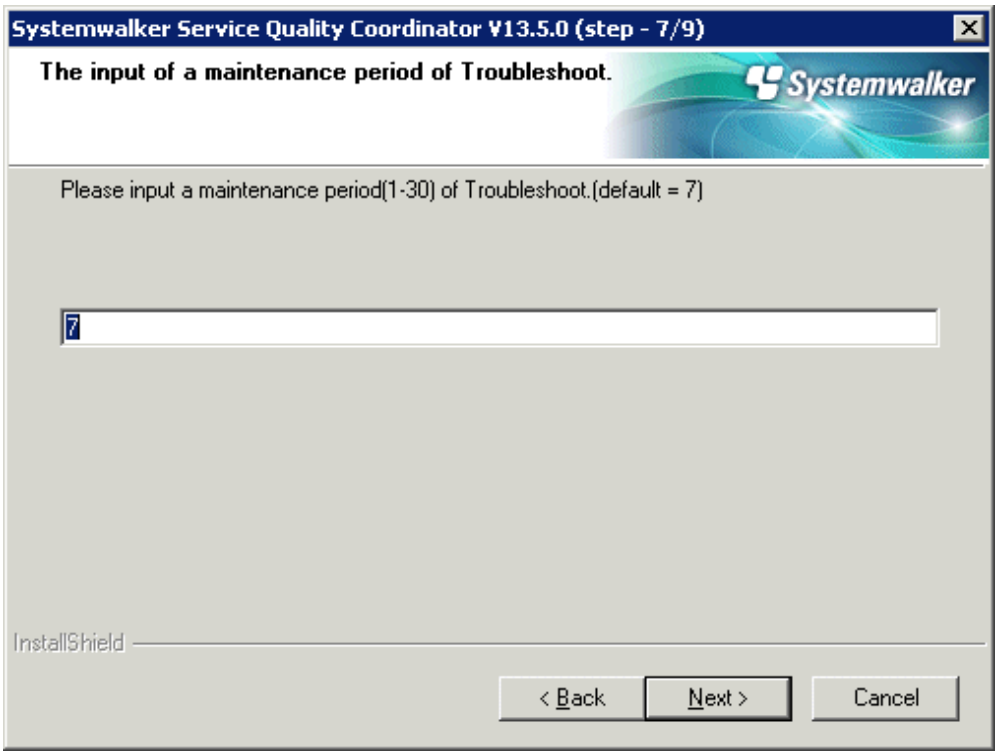
Enter the host name or IP address of the Manager to connect to, and click **Next**.

Select the method of communicating with the Manager



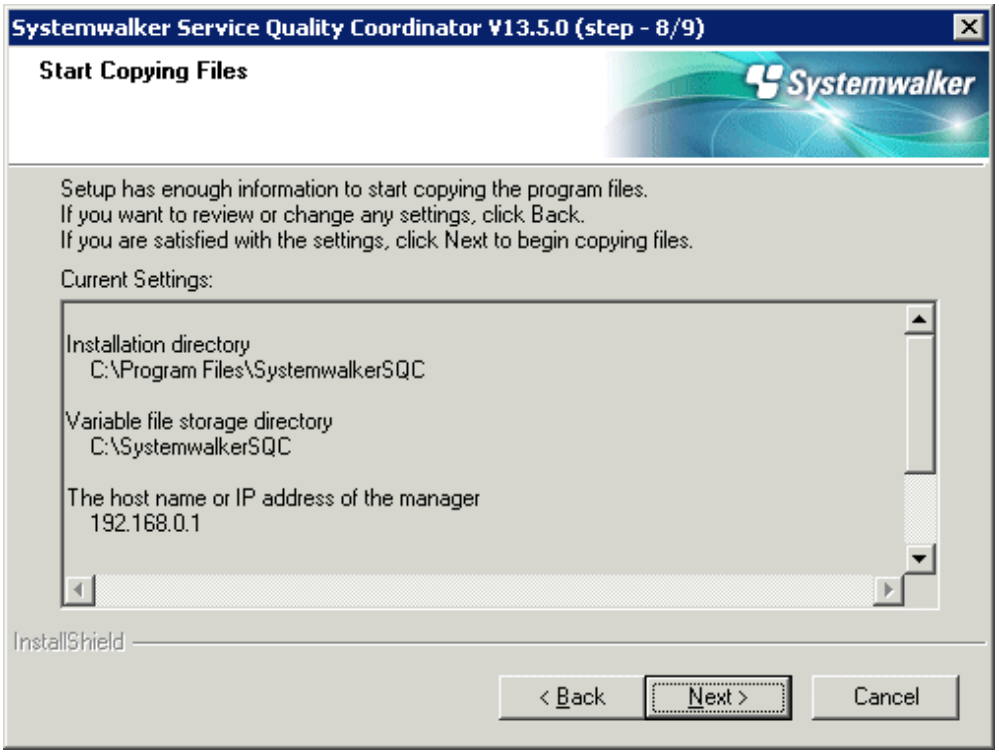
Select the method of communicating with the Manager, and click **Next**.

Enter the Troubleshoot retention period



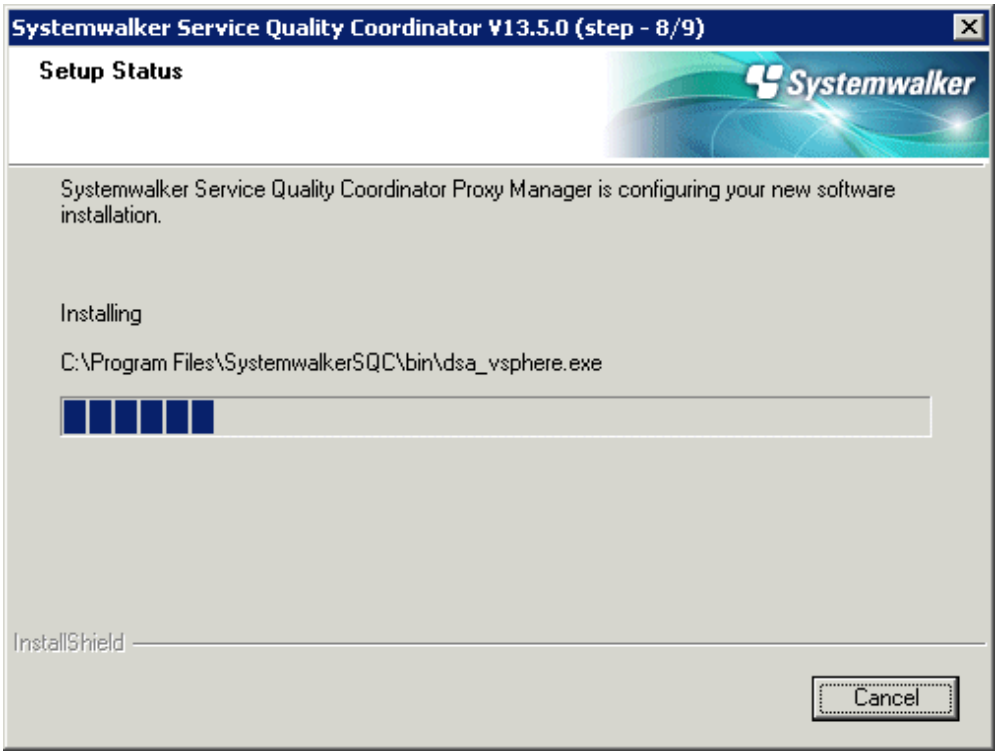
Enter the Troubleshoot retention period and click **Next**.

Confirm commencement of the file copy process



Confirm that the settings are correct and click **Next**.

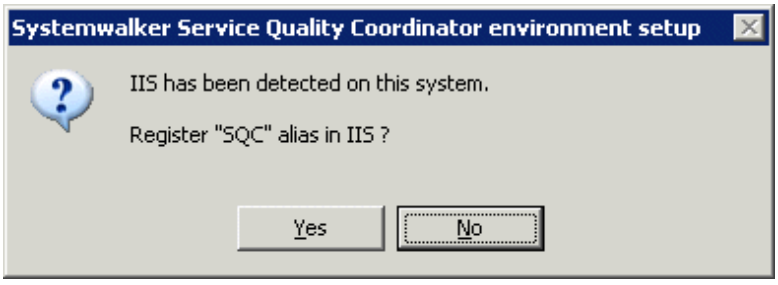
Setup status



Installation will commence.

Environment settings

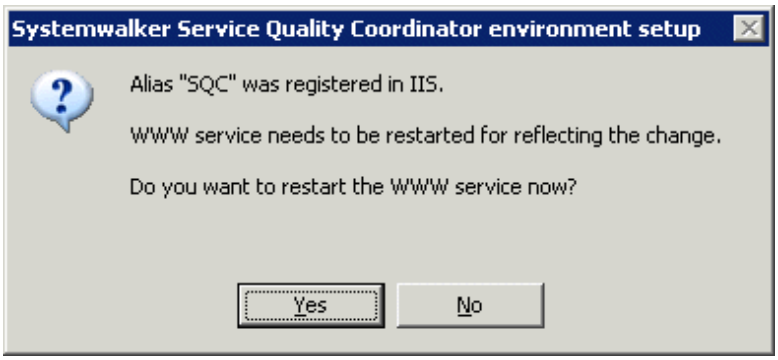
If the following screen is displayed, set the environment settings.



Select [Yes(Y)>].

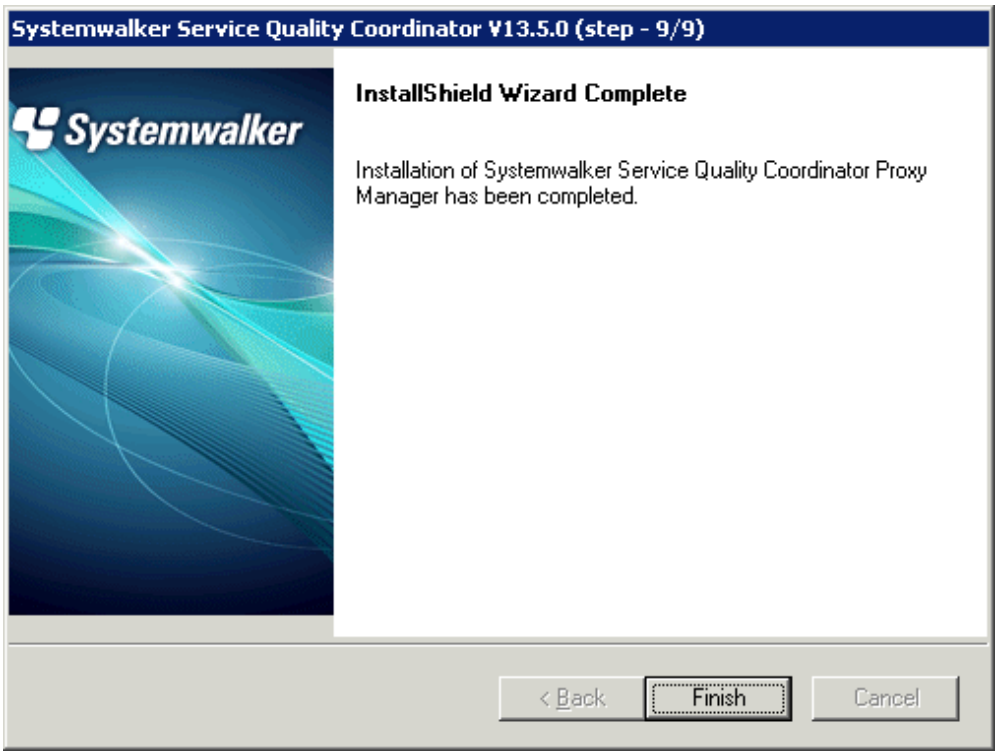
Environment settings

This screen is displayed after above screen.



Select [Yes(Y)>].

InstallShield Wizard completed



Click **Finish** to finish installation.

UNIX

```
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<< Select Installation type >>

 1.Enterprise Manager
 2.Manager
```

```
 3.Proxy Manager
 4.Agent for Server
 5.Agent for Business

--------------------------------------------------------------------------------
Please specify installation type. [?,q] ==> 3
```

Enter "3" and press the **Enter** key.

Confirm the installation directory

```
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]
> n
```

If the installation directory is correct, enter "n" and press the **Enter** key.

- 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
```

Enter the host name or IP address of the Manager to connect to

```
Please specify manager host name or IP address. [?, q]
> 127.0.0.1
```

Enter the host name or IP address of the Manager to connect to, and press the **Enter** key.

Confirm the host name or IP address of the Manager to connect to

```
Current Manager Host is following:
    Manager Host: 127.0.0.1
Do you want to change the above environment? (default: n)[y, n, ?, q]
> n
```

If the host name or IP address of the Manager to connect to is correct, enter "n" and press the **Enter** key.

Confirm the method of communicating with the Manager

```
Default data transfer method to Manager is following:
    Data transfer method to Manager: push
Do you want to change the above environment? (default: n)[y, n, ?, q]
> n
```

If the method of communicating with the Manager is correct, enter "n" and press the **Enter** key.

- **If "y" is entered**
  The following window will be displayed to allow the user to specify the method of communicating with the Manager.

```
Please specify data transfer method to Manager. (default: push)[push, pull, ?, q]
> pull
```

Confirm the Troubleshoot retention period

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

If the Troubleshoot retention period is correct, enter "n" and press the **Enter** key.

- If **"y"** is entered
  The following window will be displayed to allow the user to change the Troubleshoot retention period:

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

Confirm the commencement of installation

