ETERNUS SF Disk Space Monitor

User's Guide

Windows/Solaris/Linux

Preface

Purpose of this manual

This manual explains how to use ETERNUS SF Disk Space Monitor.

Target audience

ETERNUS SF Disk Space Monitor is a software product designed to support system infrastructure operation by enabling the space monitoring of entire filesystems and databases. This manual is intended for persons who use ETERNUS SF Disk Space Monitor to manage systems.

Organization of the product manuals

An overview of the ETERNUS SF Disk Space Monitor manuals is provided below.

・ ETERNUS SF Disk Space Monitor User's Guide

This manual provides an overview of the product, lists the environment settings required to install the product, and explains how to use the product.

Organization of this manual

This manual can be broadly divided into the following five parts:

"Overview"

"Installation (Basic)"

"User's Guide"

"Installation (Advanced)"

"Reference"

The organization of each part is shown overleaf.

Positioning of this manual

This manual is common to the following versions of ETERNUS SF Disk Space Monitor:

・ ETERNUS SF Disk Space Monitor 13.3 Windows version

・ ETERNUS SF Disk Space Monitor 13.3 Solaris(TM) Operating System version

・ ETERNUS SF Disk Space Monitor 13.3 Linux version

How to read this manual

Part I of this manual provides the reader with an overview of ETERNUS SF Disk Space Monitor.

Part II explains the installation procedure required for basic operation. The user should read this section if he or she wishes to perform a simple installation.

Part III explains how to use ETERNUS SF Disk Space Monitor. It explains window organization, operation methods, and so on.

Part IV explains how to perform advanced setup and the installation and setup procedures needed to use the functions of ETERNUS SF Disk Space Monitor.

Part V is for reference. Read this part when necessary.

Supplementary information

Notation

・ The URLs shown in the window images contained in this manual are samples only.
When actually specifying an URL, users should follow the settings and conventions of their own Web server.

・ Platform-specific information is preceded by the following labels:

- Windows

  [Windows]

- Solaris Operating System

  [Solaris]

- Linux

  [Linux]

Abbreviations

1. Microsoft® Windows® 2000 Professional operating system, Microsoft® Windows® 2000 Server operating system, and Microsoft® Windows® 2000 Advanced Server operating system are abbreviated as "Windows® 2000".

2. Microsoft® Windows® XP Professional is abbreviated as "Windows® XP".

3. Microsoft® Windows Server® 2003 Enterprise Edition, Microsoft® Windows Server® 2003 Standard Edition, and Microsoft® Windows Server® 2003 Web Edition are abbreviated as "Windows® 2003".

4. Microsoft® Windows Server® 2008 Enterprise、Microsoft® Windows Server® 2008 Standard are abbreviated as "Windows® 2008".

5. Microsoft® Windows Vista® Home Basic、Microsoft® Windows Vista® Home Premium、Microsoft® Windows Vista® Business、Microsoft® Windows Vista® Enterprise、Microsoft® Windows Vista® Ultimate are abbreviated as "Windows® Vista".

6. Microsoft® SQL Server is abbreviated as "SQL Server".

7. Microsoft® Cluster Server is abbreviated as "MSCS".

8. Solaris(TM) Operating System is abbreviated as "Solaris".

9. Systemwalker Centric Manager is abbreviated as "Centric Manager".

10. Symfoware Server is abbreviated as "Symfoware".

11. Oracle Database is abbreviated as "Oracle".

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October 2008

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・ The contents of this manual may be subject to change without prior notice.

Contents

Part 1   Overview

Part I provides an overview of ETERNUS SF Disk Space Monitor.

Chapter 1 Overview

This chapter provides an overview of ETERNUS SF Disk Space Monitor.

1.1 Product Overview

This section provides an overview of ETERNUS SF Disk Space Monitor.

1.1.1 Features of this product

ETERNUS SF Disk Space Monitor is a software product designed to support system infrastructure operation by enabling space monitoring of entire filesystems and databases. It will enable the user to conduct the following types of operation management:

- Automatic notification based on pre-defined thresholds
  ETERNUS SF Disk Space Monitor provides space usage information profiles for disk systems and databases, automatically. Pre-definition of space usage thresholds enables ETERNUS SF Disk Space Monitor to notify administrators as soon as disks and databases reach utilization levels that demand intervention. Administrators can then take the necessary preemptive actions to ensure high space utilization does not threaten stable operation.

- Real-time view of storage space use
  ETERNUS SF Disk Space Monitor provides you with a choice to monitor views and drill-down views that deliver profiled information. You will know the real-time status of your storage capacity through lists and visual aids that will quickly help you comprehend the problem areas. This lets you resolve those problems and recover normal operation in the shortest possible time. Fully auditable archives also let you analyze the background to recent problems and determine future policy from analysis of trends.

- Long-term storage space monitoring
  The "periodic reporting" function in ETERNUS SF Disk Space Monitor delivers you regular space use information in the form of daily, weekly or monthly reports. This provides a more long term system status evaluation and enables a considerable perspective that goes beyond estimating the time of the next potential problem. It lets you determine the most appropriate time for the next storage enhancement.

1.1.2 Function organization

This section describes the organization of functions provided by ETERNUS SF Disk Space Monitor.

1.1.2.1 Management types

The different types of management that can be performed with ETERNUS SF Disk Space Monitor can be shown in the following table.

Management type		Overview
Space management		-
-	Filesystem space management	Manages the space of the filesystem for the following platform: ・ Windows ・ Linux ・ Solaris OS
	Database space management	Manages the space of the following middleware: ・ Symfoware Server ・ Oracle Database Server
	User data management	Manages user-specific data (in CSV format), such as job data.

1.1.2.2 Display and analysis functions

ETERNUS SF Disk Space Monitor provides the following display and analysis functions:

- ・ **Monitor** view
  This display function enables users to quickly understand the current status of the entire system.

- ・ **Drill Down** view
  This function displays detailed information when problems occur. In contrast to the Monitor view, which displays summary information, the **Drill Down** view displays detailed information for each resource.

- ・ **Report** view
  This window outputs regular reports for periodic reporting and inspection purposes. Three levels of reporting (full system inspection reports, categorized diagnostic reports and detailed reports) are provided depending on the precision of the information and the purpose of the analysis. Reports can be generated in daily, weekly and monthly formats, etc.

1.1.3　　Product organization

The section explains the product organization of ETERNUS SF Disk Space Monitor..

1.1.3.1　　Installation types

ETERNUS SF Disk Space Monitor uses an agent function installed on a managed server to collect information. The information collected by each Agent is then managed collectively by a Manager. The following table explains different installation types.

Installation types	Function
Manager	Collectively manages the information collected by Agents.
Operation Management Client	Connects to a 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 platform is Windows, Manager and the operation management client can be installed on the same server.
Agent	Collects space information from within servers.

Point

- ・ Functions equivalent to Agent have been bundled with the Manager

- ・ To use Agent on a Manager make policy settings on the Manager and then use the Console to register the Manager as an Agent. There is no need to install an Agent on the machine.

1.1.3.2　　Supported middleware products

The following table shows the middleware products supported by ETERNUS SF Disk Space Monitor.

Middleware	Platform	V/L	Edition
Symfoware Server	Windows	V6.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V7.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V8.0	Standard Edition
			Enterprise Edition

Middleware	Platform	V/L	Edition
			Enterprise Extended Edition
		V9.0	Standard Edition
			Enterprise Edition
		V9.1	Standard Edition
			Enterprise Edition
	Windows for Itanium	V8.0	Enterprise Extended Edition
		V9.0	Standard Edition
			Enterprise Edition
		V9.1	Standard Edition
			Enterprise Edition
	Solaris	6.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		7.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		8.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		9.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		9.1	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
	Linux	V6.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V7.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V8.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V9.0	Standard Edition
			Enterprise Edition
		V9.1	Standard Edition
			Enterprise Edition
	Linux for Itanium	V7.0L10	Enterprise Extended Edition
		V8.0	Enterprise Extended Edition

Middleware	Platform	V/L	Edition
		V9.0	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
		V9.1	Standard Edition
			Enterprise Edition
			Enterprise Extended Edition
Oracle Database Server	Windows	9i	Standard Edition
			Enterprise Edition
		10g	Standard Edition
			Enterprise Edition
		11g	Standard Edition
			Enterprise Edition
	Windows for Itanium	10g	Standard Edition
			Enterprise Edition
	Solaris	9i	Standard Edition
			Enterprise Edition
		10g	Standard Edition
			Enterprise Edition
		11g	Standard Edition
			Enterprise Edition
	Linux	9i	Standard Edition
			Enterprise Edition
		10g	Standard Edition
			Enterprise Edition
		11g	Standard Edition
			Enterprise Edition
	Linux for Itanium	10g	Standard Edition
			Enterprise Edition

1.2   Configuration Models

This section explains how ETERNUS SF Disk Space Monitor products can be combined.

1.2.1   Basic model comprising a Manager and Agents

This is the most basic model. It consists of a Manager and a number of Agents.
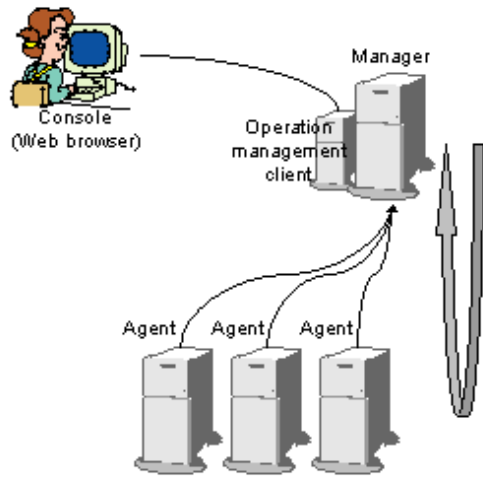
- Each Agent collects performance information from their local server. The information that is collected is then managed collectively on the Manager.

- In the above diagram, the operation management client and the Manager are located on separate machines. However, if the Manager is installed on a Windows machine, it can be installed on the same machine as the operation management client.

![P] Point
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When the Manager is operating in a cluster system, the Manager and the operation management client cannot be installed on the same machine.
....

- In addition to using the operation management client, the system administrator can conduct operation management from a Web browser located on a separate machine. In this case, the system administrator connects to the operation management client via HTTP as shown in the diagram above.

1.2.2　Manager redundancy model

In this model, two Managers are used to manage the same system. This means that if one node fails, it is possible to continue management operations by switching to the other node.

Even if one Manager cannot be used due to a network fault, etc., this system permits the Manager connected to a functioning network to take over management operations. This differs from the redundancy that is achieved using a cluster system.
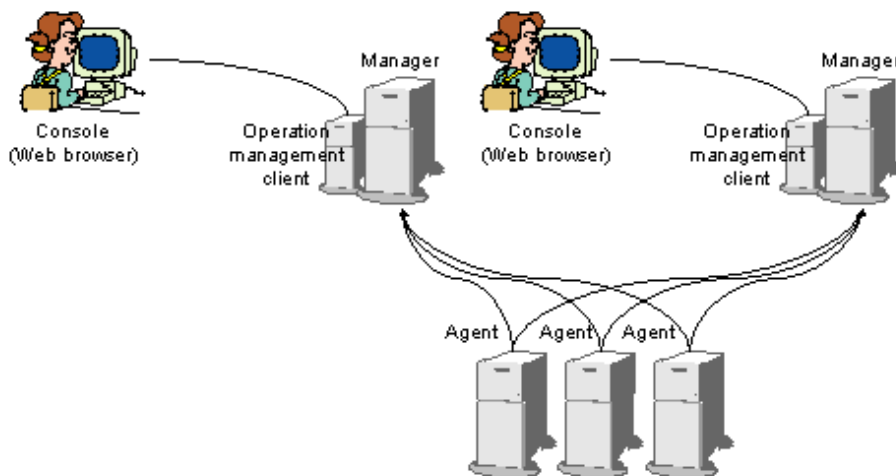
・ The functions of the Manager in a redundant configuration are the same as those of a normal Manager (i.e., a Manager that is not in a redundant configuration).

・ Each Manager is connected to a different operation management client.

1.2.3　　Cluster system operation model

The management mechanism provided by a Manager can be operated in a cluster system. This improves the availability of management operations because if a problem develops on one node, operations can continue on the remaining normal node.

In a cluster system, Agents operate on the active and standby nodes respectively.
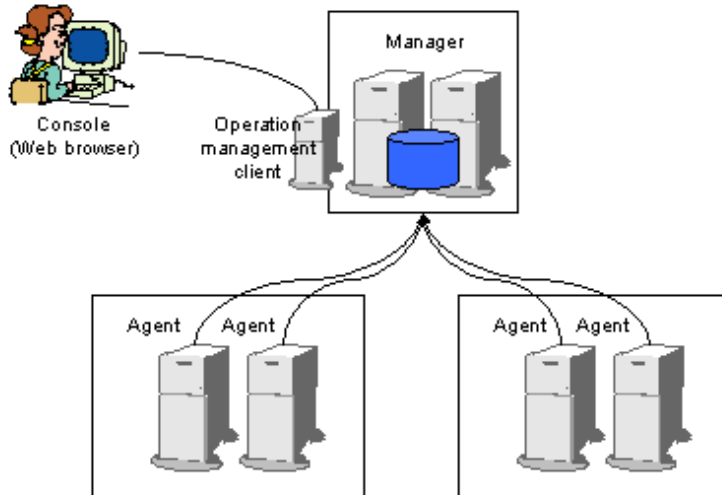
1.3　　Overview of Functions

This section gives an overview of the display and analysis functions provided by ETERNUS SF Disk Space Monitor.

1.3.1　　Console

The **Console** provides two functions: the Monitor function and the Drill Down function.

1.3.1.1　　Monitor view

The **Monitor** view displays representative information to enable the user to understand the current status of the entire system.
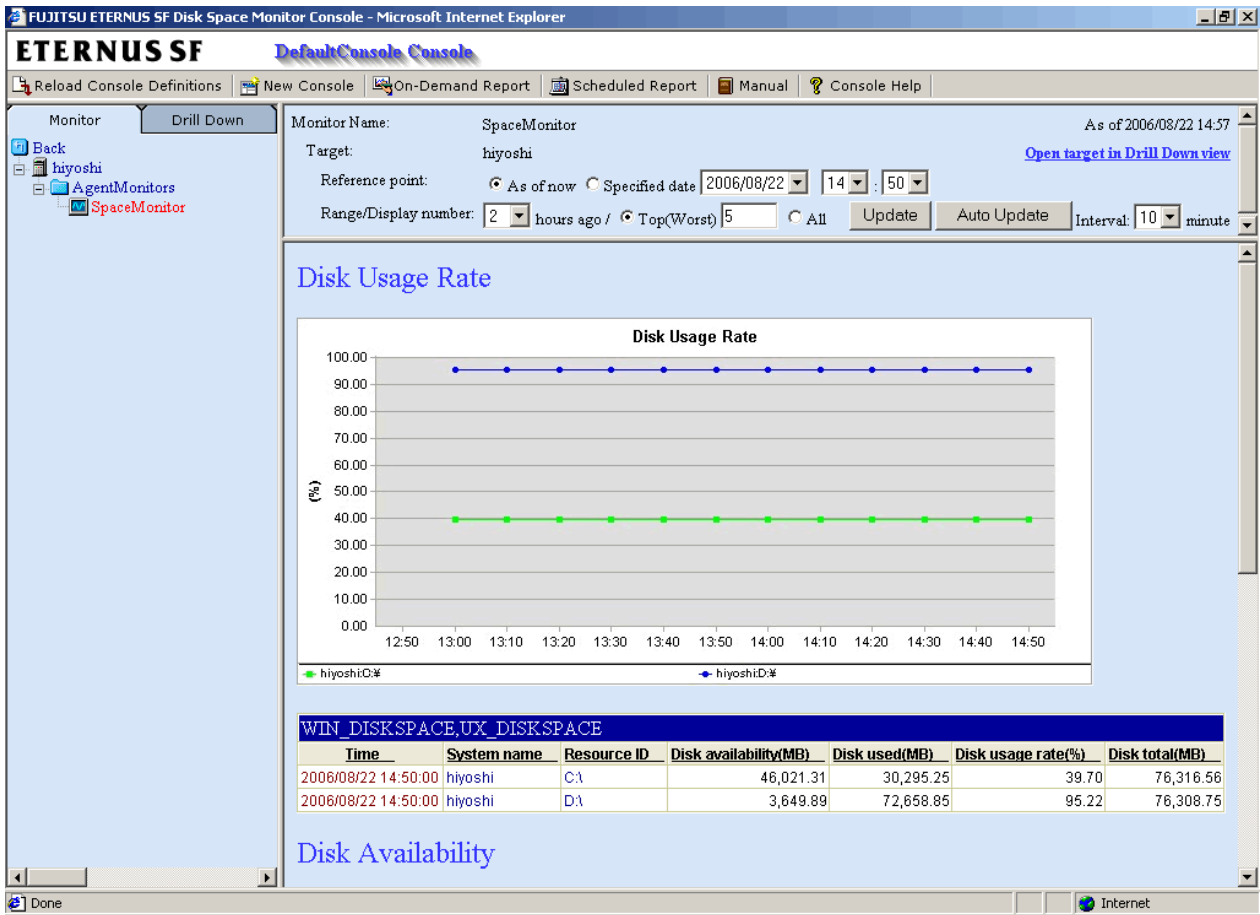
1.3.1.2 Drill Down view

The **Drill Down** view displays a variety of detailed information in chronological order based on the time that a problem occurred.
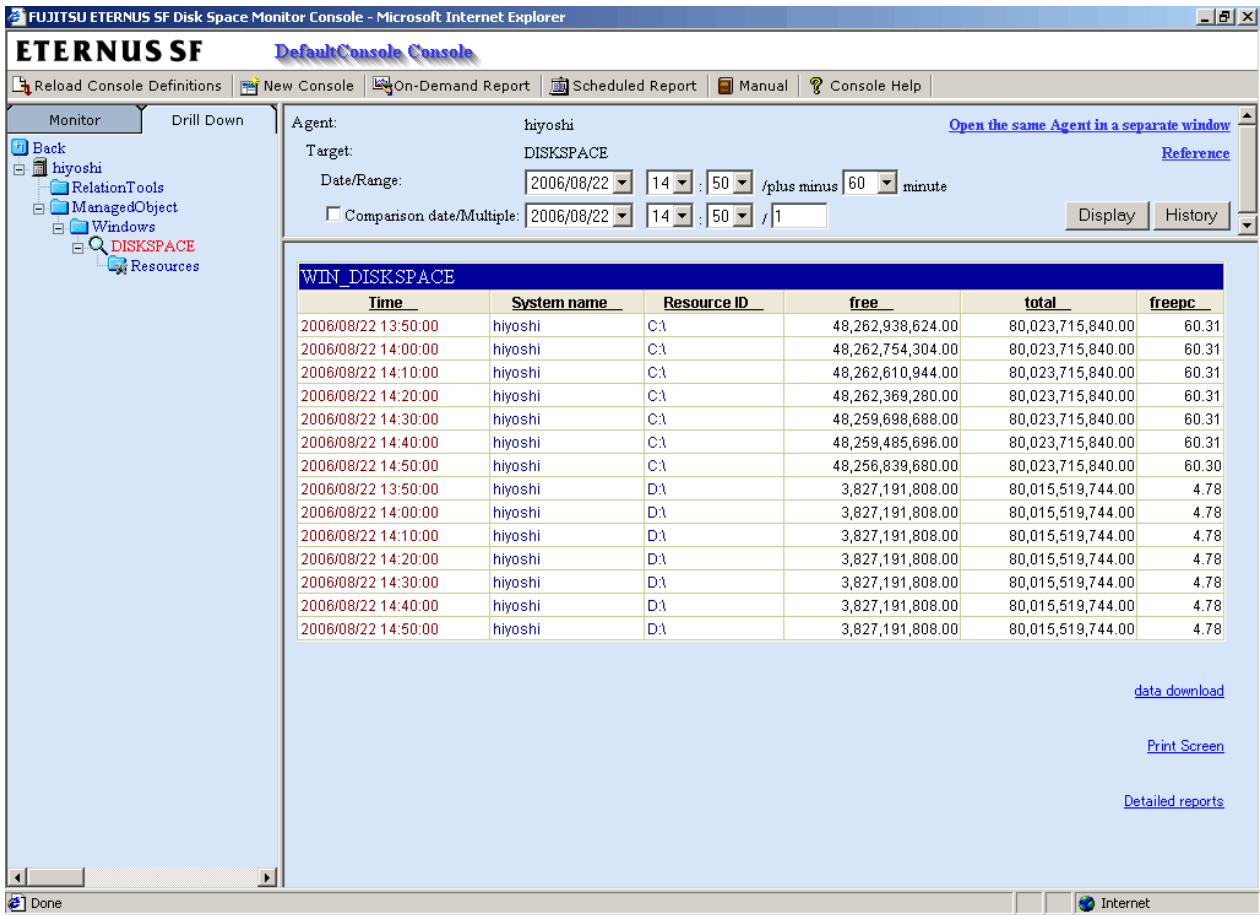
1.3.2   Report view

The **Report** view provides two types of reporting function: the On-Demand Report function and the Scheduled Report function.

1.3.2.1   On-Demand Report

Three levels of reporting are provided depending on the precision of the information and the purpose of the report: full system inspection reports, categorized diagnostic reports and detailed reports.

FUJITSU ETERNUS SF Disk Space Monitor Generate of report - Microsoft Internet Explorer

ETERNUS SF

2006/08/22 (Tue) 15:02:15

Registered Report Name
Sample

Category
Full system inspection report

Report Type
Disk space

System group
DefaultGroup

Number of data items to display in the report
○ Top(Worst) 5 items ○ All

Data interval
○ Ten minutes ○ One hour ○ One day

Report period
Report start date
2006 / 08 / 22 / 00 : 00
Report end date
2006 / 08 / 22 / 23 : 50

Generate

[Full system inspection report] Disk space

Report Title	Sample
System Group	DefaultGroup
Server Name	
Report Term	2006/8/22 (Tu)

Disk Usage Rate

Legend: akaba:C:\ , akaba:E:\ , empathy:/ , empathy:/SWFWDB , musaura:/

WIN_DISKSPACE,UX_DISKSPACE

No.	System name	Resource ID	Disk usage rate(%)	Disk availability(MB)	Disk used(MB)	Max Disk usage rate(%)
1	empathy	/SWFWDB	57.80	118.58	162.45	57.80
2	empathy	/	62.33	1,532.56	2,536.29	62.58
3	akaba	C:\	96.60	295.82	8,411.25	96.65
4	akaba	E:\	96.86	219.75	6,777.27	96.86
5	musaura	/	97.22	280.47	9,795.53	97.26

Disk Availability
600.00

Done — Internet

Report category	Overview
Full system inspection report	This report enables system administrators to periodically inspect the operational status of the system.
Categorized diagnostic report	This report is for primary fault isolation of bottlenecks within servers where problems have occurred.
Detailed report	This report is for checking detailed information in terms of particular data.