```
Do you want to continue with the installation of Systemwalker SQC Proxy Manager [y,n]
```

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

3.1.3 Installing an Agent

Preparing for installation

Before running the Installer, refer to "1.2.2 Installing an Agent or Proxy Manager" to check the installation conditions and collect the necessary information.

Prepare the product CD-ROM (Server) and refer to "Chapter 3 Installation and Setup" for information about installer startup and screens.

Installation procedure

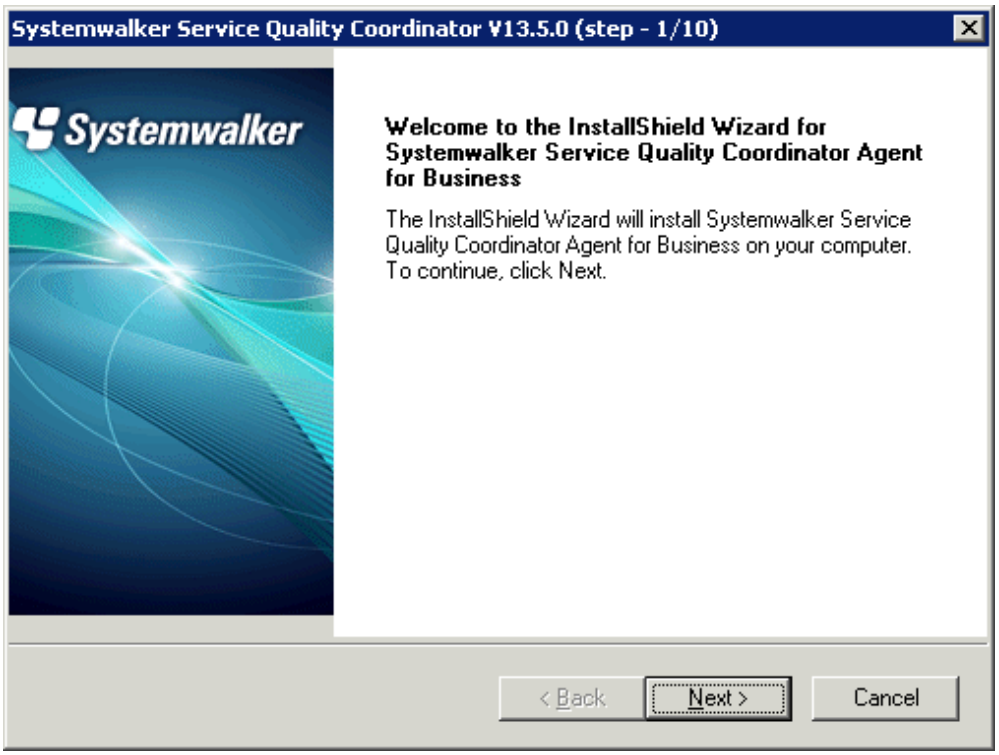
This section explains the procedure for installing an Agent.

Windows

Select either **Installation of Agent for Server** or **Installation of Agent for Business**.

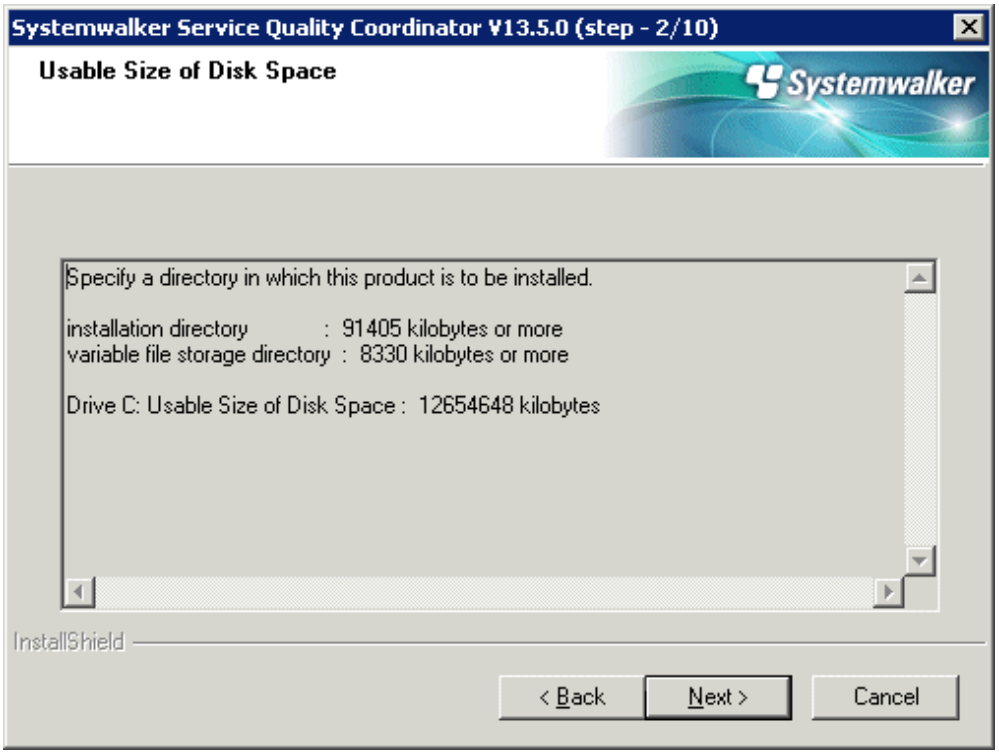
This screen-shot is taken from an Agent for Server installation.

Installation window



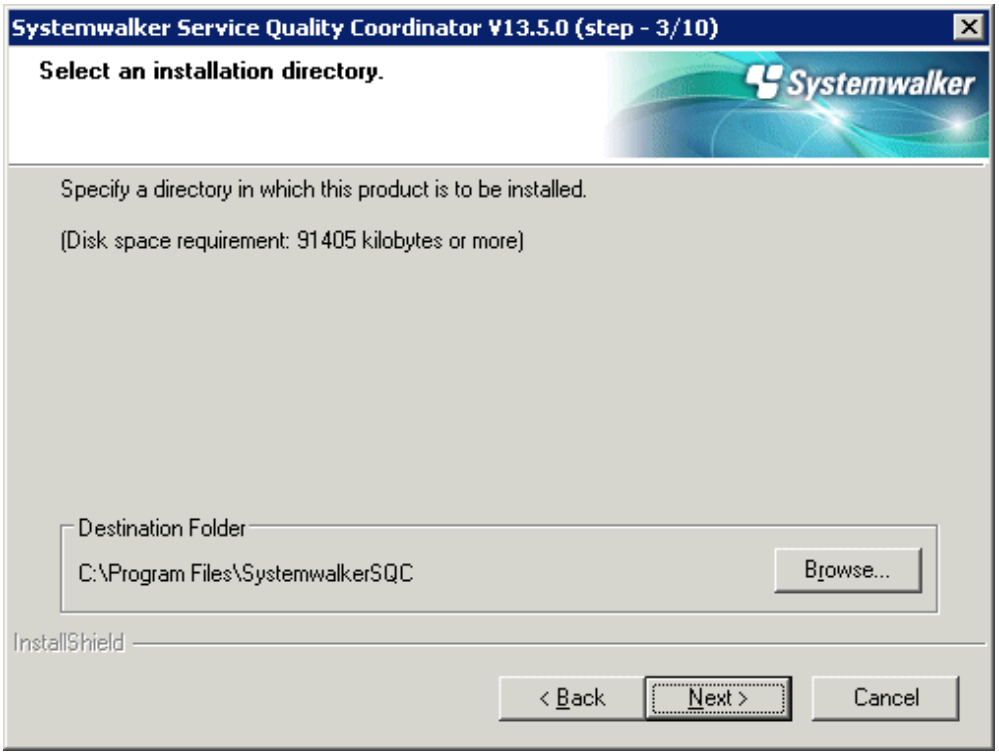
Click **Next**.

Available disk space display



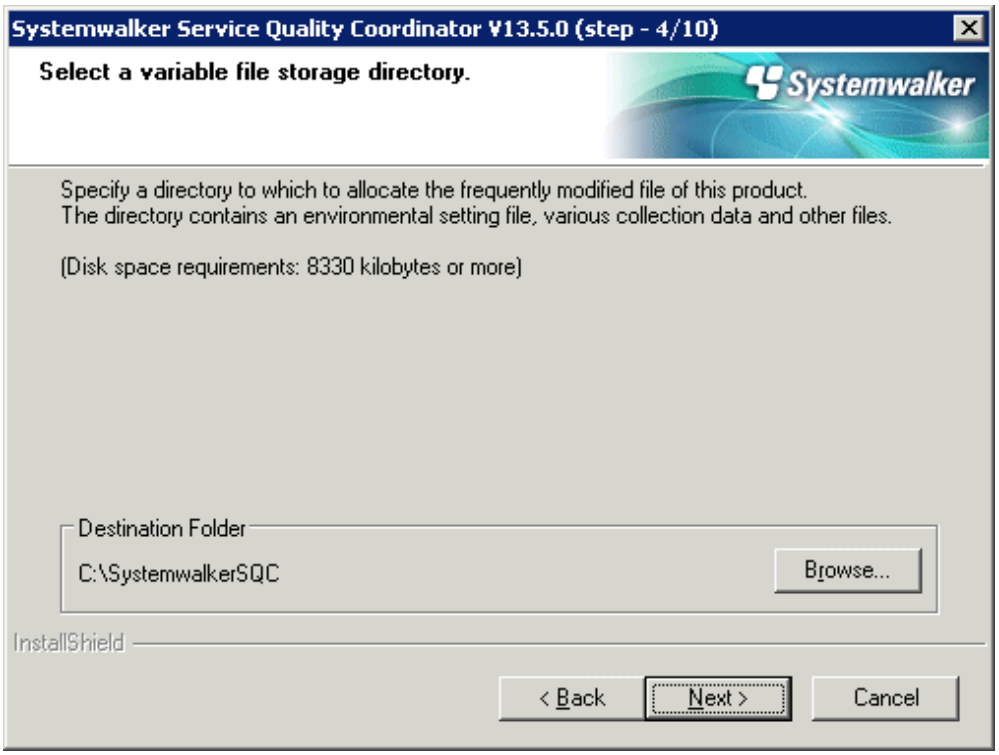
Check the remaining disk space and click **Next**.

Select the installation directory



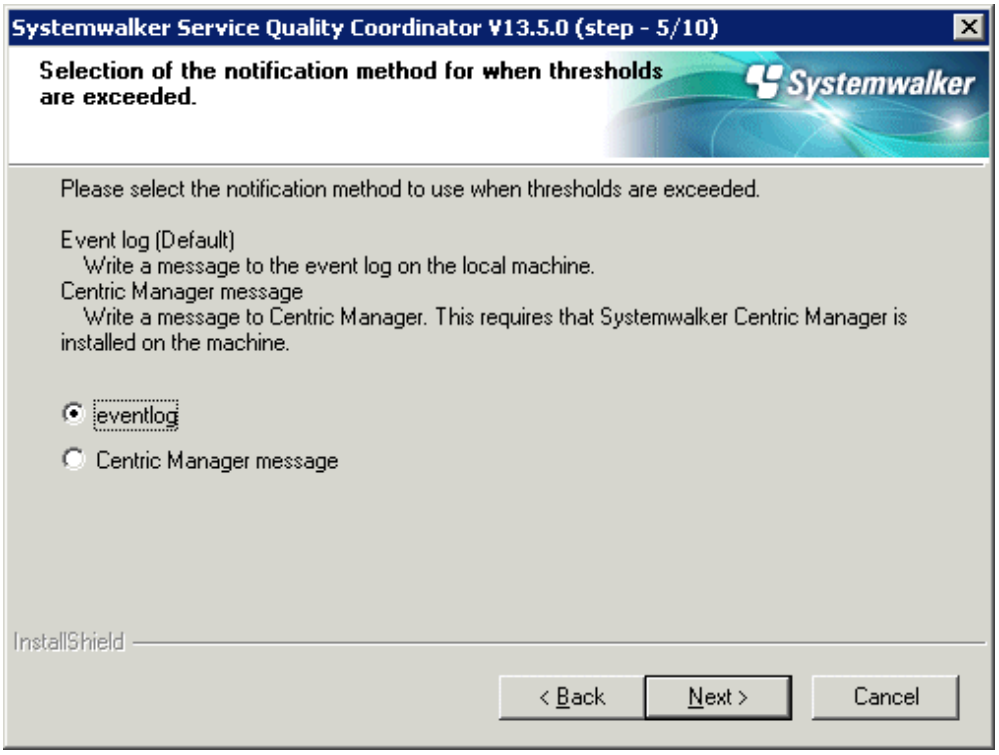
Check the installation directory and click **Next**.

Select the variable file storage directory



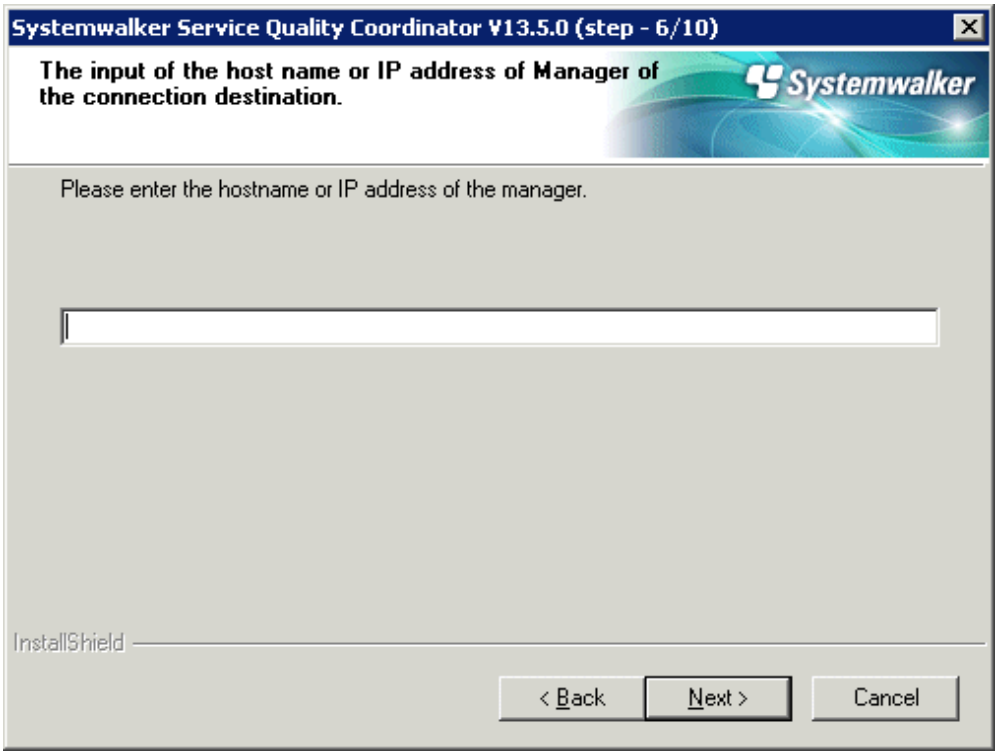
Check the variable file storage directory and click **Next**.

Select threshold violation notification method



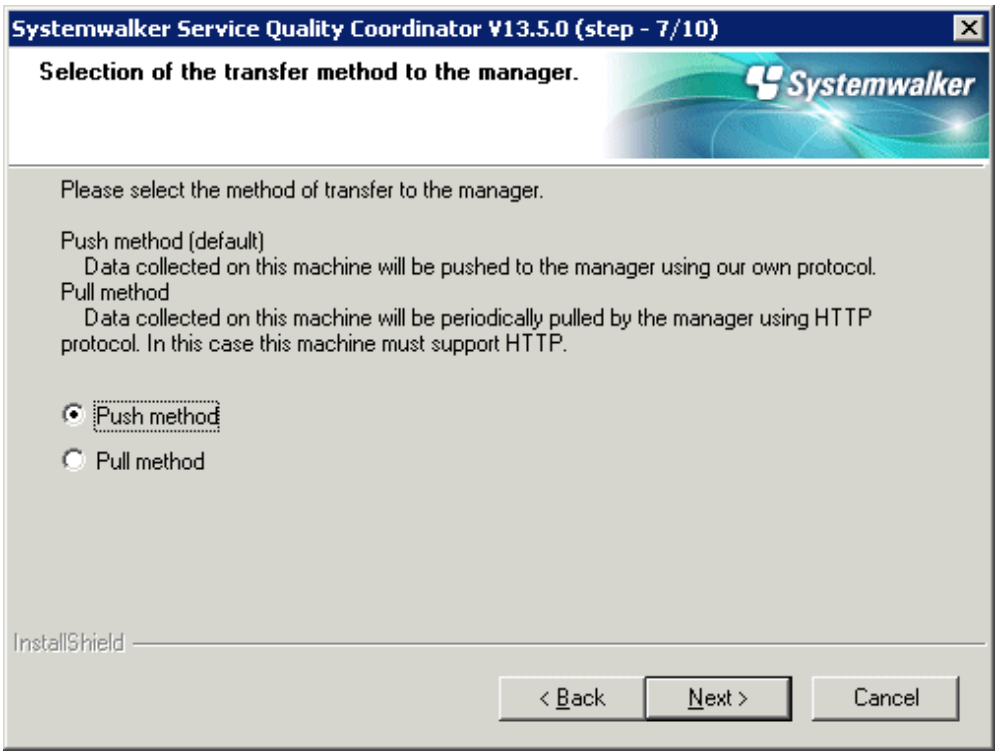
Select the threshold violation notification method and click **Next**.

Enter the host name or IP address of the Manager to connect to



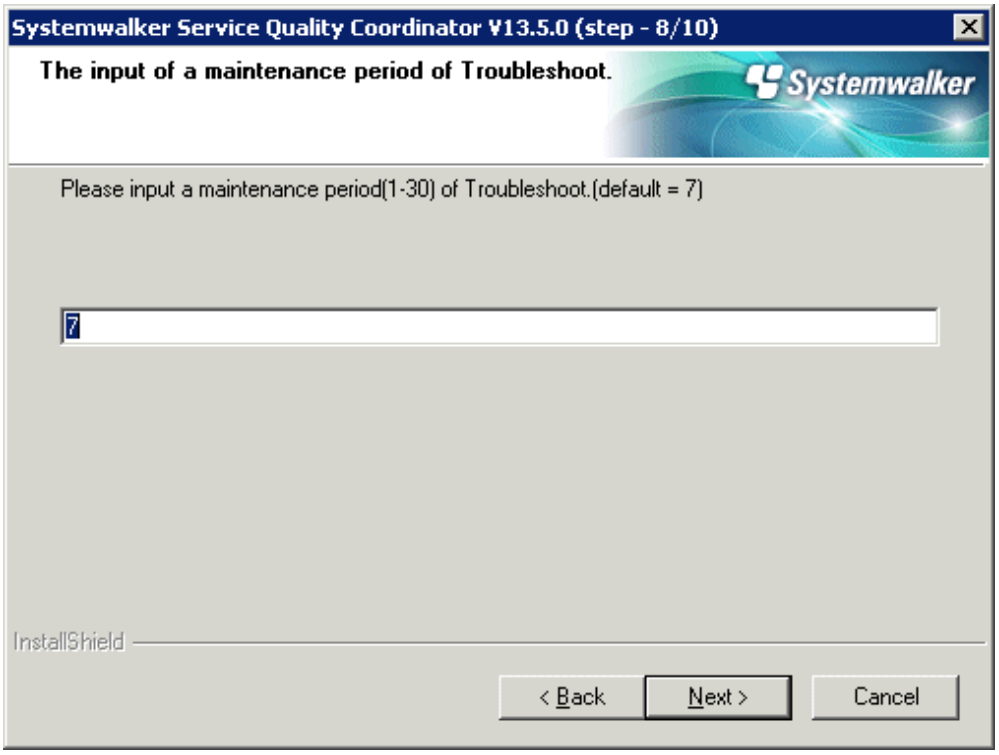
Enter the host name or IP address of the Manager to connect to and click **Next**.

Select method to communicate with Manager



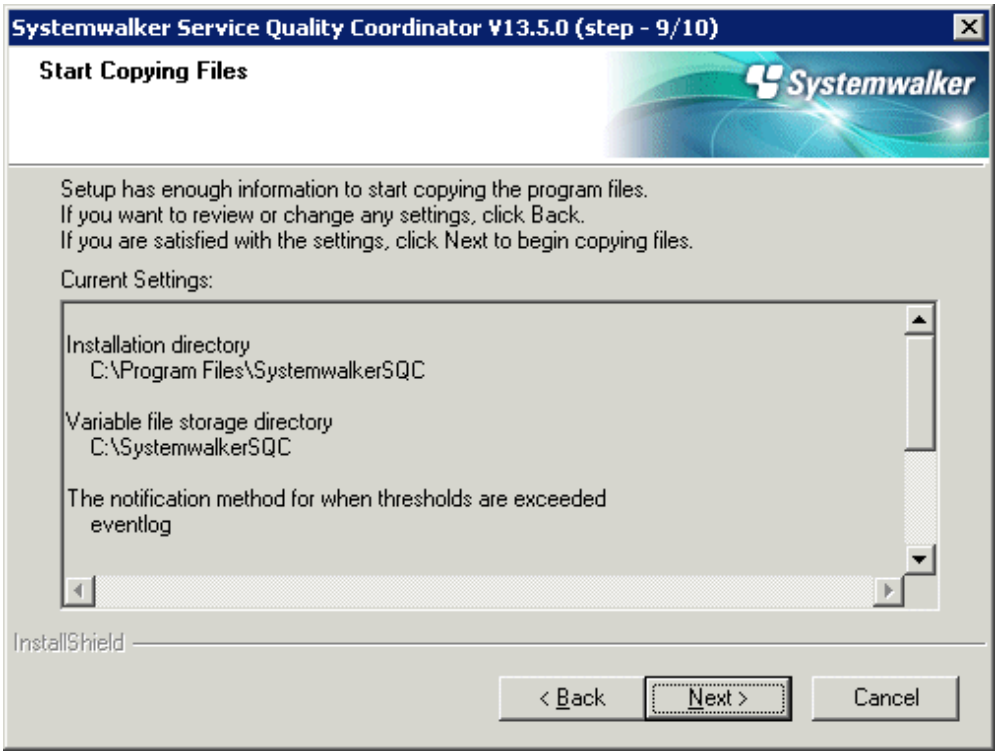
Select the method used to communicate with the Manager and click **Next**.

Enter the Troubleshoot retention period



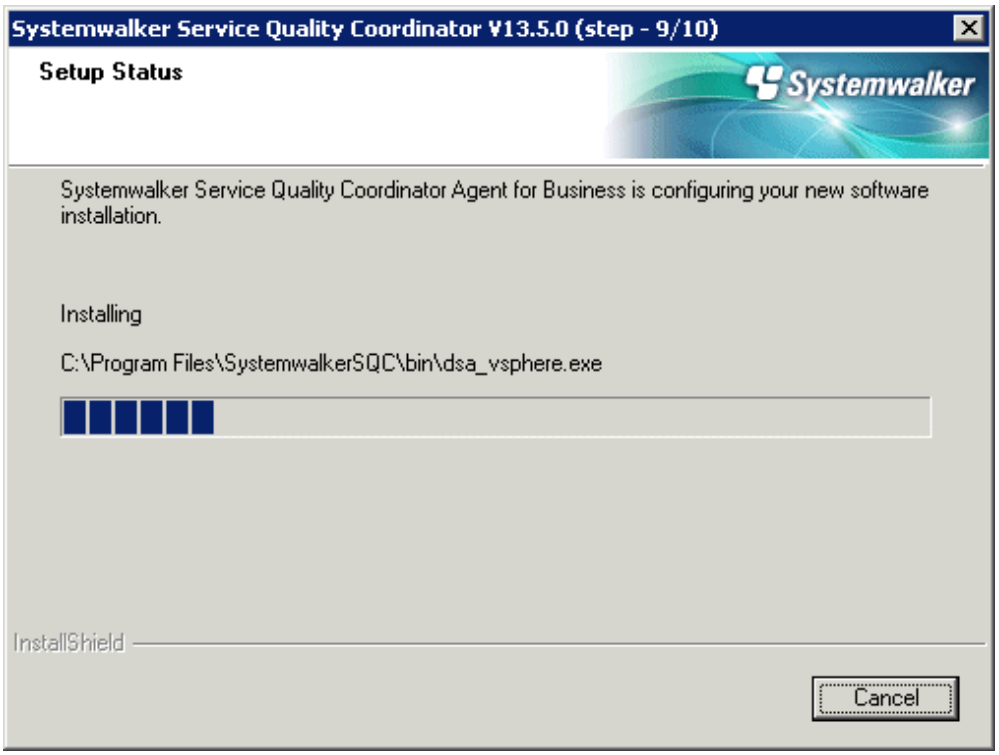
Enter the Troubleshoot retention period and click **Next**.

Check that file copy starts



Check the settings and click **Next**.

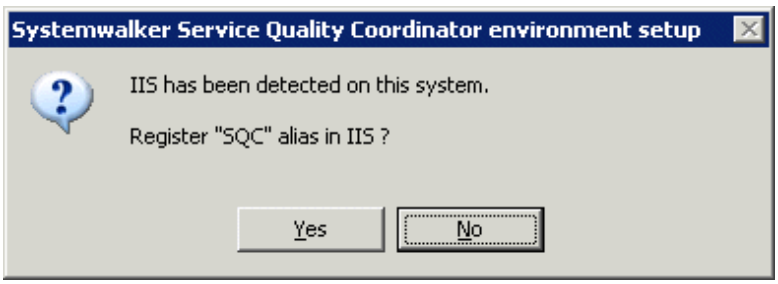
Setup status



Start installation.

Environment settings

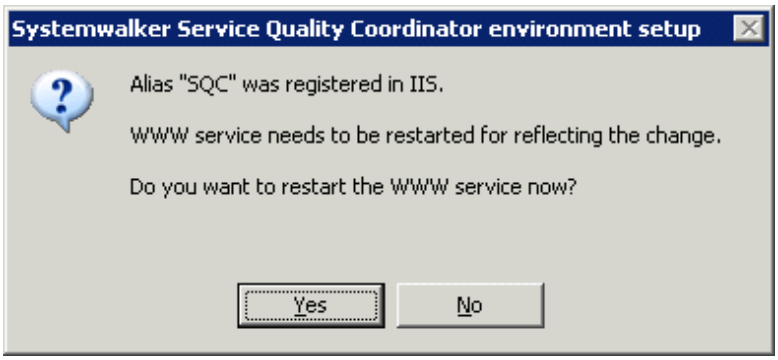
If the following screen is displayed, set the environment settings.



Select [Yes(Y)>].

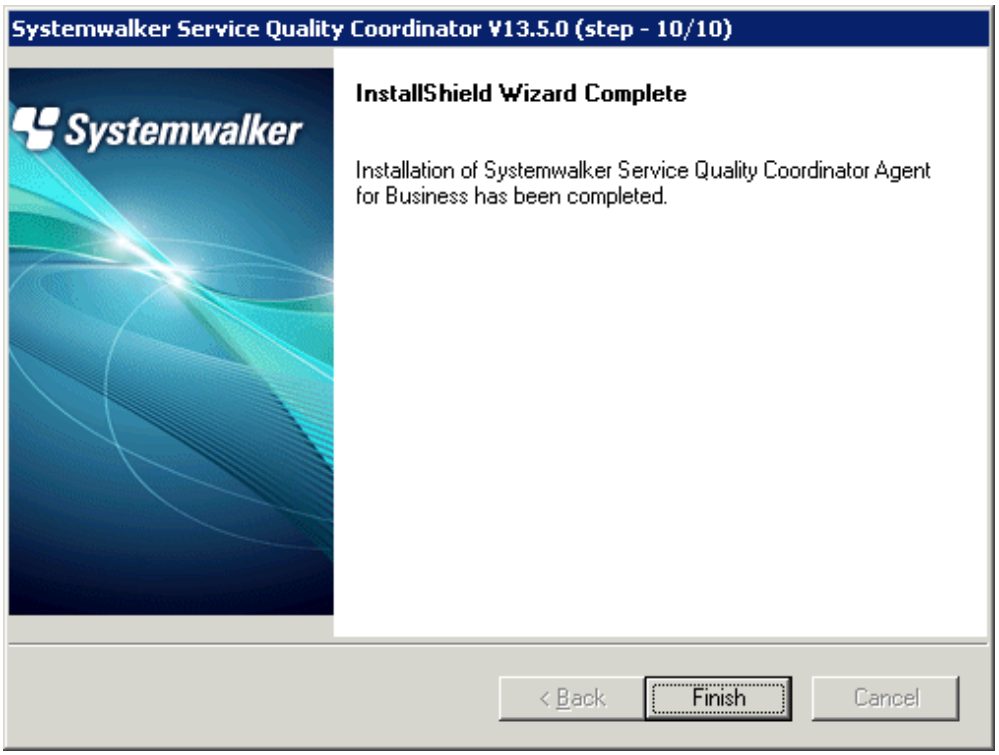
Environment settings

This screen is displayed after above screen.



Select [Yes(Y)>].

Completion of InstallShield Wizard



Select **Finish** to complete installation.

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```
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<< 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
```