1.3.2.2　Scheduled report

Unlike the On-Demand Report function, which outputs reports to the screen as needed, the Scheduled Report function automatically outputs daily, weekly and monthly reports by setting up report criteria in advance and registering these with the scheduler.

Chapter 2 and so it must be started in orderProduct Architecture

This chapter explains the mechanism and behavior of each component of this product.

2.1 Overview

This section explains an overview of ETERNUS SF Disk Space Monitor.

2.1.1 Monitoring and assessment functions

The functions provided by ETERNUS SF Disk Space Monitor can be broadly divided into a monitoring function and an assessment function.
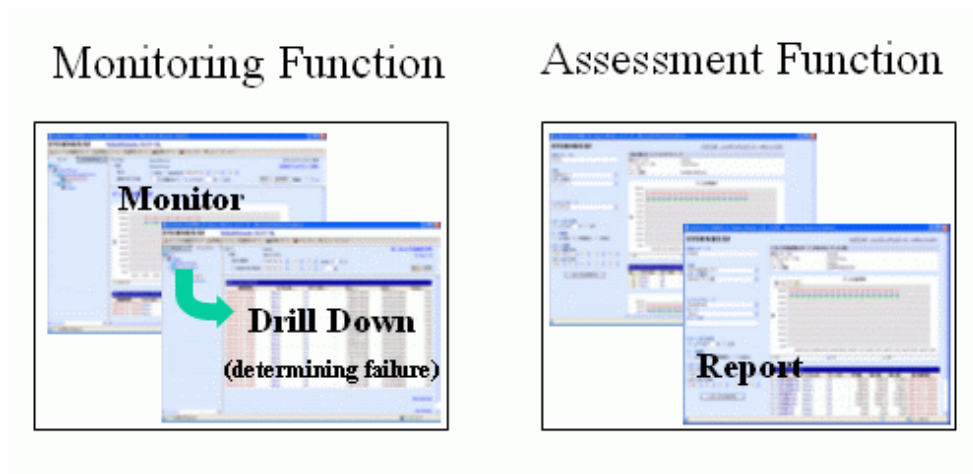
For the monitoring function, the Monitor function is provided in order to monitor whether the entire system is operating properly, or whether errors have occurred. (The Monitor function includes the threshold monitoring function.) If some kind of error has occurred, the Drill Down function is provided in order to isolate the problem by analyzing detailed information about resources.

For the assessment function, the Report function is provided in order to periodically evaluate the system over certain periods of time.

P Point
....
ETERNUS SF Disk Space Monitor provides functions that support both the monitoring and assessment aspects of operation management.
....

2.1.2 Basic Component Configuration

This section explains the configuration and basic behavior of ETERNUS SF Disk Space Monitor components using the following figure.
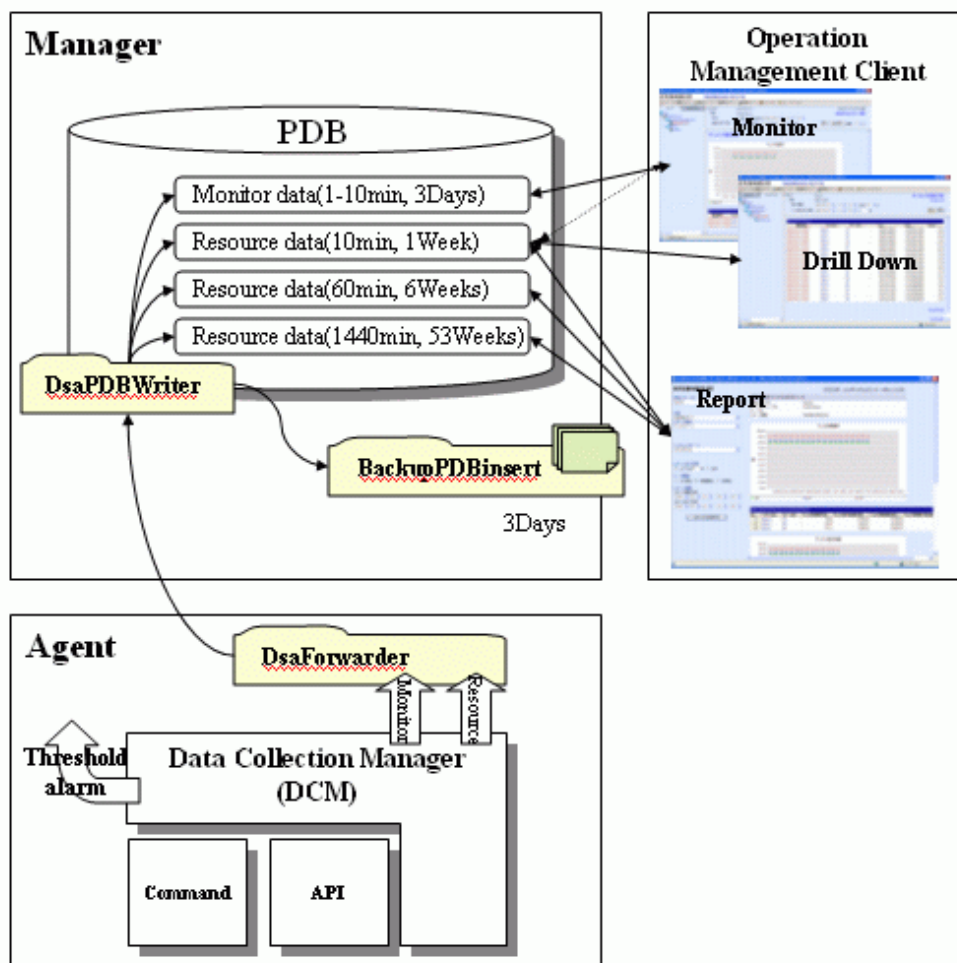
With ETERNUS SF Disk Space Monitor, performance information is collected by Agents installed on managed servers. The performance information collected by each Agent is sent to a Manager, where it is stored in a performance database (PDB). The information stored in the PDB can be looked up using the display functions provided on the operation management client.

Note
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The information of disk space is included in resource data (10 min, 1 week).

SpaceMonitor shows from the information of disk space of resource data.
. . . .

Point
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The folder-shaped sections in the figure above (such as "DsaPDBWriter" and "DsaForwarder") represent directories that are important for the behavior of Managers and Agents. These directories are explained the sections that follow.
. . . .

2.1.3　　Collection policies and configuration information

ETERNUS SF Disk Space Monitor provides templates that include collection items recommended by Fujitsu. Create and apply policies by adjusting these templates to the characteristics of the systems being managed.

This enables the necessary information to be continuously collected without any advanced skills relating to performance.
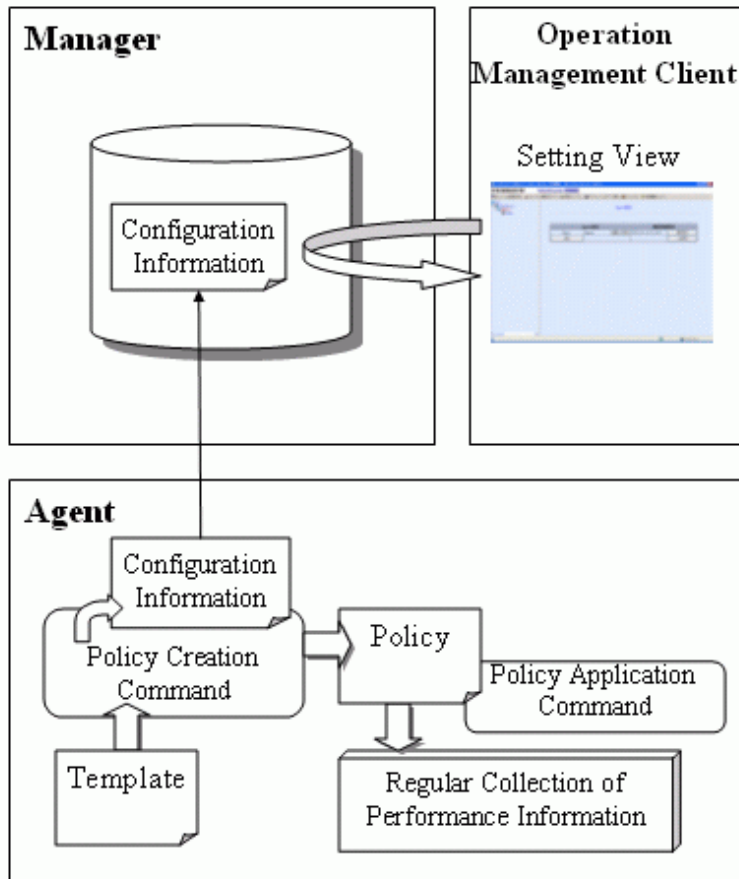
As shown in the figure above, policies are created and applied by executing commands on Agents. At this point, the policies are created from the template and configuration information. (Configuration information is used to automatically detect objects that can be managed.)

Configuration information is sent to the Manager, where it stored in the PDB.

When environment setup is performed on the operation management client, this configuration information is referenced, and the information collected for the system can be displayed in a tree structure.

2.2   Communication Modes

This section explains the communication modes used by ETERNUS SF Disk Space Monitor. The communication modes can be broadly divided into two types.

2.2.1　Communication mode using the Push method
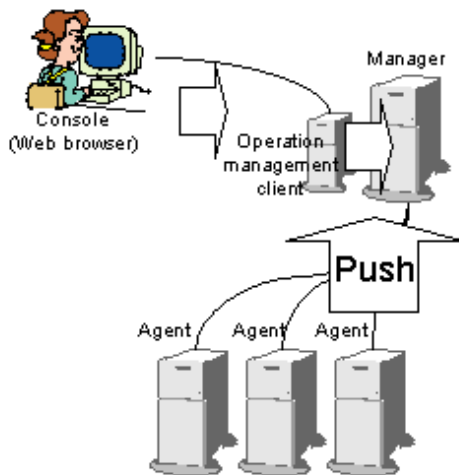
Communications normally take place as shown in the above diagram. The arrows indicate the direction of communications.

- ・ Between Agent and Manager
  Communications occur using a custom protocol (port number 2344). This mode pushes data from the Agent to the Manager.

- ・ Between Operation Management Client and Manager
  Communications occur using a custom protocol (port number 2345). This mode of communication is used to extract data stored in the Manager for display.

- ・ Between Console and Operation Management Client
  Communications occur using HTTP. Display data created by the operation management client is downloaded using HTTP.

2.2.2　Communication mode using the Pull method
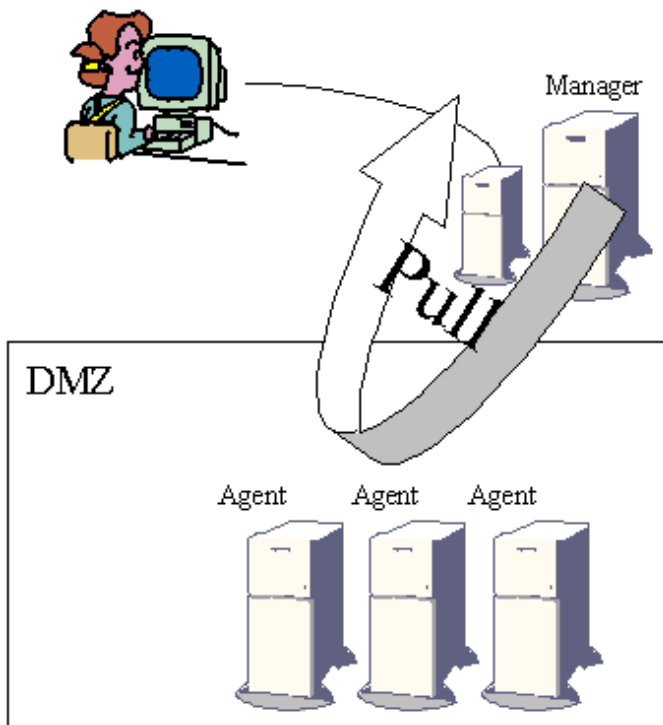
If communications between Managers and Agents is restricted, such as in Internet environments, the "Pull" method can be used instead of the "Push" method, as shown in the figure above.

For communications using the "Pull" method, an HTTP environment must be created where the Agents are located, using either of the following methods:

· Using the functions provided by this product
  This method uses the thttpd service that is provided as a standard part of this product's Agent functions. Any desired port number can be set as the port number for this service. (The default is 23440.)

Note

....

The thttpd service does not start by default, and so it must be started in order to perform communications using the "Pull" method.
....

· Using a general http service
  This method uses a general http service, such as Apache, by defining a dedicated alias for this product.

See

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Refer to Chapter 12 Configuring Communication Environment with the Pull Method for details on the Pull method of communication.

Refer to Chapter 16 Setting up an HTTP Communication Environment for details on the HTTP communications environment.
....

2.3   Agent

Agents collect performance information by periodically issuing commands or APIs provided by the operating system or middleware.
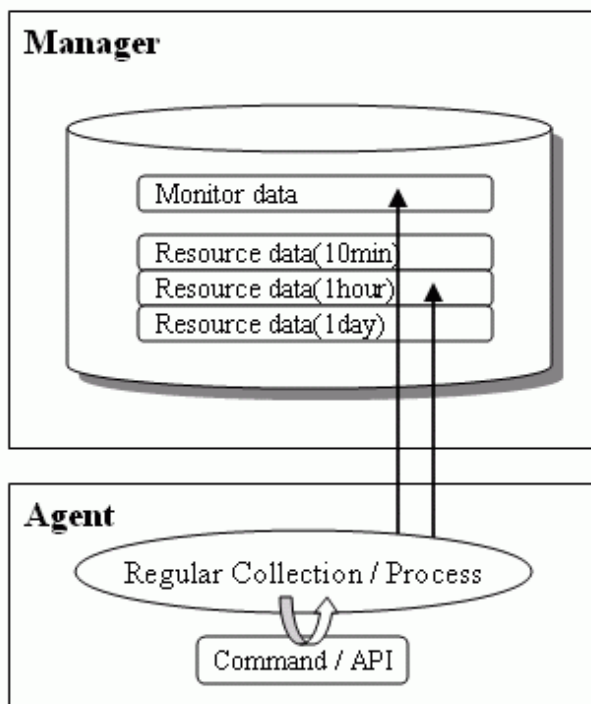
The information collected by Agents is transformed into monitor data and resource data and sent to a Manager.

Monitor data is summarized data for gaining a general understanding of the state of the system. For example, this data is used when user data is managed.

Resource data is detailed data that is collected for each resource. For example, the disk space usage rate falls into this category. Resource data is further processed into three types of data (for different display objectives) and sent to the Manager.

The rest of this section explains the roles of the directories that are used when Agents run.

DsaFowarder/DsaFowarder_sum directory

These directories are used to temporarily store data to be sent to a Manager. The DsaForwarder directory is used to store resource data and the DsaForwarder_sum directory is used to store monitor data. If the Manager is in a redundant configuration, additional directories named "DsaForwarder2" and "DsaForwarder_sum2" are also used.

If communications with the Manager are broken, data will be stored in this directory until communications recommence.

🖙 **Note**

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If the communications interruption continues for a long time, unsent data will place pressure on the disk capacity. As the amount of available disk space decreases, first a warning event will be output, then an error event, and finally the Agent will stop running.

Note, however, that even if there is sufficient space available on the disk, if the number of unsent data files exceeds a specified level (approximately 3,000), files with the oldest dates will be automatically deleted every 60 minutes to reduce disk usage. Once files are deleted, performance data for the deleted period will be lost.

. . . .

The specific location for this directory is as follows:

[Windows]

Variable file directory\transfer\DsaForwarder
Variable file directory\transfer\DsaForwarder_sum

[Solaris][Linux]

/var/opt/FJSVssqc/temp/DsaForwarder
/var/opt/FJSVssqc/temp/DsaForwarder_sum

2.4   Manager

The data collected by each Agent is sent to the Manger and stored in the PDB.

Four different types of data are held in the PDB, depending on the interval at which the data is collected. The following table shows the retention periods for each of these types of data.

Collection interval	Function that displays this data	Retention period
1 to 10 minutes (Monitor data)	・ Monitor	3 days
10 minutes (Resource data)	・ Drill Down ・ On-Demand Report (specified in 10-minute units) ・ Scheduled Report (daily, weekly, monthly)	7 days
1 hour (Resource data)	・ On-Demand Report (specified in one-hour units) ・ Scheduled Report (daily, weekly, monthly)	6 weeks
24 hours (Resource data)	・ On-Demand Report (specified in one-day units) ・ Scheduled Report (daily, weekly, monthly)	13 months

The rest of this section explains the roles of the directories that are used when Managers run.

DsaPDBWriter directory

This is a buffer directory for temporarily storing data that is to be written to the PDB. Data that is received from Agents is temporarily stored in this directory.

![Note icon] **Note**

. . . .

The amount of data in this directory will grow continuously if data is received from Agents faster than the Manager can write it to the PDB.

. . . .

The specific location for this directory is as follows:

[Windows]

```
Variable file directory\transfer\DsaPDBWriter
```

[Solaris][Linux]

```
/var/opt/FJSVssqc/temp/DsaPDBWriter
```

BackupPDBinsert directory

This directory holds archive files for backing up the PDB. Refer to Chapter 17 Maintaining the Operating Environmentfor details on backing up the PDB.

The specific location for this directory is as follows:

[Windows]

```
Variable file directory\spool\BackupPDBinsert
```

[Solaris][Linux]

```
/var/opt/FJSVssqc/BackupPDBinsert
```

2.5　Operation Management Client

Operation management clients provide display functions. The display function of this product uses Web browsers via IIS (HTTP server).

This means that information can be viewed from multiple Web browsers if these Web terminals can connect to the operation management client via HTTP. However, IIS (HTTP server) must be installed on the operation management client.
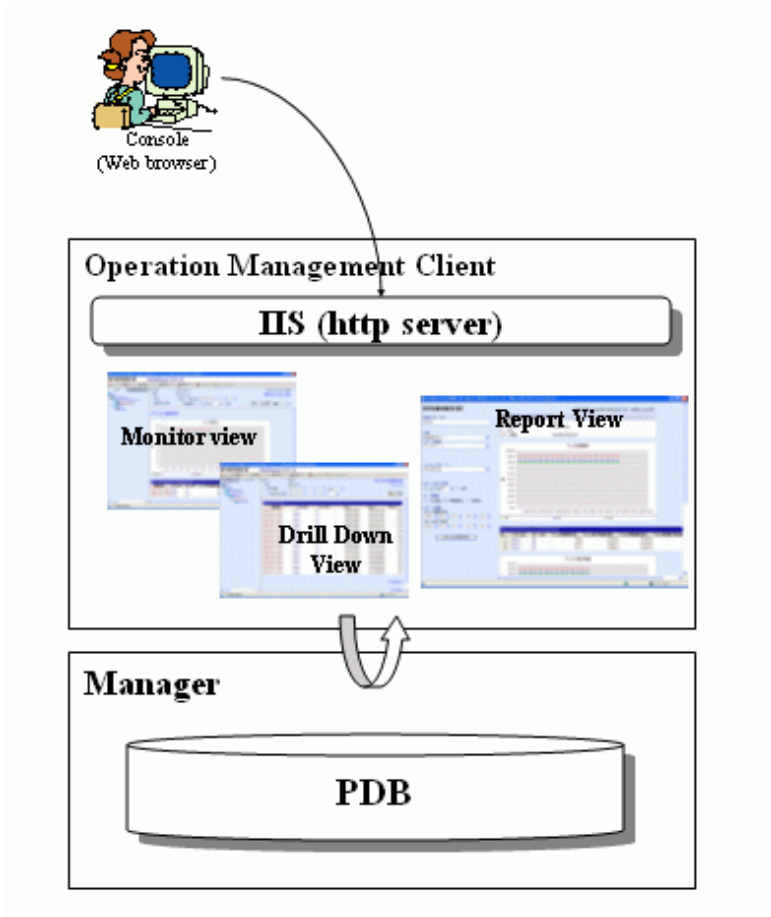
Note

Display timeouts may occur in situations where it takes a long time to display information, such as when reports are output. In such cases, increase the IIS timer if necessary.

Point

There are the following two types of timeout.

- Connection timeouts
- CGI script timeouts

Chapter 3 Installation Conditions and Resource Estimation

This chapter explains the installation conditions and resource estimation for ETERNUS SF Disk Space Monitor.

3.1 Manager

This section explains the installation conditions for Managers.

3.1.1 Hardware environment

[Windows]

Item	Requirement	Remarks
CPU	Intel Pentium 3 equivalent or higher	
Available disk space	50 MB + the space required for the database	Refer to the next section for the formula for estimating the size of the database. **Note** Only the NTFS file system is supported.
Available memory space	30 MB min.	-

[Windows for Itanium]

Item	Requirement	Remarks
CPU	Intel(R) Pentium 2 equivalent or higher	
Available disk space	50 MB + the space required for the database	Refer to the next section for the formula for estimating the size of the database. **Note** Only the NTFS file system is supported.
Available memory space	200MB min.	-

[Solaris]

Item	Requirement	Remarks
CPU	U1traSPRC-II or higher	At least 400 MHz is recommended
Available disk space	50 MB + the space required for the database	Refer to the next section for the formula for estimating the size of the database.
Available memory space	30 MB min.	-

[Linux]

Item	Requirement	Remarks
CPU	Intel Pentium 3 equivalent or higher	
Available disk space	50 MB + the space required for the database	Refer to the next section for the formula for estimating the size of the database.
Available memory space	30 MB min.	-

[Linux for Itanium]

Item	Requirement	Remarks
CPU	Intel Itanium 2 processor equivalent or higher	
Available disk space	50 MB + the space required for the database	Refer to the next section for the formula for estimating the size of the database.
Available memory space	30 MB min.	-

Point

The disk performance of the Manager affects the performance of each display function (the **Monitor** view, the **Drill Down** view and the **Report** view).

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).

3.1.1.1 How to estimate the amount of space required for the performance database

Managers require disk space for a performance database.

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

To estimate the disk space required:

1. First, calculate how much data will be collected by each of the Agents on the servers being managed.

2. Next, calculate the total of the results from step 1. This total gives the disk space required for the database.

This section explains how to calculate the amount of data that will be collected by a single Agent. Make this calculation for each instance of the resources that the Agents are managing. Multiply the number of instances of each resource by the coefficient shown in the table below, and add up these totals.

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.