Enter "4" or "5" and press the **Enter** key.

Confirm the installation directory

```
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]
> n
```

If the installation directory is correct, enter "n" and press the **Enter** key.

- 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
```

Enter the host name or IP address of the Manager to connect to

```
Please specify manager host name or IP address. [?, q]
> 127.0.0.1
```

Enter the host name or IP address of the Manager to connect to, and press the **Enter** key.

Confirm the host name or IP address of the Manager to connect to

```
Current Manager Host is following:
    Manager Host: 127.0.0.1
Do you want to change the above environment? (default: n)[y, n, ?, q]
> n
```

If the host name or IP address of the Manager to connect to is correct, enter "n" and press the **Enter** key.

Confirm the method of communicating with the Manager

```
Default data transfer method to Manager is following:
    Data transfer method to Manager: push
Do you want to change the above environment? (default: n)[y, n, ?, q]
> n
```

If the method of communicating with the Manager is correct, enter "n" and press the **Enter** key.

If "y" is entered
The following window will be displayed to allow the user to specify the method of communicating with the Manager.

```
Please specify data transfer method to Manager. (default: push)[push, pull, ?, q]
> pull
```

Confirm the alert action

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

If the notification method to use in the event of a threshold violation is correct, enter "n" and press the **Enter** key.

If "y" is entered
The following window will be displayed to allow the user to specify the notification method to use in the event of a threshold violation.

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

Confirm the Troubleshoot retention period

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

If the Troubleshoot retention period is correct, enter "n" and press the **Enter** key.

If "y" is entered
The following window will be displayed to allow the user to change the Troubleshoot retention period:

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

Confirm the commencement of installation

```
Do you want to continue with the installation of Systemwalker SQC Agent for Server [y,n]
```

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

3.1.4 Installing an Operation Management Client

Preparing for installation

Before running the Installer, refer to "1.2.3 Installing an Operation Management Client" to check the installation conditions and collect the necessary information.

Prepare the product CD-ROM (Client/Documentation) and refer to "Chapter 3 Installation and Setup" for information about installer startup and screens.

Point

Unix

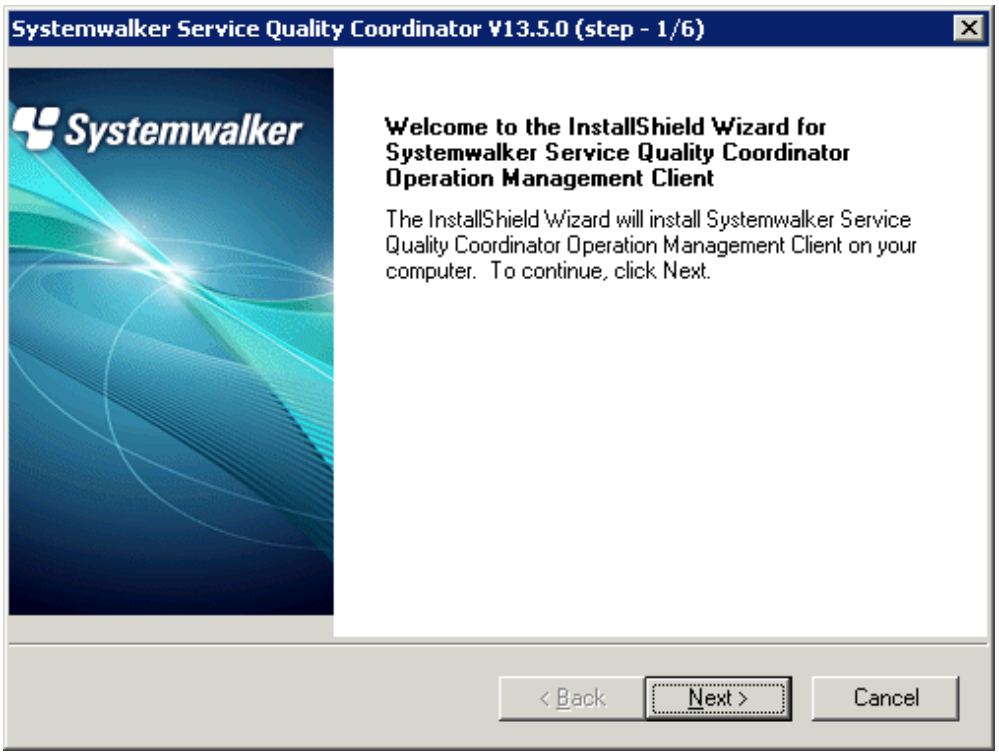
Install the operation management client on a Windows machine. The user must have the privileges of a member of the Administrators group.

Installation procedure

This section explains the procedure for installing an Operation Management Client.

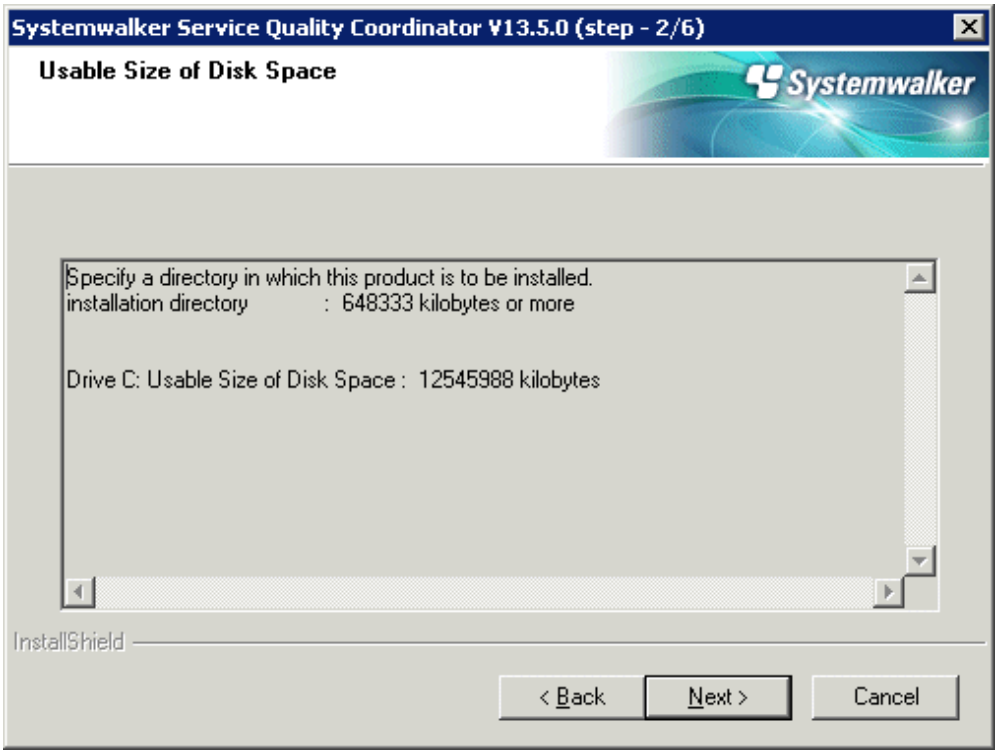
Select **Install Operation Management Client**.

Installation window



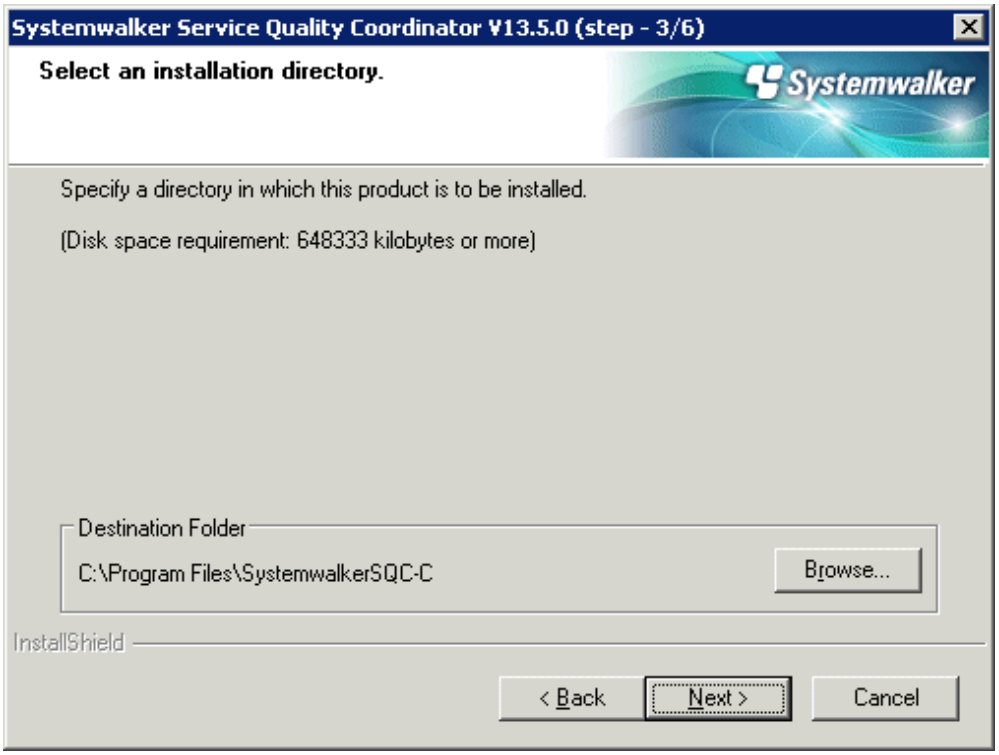
Click **Next**.

Available disk space display



Click **Next** if the available disk space is sufficient.

Select the installation directory



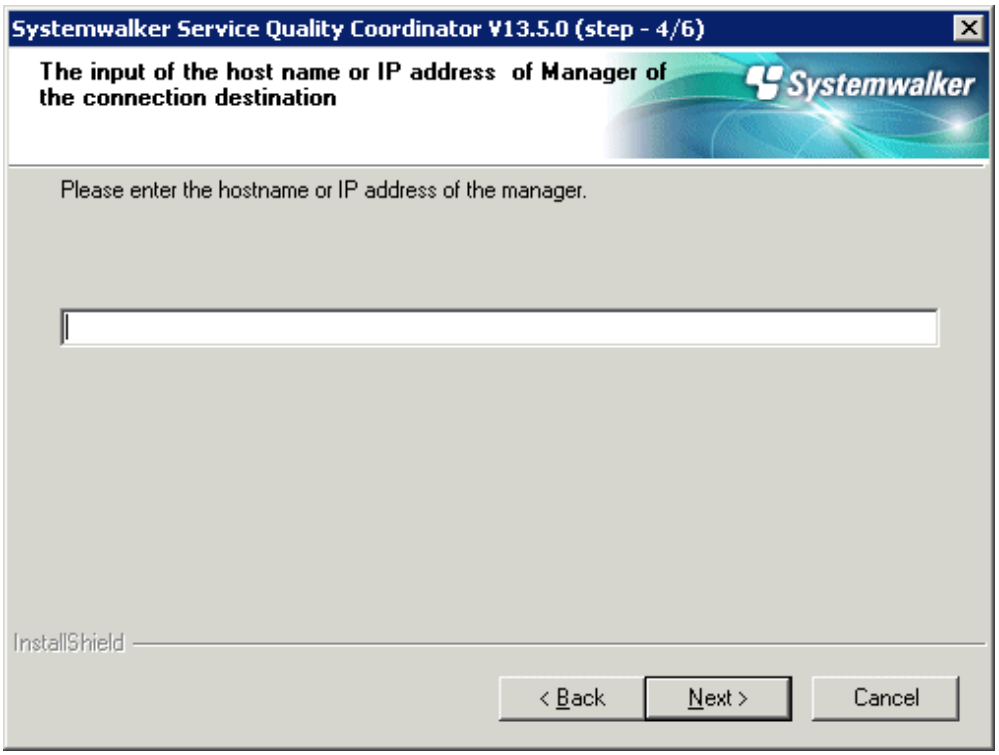
Check that the installation directory is correct and click **Next**.

Note

Default install directory is <System Drive>\Program Files in Windows x64 environment.

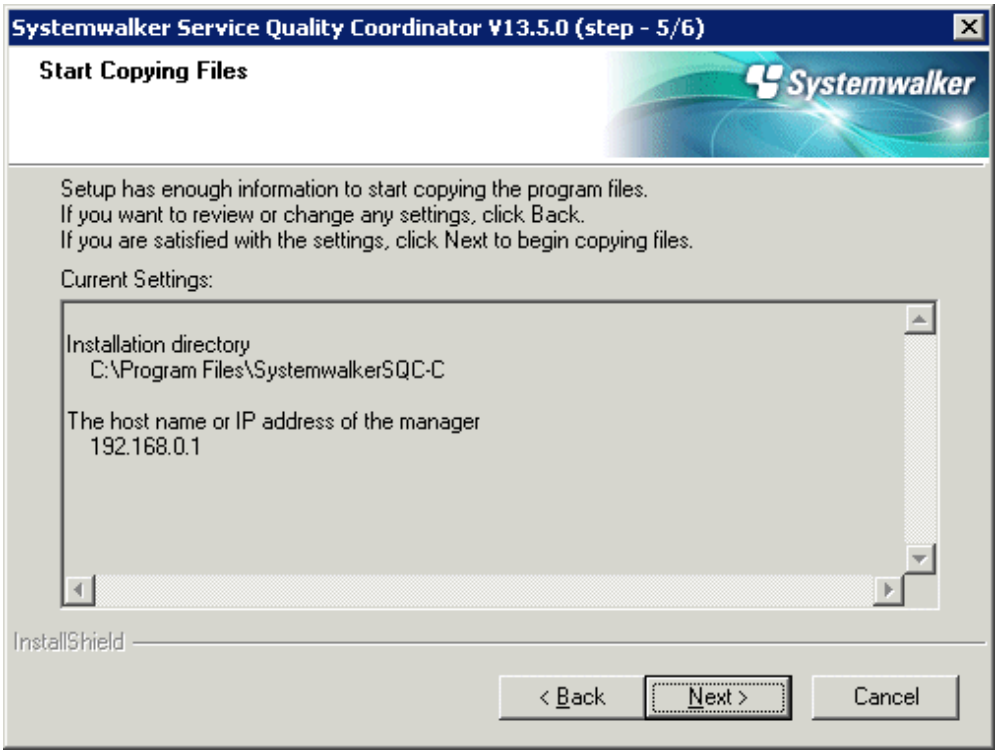
Please do not specify [<System Drive>\Program Files] or sub-directories when installing in Windows x64 environment.

Enter the host name or IP address of the Manager to connect to



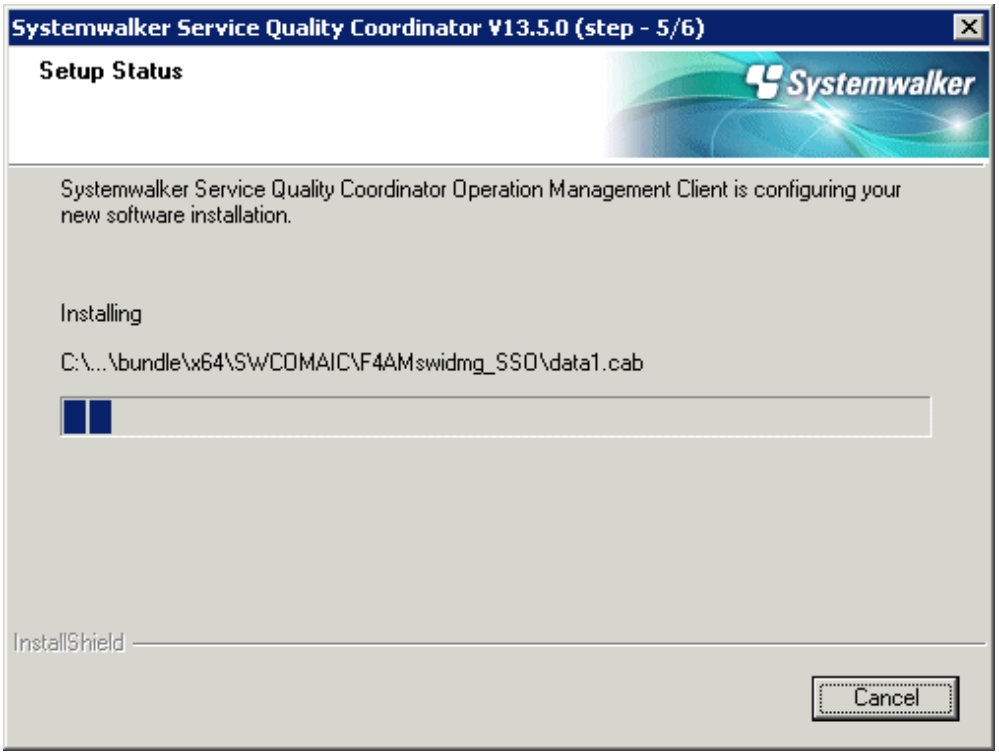
Enter the host name or IP address of the Manager to connect to, and click **Next**

Confirm commencement of the file copy process



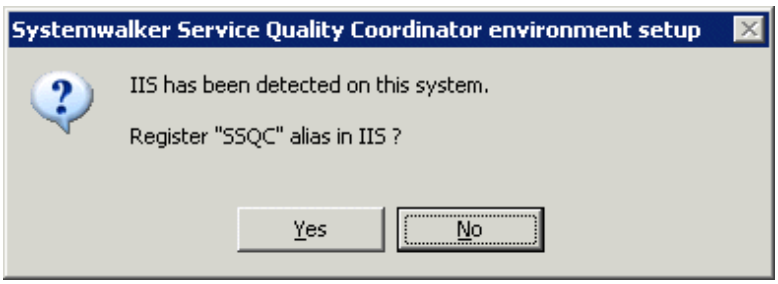
Confirm that the settings are correct and click **Next**.

Setup status



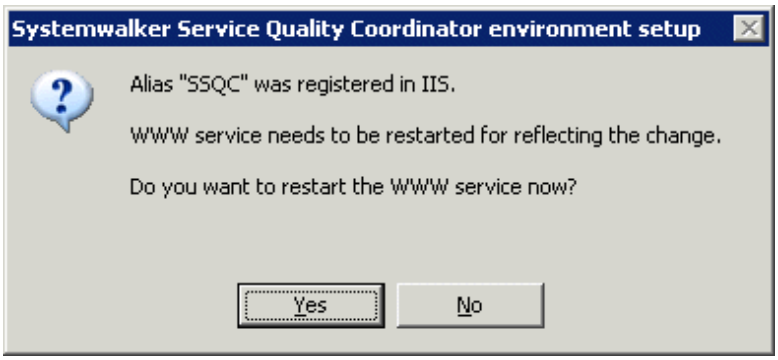
Installation will commence.

Environment settings



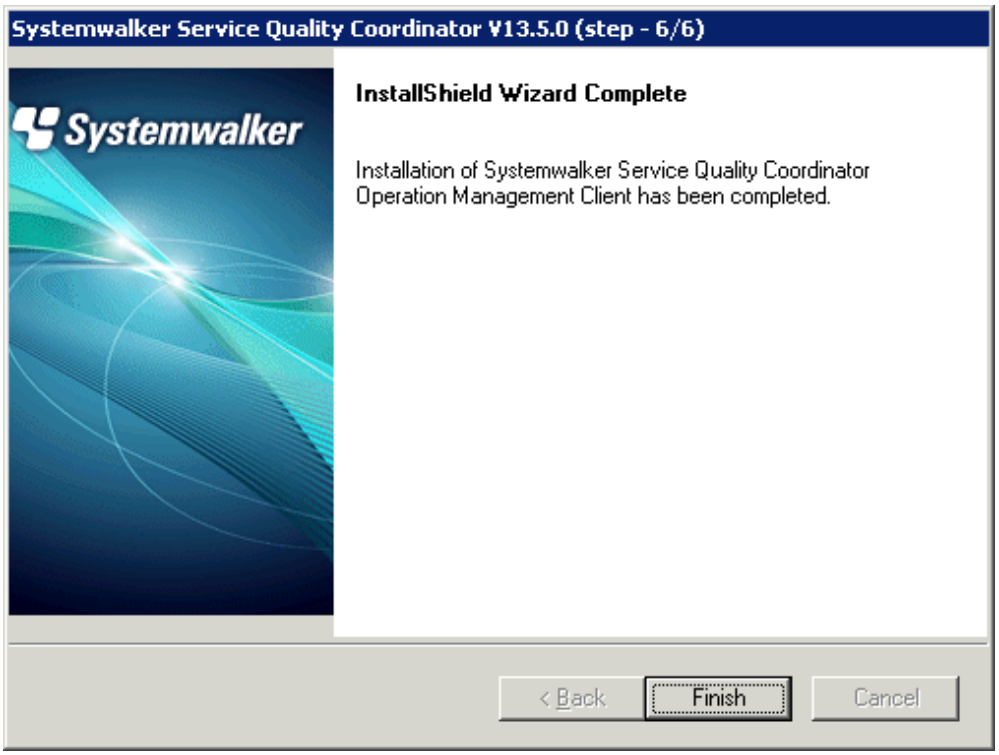
Click **Yes**.

Environment settings



Click **Yes**.

InstallShield Wizard completed