Managed resource	Instance	Coefficient (MB)
OS (Windows)	1	11.8222
	Number of logical drives	6.2062

Managed resource	Instance	Coefficient (MB)
OS (Solaris)	1	39.7501
	Number of (mounted) logical disks	3.1031
OS (Linux)	1	39.7501
	Number of (mounted) logical disks	3.1031
Symfoware Server	Number of RDB systems	3.1031
	Number of RDB systems number of DB spaces	3.1031
Oracle Database Server	Number of instances (SIDs)	22.3626
	Number of instances (SIDs) number of table spaces	3.1031

3.1.2   Software environment

[Windows]

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2008 Standard	
	Microsoft(R) Windows Server(R) 2008 Enterprise	

[Windows for Itanium]

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003 Enterprise Edition for Itanium-based Systems	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2008 for Itanium-based Systems	

[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)	

Item	Requirement	Remarks
	Red Hat Enterprise Linux 5 (for Intel64)	

[Linux for Itanium]

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for Intel Itanium)	

3.1.2.1 Products that cannot be installed

Product name
・ Systemwalker Service Quality Coordinator
・ Systemwalker WebMGR
・ Systemwalker PerfMGR

3.2 Agent

This section explains the installation conditions for Agents.

3.2.1 Hardware environment

[Windows]

Item	Requirement	Remarks
CPU	・ Intel Pentium 3 equivalent or higher ・ 64-bit Intel Xeon processor (EM64T) equivalent or higher	-
Available disk space	50 MB	**Note** Only the NTFS file system is supported.
Available memory space	・ 30 MB min. ・ 80 MB min. (*1)	*1: For 64-bit Intel Xeon processor (EM64T)

[Windows for Itanium]

Item	Requirement	Remarks
CPU	Intel Itanium 2 processor equivalent or higher	-
Available disk space	50 MB	**Note** Only the NTFS file system is supported.
Available memory space	200 MB min.	-

[Solaris]

Item	Requirement	Remarks
CPU	U1traSPRC-II or higher	At least 400 MHz is recommended
Available disk space	50 MB	-
Available memory space	20 MB min.	-

[Linux]

Item	Requirement	Remarks
CPU	・ Intel Pentium 3 equivalent or higher ・ 64-bit Intel Xeon processor (EM64T) equivalent or higher	-
Available disk space	50 MB	-
Available memory space	20 MB min.	-

[Linux for Itanium]

Item	Requirement	Remarks
CPU	Intel Itanium 2 processor	-
Available disk space	50 MB	-
Available memory space	20 MB min.	-

3.2.2   Software environment

[Windows]

Item	Requirement	Remarks
Operating system	Windows(R) 2000 Server	Service Pack 3/4
	Windows(R) 2000 Advanced Server	Service Pack 3/4
	Microsoft(R) Windows Server(R) 2003 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 Standard x64 Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Standard x64 Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 Enterprise x64 Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Enterprise x64 Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2008 Standard	
	Microsoft(R) Windows Server(R) 2008 Enterprise	

[Windows for Itanium]

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003 Enterprise Edition for Itanium-based Systems	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2008 for Itanium-based Systems	

[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)	

[Linux for Itanium]

Item	Requirement	Remarks
Operating system	Red Hat Enterprise Linux 5 (for Intel Itanium)	

3.2.2.1 Products that cannot be installed

Product name
・ Systemwalker Service Quality Coordinator
・ Systemwalker WebMGR
・ Systemwalker PerfMGR

3.3　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.
. . . .

3.3.1　Hardware environment

[Windows]

Item	Requirement	Remarks
CPU	Intel Pentium 3 equivalent or higher	-
Available disk space	300 MB min.	-
Available memory space	100 MB min.	-

3.3.1.1　How to estimate the space required for reports

Operation management clients must have space for reports.

Each standard report takes up about 500 kilobytes of space.

The method for estimating the space required for on-demand reports and scheduled reports is explained below.

Type of report function	Estimation method
On-demand report	Up to 50 on-demand reports can be stored, so 25 megabytes of space is required. ・ 500 KB x 50 (copies) = 25 MB
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 x 1 (copy) x 365 (days) = 182.5 MB ・ Weekly reports: 500 KB x 1 (copy) x 53 (weeks) = 26.5 MB ・ Monthly reports: 500 KB x 1 (copy) x 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. . . . .

3.3.2　Software environment

[Windows]

Item	Requirement	Remarks
Operating system	Microsoft(R) Windows Server(R) 2003 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Standard Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2003 R2 Enterprise Edition	Service Pack 1/2
	Microsoft(R) Windows Server(R) 2008 Standard	
	Microsoft(R) Windows Server(R) 2008 Enterprise	
	Microsoft(R) Windows(R) XP Professional	Service Pack 2
	Microsoft(R) Windows Vista(R) Home Basic(x86)	
	Microsoft(R) Windows Vista(R) Home Premium(x86)	
	Microsoft(R) Windows Vista(R) Business(x86)	
	Microsoft(R) Windows Vista(R) Ultimate(x86)	
	Microsoft(R) Windows Vista(R) Enterprise(x86)	
HTTP server	Microsoft(R) Internet Information Server 5.0 or later	
Web browser	Microsoft(R) 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.

3.3.2.1   Products that cannot be installed

Product name
・ Systemwalker Service Quality Coordinator
・ Systemwalker WebMGR
・ Systemwalker PerfMGR

Part 2   Installation (Basic)

Part II gives the user an overall understanding of how to install the product as quickly as possible. After reading this part, the user will be able to run this product easily.

Chapter 4   Installation and Setup

This chapter explains two installation methods. The first is a simple method for installing this product to see how it goes. The second is an installation method based on the configuration model explained in 1.2 Configuration Models.

- ・ Refer to 4.1 Simple Installation for details on the simple installation method.

- ・ Refer to the following table for details on the installation method based on the configuration model.

Configuration model	Reference location
Basic model comprising a Manager and Agents	4.2 Basic Model Comprising a Manager and Agents
Redundant Manager operation model	4.3 Redundant Manager Operation Model
Cluster system operation model	4.4 Cluster System Operation Model

See
. . . .

Refer to Chapter 10 Defining Thresholds for details on defining thresholds, and to Chapter 11 Managing User Datafor details on managing user data.
. . . .

4.1   Simple Installation

Point
. . . .

This section explains how to set up the following functions:

- ・ Manager

- ・ Agent

- ・ Operation management client

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

Install and set up this product in the following order:

```
┌─────────────────┐
│     Manager     │
└─────────────────┘
         │
         ▼
┌─────────────────┐
│      Agent      │
└─────────────────┘
         │
         ▼
┌────────────────────────────┐
│ Operation Management Client │
└────────────────────────────┘
```
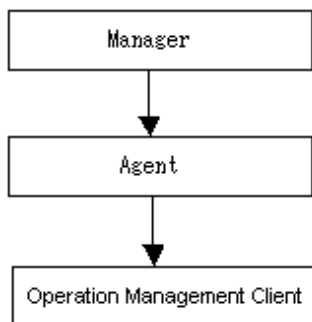
The setup explanations in this section follow this order. Perform these operations in the same order as they are presented.

4.1.1   Tasks required for Manager installation

This section explains how to install the Manager. The installation procedure is as follows:
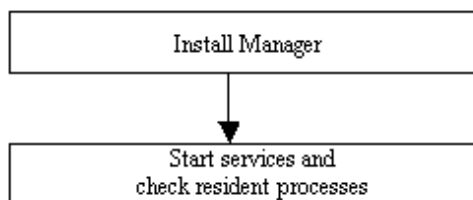
```
┌─────────────────────────────┐
│       Install Manager       │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│      Start services and     │
│   check resident processes  │
└─────────────────────────────┘
```

The explanations in this section follow this procedure. Perform these installation and setup operations in the same order as they are presented.

4.1.1.1　Installation

4.1.1.1.1　Installation conditions

Refer to 3.1 Manager for the installation conditions.

4.1.1.1.2　Pre-installation preparations

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]

No.	Prompt item	Description
1	Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
2	Variable file directory	This is the path to the directory where files that change during operation are stored.

[Solaris][Linux]

No.	Prompt item	Description
1	Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
2	Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.
3	Variable file directory	This is the path to the directory where files that change during operation are stored.

4.1.1.1.3　Installation procedure

The installation procedure is as follows:

[Windows]

1. Log in to the Windows machine using an account with Administrator privileges.

2. Insert the CD-ROM for this product into the CD-ROM drive.

3. The installer will start automatically.

P Point

・・

On some machines, the installer may not start automatically. In this case, start the installer manually using the following procedure:

- Select **Run** from the **Start** menu.

- In the **Run** window, click the **Browse** button, select the following file, and then click **OK**.

```
CD-ROM drive:\dsmSetup.exe
```

- The installer will start automatically.

・・

4. Click the **Install Manager** button in the installer window.

5. The installer will start, and the prompts explained in the previous section will appear.

[Solaris]

1. Log in to the Solaris machine as a superuser.

2. Mount the CD-ROM.

   - Insert the CD-ROM into the drive.

   - The CD-ROM drive may be mounted automatically by the volume management daemon.
     If not, perform the following operations:

```
# mkdir -p /cdrom/cdrom0 (*1)

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

#

*1: This step is required only if the /cdrom/cdrom0 directory does not exist.

*2: Adjust "𝑛" in "c𝑛t𝑛d𝑛s𝑛" to match the CD-ROM drive on the machine where the
program will be installed.
```

3. Execute the shell script for installing the program. An execution example is shown below. In this example, the name of the CD-ROM drive is "/cdrom/cdrom0".

```
# cd /cdrom/cdrom0/FJSVssqc/manager/packages

# ./install.sh
```

4. The installer will start, and the prompts explained in the previous section will appear.

[Linux]

1. Log in to the Linux machine as a superuser.

2. Mount the CD-ROM.

   - Insert the CD-ROM into the drive.

   - The CD-ROM drive may be mounted automatically by the volume management daemon.
     If not, perform the following operations:

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

*1 Change "/mnt/cdrom" depending on the CD-ROM drive location in the installation
environment.
```

3. Execute the shell script for installing the program. An execution example is shown below. In this example, the name of the CD-ROM drive is "/mnt/cdrom".

```
# cd /mnt/cdrom/FJSVssqc/manager/packages
```

```
# ./install.sh
```

4. The installer will start, and the prompts explained in the previous section will appear.

4.1.1.2　　How to start and verify the program

Start the program by referring to Chapter 5 How to Start and Stop Resident Processes. Also, check that resident processes are running normally.

4.1.2　　Tasks required for Agent installation

This section explains how to install Agent functions.

The installation procedure is as follows:
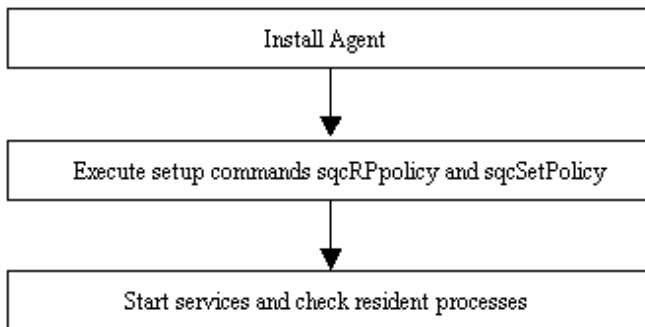
The explanations in this section follow this procedure. Perform these installation and setup operations in the same order as they are presented.

4.1.2.1　　Installation

4.1.2.1.1　　Installation conditions

Refer to 3.2 Agent for the installation conditions.

4.1.2.1.2　　Pre-installation preparations

When the installation process starts, it prompts the user to specify the following items. Therefore,

before starting the installation process, check or decide which settings to use.

[Windows]

No.	Prompt item	Description
1	Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
2	Variable file directory	This is the path to the directory where files that change during operation are stored.
3	Alert action when thresholds are exceeded	Select either "syslog" (output message to the event log) or "centric" (Centric Manager event linkage) as the alert action taken when thresholds are exceeded.

No.	Prompt item	Description
		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.
4	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. . . . .
5	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".

[Solaris][Linux]

No.	Prompt item	Description
1	Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
2	Definition file directory	This is the path to the directory where definition files that are referenced during operation are stored.
3	Variable file directory	This is the path to the directory where files that change during operation are stored.
4	Alert action when thresholds are exceeded	Select either "syslog" (output message to the event log) or "centric" (Centric Manager event 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.
5	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. . . . .
6	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".

4.1.2.1.3 Installation procedure

The installation procedure is as follows:

[Windows]

1. Log in to the Windows machine using an account with Administrator privileges.

2. Insert the CD-ROM for this product into the CD-ROM drive.

3. The installer will start automatically.

··

On some machines, the installer may not start automatically. In this case, start the installer manually using the following procedure:

- Select **Run** from the **Start** menu.

- In the **Run** window, click the **Browse** button, select the following file, and then click **OK**.

> *CD-ROM drive*:\dsmSetup.exe

- The installer will start automatically.

··

4. Click the appropriate button in the installer window.

- **Install Agent**

5. The installer will start, and the prompts explained in the previous section will appear.

[Solaris]

1. Log in to the Solaris machine as a superuser.

2. Mount the CD-ROM.

- Insert the CD-ROM into the drive.

- The CD-ROM drive may be mounted automatically by the volume management daemon.
  If not, perform the following operations:

> \# mkdir -p /cdrom/cdrom0 (*1)
>
> \# /usr/sbin/mount -F hsfs -o ro /dev/dsk/cntndnsn /cdrom/cdrom0 (*2)
>
> \#
>
> *1: This step is required only if the /cdrom/cdrom0 directory does not exist.
>
> *2: Adjust "n" in "cntndnsn" to match the CD-ROM drive on the machine where the program will be installed.

3. Execute the shell script for installing the program. Execution examples are shown below. In these examples, the name of the CD-ROM drive is "/cdrom/cdrom0".

- For Agent

> \# cd /cdrom/cdrom0/FJSVssqc/agent/packages
>
> \# ./install.sh

4. The installer will start, and the prompts explained in the previous section will appear.

[Linux]

1. Log in to the Linux machine as a superuser.

2. Mount the CD-ROM.

- Insert the CD-ROM into the drive.

- The CD-ROM drive may be mounted automatically by the volume management daemon.
  If not, perform the following operations:

> \# mount -r -t iso9660 /dev/cdrom /mnt/cdrom (*1)
>
> *1 Change "/mnt/cdrom" depending on the CD-ROM drive location in the installation environment.

3. Execute the shell script for installing the program. Execution examples are shown below. In these examples, the name of the CD-ROM drive is "/mnt/cdrom".

   - For Agent

   ```
   # cd /mnt/cdrom/FJSVssqc/agent/packages
   # ./install.sh
   ```

4. The installer will start, and the prompts explained in the previous section will appear.

4.1.2.2   Setup

Execute the *sqcRPolicy* and *sqcSetPolicy* commands by referring to Chapter 13 Creating and Applying Collection Policies.

[Windows]

To collect disk-related performance information for Windows systems, first enable information collection by executing the *diskperf* Windows command, as shown in the following example:

```
diskperf -y
```

Refer to the Windows Help files for details on the *diskperf* command. Be sure to enable information collection for both physical and logical drives.

P Point

・ For the *diskperf* command, the system must be restarted after the settings have been made.

・ The *diskperf* command must be executed before the ETERNUS SF Disk Space Monitor DCM service is started (that is, before performance information starts being collected).

4.1.2.3   How to start and verify the program

Start the program by referring to Chapter 5 How to Start and Stop Resident Processes Also, check that resident processes are running normally.

4.1.3   Tasks required for operation management client installation

This section explains how to install the operation management client. The installation procedure is as follows:
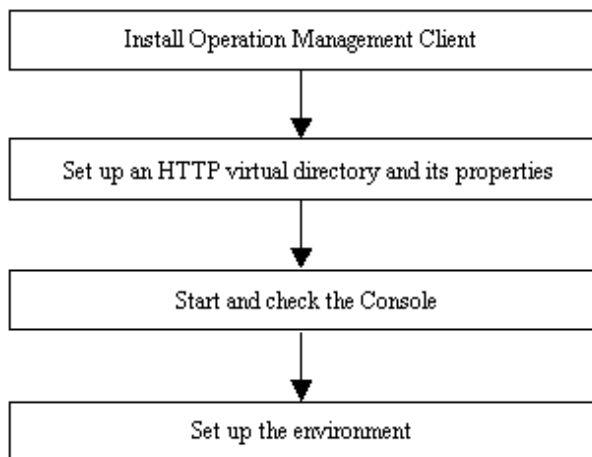
The explanations in this section follow this procedure. Perform these installation and setup operations in the same order as they are presented.

4.1.3.1 Installation

4.1.3.1.1 Installation conditions

Refer to 3.3 Operation Management Client for the installation conditions

4.1.3.1.2 Pre-installation preparations

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.

No.	Prompt item	Description
1	Installation directory	This is the path to the directory where fixed resources such as execution modules are installed.
2	Manager address	This is the host name or IP address of the Manager that the operation management client connects to.

4.1.3.1.3 Installation procedure

The installation procedure is as follows:

[Windows]

1. Log in to the Windows machine using an account with Administrator privileges.

2. Insert the CD-ROM for this product into the CD-ROM drive.

3. The installer will start automatically.

🅿 Point

On some machines, the installer may not start automatically. In this case, start the installer manually using the following procedure:

- Select **Run** from the **Start** menu.

- In the **Run** window, click the **Browse** button, select the following file, and then click **OK**.

CD-ROM drive:\dsmSetup.exe

- The installer will start automatically.

4. Click the **Install Operation Management Client** button in the installer window.

5. The installer will start, and the prompts explained in the previous section will appear.

[Solaris][Linux]

The procedure for installing the operation management client from the Solaris/Linux edition of the CD is as follows:

1. Log in to the Windows machine using an account with Administrator privileges.

2. Insert the CD-ROM for this product into the CD-ROM drive.

3. Execute the following file:

CD-ROM drive:\FJSVssqc\tools\DSMSETUP.exe

4. The installer will start automatically.

5. Click the **Install Operation Management Client** button in the installer window.

6. The installer will start, and the prompts explained in the previous section will appear.

4.1.3.2   Setup

An HTTP virtual directory and properties for this virtual directory must be set up for the operation management client. Set up this directory by referring to Chapter 16 Setting up an HTTP Communication Environment

4.1.3.3   How to start and verify the program

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

```
http://host name of the operation management client/SSQC/AdminConsole.html
```

4.1.3.4   Environment setup

Use the following procedure to set up the environment.

1. Open the **Setting view**. Refer to 9.2.1 Window Configuration for details.

2. Register the system groups. Refer to 9.2.3.1.1 SystemGroups for details.

3. Register the Agents. Refer to 9.2.3.2 Unregistered Agent information (UnregisteredAgents) for details.

After these environments have been set up, the **Monitor**, **Drill Down**, and **Report view**s of the **Console** window can be displayed.

Point

For redundant Manager operations, set up environments for the operation management clients connected to each Manager.

4.1.4   Uninstallation

This section describes the procedure for uninstalling this software.

[Windows]

1. Log in to the machine where the software will be uninstalled with Administrator privileges.

2. Double-click on the **Add/Remove Applications** or the **Add/Remove Programs** on the Control Panel.

3. Select the following programs from the application list and click either the **Add/Remove** button or the **Change/Remove** button.

   - ETERNUS SF Disk Space Monitor Manager 13.3

   - ETERNUS SF Disk Space Monitor Agent 13.3

   - ETERNUS SF Disk Space Monitor Operation Management Client 13.3

4. Follow the instructions to uninstall the programs.

Note

While uninstalling, when the display targets other windows, the progress bar is hidden behind the window. In that case, please display the window in the progress bar forward by clicking the task of uninstallation in the taskbar and other methods.

Note

When uninstalling the operation management client, OCMM 5.1 (which is installed at the same time) must be uninstalled manually. Select the following program from the application list and click either the **Add/Remove** button or the **Change/Remove** button.

・ OCMM 5.1

[Solaris]

 Note

Files that have been added after the installation are also deleted, so back up these files if necessary.

1. Become superuser while on the system.

   # **su** <RETURN>

2. Execute the *pkgrm* command.

   - For Agent

     # pkgrm FJSVdsmag <RETURN>

   - For Manager

     # pkgrm FJSVdsmmg <RETURN>

[Linux]

 Note

Files that have been added after the installation are also deleted, so back up these files if necessary.

1. Become superuser while on the system.

   # **su** <RETURN>

2. Execute the *rpm* command.

   - For Agent

     # **rpm -e FJSVdsmag** <RETURN>

   - For Manager

     # **rpm -e FJSVdsmmg** <RETURN>

4.1.5 Upgrade Installations

This section explains the installation method used to upgrade this product from the previous version to the current version.

 Note

・ 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.

The upgrade procedure is explained below.

4.1.5.1 Tasks to Perform at the Manager

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

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 resident processes are running, stop the service or daemon by referring to Section Chapter 5 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

   Start installing the Manager in the same way as for the initial installation, as described in Section "4.1.1.1.3 Installation procedure".

   Select "YES" when the prompt appears asking whether to overwrite 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)

   - 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. Start the Manager service and confirm that it has started normally

   Start the "ETERNUS SF Disk Space Monitor DCM" service by referring to Section Chapter 5 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 that this version of the PDB file (pdb.dat) exists in the following directory:

   ```
   variable file storage directory\data
   ```

4. Stop the Manager service and confirm that it has stopped normally

   Stop the "ETERNUS SF Disk Space Monitor DCM" service by referring to Section Chapter 5 How to Start and Stop Resident Processes. Also check that the relevant resident processes have stopped correctly.

5. 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*\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

Note

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

6. Start the Manager service and confirm that it has started normally

   Start the service by referring to Section "Chapter 5 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.

Note

- The PDB is included in these files. Note the size of the backup destination, as the amount of data can become quite large.

2. Perform upgrade installation of Manager

   Start installing the Manager in the same way as for the initial installation, as described in "4.1.1.1.3 Installation procedure".

   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. Start the Manager daemon and confirm that it has started normally

   Start the daemon by referring to Section "Chapter 5 How to Start and Stop Resident Processes. Also check that the relevant resident processes have started correctly.

4. Write the files back to /var/opt/FJSVssqc/

   Return the files backed up in "2. Back up files in /var/opt/FJSVssqc/" above to their original path.

5. Check pdb.dat

Check that pdb.dat exists in the following directory:

```
/var/opt/FJSVssqc/PDB/
```

6. Stop the Manager daemon and confirm that it has stopped normally

   Stop the daemon by referring to Section Chapter 5 How to Start and Stop Resident Processes Also check that the relevant resident processes have stopped correctly.

7. 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

   ## Note

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

8. Start the Manager daemon and confirm that it has started normally

   Start the daemon by referring to Section Chapter 5 How to Start and Stop Resident Processes. Also check that the relevant resident processes have started correctly.

4.1.5.2   Tasks to Perform at the Agent

The procedure for upgrading an Agent is described below.

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 resident processes are running, stop the service or daemon by referring to Section Chapter 5 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

Start installing the Agent in the same way as for the initial installation, as described in Section "4.1.2.1.3 Installation procedure".

Select "YES" when the prompt appears asking whether to overwrite the existing installation.
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\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

Execute the sqcRPolicy and sqcSetPolicy commands by referring to Section "Chapter 13 Creating and Applying Collection Policies".

4. Start the Agent service and confirm that it has started normally

Start the service by referring to Section "Chapter 5 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

Start installing the Agent in the same way as for the initial installation, as described in "4.1.2.1.3 Installation procedure".

Select "YES" when the prompt appears asking whether to overwrite the existing installation.
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

   Execute the sqcRPolicy and sqcSetPolicy commands by referring to Section "Chapter 13 Creating and Applying Collection Policies".

6. Start the Agent daemon and confirm that it has started normally

   Start the daemon by referring to Section "Chapter 5 How to Start and Stop Resident Processes". Also check that the relevant resident processes have started correctly.

4.1.5.3 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 Section "4.1.3.1.3 Installation procedure".

2. Select "YES" when the prompt appears asking whether to overwrite the existing installation. An overwrite installation is then performed, inheriting the information that was entered for the prompts during the previous installation.

3. Select "NO" when the prompt appears asking whether to recreate the virtual directory for the HTTP server.

4.2 Basic Model Comprising a Manager and Agents

The following table shows the procedure for creating an environment for the basic model (consisting of a Manager and Agents).

Refer to the various reference locations for the details of each procedure.

···

If a section is indicated in the "Reference location" column below, perform only the procedure in the specified section (including any sub-sections), without continuing to the next section.

···

Item No.	Location	Step	Task details	Reference location
1	Manager	1-1	Install the program.	4.1.1.1 Installation
		1-2	(Only if "pull" operation is to be performed) Make settings for "pull" operations.	12.1.1 Definitions for pull communications
		1-3	Start resident processes.	5.1 Manager
2	Agent	2-1	Install the program.	4.1.2.1 Installation
		2-2	(Only if "pull" operation is to be performed) Make settings for "pull" operations. Do not start the DCM service at this point.	12.1.2 Executing the setup command for pull communications
		2-3	(Only if the performance of middleware is to be managed) Preparation and verification may be required on the middleware side, depending on the middleware. In such cases, make preparations and verifications on the middleware side.	Chapter 6 Linkage Products and Other Supplementary Notes
		2-4	Create policies.	13.1 Creating Server Resource Information Collection Policies
		2-5	Apply policies.	13.2 Applying Policies
		2-6	Start resident processes.	5.2 Agent
3	Operation Management Client	3-1	Install the operation management client.	4.1.3 Tasks required for operation management client installation

4.3   Redundant Manager Operation Model

"Redundant Manager operations" refers to the function that improves the availability of the entire system by using two Managers to monitor the same system.

Because two Managers with the same functions are set up and management information is held on each Manager server, even if a problem occurs on one server, it is possible to continue monitoring the system with the other server without the need for manual switchover operations. As a result, job downtime can be minimized, and highly available systems can be achieved.

This section explains how to install a redundant Manager configuration, using an example of creating a new environment for ETERNUS SF Disk Space Monitor.

Refer to the various reference locations for the details of each procedure.

P Point

If a section is indicated in the "Reference location" column below, perform only the procedure in the specified section (including any sub-sections), without continuing to the next section.

P Point

To migrate from an environment where a Manager is already operating independently to a redundant Manager operation, perform only the following steps.

- ・ Item 1 (for the second Manager)

- ・ Steps 2-3, 2-6 and 2-7 in Item 2, after 5.2 Agent on the existing Agent

- ・ Item 3 (for the second operation management client)

Item No.	Location	Step	Task details	Reference location
1	Manager	1-1	Install the program.	4.1.1.1 Installation
		1-2	(Only if "pull" operation is to be performed) Make settings for "pull" operations.	12.1.1 Definitions for pull communications
		1-3	(Only if "pull" operation is to be performed) Execute the Manager setup command for redundant Manager operations. **P Point** Execute this command on one of the Managers but not the other.	4.3.1.1 Manager setup command for redundant Manager operations
		1-4	Start resident processes. Perform steps 1 to 4 above for the second Manager as well.	5.1 Manager
2	Agent	2-1	Install the program. **P Point** Specify which of the two Managers that the Agent will connect to.	4.1.2.1 Installation
		2-2	(Only if "pull" operation is to be performed) Make settings for "pull" operations. Do not start the DCM service at this point.	12.1.2 Executing the setup command for pull communications 12.2.2 Changing from push to pull communications
		2-3	Execute the Agent setup command for redundant Manager operations.	4.3.1.2 Agent setup command for redundant Manager operations

Item No.	Location	Step	Task details	Reference location
		2-4	(Only if the performance of middleware is to be managed) Preparation and verification may be required on the middleware side, depending on the middleware. In such cases, make preparations and verifications on the middleware side.	Chapter 6 Linkage Products and Other Supplementary Notes
		2-5	Create policies.	13.1 Creating Server Resource Information Collection Policies
		2-6	Apply policies.	13.2 Applying Policies
		2-7	Start resident processes.	5.2 Agent
3	Operation Management Client	3-1	Install separate operation management clients for each Manager.	4.1.3 Tasks required for operation management client installation

This section explains the setup command for redundant Manager operations.

Point

To cancel redundant Manager operations, no action needs to be taken on the operation management clients. Perform necessary setting operations by changing only the procedures relating to the Manager and Agent as appropriate.

4.3.1 Setting up redundant Manager operations

To make Managers redundant, the redundancy setup command must be executed on the Managers and all of their Agents.
This section explains the specification for the redundancy setup command.

4.3.1.1 Manager setup command for redundant Manager operations

[Command name]

sqcHmSetup:Manager environment setup command for redundant Manager operations

[Syntax]

[Windows]

```
Installation directory\bin\sqcHmSetup.exe [-u]
```

[Solaris][Linux]

Note

Log in as a superuser to execute this command.

```
/opt/FJSVssqc/bin/sqcHmSetup.exe [-u]
```

[Function]

This command creates or removes the Manager environment for redundant Manager operations.

[Options]

Option	Meaning
[-u]	This option cancels the redundant Manager operations.

[Termination status]

Normal termination: 0

Abnormal termination: 1

If this command terminates normally, the following message will be output:

・"Command succeeded."

If this command terminates abnormally, the following messages will be output:

・"Usage: sqcHmSetup.exe [-u]
(The command has not been used correctly.)

・"Failed to write environment settings to dmcoll.ini.
Command failed."
(Self-explanatory)

・"Failed to read environment settings from dmcoll.ini.
Command failed."
(Self-explanatory)

・"Failed to read environment settings from registry.
Command failed."
(Self-explanatory. This message is for Windows only.)

・"Failed to get service status.
Command failed."
(Could not get the status of the sqcschdle service.)

・"sqcschdle" is running and so sqcHmSetup can not be run
Please stop "sqcschdle" and retry sqcHmSetup.
Command failed."
(Self-explanatory)

[Usage example]

To make a Manager redundant, execute this command as follows:

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcHmSetup.exe

Command Succeeded.

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcHmSetup.exe

Command Succeeded.

#
```

To cancel redundant Manager operations, execute this command as follows:

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcHmSetup.exe -u

Command Succeeded.

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcHmSetup.exe -u

Command Succeeded.

#
```

[File]

If this command is completed successfully, the following file will be edited:

[Windows]

Variable file directory\control\data\dmcoll.ini

[Solaris][Linux]

/etc/opt/FJSVssqc/data/dmcoll.ini

[Notes]

None.

4.3.1.2 Agent setup command for redundant Manager operations

[Command name]

sqcHaSetup:Agent environment setup command for redundant Manager operations

[Syntax]

[Windows]

Installation directory\bin\sqcHaSetup.exe -h host name

Installation directory\bin\sqcHaSetup.exe -u

Installation directory\bin\sqcHaSetup.exe -d

[Solaris][Linux]

🛑 **Note**
. . . .

Log in as a superuser to execute this command.

/opt/FJSVssqc/bin/sqcHaSetup.sh -h *host name*

/opt/FJSVssqc/bin/sqcHaSetup.sh -u

/opt/FJSVssqc/bin/sqcHaSetup.sh -d

. . . .

[Function]

This command creates or removes the Agent environment for redundant Manager operations.

[Options]

Option	Meaning
-h host name	Specify either the host name or the IP address of the Manager that had not been set up when the Agent was first installed. This option cannot be specified together with other options.
-u	This option cancels the redundant Manager operations. This option cannot be specified together with other options.
-d	This option displays the Manager that is currently specified as the connection destination. This option cannot be specified together with other options. 🛈 **Note** .... This option can only be specified with "push" operations. ....

[Termination status]

Normal termination: 0

Abnormal termination: 1

If this command terminates normally, the following message will be output:

- "Command Succeeded."

If this command terminates abnormally, the following messages will be output:

- "Usage: sqcHaSetup.exe -h hostname

  sqcHaSetup.exe -u
  sqcHaSetup.exe -d"

  (Either an option has not been specified or the command has not been used correctly.)

- "Failed to write environment settings to DSAconfiguration.txt.
  Command failed."
  (Self-explanatory)

- "Failed to read environment settings from DSAconfiguration.txt.
  Command failed."
  (Self-explanatory)

- "Failed to read environment settings from registry.
  Command failed."
  (Self-explanatory)

- "Failed to create/delete directory.
  Command failed."
  (Self-explanatory)

- "Failed to get service status.
  Command failed."
  (Could not get the status of the DCM service. This message is for Windows only.)

- "DCM is running and so sqcHaSetup can not be run.
  Please stop DCM and retry sqcHaSetup.
  Command failed."
  (Self-explanatory)

- "An error occurred. Cause code = XXX
  Command failed."
  (Another error occurred. "XXX" indicates the error code.)

[Usage example]

To add a second Manager, execute this command as follows:

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcHaSetup.exe -h hostname

Command succeeded.

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcHaSetup.sh -h hostname

Command succeeded.

#
```

To cancel redundant Manager operations, execute this command as follows:

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcHaSetup.exe -u

Command succeeded.

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcHaSetup.sh -u

Command Succeeded.

#
```

To display the Manager that is currently specified as the connection destination, execute this command as below. (For "push" operations only)

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcHaSetup.exe -d

Manager host name 1: XXXX

Manager host name 2: YYYY

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcHaSetup.sh -d
```

```
Manager host name 1: XXXX

Manager host name 2: YYYY

#
```

"XXXX" and "YYYY" are the host names of the servers that are currently specified as the Managers to connect to. If redundant Manager operations have not been set up, then "Manager host name 2" (the "YYYY" section) will be left blank.

[File]

If this command is completed successfully, the following file will be edited:

[Windows]

```
Variable file directory\control\DSAconfiguration.txt
```

[Solaris][Linux]

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

[Notes]

None.

4.4   Cluster System Operation Model

Operating Managers in a cluster system improves the availability of management operations. This is because even if a fault occurs with one node in the cluster system, management operations can be taken over by the other node, which is still functioning correctly.

Note

Managers cannot be installed on cluster systems in the following situations.

- Machines where both the Manager and the operation management client have been installed

- Managers that use redundant operations

The following cluster systems and configurations are supported.

[Cluster system]

[Windows]

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

- Microsoft(R) Windows Server(R) 2003 Enterprise Edition

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

[Windows for Itanium]

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

- Microsoft(R) Windows Server(R) 2003 Enterprise Edition for Itanium-based Systems

- Microsoft(R) Windows Server(R) 2008 for Itanium-based Systems

[Solaris]

- Fujitsu PRIMECLUSTER Enterprise Edition 4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00

- Fujitsu PRIMECLUSTER HA Server 4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00

- Fujitsu PRIMECLUSTER Clustering Base 4.1/4.1A10/4.1A20/4.1A30/4.1A40/4.2A00/4.2A30/4.3A00

[Linux]

- Fujitsu PRIMECLUSTER Enterprise Edition 4.2A00/4.2A30

- Fujitsu PRIMECLUSTER HA Server 4.2A00/4.2A30

- Fujitsu PRIMECLUSTER Clustering Base 4.2A00/4.2A30

[Linux for Itanium]

- Fujitsu PRIMECLUSTER Enterprise Edition 4.1A40

- Fujitsu PRIMECLUSTER HA Server 4.1A40

[Cluster configuration]

- 1:1 active/standby node configuration (configurations where one node is on standby for another node)

In this section, the node that performs management tasks is referred to as the "active node", while the node that is standing by to take over these tasks is referred to as the "standby node". The operation for transferring management tasks from the active node to the standby node when an error occurs is called "failover". Also, the disk that is shared by the active node and the standby node is referred to as the "shared disk".

🅿 Point

....

Use logical host names or logical IP addresses to specify the host names or IP addresses for Managers in a cluster system (such as when specifying the connection destination Manger from the Console or during the installation of an Agent).

This allows ETERNUS SF Disk Space Monitor to be operated without the need to be aware of which node is currently active.

....

The installation procedure differs depending on the type of cluster system being installed. Refer to the installation method corresponding to the cluster system being installed.

Cluster system	Reference location
MSCS/failover clustering	4.4.1 Operating MSCS/Failover Clustering cluster systems
PRIMECLUSTER	4.4.2 Operating PRIMECLUSTER cluster systems

4.4.1　Operating MSCS/Failover Clustering cluster systems

4.4.1.1　Installation and environment setup

This section explains how to install ETERNUS SF Disk Space Monitor on MSCS/failover clustering cluster systems. Be sure to follow the order shown.

📒 Note

....

- This section explains the procedure for creating a ETERNUS SF Disk Space Monitor environment in an MSCS cluster environment and so includes MSCS/failover clustering setup operations. Reading this section requires a basic understanding and some practical knowledge of MSCS/failover clustering.

- Use an account with Administrator privileges to perform the settings in this section.

....

4.4.1.1.1　Creating a group and registering basic resources

MSCS/failover clustering must be installed and the MSCS/failover clustering environment must be set up before the operations explained in this section can be performed.

Creating a group

Register the group to be used by ETERNUS SF Disk Space Monitor.

- Use the cluster administrator to create a resource group named "DiskSpaceMonitor Group" for this product.

Note

If this product is linked with Systemwalker Centric Manager, a resource group need not be created.

Setting up the shared disk, host name and IP address

Register the basic resources with the group.

- Register host names, IP addresses, and the disk for storing shared files for this product with the "DiskSpaceMonitor Group".

Note

If this product is linked with Systemwalker Centric Manager, register the above resources in the "CentricMGR Group".

4.4.1.1.2 Installing ETERNUS SF Disk Space Monitor on the active server

1. Install ETERNUS SF Disk Space Monitor on the active server.

Note

Do not install ETERNUS SF Disk Space Monitor on the shared disk at this stage.

4.4.1.1.3 Executing the cluster setup command on the active server

1. Vary the shared disk online.

2. Get disk ownership rights on the active server.
   Get the following disk ownership rights:

   - Quorum disk

   - The shared disk used by this product

3. Close the cluster administrator and the registry editor.
   If the cluster administrator and the registry editor are running, close them.

4. Execute the cluster setup command on the active server.
   Execute the *sqcsetupclp* cluster setup command on the active server. The syntax for this command is as follows:

```
Installation directory\bin\sqcsetupclp -m shared disk -h logical host name
```

See

Refer to 4.4.3 Cluster setup command for details on the cluster setup command.

4.4.1.1.4 Installing ETERNUS SF Disk Space Monitor on the standby server

1. Install ETERNUS SF Disk Space Monitor on the standby server.

Note

When installing ETERNUS SF Disk Space Monitor, make sure both the active server and the standby server have the same environment (the same directory configuration).

Also, do not install ETERNUS SF Disk Space Monitor on the shared disk.

See

Refer to 4.1.1.1 Installation for details on the installation method.

4.4.1.1.5 Executing the cluster setup command on the standby server

1. Close the cluster administrator and the registry editor.
   If the cluster administrator and the registry editor are running, close them.

2. Execute the cluster setup command on the standby server.
   Execute the *sqcsetupcls* cluster setup command on the standby server. The syntax for this command is as follows:

```
Installation directory\bin\sqcsetupcls -m shared disk
```

See

Refer to 4.4.3 Cluster setup command for details on the cluster setup command.

4.4.1.1.6 Registering resources

Register the ETERNUS SF Disk Space Monitor services as MSCS/failover clustering resources on the active server.

Register the following services as MSCS/failover clustering application resources in the "DiskSpaceMonitor Group" created in Creating a group.

- ETERNUS SF Disk Space Monitor DCM service
- ETERNUS SF Disk Space Monitor sqcschdle service

Note

If this product is linked with Systemwalker Centric Manager, register all of these services as resources in the "CentricMGR Group".

> 📝 **Note**
> ....
> If ETERNUS SF Disk Space Monitor 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
> ....

ETERNUS SF Disk Space Monitor DCM service

Item	Setting
Name	ETERNUS SF Disk Space Monitor DCM
Resource type	Generic service
Group	DiskSpaceMonitor Group or CentricMGR Group
Owners that can execute this service	Active server and standby server
Resource dependencies	The IP address and the shared disk
Service name	SQC_DCM

ETERNUS SF Disk Space Monitor sqcschdle service

Item	Setting
Name	ETERNUS SF Disk Space Monitor sqcschdle
Resource type	Generic service
Group	DiskSpaceMonitor Group or CentricMGR Group
Owners that can execute this service	Active server and standby server
Resource dependencies	The IP address and the shared disk
Service name	sqcschdle

4.4.1.2   Uninstallation

Use the following procedure to remove ETERNUS SF Disk Space Monitor from cluster systems.

1. Make the current server the active node.

2. Stop the services that are being managed by the cluster system.
   From the cluster administrator, vary the following ETERNUS SF Disk Space Monitor services offline.

   - ETERNUS SF Disk Space Monitor DCM service

> 📝 **Note**
> ....
> If this product is linked with Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.
> ....

3. Remove resources.
   Use the cluster administrator to remove the application resources and ETERNUS SF Disk Space Monitor cluster services registered in 4.4.1.1.6 Registering resources.

4. Execute the cluster cancel command on the standby server.
The syntax for this command is as follows:

> *Installation directory*\bin\sqcunsetcl

5. Uninstallation
Uninstall ETERNUS SF Disk Space Monitor from the standby server.

📑 See
··
If necessary, refer to 4.1.4 Uninstallation for details on uninstallation.
··

6. Execute the cluster cancel command on the active server.
The syntax for this command is as follows:

> Installation directory\bin\sqcunsetcl

7. Uninstallation
Uninstall ETERNUS SF Disk Space Monitor from the active server.

📑 See
··
If necessary, 4.1.4 Uninstallation for details on uninstallation.
··

8. Delete unnecessary directories from the shared disk.

9. Delete the shared disk.
Use the cluster administrator to delete the shared disk (that has been registered as a cluster resource and has been used by ETERNUS SF Disk Space Monitor for cluster operations) from the "DiskSpaceMonitor Group".

📑 Note
··
If this product is linked with Systemwalker Centric Manager, delete this shared disk from the "CentricMGR Group" as well.
··

10. Delete the "DiskSpaceMonitor Group".

📑 Note
··
If this product is linked with Systemwalker Centric Manager, there is no need to delete the group.
Start the Systemwalker Centric Manager service that was stopped in Step 2.
··

4.4.2 Operating PRIMECLUSTER cluster systems

4.4.2.1 Installation and environment setup

This section explains how to install ETERNUS SF Disk Space Monitor on PRIMECLUSTER cluster systems. Perform these installation and setup operations in the same order as they are presented.

📑 Note
··
・ This section explains the procedure for creating a ETERNUS SF Disk Space Monitor environment in a PRIMECLUSTER cluster environment and so includes PRIMECLUSTER setup operations. Reading this section requires a basic understanding and some practical knowledge of PRIMECLUSTER.

・ Log in with system administrator privileges to make the settings described in this section.
··

4.4.2.1.1　　　　　　Setting up the shared disk and allocating IP addresses and host names

PRIMECLUSTER must be installed and the PRIMECLUSTER environment must be set up before the operations explained in this section can be performed.

📑 See
....
If necessary, refer to the PRIMECLUSTER manual for the procedures for installing PRIMECLUSTER and creating a new cluster environment.
....

Setting up the shared disk

Set up the shared disk that stores files that are shared by ETERNUS SF Disk Space Monitor on the active and standby nodes.

📑 See
....
Refer to the PRIMECLUSTER manual for details on how to set up the shared disk device.
....

Allocating the IP addresses and host names

📒 Note
....
If this product is linked with Systemwalker Centric Manager, there is no need to allocate a new IP address and host name.
....

Each node in the cluster system manages multiple IP addresses and host names.

- ・ The IP address of the group used by ETERNUS SF Disk Space Monitor (hereafter referred to as the "logical IP address")
  When the cluster system starts operating, the network allocates a new, unique IP address.

- ・ The host name for ETERNUS SF Disk Space Monitor (hereafter referred to as the "logical host name")
  This host name resolves to the logical IP address.
  This host name can be made valid by registering it with a naming service such as DNS.

📑 See
....
Refer to the PRIMECLUSTER manual for details on how to set IP addresses and host names.
....

4.4.2.1.2　　　　　　Installing ETERNUS SF Disk Space Monitor on the active server

1. Install ETERNUS SF Disk Space Monitor on the active server.

📒 Note
....
Do not install ETERNUS SF Disk Space Monitor on the shared disk at this stage.
....

📑 See
....
Refer to 4.1.1.1 Installation for details on the installation method.
....

4.4.2.1.3　　　　Executing the cluster setup command on the active server

1. Stop the cluster application on the active server.

> 📋 **Note**
>
> If this product is linked with Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.

2. Make the shared disk device accessible from the active server.

3. Execute the cluster setup command on the active server.
   Execute the *sqcsetupclp* cluster setup command on the active server. The syntax for this command is as follows:

```
/opt/FJSVssqc/bin/sqcsetupclp -m mount point for the shared disk device -h logical host
name
```

> 📖 **See**
>
> Refer to 4.4.3 Cluster setup command for details on the cluster setup command.

4.4.2.1.4　　　　Installing ETERNUS SF Disk Space Monitor on the standby server

1. Install ETERNUS SF Disk Space Monitor on the standby server.

> 📖 **See**
>
> Refer to 4.1.1.1 Installation for details on the installation method.

> 📋 **Note**
>
> Create the same ETERNUS SF Disk Space Monitor environment on both the active server and the standby server (the same device name, shared disk device, and installation path).
> Do not install ETERNUS SF Disk Space Monitor on the shared disk at this stage.

4.4.2.1.5　　　　Executing the cluster setup command on the standby server

1. Stop the cluster application on the standby server.

2. Make the shared disk device accessible from the standby server.

3. Execute the cluster setup command on the standby server.
   Execute the *sqcsetupcls* cluster setup command on the standby server. The syntax for this command is as follows:

```
/opt/FJSVssqc/bin/sqcsetupcls -m mount point for the shared disk device
```

> 📖 **See**
>
> Refer to 4.4.3 Cluster setup command for details on the cluster setup command.