Click F**inish** to finish installation.

Note

After installation, perform the procedure in following section to increase the desktop heap size for Windows:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

3.1.5 Installing an Enterprise Manager

Preparing for installation

Before running the Installer, refer to "1.2.4 Installing an Enterprise Manager" to check the installation conditions and collect the necessary information.

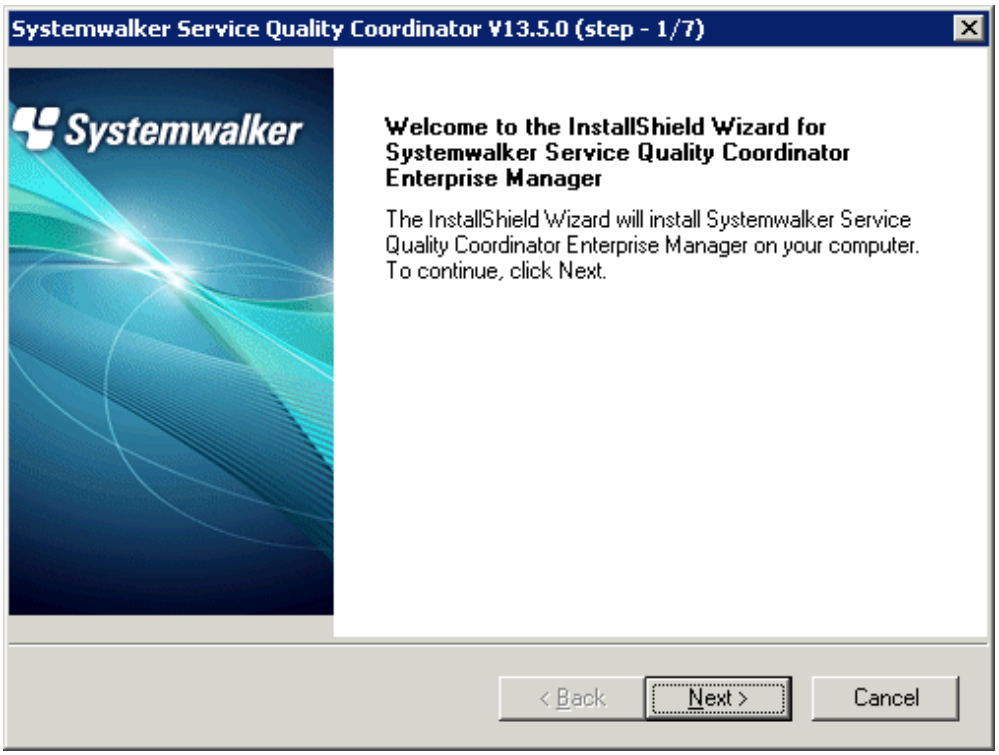
Prepare the product CD-ROM (Server) and refer to "Chapter 3 Installation and Setup" for information about installer startup and screens.

Installation procedure

This section explains the procedure for installing an Enterprise Manager.

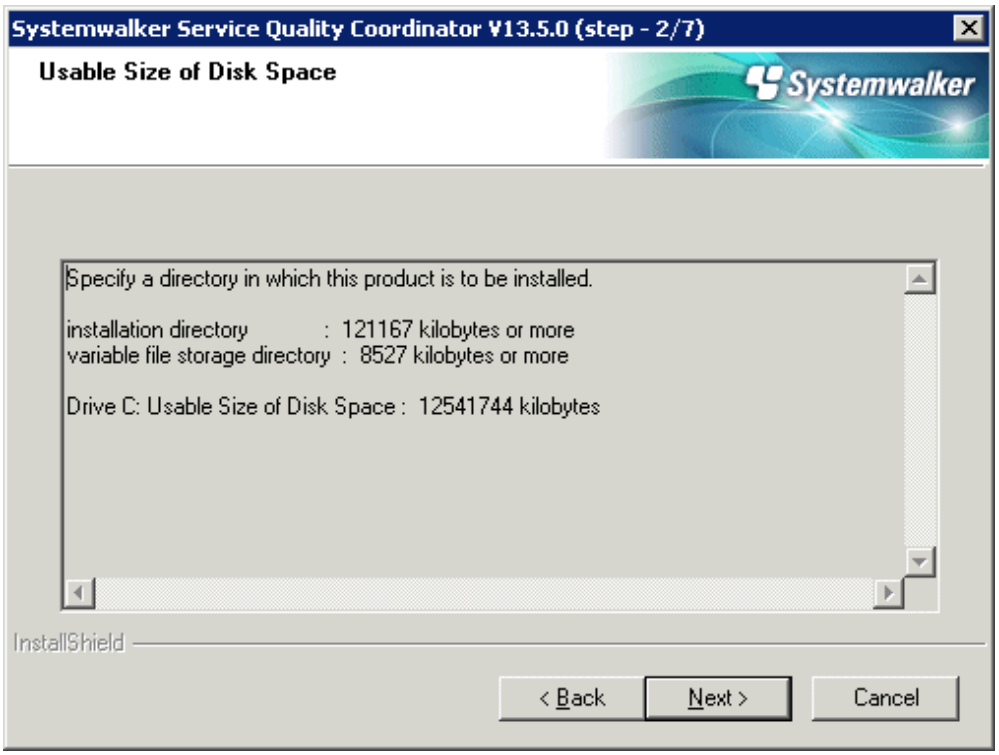
Windows

Select **Installation of Enterprise Manager**.



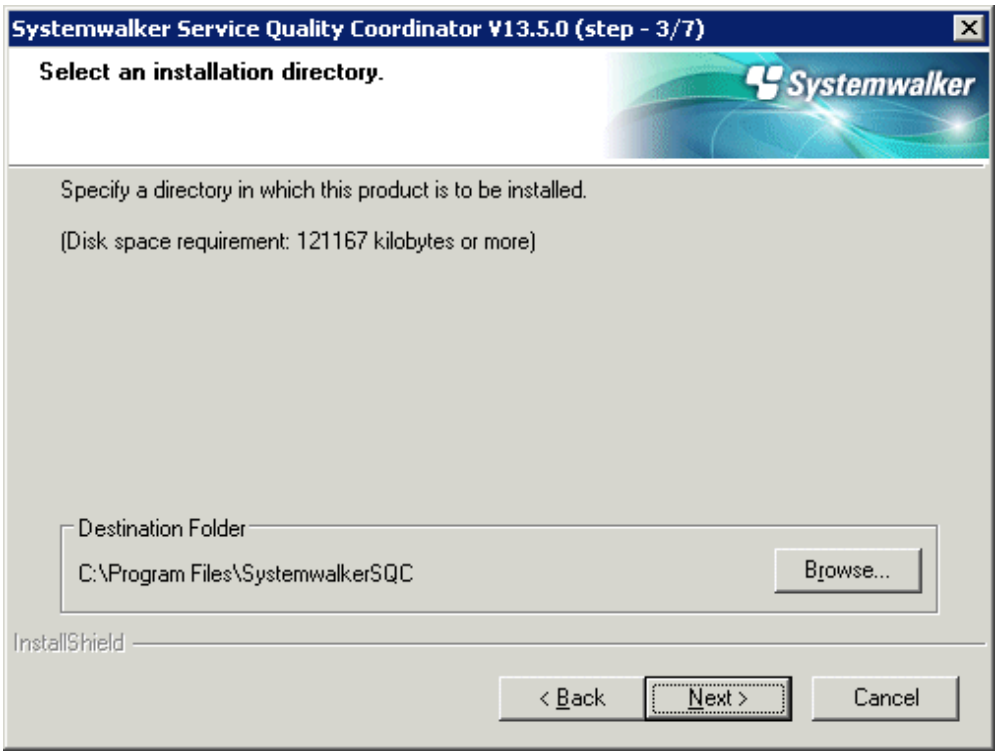
Click **Next**.

Available disk space display



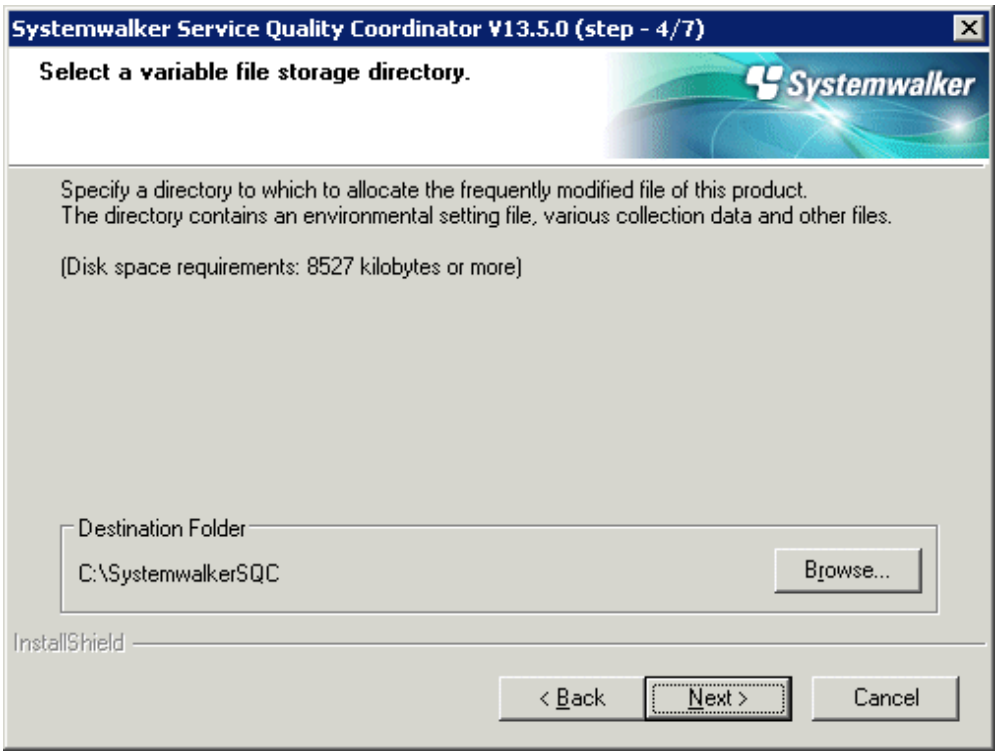
Click **Next** if the available disk space is sufficient.

Select the installation directory



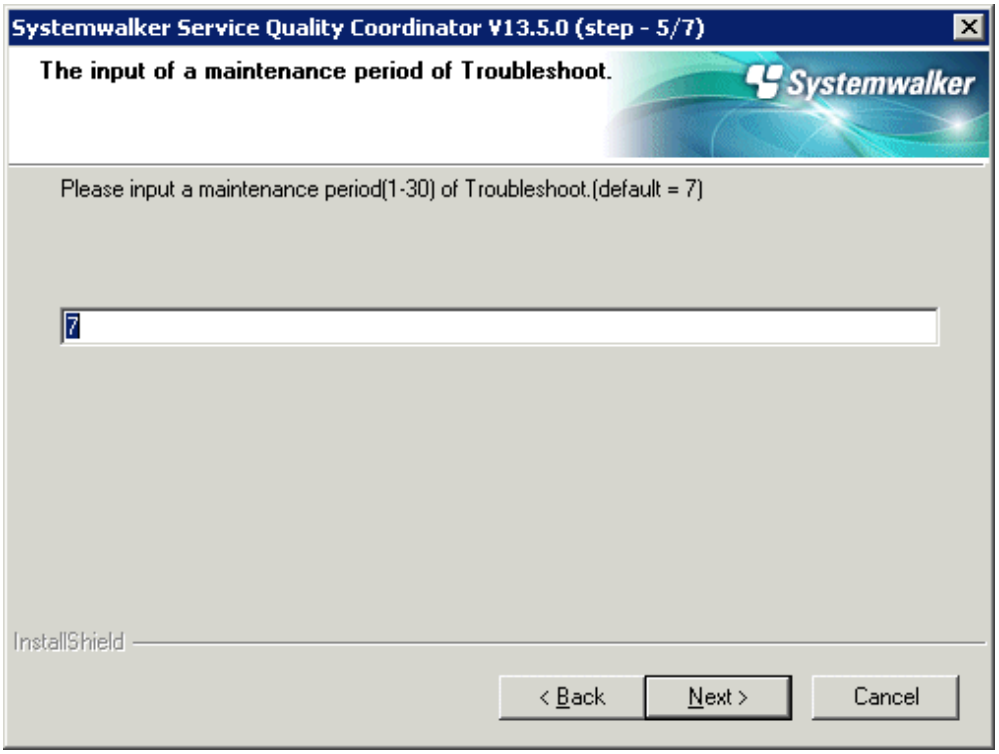
Check that the installation directory is correct and click **Next**.

Select the variable file storage directory



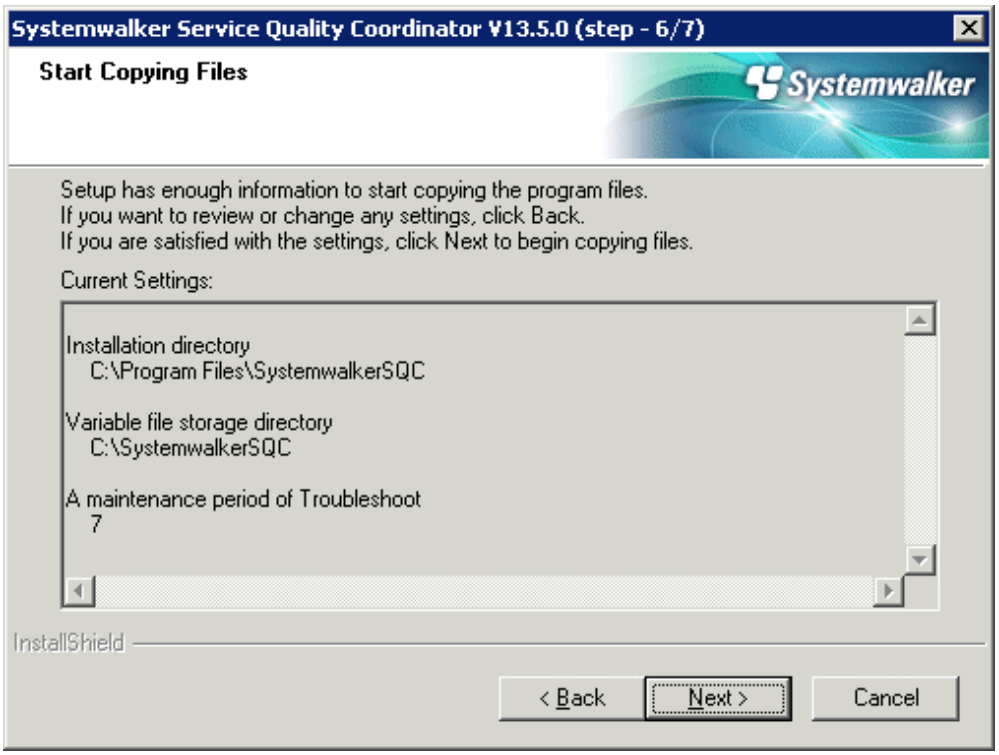
Confirm that the variable file storage directory is correct and click **Next**.

Enter the Troubleshoot retention period



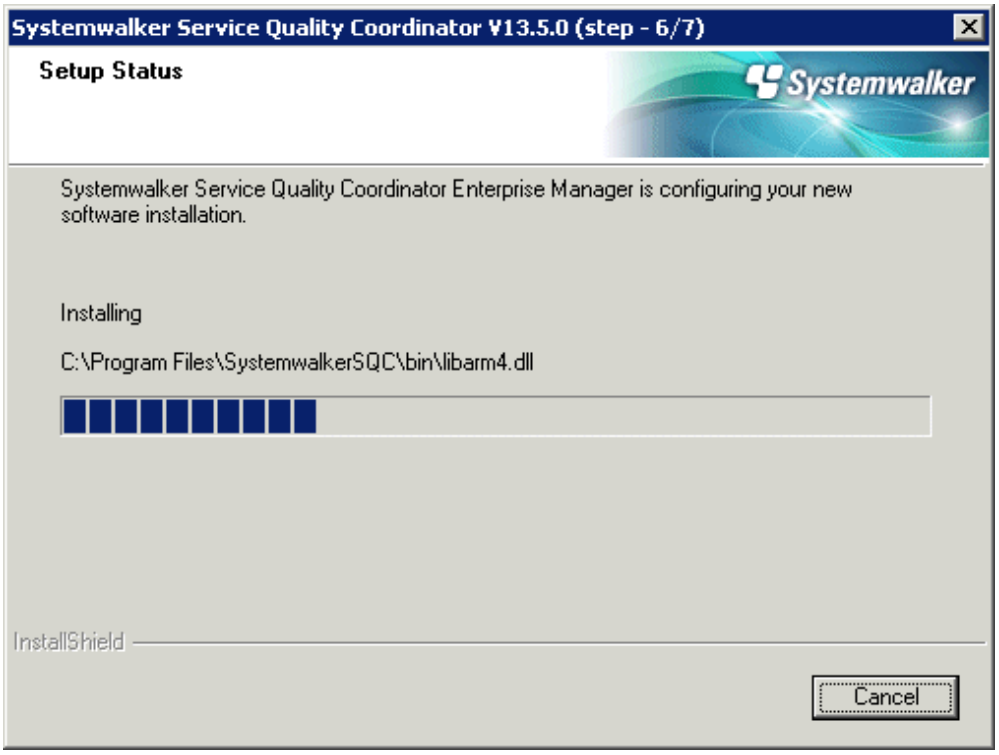
Enter the Troubleshoot retention period and click **Next**.

Confirm commencement of the file copy process



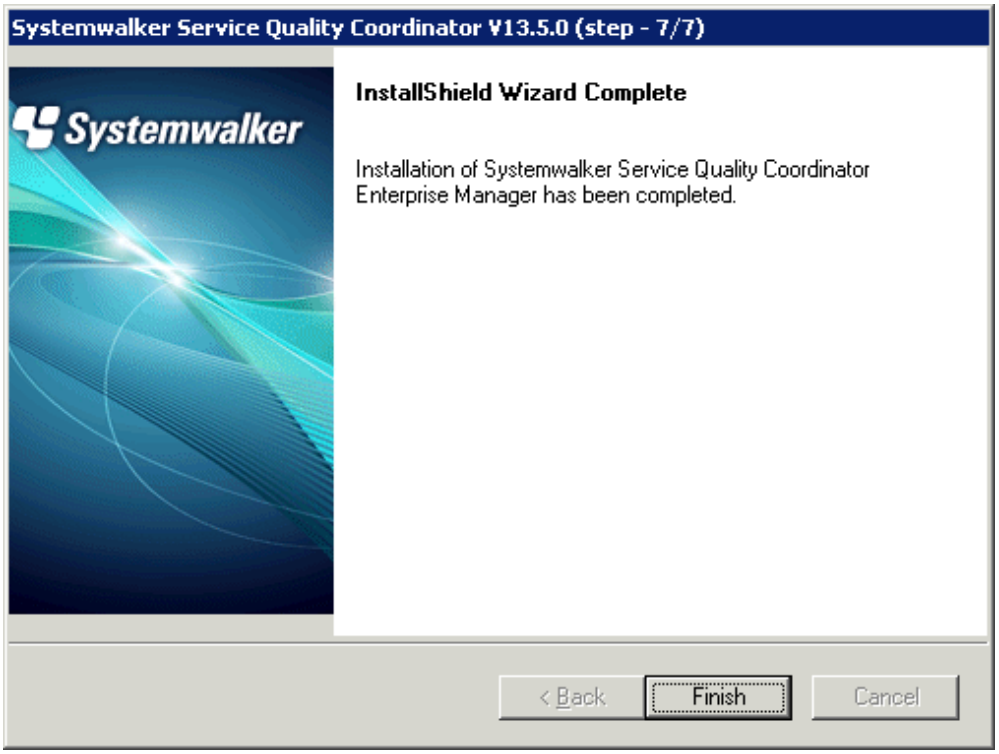
Confirm that the settings are correct and click **Next**.

Setup status



Installation will commence.

InstallShield Wizard completed



Click **Finish** to finish installation.

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```
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<< Select Installation type >>

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

--------------------------------------------------------------------------------
Please specify installation type. [?,q] ==> 1
```

Enter "1" and press the **Enter** key.

Confirm the installation directory

```
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]
> n
```

If the installation directory is correct, enter "n" and press the **Enter** key.

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
```

-

Checking Troubleshoot retention period

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

Enter "n" after confirming the Troubleshoot retention period, and press the **Enter** key.

If "y" is entered

The following window will be displayed to allow the user to change the installation directory:

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

Confirm the commencement of installation

```
Do you want to continue with the installation of Systemwalker SQC Enterprise Manager [y,n]
```

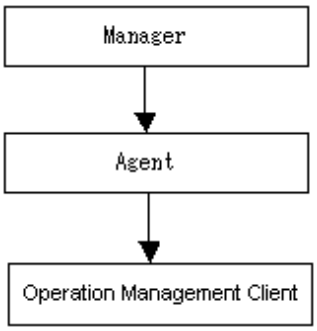
Enter "y" and press the **Enter** key to start installation.

3.2 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

- 3.2.1 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.
- 3.2.2 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.
- 3.2.3 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.

3.2.1 Tasks to perform on the Manager

1. **Install a Manager**

   Install the Manager by referring to "3.1.1 Installing a Manager" above.

2. **Set up a 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".

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.

3.2.2 Tasks to perform on the Agent

1. **Installing an Agent**

   Install the Agent by referring to "3.1.3 Installing an Agent" 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.

3.2.3 Tasks to perform on the Operation Management Client

1. **Install an Operation Management Client**

   Install an Operation Management Client by referring to "3.1.4 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:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

3.3 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:

- 3.3.1 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 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.
- 3.3.3 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.
- 3.3.4 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.

3.3.1 Tasks to perform on the Manager

1. **Install a Manager**

   Install the Manager by referring to "3.1.1 Installing a Manager" above.

2. **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".

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 Proxy Manager

1. **Install a Proxy Manager**

   Install a Proxy Manager by referring to "3.1.2 Installing a Proxy Manager" above.

2. **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".

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.

3.3.3 Tasks to perform on the Agent

1. **Installing an Agent**

   Install the Agent by referring to "3.1.3 Installing an Agent" 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.

3.3.4 Tasks to perform on the Operation Management Client

1. **Installing an Operation Management Client**

   Install an Operation Management Client by referring to "3.1.4 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:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition)*.

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3.4 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:

- 3.4.1 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.
- 3.4.2 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.
- 3.4.3 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.
- 3.4.4 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.

- 3.4.5 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.

3.4.1 Tasks to perform on the Enterprise Manager

1. **Install an Enterprise Manager**

   Install an Enterprise Manager by referring to "3.1.5 Installing an Enterprise Manager" 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.

3.4.2 Tasks to perform on the Manager

1. **Install a Manager**

   Install the Manager by referring to "3.1.1 Installing a Manager" above.

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

   Execute the sqcEmSetup command by referring to "A.3 Two-tier Manager Operation Setup Command".

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.

3.4.3 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 a Proxy Manager" above.

2. **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".

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.

3.4.4 Tasks to perform on the Agent

1. **Install an Agent**

   Install an Agent by referring to "3.1.3 Installing an Agent" 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.

3.4.5 Tasks to perform on the Operation Management Client

1. **Install an Operation Management Client**

   Install an Operation Management Client by referring to "3.1.4 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:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition).*

EE

3.5 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 then becannot 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.

- 3.5.1 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.
- 3.5.2 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.
- 3.5.3 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.
- 3.5.4 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.
- 3.5.5 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.
- 3.5.6 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.

3.5.1 Tasks to perform on the first Manager

1. **Install the first Manager**

   Install the Manager by referring to "3.1.1 Installing a Manager" 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.

3.5.2 Tasks to perform on the second Manager

1. **Install the second Manager**

   Install the Manager by referring to "3.1.1 Installing a Manager" 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.

3.5.3 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 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 a 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.

3.5.4 Tasks to perform on the Agent

1. **Install an Agent**

   Install the Agent by referring to "3.1.3 Installing an Agent" 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.

3.5.5 Tasks to perform on the first Operation Management Client

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

   Install an Operation Management Client by referring to "3.1.4 Installing an Operation Management Client" above.

1. **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".

2. **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:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition).*

3.5.6 Tasks to perform on the second Operation Management Client

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

   Install an Operation Management Client by referring to "3.1.4 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:

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition).*

EE

3.6 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:

- Microsoft(R) Windows(R) 2000 Advanced Server
- Microsoft(R) Windows Server(R) 2003 Enterprise Edition
- Microsoft(R) Windows Server(R) 2003 Datacenter Edition
- Microsoft(R) Windows Server(R) 2008 Enterprise
- Microsoft(R) Windows Server(R) 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:

- 3.6.1 Tasks to perform on an Enterprise Manager
- 3.6.2 Tasks to perform on a Manager

3.6.1 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.

- 3.6.1.1 Before constructing the environment
  1. Prepare the resource group
  2. Set up the shared disk, network and IP addresses
- 3.6.1.2 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
- 3.6.1.3 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
- 3.6.1.4 Registering resources
- 3.6.1.5 Starting services

3.6.1.1 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.

3.6.1.2 Installing on the server on the active node

1. **Install an Enterprise Manager on the active server**
   Installing an Enterprise Manager Perform the installation process as described in "3.1.5 Installing an Enterprise Manager".

   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 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".

3.6.1.3 Installing on the server on the standby node

1. **Install an Enterprise Manager on the standby server**
   Perform the installation process as described in "3.1.5 Installing an Enterprise Manager".

   Point

   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>
      ```

3.6.1.4 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

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.

- Microsoft(R) Windows Server(R) 2008 Enterprise
- Microsoft(R) Windows Server(R) 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

3.6.1.5 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.

- 3.2 Basic Manager-Agent Model
- 3.3 Relay Model Using Proxy Manager
- 3.4 Two-tier Manager Operation Model

Note

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.

3.6.2 Tasks to perform on a Manager

Perform this procedure if Manager clustering is to be used.

Procedure

Perform the procedure shown below.

- 3.6.2.1 Before constructing the environment
  1. Prepare the resource group
  2. Set up the shared disk, network and IP addresses
- 3.6.2.2 Installing on the server on the active node
  1. Install a Manager on the active server
  2. Set up clustering on the active server
- 3.6.2.3 Installation on the standby node server
  1. Install a Manager on the standby server
  2. Set up clustering on the standby server
- 3.6.2.4 Registering resources
- 3.6.2.5 Starting services

3.6.2.1 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".

3.6.2.2 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".

   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".

3.6.2.3 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".

   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>
      ```

3.6.2.4 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.

- Microsoft(R) Windows Server(R) 2008 Enterprise
- Microsoft(R) Windows Server(R) 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

Item	Setting
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

3.6.2.5 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.

- 3.2 Basic Manager-Agent Model
- 3.3 Relay Model Using Proxy Manager
- 3.4 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.

EE

3.7 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
- Fujitsu PRIMECLUSTER HA Server 4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00
- Fujitsu PRIMECLUSTER Clustering Base 4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00

Linux

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

[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:

- 3.7.1 Tasks to perform on an Enterprise Manager
- 3.7.2 Tasks to perform on a Manager

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. Set up the shared disk
  2. Assign the IP address and host name
- 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 Installation on the standby node server
  1. Install an Enterprise Manager on the standby server
  2. Set up clustering on the standby server
- 3.7.1.4 Registering resources
  - Registering with the userApplication Configuration Wizard (Solaris versions)
  - Registering with the RMS Wizard (Linux versions)
- 3.7.1.5 Starting the daemon

3.7.1.1 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.

3.7.1.2 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 "3.1.5 Installing an Enterprise Manager".

   Note

   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.

    Point

    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".

3.7.1.3 Installation on the standby node server

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

    Install an Enterprise Manager by referring to "3.1.5 Installing an Enterprise Manager".

    Note

    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>
   ```

3.7.1.4 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.

Point

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 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 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.

b. 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.
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.

3.7.1.5 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.

- 3.2 Basic Manager-Agent Model
- 3.3 Relay Model Using Proxy Manager
- 3.4 Two-tier Manager Operation Model

Note

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. Set up the shared disk
  2. Assign an IP address and host name
- 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
  - Registering with the userApplication Configuration Wizard
  - Registering with the RMS Wizard
- 3.7.2.5 Starting the daemon

3.7.2.1 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.

3.7.2.2 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".

   Note

   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.

      Point

      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>
   ```

1. 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.

a. 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**
   Install the Manager by referring to "3.1.1 Installing a Manager".

   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>
      ```

3.7.2.4 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 will prevent userApplication from failing over.

3.7.2.5 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.

- 3.2 Basic Manager-Agent Model
- 3.3 Relay Model Using Proxy Manager
- 3.4 Two-tier Manager Operation Model
- 3.5 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).

The communication mode is set up according to the results of the prompts when the product is installed. For Push type communications, no further definitions are required. However, if Pull type communications are selected, follow the setup procedure explained in this chapter.

Point

- The communications mode ("push" or "pull") is selected at installation time.
- 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
- 4.2 Proxy Manager Relay Model Used in Pull Operation
- 4.3 Redundant Manager Operation Model Used in Pull Operation (Enterprise Edition only)
- 4.4 Pull Operation Settings

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. Set up Pull communications for the Agent.

3. Set up the Agent.
4. 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".

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 "3.1.3 Installing an Agent".

2. **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".

3. **Set up the Agent.**

   Execute the sqcRPolicy and sqcSetPolicy commands by referring to "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.

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 "3.1.4 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.

Note

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

- Section 5.1.1, "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. Set up a Pull communication environment for the Proxy Manager.
  3. Set up the Proxy Manager
  4. 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. Set up a Pull communication environment for the Agent.
    3. Set up the Agent.
    4. 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".

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 a Proxy Manager".

2. **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".

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.

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.

4.2.3 Tasks to perform on the Agent

1. **Install an Agent.**

   Install an Agent by referring to "3.1.3 Installing an Agent".

2. **Set up Pull communications for the Agent.**

   Execute the sqcSetFileSec command by referring to "4.4.2 Setting up a Pull Communication Environment".

3. **Set up the Agent.**

   Execute the sqcRPolicy and sqcSetPolicy commands by referring to "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.

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 "3.1.4 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.

Note

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

- Section 5.1.1, "How to increase the size of the desktop heap" in the *User's Guide (Console Edition).*

EE

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:

Point

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. Define Pull communications for the Proxy Manager.
  3. Set up the Proxy Manager for redundant Manager operation.
  4. Set up the Proxy Manager

5. 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. Define Pull communications for the Agent.
3. Set up the Agent for redundant Manager operation.
4. Set up the Agent.
5. 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".

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.**

   Point

   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".

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**

   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.

   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

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 a Proxy Manager".

2. **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".

3. **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".

4. **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.

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.

4.3.4 Tasks to perform on the Agent

1. **Install an Agent.**

   Install an Agent by referring to "3.1.3 Installing an Agent".

2. **Set up Pull communications for the Agent.**

   Execute the sqcSetFileSec command by referring to "4.4.2 Setting up a Pull Communication Environment".

3. **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".

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.

4.3.5 Tasks to perform on the first Operation Management Client

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

   Install an Operation Management Client by referring to "3.1.4 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:

- Section 5.1.1, "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 "3.1.4 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.

Note

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

- Section 5.1.1, "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

Note

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 Section 1.4, "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 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.

   Delete the following section in its entirety.

   Note

   - The following example applies to Windows. In UNIX, specify "/opt/FJSVssqc/bin/dsa_file" for path and "/var/opt/FJSVssqc/DelayXfer" for out_dir.
   - The absolute path to the Delayxfer directory in the actual installation directory must be specified for out_dir.

   ```
   [DsaForwarder]
   execute_style=on
   path=dsa_forwarder.exe
   input=SQC3PDBDSREG
   input=SQC3PDBCONSOL
   input=SQC3PDBRYG
   input=SQC3PDBXML
   server=
   port=2344
   ```

```
input_expire=0
connect_timeout=30
send_timeout=30
retry_count=30
retry_sleep=30
retry_no_sleep=30
SSL=0
SSL_CAlist=%CONTROL_DIRECTORY\cert.pem
[DsaForwarder_sum]
execute_style=on
path=dsa_forwarder.exe
input=SQC3PDBDSREG
input=SQC3PDBSUMMARY
input_expire=1
server=
port=2344
connect_timeout=30
send_timeout=30
retry_count=30
retry_sleep=30
retry_no_sleep=30
SSL=0
SSL_CAlist=%CONTROL_DIRECTORY\cert.pem
```

Add the following section:

```
[DelayXfer]
execute_style=on
path=dsa_file.exe
input=SQC3PDBDSREG
input=SQC3PDBESREG
input=SQC3PDBCONSOL
input=SQC3PDBSUMMARY
input=SQC3PDBRYG
input=SQC3PDBXML
input=SQC3PDBMANAGE
input=SQC3PDBEVENT
out_dir=%WORKING_DIRECTORY\DelayXfer
out_file=%c_delayxfer.txt
```

```
check_interval=3
operation=SWAP
```

2. **Definition of the using port number**

   UNIX

   Define the port number which is used for the Pull communication indicated in the "4.4.1 Defining Pull communications" to /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
```

- 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 Section 1.4, "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.

   The Manager IP address is specified in two locations.

   Note

   The following example applies to Windows. In UNIX, specify "%BASE_DIRECTORY/bin/dsa_forwarder" for path.

   Add the following section:

   ```
   [DsaForwarder]
   ```

```
execute_style=on
path=dsa_forwarder.exe
input=SQC3PDBDSREG
input=SQC3PDBCONSOL
input=SQC3PDBRYG
input=SQC3PDBXML
server=<Specify the IP address of the Manager here>
port=2344
input_expire=0
connect_timeout=30
send_timeout=30
retry_count=30
retry_sleep=30
retry_no_sleep=30
SSL=0
SSL_CAlist=%CONTROL_DIRECTORY\cert.pem
[DsaForwarder_sum]
execute_style=on
path=dsa_forwarder.exe
input=SQC3PDBDSREG
input=SQC3PDBSUMMARY
input_expire=1
server=<Specify the IP address of the Manager here>
port=2344
connect_timeout=30
send_timeout=30
retry_count=30
retry_sleep=30
retry_no_sleep=30
SSL=0
SSL_CAlist=%CONTROL_DIRECTORY\cert.pem
```

Delete the following section in its entirety.

```
[DelayXfer]
execute_style=on
path=dsa_file.exe
input=SQC3PDBDSREG
input=SQC3PDBESREG
```

```
input=SQC3PDBCONSOL
input=SQC3PDBSUMMARY
input=SQC3PDBRYG
input=SQC3PDBXML
input=SQC3PDBMANAGE
input=SQC3PDBEVENT
out_dir=%WORKING_DIRECTORY\DelayXfer
out_file=%c_delayxfer.txt
check_interval=3
operation=SWAP
```

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:

Server type	Description
Operation Management Client	This is necessary to display the console. **Note** If the Web server used to set the virtual directory is Microsoft(R) Internet Information Services, refer to "5.2.1 Microsoft® Internet Information Services" flowchart for setting procedures. Note the following points in particular. - It is necessary to make the anonymous access settings in "5.2.1.5 Directory security settings" or basic authentication settings in "5.3 How to Set Up Basic Authentication for Operation Management Clients". - The specified user should belong to the Administrators group.
Manager	Required when specifying the information collected by the Browser Agent in the receiving server. **Note** 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.)
Proxy Manager	Required when specifying the information collected by the Browser Agent in the receiving server. 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.
Agent	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.

- 5.1 Virtual Directories
- 5.2 Setting up a Virtual Directory
- 5.3 How to Set Up Basic Authentication for Operation Management Clients

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	**Windows** Installation directory\www
Manager	SQC	**Windows** Installation directory\www **UNIX** /opt/FJSVssqc/www
Proxy Manager	SQC	**Windows** Installation directory\www **UNIX** /opt/FJSVssqc/www
Agent	SQC	**Windows** Installation directory\www **UNIX** /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:

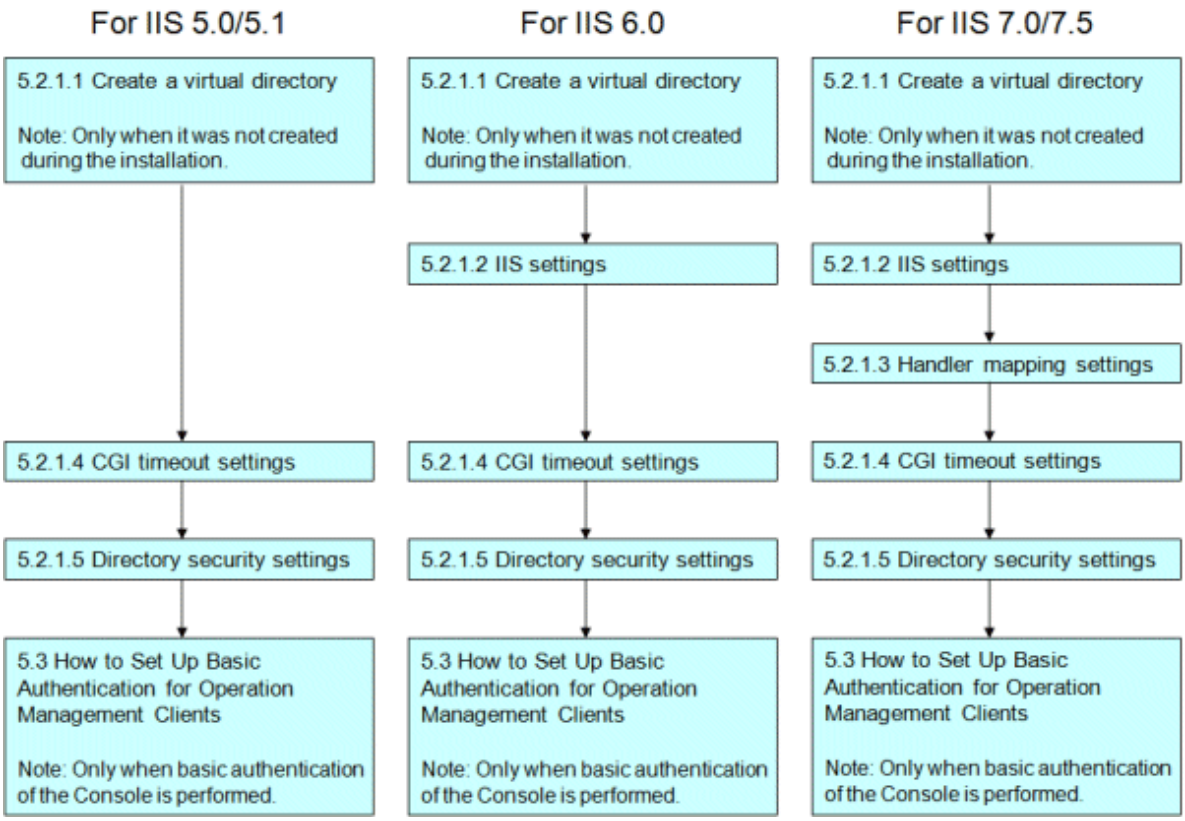
- 5.2.1 Microsoft® Internet Information Services
- 5.2.2 Apache HTTP Server 1.3
- 5.2.3 Netscape® Enterprise Server 3.0
- 5.2.4 Interstage HTTP Server (bundled with Interstage Application Server)
- 5.2.5 For InfoProvider Pro (bundled with Interstage Application Server)

5.2.1 Microsoft® Internet Information Services

This section explains the Microsoft® 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 5.0/5.1

IIS 5.0 is a standard installation with Windows® 2000 Server and 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.