4.4.2.1.6　　　　Registering resources

The ETERNUS SF Disk Space Monitor daemon is registered as a PRIMECLUSTER resource

This section explains how to register the resource on the active server

The overall procedure is as follows:

- Register the ETERNUS SF Disk Space Monitor resource created by the cluster setup command as the ETERNUS SF Disk Space Monitor daemon.

Note

・・

If this product is linked with Systemwalker Centric Manager, register the ETERNUS SF Disk Space Monitor daemon as an application resource in the 'CentricMGR Group'.

・・

The method for registering resources is different for each platform.

Refer to the registration method for the platform being used.

Platform	Reference location
Solaris	4.4.2.1.7 Registering resources using the userApplication Configuration Wizard
Linux	4.4.2.1.8 Registering resources using the RMS Wizard

4.4.2.1.7 Registering resources using the userApplication Configuration Wizard

[Solaris]

Creating resources

From PRIMECLUSTER's **userApplication Configuration Wizard**, select **Create Resource**, and set up the following Resource types. Refer to the PRIMECLUSTER manual for details.

- Fsystem:

  Select a partition for shared resources.

- Ipaddress:

  Select IP Address Takeover for the network type. For the IP address/host name, use the one specified in the cluster setup command option.

- Procedure:

  Select **Application** for the procedure class and **DiskSpaceMonitor** for the procedure resource.

Creating cluster applications

Create the application by selecting **Create userApplication** from the top menu of PRIMECLUSTER's **userApplication Configuration Wizard**. Refer to the PRIMECLUSTER manual for details.

- In the **userApplication name and operation type setting** window, select **Standby** for the operation type.

- In the **Set Attributes** window, set the userApplication attributes. The following table shows the example settings (recommended values) of these attributes.

Attribute	Value	Outline
AutoStartUp	Yes	When RMS starts, the userApplication also automatically starts.
AutoSwitchOver	HostFailure ResourceFailure	This enables automatic failover when host or resource fails.
PersistentFault	1	When userApplication is in Faulted state, it stays in this state even after RMS reboot.
ShutdownPriority	NONE (default)	A weighting factor (priority) is not allocated to the userApplication.
StandbyTransitions	StartUp	Transition to standby state occurs at RMS startup or on transition to another node.

Attribute	Value	Outline
	SwitchRequest	
OnlinePriority	0 (default)	After the RMS restarts, the userApplication goes online at the node with the highest priority. The priority is determined by the node setup order that was specified in 'SysNode setting' at userApplication creation time.
HaltFlag	No (default)	If another problem (double failure) occurs during Fault processing, forced shutdown of the node does not occur. As a result, the userApplication will not failover.

・ Select all the resources created in "Creating resources" and then create the application.

4.4.2.1.8　　　Registering resources using the RMS Wizard

[Linux]

This section explains the settings required when creating an application using PRIMECLUSTER's **RMS Wizard**.

Preliminary settings

Settings are necessary in advance because logical IP addresses and shared disks will be used.

Refer to the PRIMECLUSTER manual for how to make settings.

Creating the cluster application

Start the **RMS Wizard** and register DiskSpaceMonitor as an application resource.

Specify a logical IP address in IpAddress and the shared disk mount point in LocalFileSystem.

4.4.2.2　　　Uninstallation

This section describes the procedure for removing ETERNUS SF Disk Space Monitor from cluster systems.

1. Stop the cluster application.
   Use the PRIMECLUSTER Cluster Admin GUI to stop the ETERNUS SF Disk Space Monitor service.

   ### 📚 See
   . . . .
   Refer to the PRIMECLUSTER manual for details on how to stop services.
   . . . .

   ### 📒 Note
   . . . .
   If this product is linked with Systemwalker Centric Manager, stop the Systemwalker Centric Manager service as well.
   . . . .

2. Delete the application and its resources
   Delete the ETERNUS SF Disk Space Monitor application and its resources that were registered with the cluster system in 4.4.2.1.6 Registering resources

3. Execute the cluster cancel command on the standby server.
   Vary the shared disk online, and execute the *sqcunsetcl* cluster cancel command on the standby server. The syntax for this command is as follows:

   /opt/FJSVssqc/bin/sqcunsetcl

4. Execute the cluster cancel command on the active server.
   Execute the *sqcunsetcl* cluster cancel command on the active server. The syntax for this command is as follows:

   /opt/FJSVssqc/bin/sqcunsetcl

5. Uninstall ETERNUS SF Disk Space Monitor.
   Uninstall ETERNUS SF Disk Space Monitor on both the active server and the standby server.

6. Delete unnecessary directories from the shared disk device.

7. Delete the shared disk device used by ETERNUS SF Disk Space Monitor from the ETERNUS SF Disk Space Monitor cluster application.
   Delete the following shared disk device that was registered in Setting up the shared disk.

   - Delete the shared disk device used by ETERNUS SF Disk Space Monitor from the ETERNUS SF Disk Space Monitor cluster application.

Note

If this product is linked with Systemwalker Centric Manager, delete this shared disk from the "CentricMGR Group" as well.

8. Delete the ETERNUS SF Disk Space Monitor cluster application.

Note

If this product is linked with Systemwalker Centric Manager, there is no need to delete the cluster application.

9. Start the Systemwalker Centric Manager cluster application that was stopped in step 1.

4.4.3　Cluster setup command

The cluster setup command must be executed to create the cluster environment.
The specification for the cluster setup command is explained below.

Point

This command can be executed on Managers.

[Command name]

sqcsetupclp: Cluster environment creation command (active node)

sqcsetupcls:Cluster environment creation command (standby node)

[Syntax]

[Windows]

(Active node)

> *Installation directory*\bin\sqcsetupclp -m *shared disk* -h *logical host name*

(Standby node)

> *Installation directory*\bin\sqcsetupcls -m *shared disk*

[Solaris][Linux]

(Active node)

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

(Standby node)

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

[Function]

This command creates a cluster environment for ETERNUS SF Disk Space Monitor.

[Options]

[Windows]

Option	Meaning
-m *shared disk*	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.

[Solaris][Linux]

Option	Meaning
-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.

[Termination status]

Normal termination: 0

Abnormal termination: 1

If this command terminates normally, the following message will be output:

・ "Cluster setup succeeded"

[Usage example]

[Windows]

(Active node: sqcsetupclp)

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcsetupclp -m F:\-h hostname

126 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.

0 files copied.
```

```
0 files copied.

0 files copied.

Cluster setup succeeded

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

(Standby node: sqcsetupcls)

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcsetupcls.exe -m F:\

Cluster setup succeeded

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

[Solaris][Linux]

(Active node: sqcsetupclp)

```
# cd /opt/FJSVssqc/bin/

# ./sqcsetupclp -m /share -h hostname

Cluster setup succeeded

#
```

(Standby node: sqcsetupcls)

```
# cd /opt/FJSVssqc/bin/

# ./sqcsetupcls -m /share

Cluster setup succeeded

#
```

[Notes]

[Windows]

Execute this command with Administrator privileges.

[Solaris][Linux]

Execute this command with superuser (root) privileges.

Chapter 5 How to Start and Stop Resident Processes

This chapter explains the resident processes used by ETERNUS SF Disk Space Monitor, as well as the methods used to start and stop them.

P Point

Resident processes need to be started and stopped in the following situations:

- When creating and applying collection policies

- During maintenance of the environment (database backup)

5.1 Manager

[Windows]

Process	Start and stop methods	Remarks
dcm.exe dsa_listener.exe dsa_pdb_writer2.exe dsa_pdb_reader2.exe dsa_file.exe dsa_tis.exe dsa_cmd.exe dsa_spacemon.exe dsa_logfile.exe	Start/stop the following service: ETERNUS SF Disk Space Monitor DCM	The main process is "dcm.exe". Use this process to check whether the other processes are running. The processes starting with "dsa_" may not be resident, depending on the operating conditions.
sqcschdle.exe	Start/stop the following service: ETERNUS SF Disk Space Monitor sqcschdle	This process is started when using "Pull" method communications provided by this product.

[Solaris][Linux]

Process	Start and stop methods	Remarks
dcmd dsa_listener dsa_pdb_writer2 dsa_pdb_reader2 dsa_file dsa_tis dsa_cmd dsa_spacemon dsa_logfile	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	The main process is "dcmd". Use this process to check whether the other processes are running. The processes starting with "dsa_" may not be resident, depending on the operating conditions.
sqcschdle.exe	Start/stop the following service: To start the process: /etc/rc2.d/S99ssqcsch start	This process is started when using "Pull" method communications provided by this product.

Process	Start and stop methods	Remarks
	To stop the process: /etc/rc0.d/K00ssqcsch stop	

5.2   Agent

[Windows]

Process	Start and stop methods	Remarks
dcm.exe dsa_forwarder.exe dsa_file.exe dsa_tis.exe dsa_cmd.exe dsa_spacemon.exe dsa_logfile.exe	Start/stop the following service: ETERNUS SF Disk Space Monitor DCM	The main process is "dcm.exe". Use this process to check whether the other processes are running. The processes starting with "dsa_" may not be resident, depending on the operating conditions.
thttpd.exe	Start/stop the following service: ETERNUS SF Disk Space Monitor thttpd	This process is started when using the thttpd service and "Pull" method communications that are provided by this product's Agents as standard features.

[Solaris][Linux]

Process	Start and stop methods	Remarks
dcmd dsa_forwarder dsa_file dsa_tis dsa_cmd dsa_spacemon dsa_logfile	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	The main process is "dcmd". Use this process to check whether the other processes are running. The processes starting with "dsa_" may not be resident, depending on the operating conditions.
thttpd	Use the following scripts to start and stop the processes. To start the processes: /opt/FJSVssqc/bin/ssqchttp start To stop the processes: /opt/FJSVssqc/bin/ssqchttp stop	This process is started when using the thttpd service and "Pull" method communications that are provided by this product's Agents as standard features.

Chapter 6 Linkage Products and Other Supplementary Notes

This chapter contains supplementary information and important points pertaining to the installation and operation of ETERNUS SF Disk Space Monitor.

6.1 Linking with Symfoware Server

Before creating and applying a collection policy (refer to Chapter 13 Creating and Applying Collection Policies, the following preparations and verifications are required on the Symfoware side.

1. The commands used to display performance (*rdbsar*, *rdbspcinf* and *rdbinf*) must be able to be used (i.e., the RDB system must be operating).

See
. . . .
Refer to the *Symfoware Server RDB Administrator's Guide* for details.
. . . .

If the RDB system configuration of Symfoware Server is changed after a collection policy has been created and applied (refer to Chapter 13 Creating and Applying Collection Policies, create and apply the collection policy again to ensure that collection matches the system configuration of Symfoware Server.

Note that after the collection policy has been created and applied again, it must be updated in the **Console** window. Collect the configuration information using the **Agent Settings** window with reference to 9.2.3.1.2 Agents

Note
. . . .
If a collection policy is created while there is no default RDB system on the Symfoware Server, an error message (such as qdg13315u) may be output.

These error messages are output to confirm the configuration of the RDB system. There is no problem so long as the collection policy creation command has terminated normally.
. . . .

6.1.1 Stopping Symfoware Server where this product's Agent has been installed

Note
. . . .
For systems where performance management for Symfoware Server is being performed by installing this product's Agent, the Agent must be stopped before Symfoware Server is stopped.
. . . .

Step	Operation	Method
1	Stop this product's Agent	Refer to Chapter 5 How to Start and Stop Resident Processes.
2	Stop Symfoware Server	Use the *rdbstop* command. (Refer to the Symfoware Server manuals for details).

Do not forget to start this product's Agent when Symfoware Server has been started.

6.2 Linking with Oracle Database Server

Before creating and applying a collection policy (refer to Chapter 13 Creating and Applying Collection Policies), the following preparations and verifications are required.

1. Enter the settings on the ETERNUS SF Disk Space Monitor side.

   A collection template needs a definition to collect Oracle performance information. Refer to Chapter 15 Collection Template

2. Check and set path information for Oracle.

   [Windows]

   Check whether the path to Oracle has been set in the PATH environment variable. This is usually set automatically when Oracle is installed. If this has not been set for some reason, the path for Oracle must be added to the PATH variable. Refer to the Oracle manual for details.

   [Solaris][Linux]

   Make settings for the collection template.

   Refer to 15.3 How to Set up Oracle Database Server for details.

3. Make sure that each Oracle service/daemon is running.

See
. . . .
Refer to the Oracle manual for details.
. . . .

If the Oracle instance to be monitored is changed after a collection policy has been created and applied (refer to Chapter 13 Creating and Applying Collection Policies"), repeat the steps described in this section.

Note that after the collection policy has been created and applied again, it must be updated in the **Console** window. Collect the configuration information using the **Agent Settings** window with reference to 9.2.3.1.2 Agents

6.3 Linking with Systemwalker Centric Manager

Linkage with Systemwalker Centric Manager is explained.

See
. . . .
Refer to the Systemwalker Centric Manager manual for details.
. . . .

6.3.1 Monitoring Thresholds

If threshold monitoring results in a threshold violation being detected, a message reporting the occurrence of an error at the relevant node will appear in the Systemwalker Centric Manager monitoring window. (The icon of the node will indicate the event by flashing, etc.)

With regard to the monitoring of resource information thresholds within servers, the managed node recognized in the monitoring window of Systemwalker Centric Manager will match the object managed by ETERNUS SF Disk Space Monitor.

Point
. . . .
If **Event log/syslog** is selected as the threshold violation notification method during installation, it will be necessary to define **Centric Manager** as the type of alarm action to execute. Refer to 10.2 Alarm Action Definitions for details on the definition method.
. . . .

Point
. . . .
To monitor threshold violations detected by ETERNUS SF Disk Space Monitor in Centric Manager's **System Monitor** window, the following settings must be performed.
. . . .

1. Register or amend the monitored events.

   Add the monitored event using Systemwalker Centric Manager's [Monitored Event Table] window and make a definition that allows performance monitoring to be performed on ETERNUS SF Disk Space Monitor messages.

   - The following conditions are used to identify ETERNUS SF Disk Space Monitor messages:
     "SSQC" is specified as the source name in the [Label Name] field of the [Event Definition] window, which is accessed via the [Monitored Event Table] window.

   Refer to the following manual for detailed information about Systemwalker Centric Manager's Monitored Event Table:

   - *Systemwalker Centric Manager User's Guide - Monitoring Functions*

6.3.2 Linking to the Monitor view from Centric Manager

To call ETERNUS SF Disk Space Monitor's **Monitor** view from Systemwalker Centric Manager's **System Monitor** window, it is necessary to register ETERNUS SF Disk Space Monitor's **Monitor** view with the menu of Systemwalker Centric Manager's **System Monitor** window. Refer to for details on how to call the **Monitor** view.

6.4 Other Supplementary and Important Information

6.4.1 syslog settings

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
deamon.err	dcmd
user.err	dsa_*

A settings example for syslog.conf is shown below.

```
daemon.err /var/adm/messages

user.err /var/adm/messages
```

6.4.2 Content display errors

The following problems sometimes occur when users try to display the desired contents (graphs or tables) in the **Monitor**, **Drill Down** or **Report** view in the **Console** window using the **Display** or **Generate** button.

- The operation terminates with error code 1572864.

- The graph image drops out (only the graph is not displayed).

These problems may occur because the desktop heap on the operation management client is not large enough. In this case, increase the size of the desktop heap using the following method.

6.4.2.1 How to increase the size of the desktop heap

📝 Note

. . . .

Making errors in editing the registry can lead to problems such as Windows not starting. Be very careful while editing the registry.

. . . .

1. Start the registry editor. (REGEDT32.EXE)

2. Display the following key from the HKEY_LOCAL_MACHINE sub-tree.

> \System\CurrentControlSet\Control\Session Manager\SubSystems

3. Modify the SharedSection parameter settings (shown in bold in the example below) in the Windows values.
   Increase the third value (separated by commas) in multiples of 256 or 512 to somewhere between 1024 and 2048.

Point

Depending on the system, an error message (such as "abnormal program termination") may be displayed when the Console is started if the value specified is too large, and the window may not open. In this case, adjust the specified value within the range indicated.

Depending on the system, there may be three or four values separated by commas. In both cases, increase the third value.

- Before

> %SystemRoot%\system32\csrss.exe ObjectDirectory=\Windows **SharedSection=1024,3072,512**
> Windows=On SubSystemType=Windows ServerDll=basesrv,1
> erverDll=winsrv:UserServerDllInitialization,3 ServerDll=winsrv:ConServerDllInitialization,2
> ProfileControl=Off MaxRequestThreads=16

- After

> %SystemRoot%\system32\csrss.exe ObjectDirectory=\Windows **SharedSection=1024,3072,1024**
> Windows=On SubSystemType=Windows ServerDll=basesrv,1
> ServerDll=winsrv:UserServerDllInitialization,3 ServerDll=winsrv:ConServerDllInitialization,2
> ProfileControl=Off MaxRequestThreads=16

4. Restart the machine.

6.4.2.2 Other content display errors

In addition, the following error codes may occur when an attempt is made to display content.

In such cases, perform the checks and actions indicated:

Error code	Check item	Action
536870912	・ Has Microsoft Internet Information Server been set up correctly?	If Internet Information Server has not been set up correctly, set it up again by referring to 16.2.1 For Microsoft® Internet Information Server
	・ Has the target data been collected?	If not even one item of the target data has been collected, make settings so that the data is collected.
1074003968	・ Is the Manager service running?	Start the Manager service if it is not running already.
	・ Can the name of the Manager be resolved from the operation management client?	If the name cannot be resolved, add the name and IP address of the Manager to the hosts file on the operation management client.
1074266112	・ Has the power to the Manager been turned off?	Turn the power to the Manager on if it has been turned off.
	・ Has the IP address of the Manager been set up incorrectly on the operation management client?	The IP address of the Manager is specified in the following registry key. Check if the content of this key is correct.

Error code	Check item	Action
		\\HKEY_LOCAL_MACHINE\SOFTWARE \Fujitsu\SQC-C\CurrentVersion\Settings \ManagerIP-Address If the wrong IP address has been specified, specify the correct IP address using the method described in 17.3.2 Changing the IP address of the Manager that is recognized by operation management clients.

6.4.3   Application errors with tclsh84

The tcl84.exe application may produce the following kind of application error on a Manager or an Agent.

・ "The application failed to initialize properly (0xc0000142)."

This problem may occur because the desktop heap on the Manager or Agent is not large enough. In this case, increase the size of the desktop heap using the method explained in 6.4.2.1 How to increase the size of the desktop heap.

6.4.4   PDB maintenance processing

Data in the PDB for which the retention period (described in 2.4 Manager) has elapsed is deleted from the PDB by the PDB maintenance processing that is executed everyday at 2:00 am.

While PDB maintenance processing is in progress, access to the PDB (such as executing PDB commands or displaying the Monitor, Drill Down or Report views in the Console window) may become temporarily impossible.

In this case, repeat the operation after the PDB maintenance processing has completed.

6.4.5   If Management Console buttons become inoperable

Description of problem

When Internet Explorer 7 is used to operate buttons on ETERNUS SF Disk Space Monitor's Management Console, the message "This website is using a scripted window to ask you for information. If you trust this website, click here to allow scripted windows." may appear in Internet Explorer's Information Bar and the Management Console buttons may become inoperable.

Cause

This message appears because Internet Explorer 7 is designed to block popup windows that are generated separately by javascript.

Action

Click Internet Explorer's Information Bar and select **Temporarily Allow Scripted Windows**.

6.4.6   If messages output by ETERNUS SF Disk Space Monitor fail to appear in the status bar

Description of problem

When ETERNUS SF Disk Space Monitor 's Management Console is displayed in Internet Explorer 7, messages output by ETERNUS SF Disk Space Monitor may fail to appear in the status bar.

Cause

Internet Explorer 7 features a new security item that determines whether to allow status bar updates by means of scripts. The default settings of this item are as follows:

・ Do not allow updates in the "Internet" zone

・ Allow updates in the "Local intranet" zone

In some cases, automatic detection of the intranet may also malfunction and cause the Management Console to operate at the security level of the Internet zone. All of these reasons can prevent messages from appearing in the status bar.

Action

1. Select **Internet Options** from the **Tools** menu of Internet Explorer 7.

2. When the **Internet Options** window appears, click the **Security** tab and select the **Local intranet** zone.

3. Click the **Sites** button to display the **Local intranet** dialog box and then clear the **Automatically detect intranet network** check box and select all the remaining check boxes. Click the **OK** button to apply the settings.

6.4.7　　If a dialog box appears when the user attempts to copy a report

Description of problem

1. Click the Copy button in the On-demand Report view and the Scheduled Report Registration View.

2. Enter a report name in the report name input dialog box that appears and click the **OK** button.

3. A new window containing no information will appear together with a dialog box entitled **The webpage you are viewing is trying to close the window. Do you want to close this window?**.

Note that even when this problem occurs, the report copy process will be executed normally.

Cause

Internet Explorer 7 features security enhancements relating to window closures that are performed using javascript. As a result of these enhancements, window closures that occurred automatically in earlier versions of Internet Explorer now have to be performed manually.

Action

When the dialog box entitled **The webpage you are viewing is trying to close the window. Do you want to close this window?** appears, click the **Yes** button to close the window manually. Note, however, that leaving the window open will not have any adverse effect on operation.

Part 3　User's Guide

Part III explains how to use the **Console** window, **Report** view and **Setting** view that make up the operational interface of ETERNUS SF Disk Space Monitor.

- **Console**

  This is the main window of the product. The **Console** window is equipped with tools to start other report and new console windows, and a display area. The display area contains the following two types of display:

  - **Monitor** view, which enables the user to quickly grasp the operational status of the entire system

  - **Drill Down** view, which displays detailed information when a problem occurs.

- **Report view (On-Demand and Scheduled)**

  This window outputs regular reports for periodic reporting and inspection purposes. The following three categories of reports are provided. Their selection depends on the precision of the information and the purpose of the report.

  - Full system inspection report

  - Categorized diagnostic report

  - Detailed report

  The following three types of Report view are available, as determined by the execution method:

  - **On-Demand Report**: A window for generating and displaying reports when they are needed

  - **Scheduled Report**: A window for viewing reports that are issued automatically according to a schedule

  - **Scheduled Report Registration View**: A window for registering scheduled reports

- **Admin Console**

  The **Admin Console** window can only be used by administrators. It is made up of the **Console Definitions** tab and the **User Definitions** tab.

Chapter 7   Console

This chapter explains how to use the Console.

7.1   Starting the Admin Console

The **Admin Console** window is started by specifying the following URL in a Web browser.

> http://*host name of the operation management client*/SSQC/XXX.html

The "XXX" part is the user name that was registered with the **Admin Console** window.

To make separate basic authentication settings for each user, refer to 16.3 How to Set Up Basic Authentication for Operation Management Clients.

The Console can also be started by clicking the **Console** button from the **Console Definitions** tab.
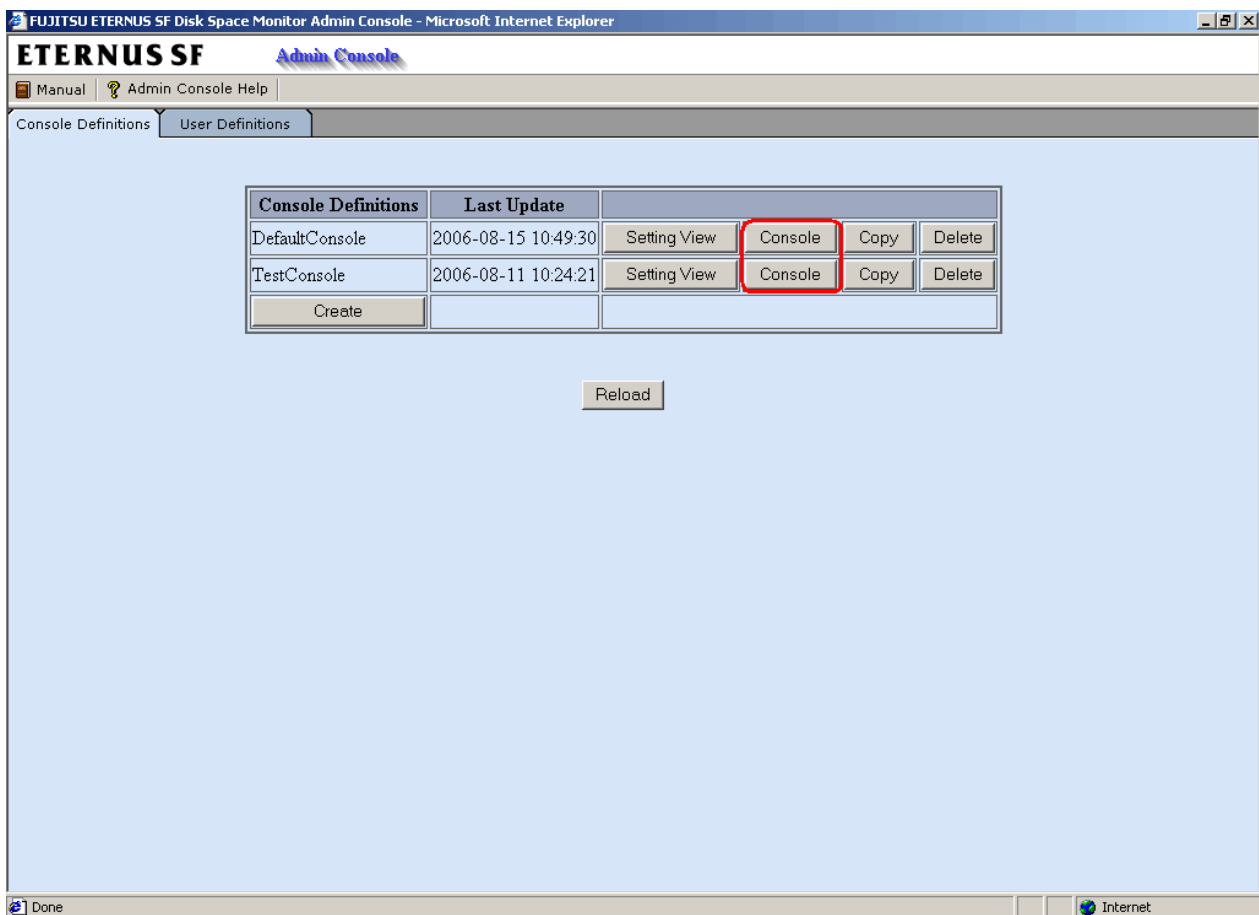
P Point

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To prevent the browser menu bar and address bar from being displayed, the initial window opened by specifying the URL starts the Console in a separate window and then closes.

Note, however, that depending on the specifications of the browser used, the following message box may appear when the initial window closes.

If this message box appears, click the **Yes** button to close the unnecessary window.

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Note

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- If the browser is equipped with a pop-up blocking function, the Console will not open in a separate window. The pop-up blocking function should be disabled in such cases.

- The Console uses JavaScript. If JavaScript is not enabled, the Console will not open in a separate window. JavaScript should be enabled in such cases.

- Do not use the pop-up context menu that is displayed when the right mouse button is clicked to perform operations on the Console window.

. . . .

7.2   Window Configuration

When the Console is started, the following Console window will appear.
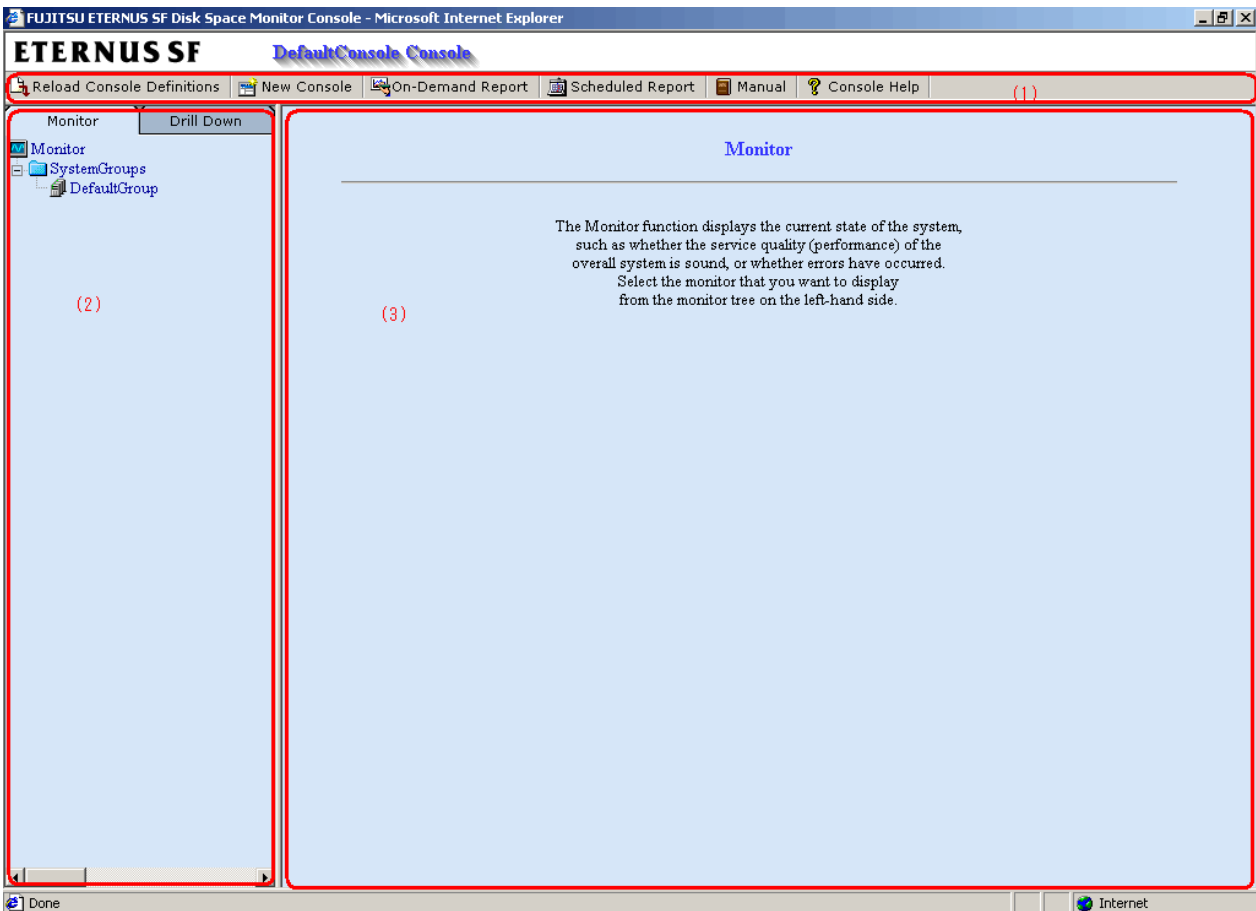
The Console is organized as shown in the following table.

Item No.	Component	Description
(1)	Toolbar	The toolbar provides the following menus: ・ **Reload Console Definitions** 　- Reloads the console definitions ・ **New Console** 　- Opens a new Console. ・ **On-Demand Report** 　- Opens the **On-Demand Report** view ・ **Scheduled Report** 　- Opens the **Scheduled Report** view ・ **Manual** 　- Opens the User's Guide (this manual). ・ **Console Help** 　- Opens the Console section of the User's Guide (this chapter) directly.
(2)	Tree display area	The **Monitor** view and the **Drill Down** view are displayed in tree structure. It is possible to switch between the two display functions by clicking the relevant tabs. By default, the **Monitor** view will be displayed when the Console is first opened.
(3)	Content display area	When a node in the tree is selected, the corresponding content of the **Monitor** or **Drill Down** view will appear in this area.

The **Console** provides two display functions: **Monitor** view and **Drill Down** view.

These functions are explained in the following two sections.

7.3　Monitor View

The **Monitor** view displays representative information to enable the user to understand the current status of the entire system.

The **Monitor** view is explained below

7.3.1　Description of the Monitor tree

The **Monitor** tree display consists of the following levels.

Level	Description
Top tree	This is the default level that is displayed when the **Monitor** view is selected. It displays **Monitor**, which is the root of the tree, and the system groups. When the System Group node is selected, the display switches to the system group tree.
System group tree	The system group tree shows all the monitors that can be displayed in the system group, as well as the Agents under it.

Level	Description
	At the top of the system group tree is a Back node that can be used to return to the previous level.
	When the Agent node is selected, the display switches to the Agent tree.
Agent tree	All monitors that can be displayed from the Agent tree are shown here.
	At the top of the tree is a Back node that can be used to return to the previous level.

Note

If an Agent or system group that has already been deleted using another definition window is selected from the current Console tree display, the following message will be displayed and the top tree will then be displayed (in its initial state).

"The node selected is not exist. The tree is initial displayed."

The following table lists the icons that are used to display the nodes making up the tree.

Icon	Meaning
	Indicates the **Monitor** view (tree root) and each monitor.
	Indicates that the node is used to return to the previous level.
	Indicates a folder used to store collected information.
	Indicates a system group.
	Indicates individual servers such as Agents.

7.3.1.1   Reloading the Monitor tree

The following methods can be used to reload the Monitor tree. The method that is selected depends on the objective.

Objective	Method
Default reload	The Monitor tree can be reloaded in its default state by clicking the **Monitor** tab.
Reload System Group, Agent tree	If the system group or Agent tree is displayed, the Monitor tree can be reloaded without changing the tree hierarchy by selecting the target node.

7.3.2　Basic operation
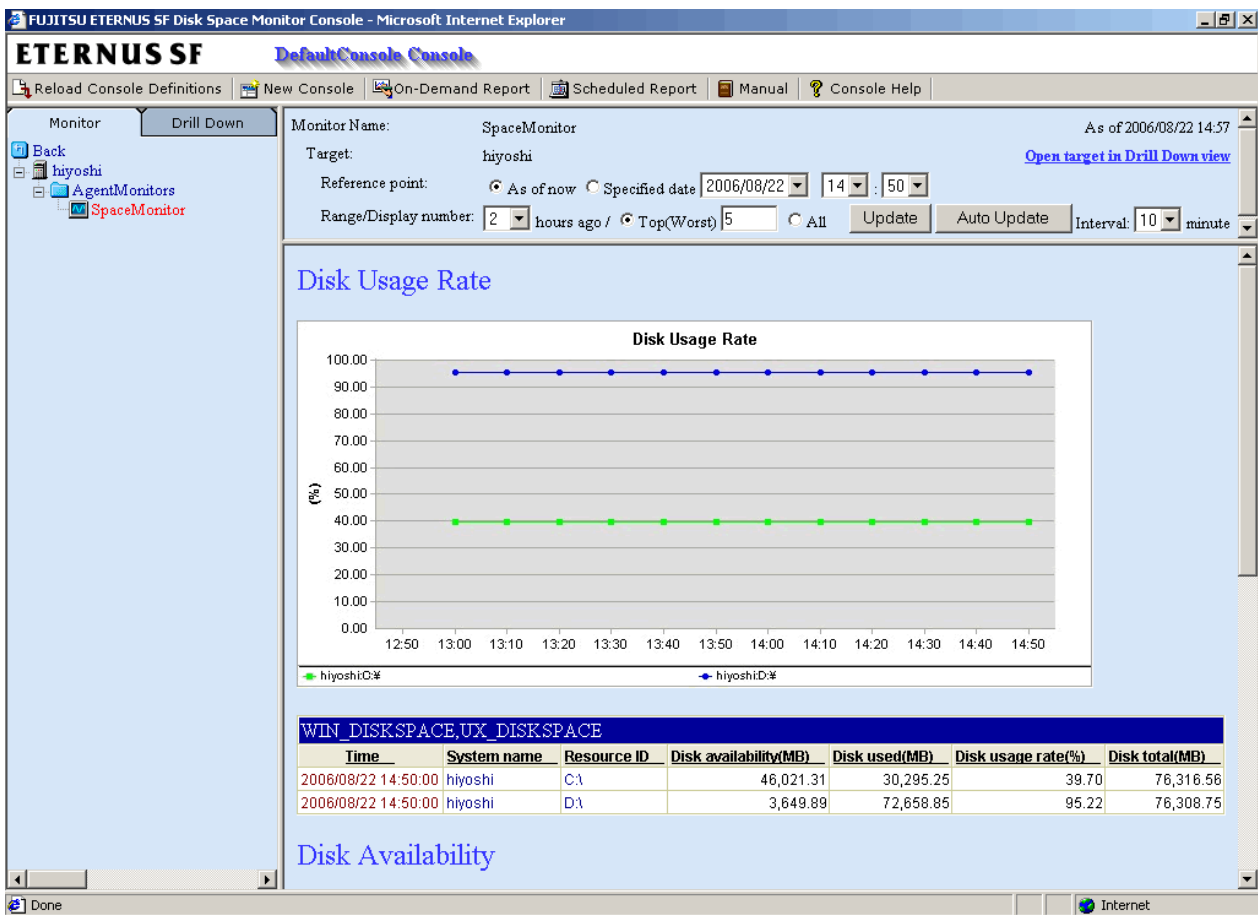
When a monitor to be displayed is selected in the Monitor tree on the left, the monitored content will be displayed on the right.

While the content is being generated, the message "Now generating contents" will appear in the status bar.

While this message is displayed, the **Update** and **Auto Update** buttons will be disabled.

7.3.2.1　Manual Update and Auto Update

The Monitor can be manually or automatically updated with the most recent information.

The options shown in the following table can be specified when performing the update process.

Option	Description
Reference point	Select the reference point for displaying the Monitor. The following reference points can be selected: **As of now**, **Specified date** If **As of now** is selected, the Monitor will be displayed with the current time as the reference point. If **Specified date** is selected, any time in the next three days can be selected as the reference point.
Range/Display number	Select the display range as the number of hours leading up to the present time. The following display periods can be selected: ・ 1, 2, 4, 8, 12, 18 and 24 hours The default period is 2 hours.

Option	Description
	For the number of display items, either "All" or an arbitrary number of items can be specified.
	P Point
	For the disk usage rate to prevent the high utilization of the disk etc, the number of data items to display in the report is extracted by a high-ranking number.
	For the free disk space to prevent full disk usage etc, the number of data items to display in the report is extracted by a low-ranking number.
	The number of data items to display to be displayed in the report is about up to 20.
	It becomes difficult to distinguish because the display area and the line in the report increase when the number of data items is any more.
Interval (for Auto Update)	Select the interval to be used in auto updates.
	The following update intervals can be selected:
	・ 1, 3, 5 and 10 minutes
	The default value is 10 minutes. Note that if the current content of the **Monitor** view is still being displayed when the next automatic refresh is due, then this next refresh will be skipped, and the content will be updated with the following refresh.

To remove the need to specify the same option many times, once an option is specified, it is inherited by other monitors.

P Point

If it is necessary to open multiple Consoles to display different types of monitors at the same time and view them at different automatic update intervals, and if Internet Explorer is the browser being used, the different options can be specified by starting Internet Explorer separately from the **Start** menu. If a new Console is opened from the Console toolbar, the options of the parent Console that is already open will be inherited.

7.3.2.2　Opening targets in Drill Down view

When the content of a monitor is displayed, a link entitled **Open target in Drill Down view** will be displayed in the top-right of the content window.

When this link is clicked, a Console will open with the target selected by the monitor selected in Drill Down mode.

This function makes it possible to quickly open a drill down view when a problem is detected by a monitor.

7.3.3　Content-related operation methods

This section explains the operations that can be performed on displayed monitor content.

Table sorting

When the header section of any column in a table displayed in monitor content is selected, the table can be sorted using the selected column as the sort key.

Sorting can be toggled between ascending and descending order.

Note

・ Numerical sorts operate correctly only when all the values in the specified column are numerical values. Sorting cannot be performed correctly if the column contains non-numerical data such as null values.

・ Date and time sorts cannot be performed correctly if the number of digits (yyyy/mm/dd hh:mm:ss, etc.) is not uniform throughout the column. Care must be taken when data has been imported from user data.

Data download

The following link is available at the bottom of the Monitor contents:

・ data download

This link can be used to download the data in the range displayed in CSV format.

7.3.4　　Monitor types

The following table lists the types of monitors that are available.

It also indicates whether the monitor can be used for the different display targets.
(SG: System Group, Agt: Agent)

SG	Agt	Monitor name	Outline
Yes	Yes	SpaceMonitor	Summary of space information
Yes	Yes	UserDataMonitor	Information about user data

 P **Point**

System Group monitors collectively display information about Agents registered with the System Group.

Note that only those monitors that can be displayed for the display targets will appear in the tree.

 P **Point**

Monitors for which correct configuration information cannot be collected will not appear in the tree, even if they do exist.

Refer to 2.4 Manager andChapter 19 Data Formats

for details on the information displayed in the **Monitor** view.

7.4　　Drill Down View

The **Drill Down** view displays a variety of detailed information in chronological order based on the time that a problem occurred.

This section explains the Drill Down function.

7.4.1　　Description of the Drill Down tree

The Drill Down tree display consists of the following levels.

Level	Description
Top tree	This is the default level that is displayed when the **Drill Down** view is selected. It displays **DrillDown**, which is the root of the tree, and the system groups. When the System Group node is selected, the display switches to the system group tree.
System group tree	The system group tree shows the system group and the Agents under it. At the top of the system group tree is a Back node that can be used to return to the previous level.

Level	Description
	When the Agent node is selected, the display switches to the Agent tree.
Agent tree	These trees show the entire configuration under the Agent. At the top of the system group tree is a Back node that can be used to return to the previous level.

Note

If an Agent or system group that has already been deleted using another definition window is selected from the current Console tree display, the following message will be displayed and the top tree will then be displayed (in its initial state).

"The node selected is not exist. The tree is initial displayed."

The following table lists the icons that are used to display the nodes making up the tree.

Icon	Meaning
	Indicates the **Drill Down** view (root of tree) and each Drill Down view item.
	Indicates that the node is used to return to the previous level.
	Indicates a folder used to store collected information.
	Indicates a system group.
	Indicates individual servers such as Agents.
	Indicates an instance defined by a middleware product, etc.
	Indicates a related tool.
	Indicates a node for which information is being set. Settings are made in the same way as for the **Setting View**. Refer to Section 9.2, "Setting View". **Note** Settings for the Drill Down tree remain in effect until the Console is closed. Console definitions made here cannot be saved. To save Console definitions, use the **Setting View**.

7.4.1.1   Reloading the Drill Down tree

The following methods can be used to reload the Drill Down tree. The method that is selected depends on the objective.

Objective	Method
Default reload	The Drill Down tree can be reloaded in its default state by clicking the **Drill Down** tab.
Reload system group, Agent tree	If the system group or Agent tree is displayed, the Monitor tree can be reloaded without changing the tree hierarchy by selecting the target node.

7.4.2　Basic operation
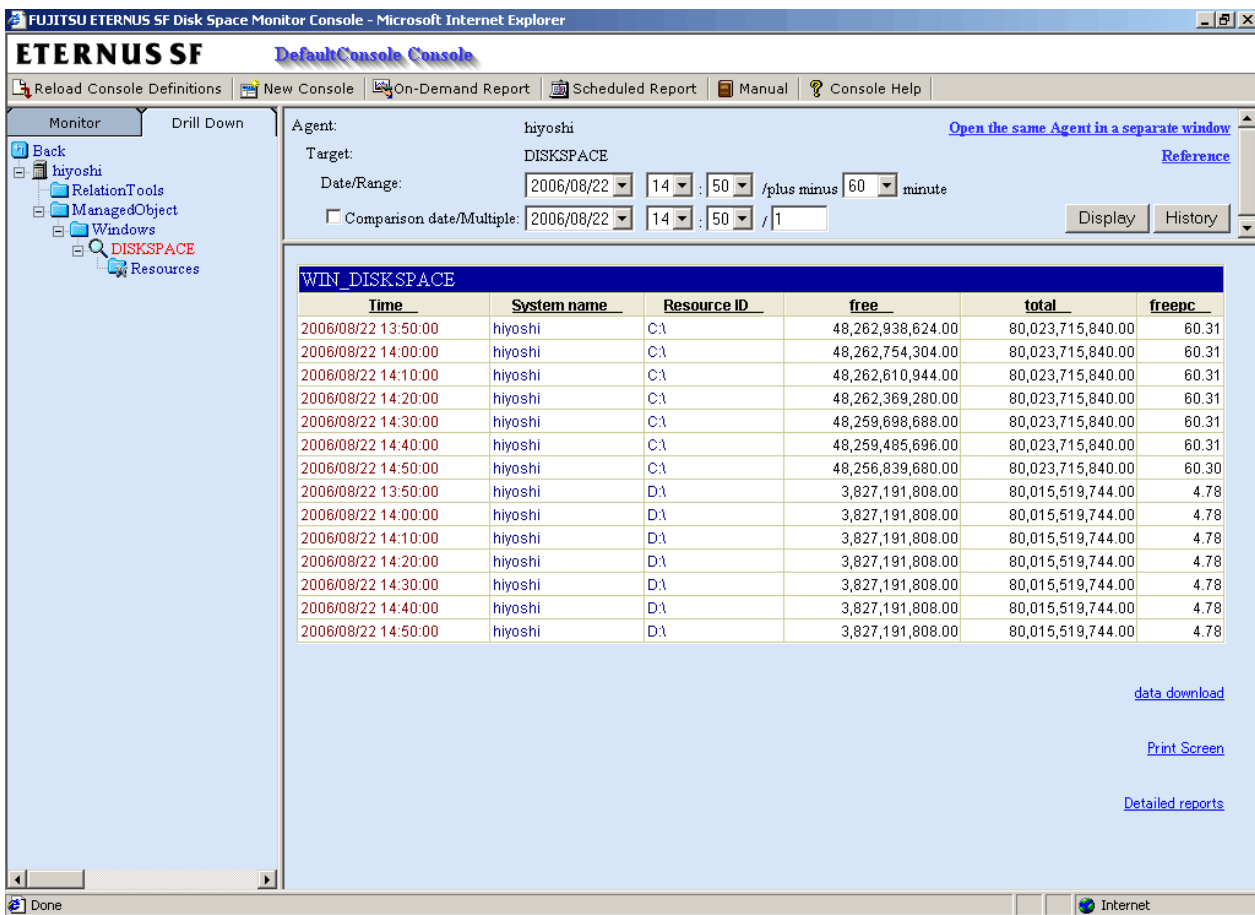
To display drill down content, select an item from the display targets in the **Drill Down** tree on the left, specify the appropriate date/range options at the top of the right window and then click the **Display** button.