A dialog for setting up a virtual directory appears when installing under the conditions listed below. If **Yes (Y)** is selected at this time, then 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

Note

IIS settings are necessary if you are using IIS 6.0 or later.

Refer to "5.2.1.2 IIS settings" and execute the commands or settings.

If a virtual directory has not been created, run the sqcSetIISreg command to create one.

Point

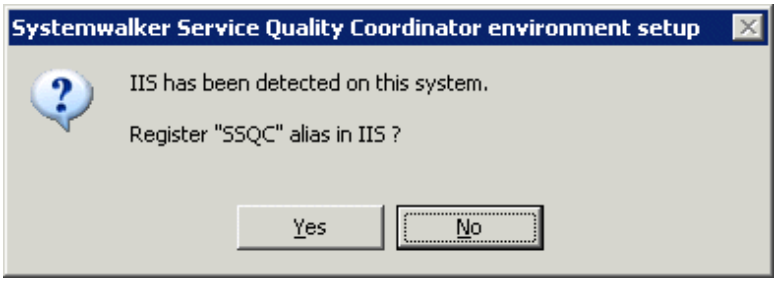
Conditions under which virtual directory settings are made automatically at the time of installation

A dialog for setting up a virtual directory appears when installing under the conditions listed below.

- IIS is installed
- The World Wide Web Publishing Service (WWW Service) is running
- A site has been set as the default web site

When Operation Management Client is installed

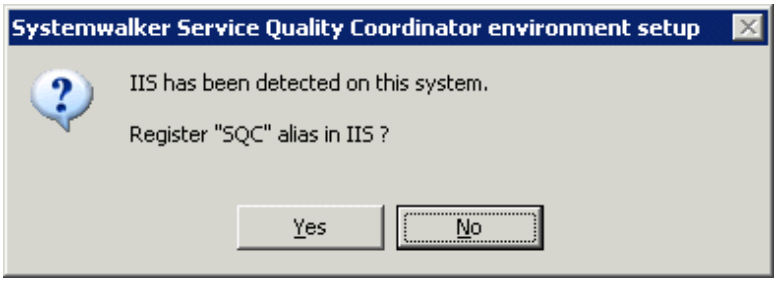
The following dialog appears during installation.



If **Yes (Y)** is selected, a virtual directory is set in IIS (with the alias "SSQC").

When an Agent for Server (and Pull operation is selected), Agent for Business or Proxy Manager is installed

The following dialog appears during installation.



If **Yes (Y)** is selected, a virtual directory is set in IIS (with the alias "SQC").

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.

Note

Run the command after moving the current directory to <Installation directory>\bin.

```
cd  <Installation directory>\bin
```

Note that on Windows Vista®, Microsoft® 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
```

Note

The commands referred to below may produce an error in the following situations:

- IIS is not installed
- Windows Scripting Host is not assigned (IIS 5.0, 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® 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® 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
```

Note that on Windows Vista®, Microsoft® 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® 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

- 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
- Double-click **Handler mapping** in the function pane on the right.
- Select **Add module map** from the operation menu on the right.
- Set the following information in the **Add Module Map** 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) 5.0/5.1:

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\inetsrv\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® Internet Information Services (IIS) 5.0/5.1/6.0:

Set up IIS 5.0, 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.

Microsoft® 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>
```

   - 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® 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

   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 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 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>
```

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 lator

     ```
     /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>
   ```

 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.

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-idnt: 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-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.

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-idnt: 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® 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® 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 **Users and Passwords** (for Windows 2000 Professional) or **User Accounts** (for Windows XP Professional) 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 Professional, 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® 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 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 "3.2 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 a Proxy Manager".

2. **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.

   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".

EE 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 "3.2 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 "3.1.5 Installing an Enterprise Manager".

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.**

   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.

   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

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 a Proxy Manager".

2. **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.

   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".

Point

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 "3.2 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:

Point

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".

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 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 a 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**

   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.

   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/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
    ```

    Refer to Section 1.1.3, "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 "3.1.4 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
- 6.4.2 Changing the IP Address/Host Name of the Manager that Is Recognized by Operation Management Clients

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 in the following definition file 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. **Edit DSAconfiguration.txt**

   Windows

Variable file directory\control\DSAconfiguration.txt

   UNIX

/etc/opt/FJSVssqc/DSAconfiguration.txt

   In this definition file, change the IP address/host name of the Manager (two locations) as shown below.
   (The IP address is changed in the following example.)

   ```
   [DsaForwarder]
   :
   server=127.0.0.1 <- Change address
   :
   [DsaForwarder_sum]
   :
   server=127.0.0.1 <- Change address
   :
   ```

2. **Creating server resource information collection policy**
   Refer to "A.1 Server Resource Information Collection Policy Creation Command" and execute sqcRPolicy and sqcSetPolicy at Agent that change connection destination of Agent to another Manager when multiple Managers are in operation.

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\sqcSetMgrInfo.exe -p IPaddress|host name
```

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 "sqcSetMgrInfo.exe" when the window appears.

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.

The following sections explain how to migrate Managers in each of these cases.

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
- 6.5.2 Inheriting the PDB from the source Manager as well

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 Section 1.7.4, "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".

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 Section 12.2.1, "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. If this option is omitted, the actual host name will be used.

Refer to Section 1.7.4, "sqcPDBexport (Configuration Information Export Command)" in the *Reference Guide* for details on sqcPDBexport.

3. **Install the destination Manager**

   Install the destination Manager from scratch by referring to "3.1.1 Installing a Manager".

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.	6.6.1.1.1 Management Data
pdb_SUMMARY_yyyymmdd.dat	These files store summary data. A new file is created each day, and the "yyyymmdd" part of the file name indicates the date when the file was created.	6.6.1.1.2 Summary Data and Resource Data (If the Management Data has moved on operation of the old edition, refer to "6.6.1.1.1 Management Data", 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 "yyyymmdd" 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 "yyyymmdd" 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 "yyyymmdd" 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**

   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:\SQC\data\pdb.dat
   [DsaPDBWriter_sum]
   database=D:\SQC\data\pdb.dat
   [DsaPDBReader]
   database=D:\SQC\data\pdb.dat
   [PDBMANAGE]
   command=pdb_manage.exe -d "D:\SQC\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:\SQC\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.

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 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 Section 1.7.6, "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 specifing -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
- 6.6.2.2 Changing the retention period for resource data

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 version

```
<installation directory>\bin\sqcSetPolicy.exe [-h <host name>] [-p <IP address>]
```

UNIX version

```
/opt/FJSVssqc/bin/sqcSetPolicy.sh [-h <host name>] [-p <IP address>]
```

Refer to Section 1.1.3, "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 Section 1.7.5, "sqcSetPDBManage (PDB Retention Period Modification Command)" in the *Reference Guide* for details.

   Format

   Windows version

```
<Installation directory >\bin\sqcSetPDBManage.bat [-M <retention period>]|-s
```

   UNIX version

```
/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.

Note

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

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 Section 1.7.5, "sqcSetPDBManage (PDB Retention Period Modification Command)" in the *Reference Guide* for details.

Format

Windows version

```
<Installation directory>\bin\sqcSetPDBManage.bat -m <retention period> | -h <retention period> | -d <retention period> | -s
```

UNIX version

```
/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 Section 1.1.3, "sqcSetPolicy (Policy Application Command)" in the *Reference Manual* 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)
- 6.7.2 Changing the retention period of log data (Troubleshoot)
- 6.7.3 Changing Log Data (Troubleshoot) Switch Time

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
```

"%VARIABL_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 Section 1.1.3, "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 Section 1.1.3, "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 Section 1.1.3 "sqcSetPolicy (Policy Application Command)" in the *Reference manual* 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 Section 1.1, "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 DsaFowarder and DsaForwarder_sum directories**

   Delete the files in the DsaFowarder and DsaForwarder_sum directories.

   Note

   Do not delete the DsaFowarder 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.

1. 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.

Note

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
```

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.
- When upgrade installation from V13.3.0 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.
  Refer to Section 1.12.2.2, "Connection parameters definition file" in the *User's Guide*.
- Refer to "Chapter 10 Incompatible Items" to check items that are incompatible with the older version.

The upgrade procedure is explained below.

7.1 Tasks to Perform at the Manager or Enterprise Manager

The procedure for performing an upgrade installation of a Manager or Enterprise Manager is provided below.

Note

- If upgrade has been done from V11 or V12, summary data which collected before the upgrade cannot be referred after the upgrade.
- If upgrade has been done from the earlier level of V13, 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.

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 Manager or Enterprise 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 relevant resident processes have stopped correctly.

Procedure

The procedure is as follows:

Windows

1. **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" or "3.1.5 Installing an Enterprise Manager".

   The message "An older version of this software is already installed on this system. Would you like to upgrade? will appear. Select "YES". Then specify the retention period for troubleshooting information as prompted.

   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
   - Backs up the PDB file from the old version (as pdbV11L10.dat when upgrading from V11.0 or pdbV12L10.dat when upgrading from V12.0)

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. **Backup the archive files (When upgrade from the earlier level of V13)**

   If conversion of PDB files described in step 7 has been done after upgrade installation, summary data which collected before the upgrade cannot be referred, but the data output as an archive files can be referred. If necessary, refer to section 12.2.2, "Archive File" in the User's Guide and make a backup as archive files.

   - Backup while the services of the Manager or Enterprise Manager are stopping.
   - If upgrade has been done from V11 or V12, summary data which collected before the upgrade cannot be referred after the upgrade.

6. **Execute the pdb_convert.exe command**

Note

Execute the pdb_convert.exe command as follows only when upgrading from versions 11 or 12:

```
Installation directory\bin\pdb_convert.exe -fvariable file storage directory\control
\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

  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

7. **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\SystemwalkerSQC\bin>sqcPDBupgrade.bat -pdb "C:\SystemwalkerSQC\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.

8. **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 have been backed up to the *variable file storage directory*\SystemwalkerSQC\control \ directory as "*file name*VnnLnn.*extension*" (where the VnnLnn part indicates the version and level prior to the upgrade). If files that were edited before the upgrade have been backed up, perform the edit operations again based on the backed up files.

These backed up files are as follows:

- DSAconfiguration.txt
- template.dat
- threshold.bat
- tsconfig.txt

Note

Backup files are created regardless of whether they have been edited.

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.

Create and deploy a collection policy 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.

11. **Restore the archive files**

If referring a data which was output as archive files before the PDB files conversion, refer to section 12.2.2, "Archive File" in the User's Guide and restore the archive files backed up in step 5.

UNIX

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 in the same way as for the initial installation, as described in "3.1.1 Installing a Manager"/"3.1.5 Installing an Enterprise Manager".

Select "YES" when the prompt appears asking whether to upgrade the existing installation. Then specify the retention period for troubleshooting information as prompted.
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.

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. **Backup the archive files (When upgrade from the earlier level of V13)**

   If conversion of PDB files described in step 9 has been done after upgrade installation, summary data which collected before the upgrade cannot be referred, but the data output as an archive files can be referred. If necessary, refer to section 12.2.2, "Archive File" in the User's Guide and make a backup as archive files.

   Note

   - Backup while the services of the Manager or Enterprise Manager are stopping.
   - If upgrade has been done from V11 or V12, summary data which collected before the upgrade cannot be referred after the upgrade.

8. **Execute the ConvPDBV13 command**

   Note

   Execute the ConvPDBV13 command as follows only when upgrading from versions 11 or 12:

   ```
   /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 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 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

9. **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.

10. **Apply user definitions to definition files that were not rewritten**

    Files that cannot be rewritten automatically are backed up to /etc/opt/FJSVssqc/ with the name *file name*V*nn*L*nn* (where V*nn*L*nn* 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

Note

Backup files are created regardless of whether they have been edited.

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.

Create and deploy a collection policy 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.

13. **Restore the archive files**

    If referring a data which was output as archive files before the PDB files conversion, refer to section 12.2.2, "Archive File" in the User's Guide and restore the archive files backed up in step 7.

7.2 Tasks to Perform at the Agent or Proxy Manager

The procedure for upgrading an Agent or Proxy Manager is described below.

Note

If V11.0 or V12.0 of Agent for Web Server or Agent for DB Server is to be upgraded, use an Agent for Business.

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.

Procedure

The procedure is as follows:

Windows

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 "3.1.3 Installing an Agent"/"3.1.2 Installing a Proxy Manager".

   The message "An older version of this software is already installed on this system. Would you like to upgrade? will appear. Select "YES".
   Then specify the retention period for troubleshooting information as prompted.

   If the IIS setting has been done under the environment before the upgrade installation, the message "IIS is installed. Would you like the IIS alias to be "SQC"?" will appear. Select "No". This will result in the settings for the previous virtual directory being maintained.

   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

2. **Apply the user definitions that have been made to the definition files that were not overwritten.**

   Files that cannot be overwritten have been backed up to the variable file storage directory\SystemwalkerSQC\control \ directory as "file nameVnnLnn.extension" (where the VnnLnn part indicates the version and level prior to the upgrade). If files that were edited before the upgrade have been backed up, perform the edit operations again based on the backed up files.

Note

Backup files are created regardless of whether they have been edited.

3. **Set up the Agent/Proxy Manager**

   Execute the sqcRPolicy and sqcSetPolicy commands by referring to "A.1 Server Resource Information Collection Policy Creation Command".

4. **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.

UNIX

1. **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 "3.1.3 Installing an Agent"/"3.1.2 Installing a Proxy Manager".

   Select "YES" when the prompt appears asking whether to upgrade the existing installation.
   Then specify the retention period for log data (Troubleshooting) as prompted.
   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.

4. **Apply the user definitions that have been made to the definition files that were not overwritten.**

   Files that cannot be written back automatically have been backed up to the /etc/opt/FJSVssqc/ directory as "*file name*VnnLnn.*extension*" (where the V*nn*L*nn* part indicates the version and level prior to the upgrade). If files that were edited before the upgrade have been backed up, perform the edit operations again based on the backed up files.

Note

Backup files are created regardless of whether they have been edited.

5. **Set up the Agent/Proxy Manager**

   Execute the sqcRPolicy and sqcSetPolicy commands by referring to "A.1 Server Resource Information Collection Policy Creation Command".

6. **Start the Agent/Proxy Manager daemon 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.

7.3 Tasks to perform on the Operation Management Client

The procedure for upgrading an Operation Management Client is described below.

Required privileges

Windows

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

Procedure

The procedure is as follows:

Windows

Performing an upgrade installation of an Operation Management Client

1. Start installing the Operation Management Client in the same way as for the initial installation, as described in "3.1.4 Installing an Operation Management Client".
2. Select "YES" when the prompt appears asking whether to upgrade the existing installation. An overwrite installation is then performed, inheriting the information that was entered for the prompts during the previous installation.
3. The message " IIS has been detected on this system. Register "SSQC" alias in IIS ?" will appear. Select "No". This will result in the settings for the previous virtual directory being maintained.

Setting up the communications environment

If you used either Microsoft® Internet Information Services 6 or Microsoft® Internet Information Services 7 as the communication environment for the Operation Management Client, run the following command:

Microsoft® Internet Information Services 6

Note

Run the command after moving the current directory to <Installation directory>\bin.

```
<Installation directory>\bin\sqccsetc.bat
```

Microsoft® Internet Information Services 7

Note

Run the command after moving the current directory to <Installation directory>\bin.

Note that on Windows Vista®, Microsoft® 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.