While the content is being generated, the message "Now generating contents" will appear in the status bar.

While this message is displayed, the **Display** button will be disabled.

The following table lists the options that can be specified.

Option	Description
Date	Select the time that will be used as the starting point for the Drill Down view.
	A time up to one week prior to the present time can be selected. The current time is selected by default when the window is opened.
Range	This option is used to select how many minutes either side of the starting point will be used as the drill down display range.
	The following display ranges can be selected:
	・ 180, 120, 60, 30, 10 and 0 minutes
	The default is 60 minutes.
	If "0" (minutes) is selected, the time specified in the **Date** option will be indicated by a pinpoint.
Comparison date	Select the time for which the Drill Down comparison display is to be made.
	Any time up to one week before the current time can be selected.
	The default time is the time when the window is opened.

Option	Description
	This item takes effect when the checkbox is selected.
Multiple	This item specifies whether to use emphasis (a red display) if the current information is a certain multiple of the comparison date/time information when a Drill Down comparison display is made.
	Real numbers between 0.001 and 1000 can be entered.
	This item takes effect when the checkbox is selected.
	P Point .... If a value less than 1 (between 0.001 and 0.999) is specified, information will be emphasized if it is less than the comparison date/time information. Example: To emphasize information that is less than half of the comparison date/time information, specify 0.5. The default value is 1. ....

To remove the need to specify the same option many times, once an option is specified, it is inherited by other Drill Down views.

7.4.2.1　Opening the same Agent in a separate window

When a node is selected in the Drill Down tree, a link entitled **Open the same Agent in a separate window** will appear in the top-right of the window.

By selecting this link, the currently selected Agent can be opened in the **Drill Down** view of a separate Console with the Agent already selected.

This enables other items in the same Agent to be displayed quickly.

7.4.2.2　History

When a node is selected in the Drill Down tree, a button labeled **History** will appear in the top-right of the window.

When the **History** button is clicked, the **Drill Down history list** window will be appear with the drill down information displayed in the past two hours shown.
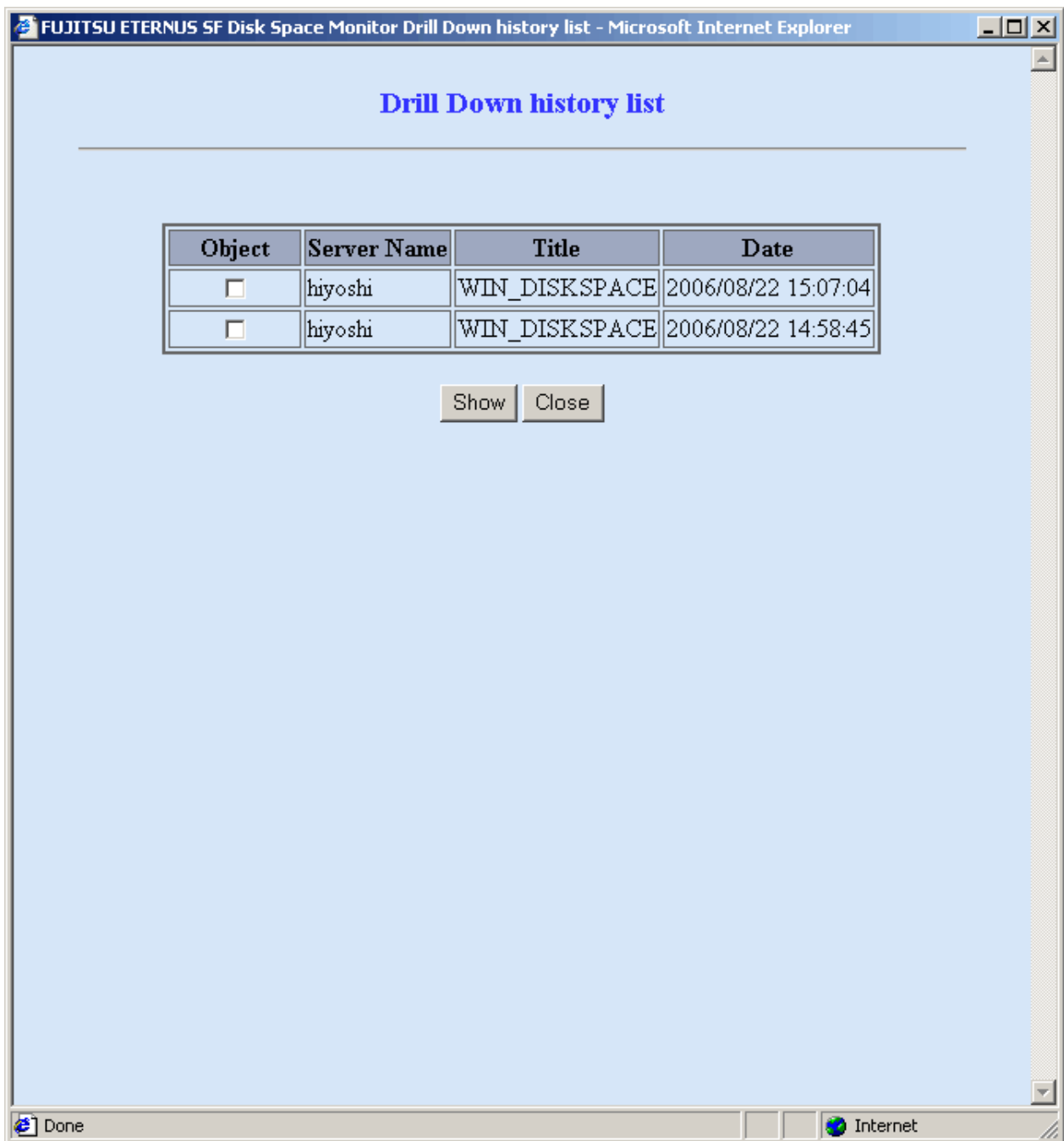
By selecting any of the check boxes shown in the list and clicking the **Show** button, the selected drill down content can be displayed in a single window.

This enables multiple items to be listed together and compared.

7.4.2.3 Displaying resources

Some of the nodes in the **ManagedObject** folder created automatically by collecting configuration information contain a **Resources** folder.
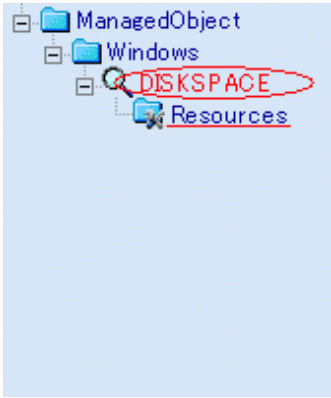
By defining resources for this type of node, the user can display the content of specific resources in the **Drill Down** view.

The following example shows the drill down content displayed when the DISKSPACE node, which is available by default, is selected.

By registering "Disk_C" as a resource node, the user can display the content of C: only.

Refer to 9.2.3.1.4 Resources for details on how to define resources.

7.4.2.4 Invoking related tools

If the RelationTools node is selected in the Drill Down tree, it is possible to invoke related tools that are registered with the **Setting** view.

Refer to 9.2.3.1.3 RelationTools for details on how to define related tools.

7.4.3 Content-related operation methods

This section explains the operations that can be performed on displayed Drill Down content.

7.4.3.1 Common operations

Table sorting

When the header section of any column in a table displayed in the Drill Down content is selected, the table can be sorted using the selected column as the sort key.

Sorting can be toggled between ascending and descending order.

📌 Note

. . . .

- ・ Numerical sorts only operate correctly when all the values in the specified column are numerical values. Sorting cannot be performed correctly if the column contains non-numerical data such as Null values.

- ・ Date and time sorts cannot be performed correctly if the number of digits (yyyy/mm/dd hh:mm:ss, etc.) is not uniform throughout the column. Care must be taken when data has been imported from user data.

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Data download/Print Screen

The following link is located underneath the Drill down content:

- data download
  This link enables the displayed range of data to be downloaded in CSV format.

- Print Screen
  This link is used to print the displayed content.

- Detailed Report

  This link calls a Detailed Report window for displaying a graph of the data currently displayed.

7.4.4   Drill Down types

The **Drill Down** view supports the items listed in the following table.

Item	Outline
Windows	Detailed Windows server space information
Solaris	Detailed Solaris server space information
Linux	Detailed Linux server space information
Symfoware	Detailed Symfoware Server space information
Oracle	Detailed Oracle Database Server space information
UserData	Information about user data

Refer to 2.4 Manager andChapter 19 Data Formats for details on the information displayed in the **Drill Down** view

Information
. . . .

Data formats can be viewed by clicking the **Reference** link shown in the top-right of the **Drill Down** view.
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7.5   Invoking Functions Directly

This section explains how to invoke the **Monitor** and **Drill Down** views directly.

Normally, to prevent the browser menu bar and address bar from being displayed, the initial window opened by specifying the URL starts the Console in a separate window and then closes.

Note, however, that depending on the specifications of the browser used, the following message box may appear when the initial window closes.
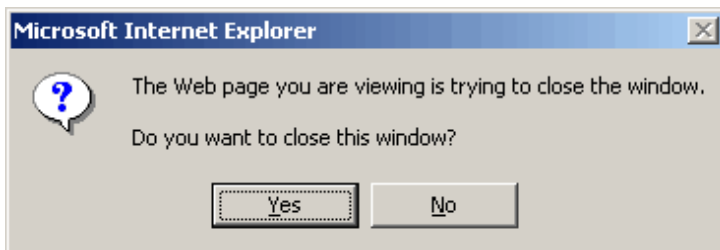
To prevent this message box from appearing, the direct function invocation method explained below uses the first window that is invoked.

For this reason, the standard toolbar of the browser is displayed.

7.5.1   Invoking the Monitor view

To invoke the **Monitor** view directly, add the following parameters.

XXX.html[?mode=monitor[&type=*TARGET_TYPE*&name=*TARGET_NAME* [&monitor=*MONITOR_NAME*]]]

The "XXX" part is the user name.

The meaning of each parameter is explained in the following table.

Parameter	Meaning
Mode	Specifies the function to be invoked. When invoking the **Monitor** view, this parameter is fixed as "monitor".
Type	Specifies the type and name (display name) of the target to be displayed.
Name	These two parameters are specified together as a set. The following types can be specified: ・ "SystemGroup" ・ "Agent" **P Point** ・・・ "Name" cannot specify some characters (such as #, ?, +, \and $) in an URL directly. Use URL encoding to specify any of these characters. ・・・ **Note** ・・・ If "SystemGroup" or "Agent" is specified for "Type", and if the object corresponding to the display name specified for "Name" does not exist, the following message will be displayed and the top tree (in its initial state) will then be displayed in the tree frame of the Console from which the **Monitor** view was invoked. "The node selected is not exist. The tree is initial displayed." ・・・
Monitor	Specifies the monitor name displayed in the Monitor tree. The monitor names that can be specified are explained in 7.3.4 Monitor types.

The content invoked by each parameter differs according to the extent of the specification.

The following table lists the various parameter combinations.

Invoked content	mode	type	name	monitor
Monitor view	Yes	No		No
Monitor target	Yes	Yes		No
Monitor content	Yes	Yes		Yes

Example of Monitor view invocation

If only the "function" parameter is specified, the Console will start up with the **Monitor** view function selected.

Sample URL entry for invocation:

http://client_host/SSQC/User1.html?mode=monitor

Sample startup window:
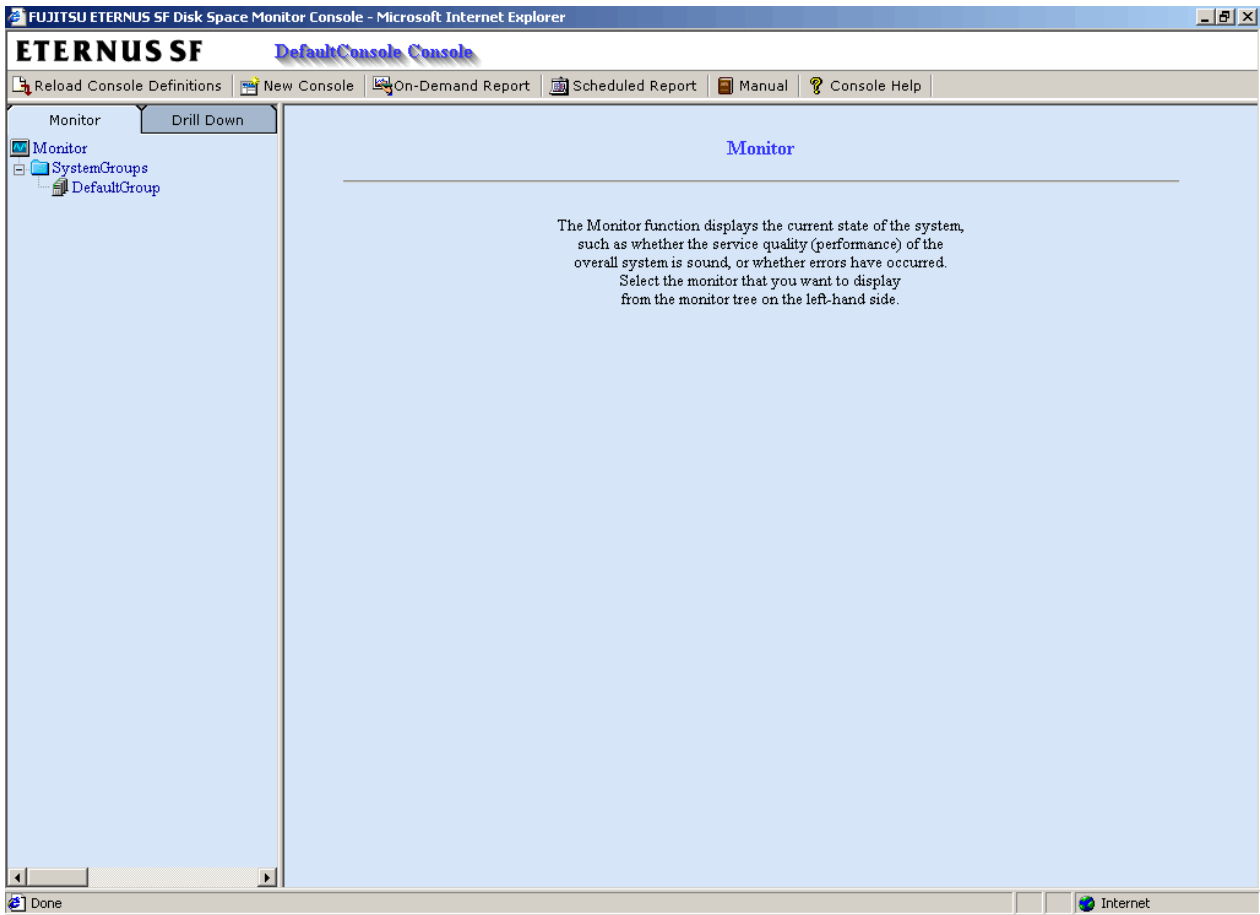
Example of monitor target invocation

When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Monitor tree.

After the Console has opened, monitor content can be displayed simply by selecting the various monitors in the tree.

Sample URL entry for invocation:

http://client_host/SSQC/User1.html?mode=monitor&type=Agent&name=italy

Sample startup window:
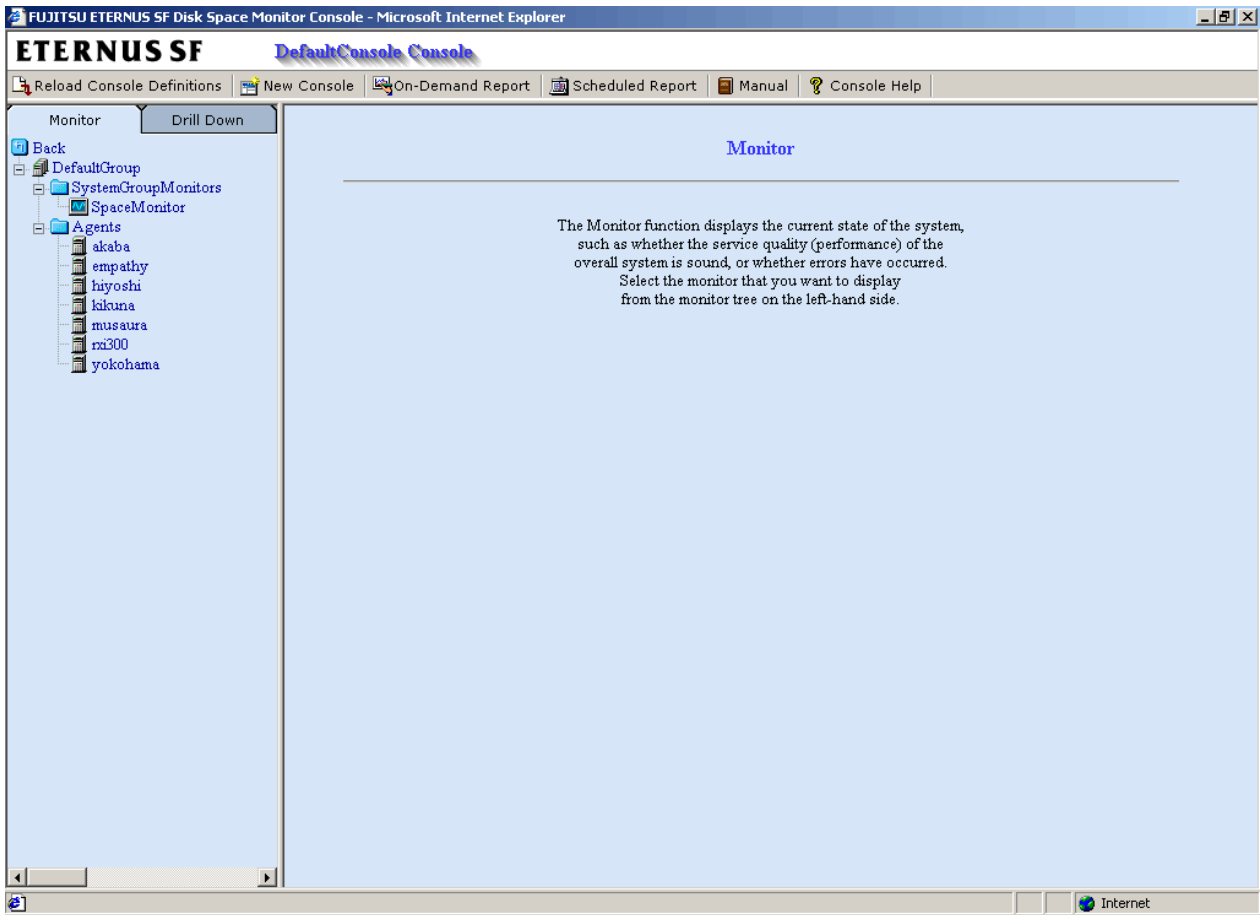
Example of monitor content invocation

When the "mode", "type/name" and "monitor" parameters are all specified, monitor content will be displayed directly.

Sample URL entry for invocation:

```
http://client_host/SSQC/User1.html?
mode=monitor&type=Agent&name=italy&monitor=ServerMonitor
```

Sample startup window:
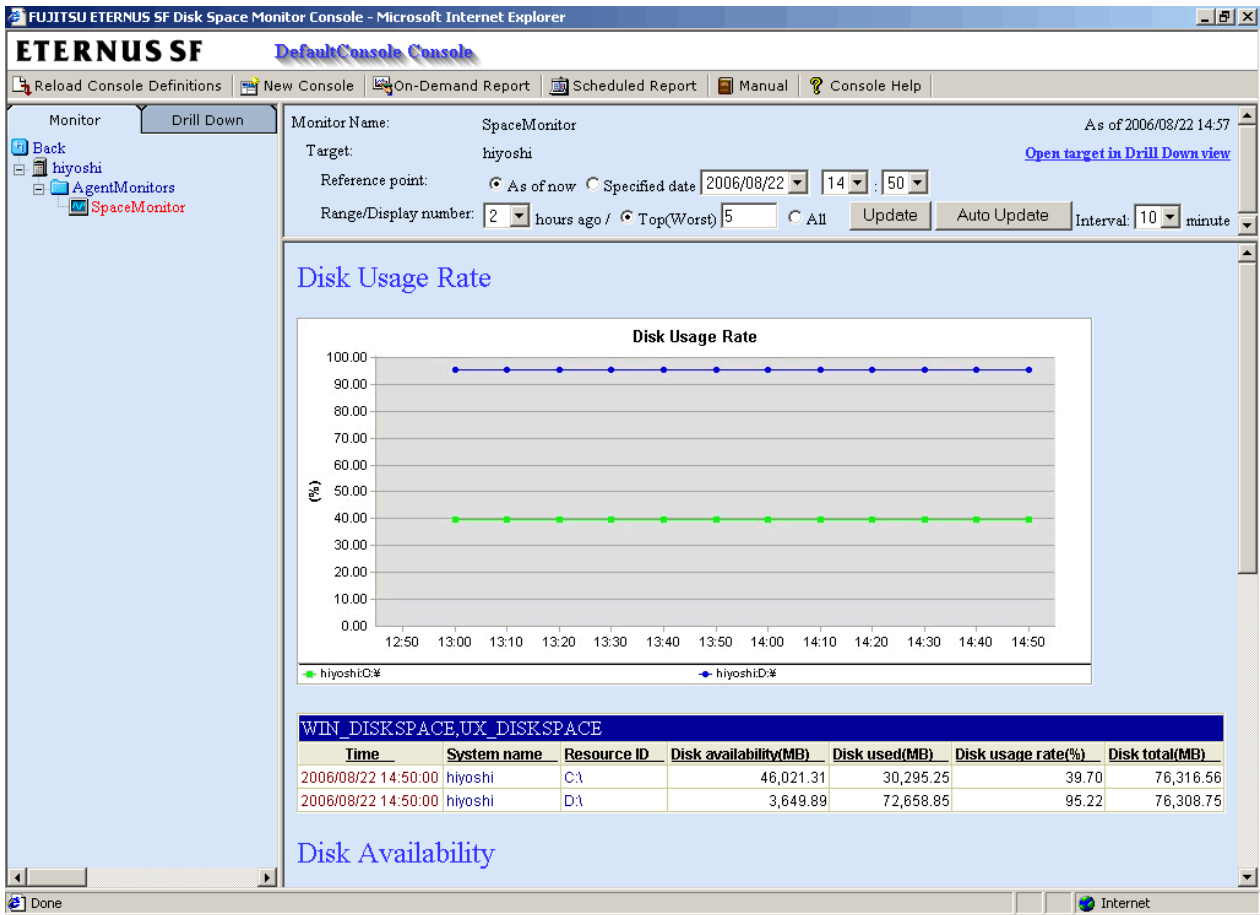
7.5.2 Invoking the Drill Down view

To invoke the **Drill Down** view directly, add the following parameters.