If the CGI of the Operation Management Client is already registered with Microsoft® Internet Information Services, the following error message may be output.

```
"* 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'. )
```

```
<Installation directory>\bin\sqccsetc_iis7.bat
```

Point

Upgrading from V11 or V12

1. **Execute the Operation Management Client Upgrade command**

   Execute the following command after the Manager has been installed and started:

   ```
   C:\Program Files\SystemwalkerSQC-C\bin\sqcv13shift.exe
   ```

   Example

   ```
   C:\Program Files\SystemwalkerSQC-C\bin>sqcv13shift.exe

   Sqcv13shift succeeded.
   ```

2. **Obtain Agent and Proxy Manager configuration information again**

   Obtain the configuration information of the Agent and Proxy Manager again.

   Refer to Section 1.2.2, "Management configuration definition (ConfigurationSettings)" in the *User's Guide (Console)* for details.

Note

If regular reports were being generated in V11 or 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 V11 or V12.

Refer to Section 1.6, "Scheduled Report Operation Commands" in the *Reference Guide* for details.

Chapter 8 Running Different Versions of Systemwalker Service Quality Coordinator Together

This section explains operations where V13 of this product is mixed with V11 or V12 of this product.

8.1 Environment that mixes both V11/12 and V13

The following table lists the previous versions and levels of the different editions for Versions 11, 12 and 13 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

V13
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
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

Point

- When data is sent from a V11 or V12 product to a V13 product via "Push" communications, they can connect without any problems.
- When data is sent from a V13 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, Analysis 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 Manager and V11 or V12 Enterprise Manager; and V11 or V12 Manager and V13 Enterprise Manager.
- Connections between V13 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 to V11 or V12.

- 8.2 Actions needed to send data from V13 to V11
- 8.3 Actions needed to send data from V13 to V12

8.2 Actions needed to send data from V13 to V11

The following actions are required on the V11 Manager that receives V13 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:

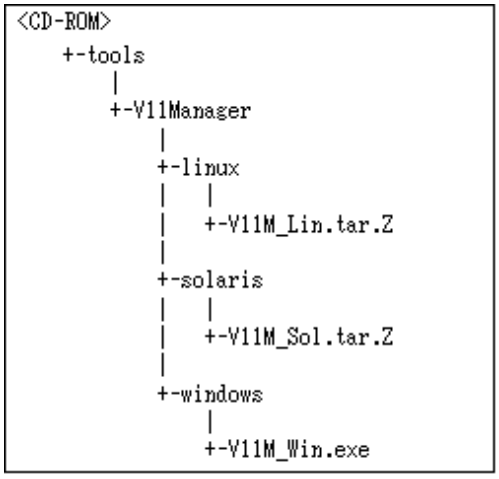
1. **Apply V13 support components**

   Apply V13 support components in order to receive V13 information.

   These components are stored as archive files on the CD-ROM (Client/Documentation) 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

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

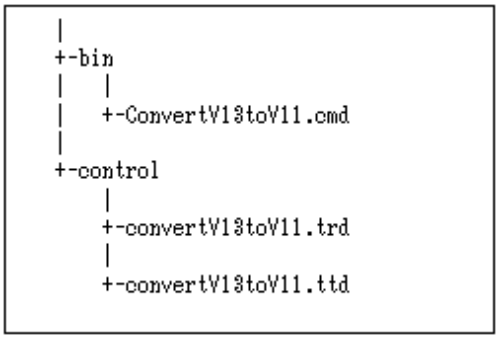
```
V11M_Lin.tar.Z
```

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

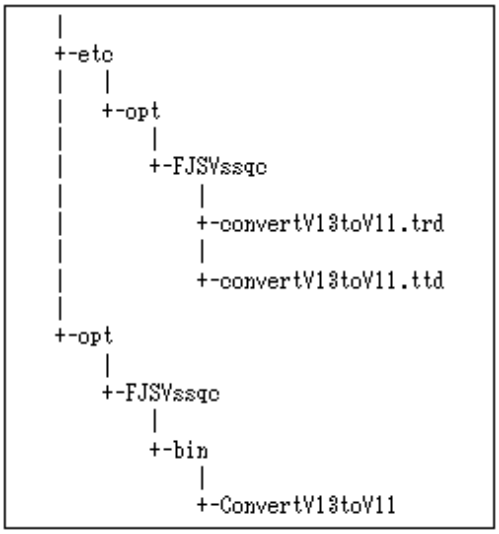


- List of components

Component	Application location
ConvertV13toV11.cmd	Installation directory\bin
convertV13toV11.trd	Variable file directory\control
convertV13toV11.ttd	

UNIX

- Directory tree



- 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.

2. **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\DSAconfigration.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=SQC3PDBDSREG
# 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=SQC3PDBDSREG
# PDB consolidation
input=SQC3PDBCONSOL
# Summary
input=SQC3PDBSUMMARY
# ES PDB registration
input=SQC3PDBESREG
# XML Configuration
input=SQC3PDBXML
```

3. **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|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|0|127|1|NULL|dca_cmd|-c"ConvertV13toV11" -rconvertV13toV11 -tconvertV13toV11

   Note

   It is necessary to add this line again after the execution of the sqcSetPolicy (policy application command) because this line is deleted.

4. **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 to V12

The following actions are required on the V12 Manager that receives V13 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:

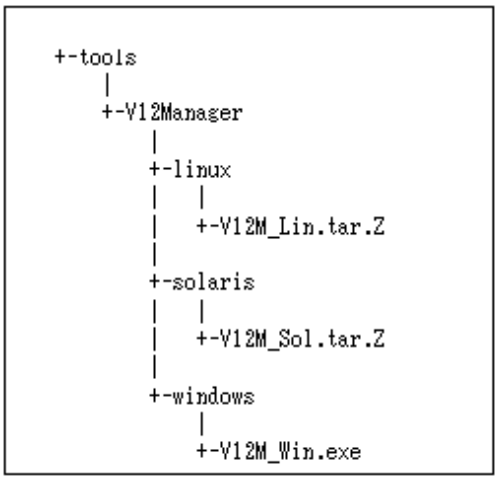
1. **Apply V13 support components**

   Apply V13 support components in order to receive V13 information.

   These components are stored as archive files on the CD-ROM (Client/Documentation) 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

```
|
+-control
    |
    +-convertV13toV12.trd
    |
    +-convertV13toV12.ttd
```

- List of components

Component	Application location
convertV13toV12.trd	*Variable file directory*\control
convertV13toV12.ttd	

UNIX

- Directory tree

```
|
+-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\DSAconfigration.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=SQC3PDBDSREG
# 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/DSAconfigration.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=SQC3PDBDSREG
# 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 Version)

This chapter explains how to uninstall this software.

Required privileges

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

Note

Backing up user assets

Before uninstalling this product, back up any user assets that need to be kept. Refer to Chapter 12, "Backup and Restore" in the *User's Guide* for the backup procedure.

Procedure

This procedure is common to the following installers. Refer to "Uninstalling under a Server Core environment" when uninstalling this software while using an Agent for Server or Agent for Business under a Server Core environment.

- "Systemwalker Service Quality Coordinator Manager"
- "Systemwalker Service Quality Coordinator Proxy Manager"
- "Systemwalker Service Quality Coordinator Agent for Server"
- "Systemwalker Service Quality Coordinator Agent for Business"
- "Systemwalker Service Quality Coordinator Enterprise Manager"
- "Systemwalker Service Quality Coordinator Operation Management Client"

1. Double-click **Add or Remove Programs** in Control Panel.

2. Select the product to remove from the list of applications and click the **Remove** button.

3. Click **Yes** in response to the message **Are you sure you want to completely remove the selected application and all its components?**

4. The uninstallation process will commence.

5. For Operation Management Client, select following option from list of applications and click **Delete** button.

   - OCMM 7.0

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 13.1.0 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

Warning messages that appear while uninstalling

When uninstalling the software, the following message may appear during restart after you select "Yes, I want to restart my computer now." in the **InstallShield Wizard Complete** window and click the **Complete** button. This will have no effect on the uninstallation procedure.

Uninstalling under a Server Core environment

When uninstalling Systemwalker Service Quality Coordinator from a Server Core environment, execute the following command from the command prompt:

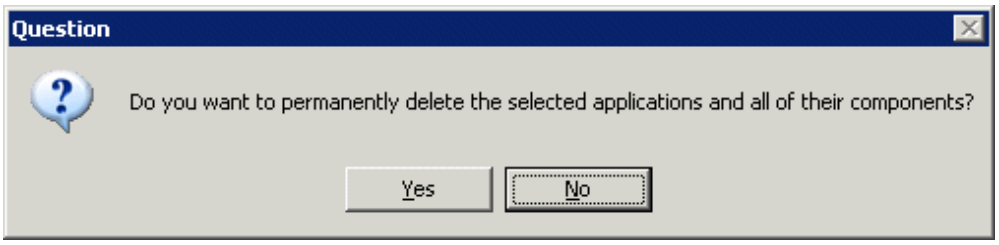
Agent for Business

```
<System drive>\Program Files\InstallShield Installation Information
\{88C978F2-6D0A-4B7F-BC5B-17D8DD1FF102}\setup.exe FromControlPanel
```

Agent for Server

```
<System drive>\Program Files\InstallShield Installation Information \{72329B17-
F397-492B-B235-E2CB41DAC3A6}\setup.exe FromControlPanel
```

After executing the command, the following window is displayed:



For details about the setup.exe FromControlPanel command, refer to "A.11 Systemwalker Service Quality Coordinator Uninstallation Command (for the server core environment)".

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).

Note

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 Chapter 12, "Backup and Restore" in the *User's Guide* for the backup procedure.

Procedure

Execute the following script:

```
/opt/FJSVssqc/bin/uninstall.sh
```

When the following script is executed, the window shown below will appear.

```
================================================================================
               Systemwalker Service Quality Coordinator Setup
                                  V13.5.0
 All Rights Reserved, Copyright(C) FUJITSU LIMITED && FUJITSU AUSTRALIA LIMITED
                                 2003-2011
================================================================================

<< Select Uninstallation type >>

 1.Agent for Server

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

Note: This example shows Agent for Server being uninstalled.

To start uninstalling, enter the number shown for the uninstallation type and press **Enter**.

- **After entering the [?] option**
  The following help message appears.

```
Use the number next to the uninstallation type to select uninstallation type to
uninstall.

Press Enter.
```

- **After entering the [q] option**
  The following message appears and unistallation is aborted.

```
Nothing done.
```

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 after uninstallation.

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

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

   Note

   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 "3.6.1.4 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 Version)" 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 Version)" 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 dbrefsv" service
   - "Systemwalker SQC dbregsv" service

   Note

   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 "3.6.2.4 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 serve**
   Uninstall the Manager from the standby server.
   Refer to "9.1 Uninstallation (Windows Version)" 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 Version)" 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.

   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 "3.7.1.4 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 "3.7.1.1 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 "3.7.1.1 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 "3.7.2.4 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 "3.7.2.1 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 "3.7.2.1 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".

Chapter 10 Incompatible Items

This chapter explains the incompatible items when upgrading the Systemwalker Service Quality Coordinator.

10.1 Data Compatibility

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 Chapter 4 "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 Section 4.2.1 "The ResponseCondition folder / End user response reports" in the *Reference Guide* for detail information about collection items.

10.2 Definition Compatibility

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 V13.4.0 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 V13.3.0 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 section 1.12.2.2 "Connection parameters definition file" in the *User's Guide* for how to encrypt the password.

10.3 Changes to the PDB File Name

PDB file for summary data (pdb_SUMMARY.dat) is renamed to pdb_SUMMARY_yyyymmdd.dat (yyyymmdd : year month day) in V13.5.0

10.4 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	- 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. - When upgrading from versions between V13.0.0 and V13.3.0, the pre-upgrade summary data could be referenced after the upgrade.
Upgrading to V13.5.0 or later	The pre-upgrade summary data cannot be referenced after the upgrade.

10.5 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 section 5.1 "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.

10.6 Changing the Display Name and Operation Method

- Window names and operations have been improved in version 13.4.0.

  Changes to the window names of major functions are as follows:

Label up to V13.3.0	Label from V13.4.0
Monitor	Summary
Drilled Down	Detail
On-Demand Report	Analysis

  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" of the Categorized diagnostic analysis and report is changed from line graph to piling graph.

- When Excel(R) format files are created from the console, detailed analysis and report chronological order displays and from summary data chronological displays, the output method has changed under V13.5.0.

V13.4.0	The performance information graph and table for one type are output in one sheet.
V13.5.0 and later	The performance information graphs and tables are output in separate sheets.

- Under V13.5.0, the name of the Monitoring Designer dashboard component has been changed to Analytics Studio.

10.7 Migration of the Dashboard Server

Dashboard server cannot migrate from old version.

Appendix A Setup Commands and Resident Processes

This appendix explains the various setup commands and how to start and stop resident processes.

Refer to Section 1.1, "Policy Commands" and Chapter 2, "Starting and Stopping Resident Processes" in 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 Section 1.1.1, "sqcRPolicy (Server Resource Information Collection Policy Creation Command)" and Section 1.1.3, " 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.

Point

- 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 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 Section 1.7.3, "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 sqcCtrlPolicy.exe -e RP (Remote Policy Operation Command) is executed, a file named "MiddlewareConf.xml" is created. To delete a managed object, edit the content of MiddlewareConf.xml by referring to Chapter 3, "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 Section 1.1.2, "sqcAPolicy (Response/Operation Information Collection Policy Setup Command)" and Section 1.1.3, " 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 Section 1.7.3, "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.

EE

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 Section 1.2, "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.

Point

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\SystemwalkerSQC\bin
```

```
C:\Program Files\SystemwalkerSQC\bin>sqcEmSetup.exe -h hostname
Command Succeeded.
C:\Program Files\SystemwalkerSQC\bin>
```

UNIX

```
# cd /opt/FJSVssqc/bin/
# ./sqcEmSetup.sh -h hostname
Command Succeeded.
#
```

EE

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 Section 1.3, "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.
#
```

EE

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 Section 1.4, "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.

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.
#
```

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 Section 1.5.1, "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.
0 files copied.
Cluster setup succeeded
C:\Program Files\SystemwalkerSQC\bin>
```

(Standby server: sqcsetupcls)

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
C:\Program Files\SystemwalkerSQC\bin>sqcsetupcls.exe -m F:\
Cluster setup succeeded
C:\Program Files\SystemwalkerSQC\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
#
```

EE

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 Section 1.5.2, "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.

Examples

Windows

```
C:\>cd C:\Program Files\SystemwalkerSQC\bin
C:\Program Files\SystemwalkerSQC\bin> sqcunsetcl
Cluster unsetup succeeded
```

```
C:\Program Files\SystemwalkerSQC\bin>
```

UNIX

```
# cd /opt/FJSVssqc/bin/
# ./sqcsunsetcl
Cluster unsetup succeeded
#
```

A.8 How to Start and Stop Resident Processes

This section explains how to start and stop resident processes.

Refer to Chapter 2, "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

Point

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 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 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

Point

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.

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/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/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.

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
```

EE

A.10 Systemwalker Service Quality Coordinator Installation Command (for the server core environment)

This command is used for installing Agent to Microsoft(R) Windows Server(R) 2008 Server Core environment. Prepare the product CD-ROM (Client/Documentation).

The "Welcome" window appears when you execute this command. Follow the onscreen instructions to make various settings and install the Systemwalker Service Quality Coordinator.

Required privileges/Execution environment

The user must belong to the Administrators group.

Syntax

```
setup.exe
```

Return values

The GUI starts when you execute the command and the command is returned immediately. A specified value may be returned as the return value, but do not use this value as an error determinant.

Command storage location

For Agent for Business

```
<CD-ROM drive>\agentforbiz
```

For Agent for Server

```
<CD-ROM drive>\agentforsrv
```

Usage example

For Agent for Business

```
<CD-ROM drive>\agentforbiz\setup.exe
```

For Agent for Server

```
<CD-ROM drive>\agentforsrv\setup.exe
```

EE

A.11 Systemwalker Service Quality Coordinator Uninstallation Command (for the server core environment)

This command is used for uninstalling Agent from Microsoft(R) Windows Server(R) 2008 Server Core environment.

Required privileges/Execution environment

The user must belong to the Administrators group.

Syntax

```
setup.exe FromControlPanel
```

Return values

The GUI starts when you execute the command and the command is returned immediately. A specified value may be returned as the return value, but do not use this value as an error determinant.

Command storage location

For Agent for Business

```
<System drive>\Program Files\InstallShield Installation Information \{88C978F2-6D0A-4B7F-BC5B-17D8DD1FF102}
```

For Agent for Server

```
<System drive>\Program Files\InstallShield Installation Information \{72329B17-F397-492B-B235-E2CB41DAC3A6}
```

Usage example

For Agent for Business

```
<System drive>\Program Files\InstallShield Installation Information \{88C978F2-6D0A-4B7F-BC5B-17D8DD1FF102}\setup.exe FromControlPanel
```

For Agent for Server

```
<System drive>\Program Files\InstallShield Installation Information \{72329B17-F397-492B-B235-E2CB41DAC3A6} \setup.exe FromControlPanel
```