XXX.html[?mode=drilldown[&type=*TARGET_TYPE*&name=*TARGET_NAME*]]

The "XXX" part is the user name.

The meaning of each parameter is explained in the following table.

Parameter name	Meaning
Mode	Specifies the function to be invoked. When invoking the **Drill Down** view, this parameter is fixed as "drilldown".
Type	Specifies the type and name (display name) of the target to be displayed.
Name	These two parameters are specified together as a set. The following types can be specified: ・ "SystemGroup" ・ "Agent" ⒫ Point ・・・ "Name" cannot specify some characters (such as #, ?, +, \and $) in an URL directly. Use URL encoding to specify any of these characters. ・・・

Parameter name	Meaning
	🛈 **Note** ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯ If "SystemGroup" or "Agent" is specified for "Type", and if the object corresponding to the display name specified for "Name" does not exist, the following message will be displayed and the top tree (in its initial state) will then be displayed in the tree frame of the Console from which the **Drill Down** view was invoked. "The node selected is not exist. The tree is initial displayed." ⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯

The content invoked by each parameter differs according to the extent of the specification.

The following table lists the various parameter combinations.

Invoked content	mode	type	name
Drill Down view	Yes	No	
Drill Down target	Yes	Yes	

Example of Drill Down view invocation

If only the "mode" parameter is specified, the Console will start up with the **Drill Down** view function selected.

Sample URL entry for invocation:

```
http://client_host/SSQC/User1.html?mode=drilldown
```

Sample startup window:
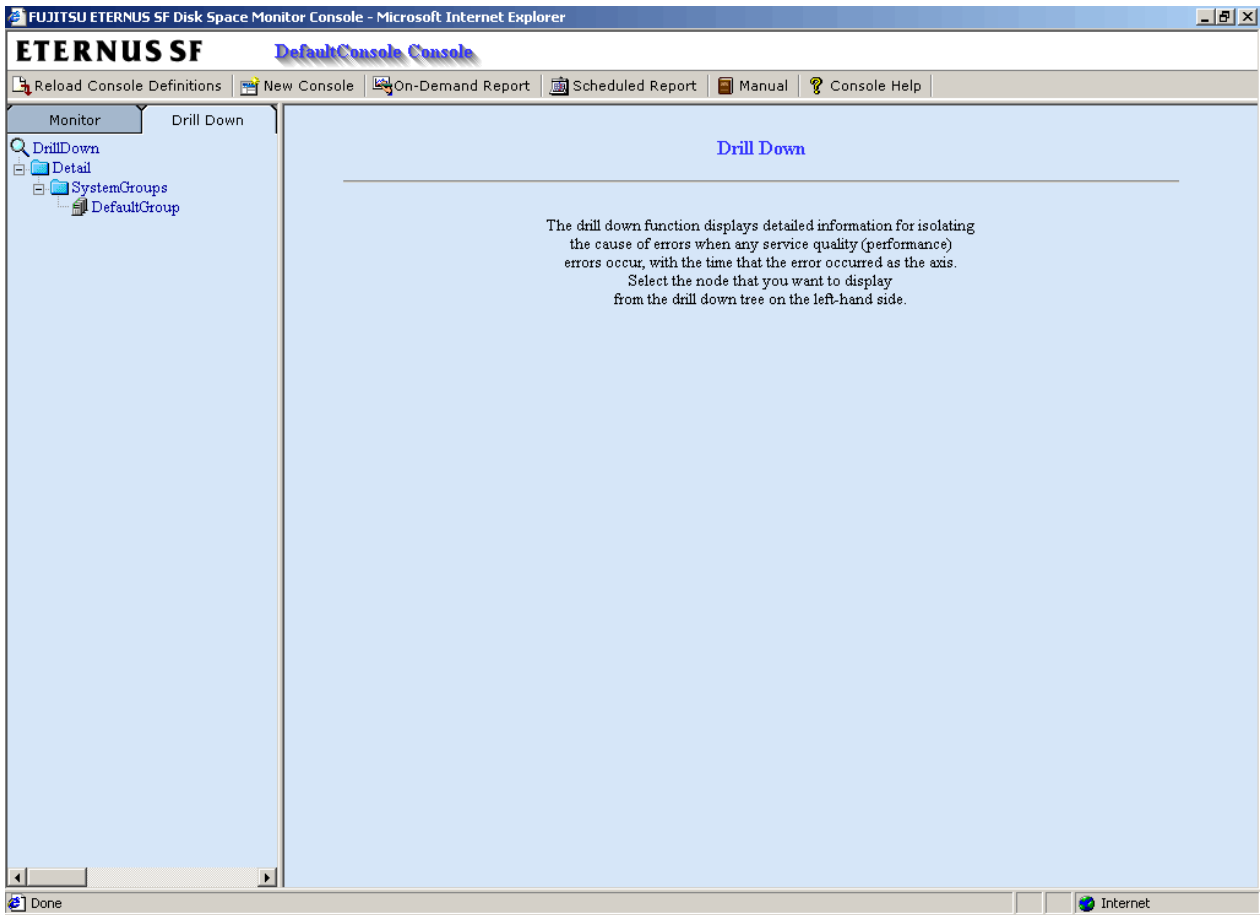
Example of drill down target invocation

When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Drill Down tree.

After the Console has started, drill down content can be displayed simply by selecting detailed parameters.

Sample URL entry for invocation:

http://client_host/SSQC/User1.html?mode=drilldown&type=Agent&name=italy

Sample startup window:
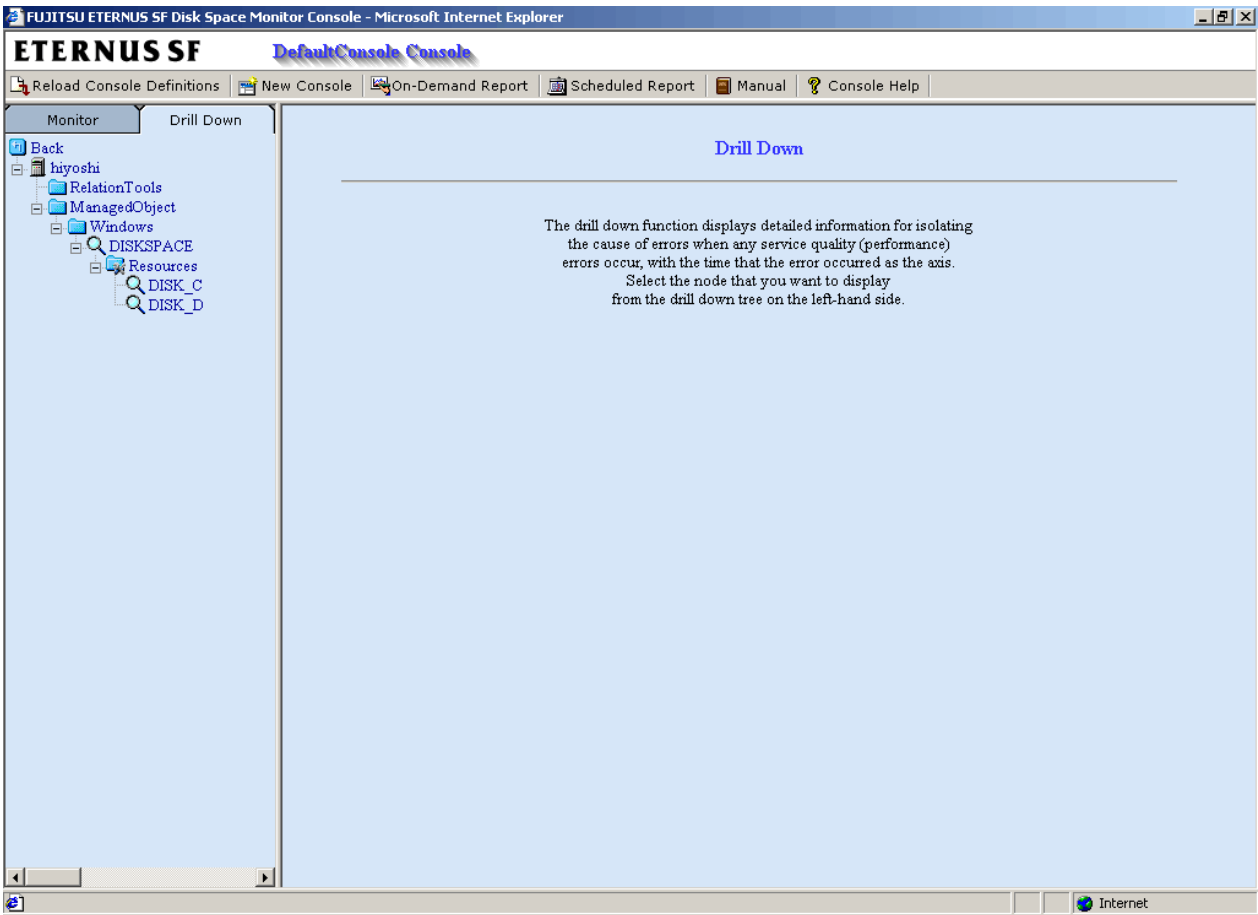
Chapter 8　　　Report View

This chapter explains how to use the different types of Report Views.

Report views can be divided into the On-Demand Report View, the Scheduled Report View and the Scheduled Report Registration View, depending on the reporting method.

This chapter will provide an overview of each type of report view and then explain the items that are common to both types.

8.1　　　On-Demand Report View

This section explains how to use the **On-Demand Report View**.

8.1.1　　　Starting the On-Demand Report View

The **On-Demand Report View** is started by selecting **On-Demand Report** from the toolbar in the Console window.
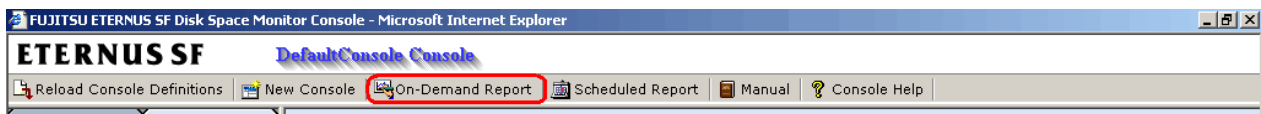
Note

Do not perform operations in the **On-Demand Report View** using the pop-up context menu that appears when the right mouse button is clicked.

8.1.2　　　Window Configuration

The **On-Demand Report View** will appear as below.

The **On-Demand Report View** is organized as shown in the following table.

Item No.	Component	Description

(1)	Toolbar	The toolbar provides the following menus:
		
		・ **Reload Console Definitions**
		
		  - Reloads the console definitions
		
		・ Manual
		
		  - Opens the User's Guide (this manual).
		
		・ Report Help
		
		  - Opens the section of the User's Guide that deals with using the Report views (this chapter).

(2)	New Report tab	Can be used to create, edit, copy and delete an on-demand report. It can also be used to register reports that are used frequently.
(3)	Report History tab	Can be used to display the history of previously created reports.

The windows associated with each tab are explained below.

8.1.3 New Report tab

The **New Report** tab can be used to perform the following operations.

・ Creation
On-demand reports can be immediately created and displayed. The on-demand reports that are created can later be displayed using the **Report History** tab.

・ Registration
On-demand reports created according to the desired conditions can be registered with a name. Registered on-demand reports can be recreated later at any time.

・ Edit
The conditions of registered on-demand reports can be edited.

・ Copy
Registered on-demand reports can be copied.

・

・ Deletion
Registered on-demand reports can be deleted.
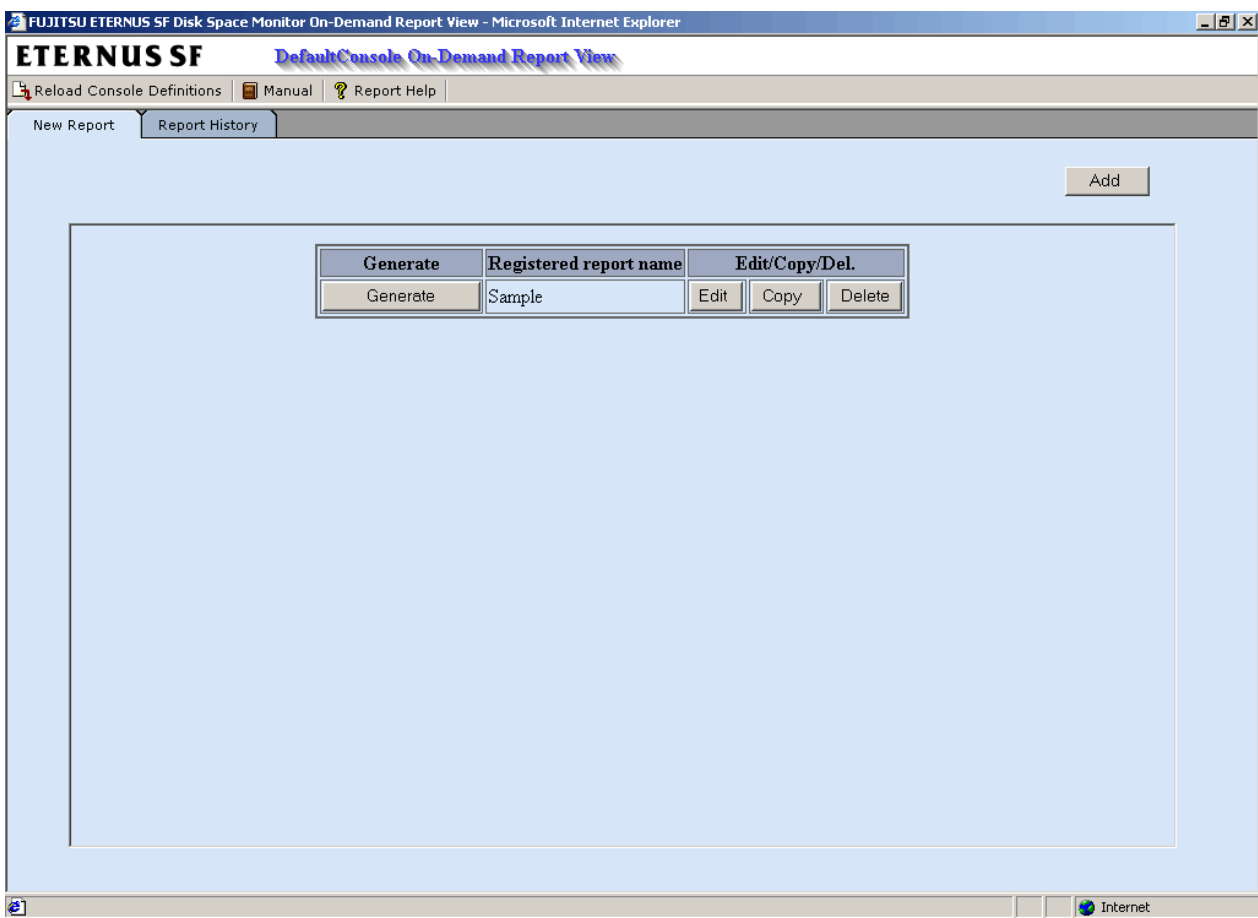
The **New Report** tab provides the following buttons that correspond to the operations described above.

Button	Operation
Generate	Opens the window for creating a new report immediately.
	This window can be used to create reports based on specified conditions.
Add	Opens the report registration window in its default state to register an on-demand report created according to the desired conditions.
	The report registration window allows the user to specify the desired report conditions and register the report using a name.

Button	Operation
	It can also be used to run a test display to check that the specified report conditions are correct.
Edit	Displays a report registration window with existing report conditions specified to enable the registered on-demand report conditions to be edited.
	The report registration window allows report conditions to be edited, overwritten and then registered.
	It is also possible to run a test display to check that the specified report conditions are correct.
Copy	Copies registered on-demand reports.
	When the **Copy** button is clicked, the **Copy of registered report** dialog box will be displayed. Enter the report name to be assigned to the copy, and then click the **OK** button.
Delete	Deletes a registered on-demand report.

Refer to 8.5 Using the Report Creation and Registration Windows for details on how to use the report creation window.

8.1.4　Report History tab

The **Report History** tab can be used to perform the following operations.

・Display
On-demand reports created at the **New Report** tab can be displayed.
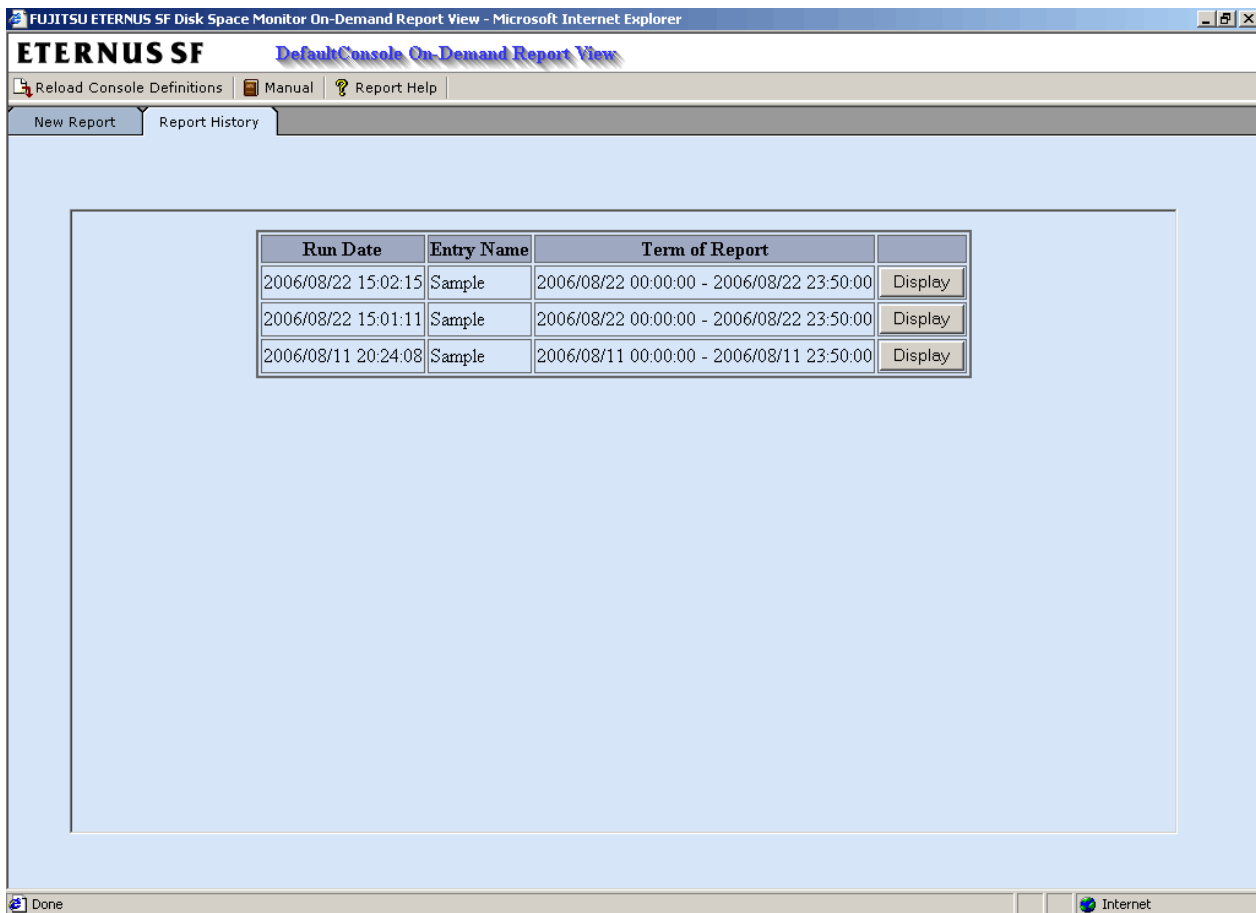
The **Report History** tab provides the following button that corresponds to the operation described above.

Button	Operation
Display	Displays the corresponding on-demand report that was created previously.

The on-demand report history can store up to 50 reports.

If this number is exceeded, reports will be automatically deleted in chronological order.

Point
. . . .

If it is necessary to keep a report, click the **Display** button to open the display window, then use the **File** menu of the browser to save the report to any folder.
. . . .

8.2 Scheduled Report View

This section explains how to use the **Scheduled Report View**.

8.2.1 Starting the Scheduled Report View

The **Scheduled Report View** is started by selecting **Scheduled Report** from the toolbar in the Console window.
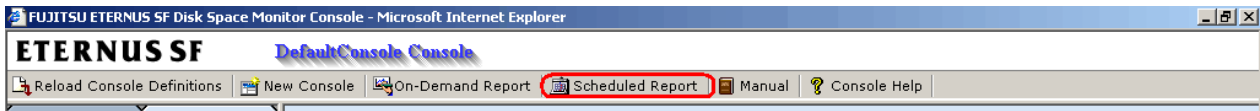
Note
. . . .

Do not perform operations in the **Scheduled Report View** using the pop-up context menu that appears when the right mouse button is clicked.
. . . .

8.2.2 Window configuration

The **Scheduled Report View** window will appear as below.

The **Scheduled Report View** is organized as shown in the following table.

Item No.	Component	Description

(1)	Toolbar	The toolbar provides the following menus:
		
		・ Reload Console Definitions
		
		   - Reloads the console definitions
		
		・ Manual
		
		   - Opens the User's Guide (this manual).
		
		・ Report Help
		
		   - Opens the section of the User's Guide that deals with using the Report views (this chapter).

(2)	Daily Report tab Weekly Report tab Monthly Report tab	These tabs are used to display daily, weekly and monthly scheduled reports created with the scheduled report creation command.

The windows associated with each tab are explained below.

The following sections also explain the scheduled report creation command that is used to create scheduled reports and the scheduled report deletion command that is used to delete scheduled reports

8.2.3   Daily Report, Weekly Report and Monthly Report tabs

The **Daily Report**, **Weekly Report** and **Monthly Report** tabs perform the following operation.

・ Display

Scheduled reports created with the scheduled report creation command can be displayed.
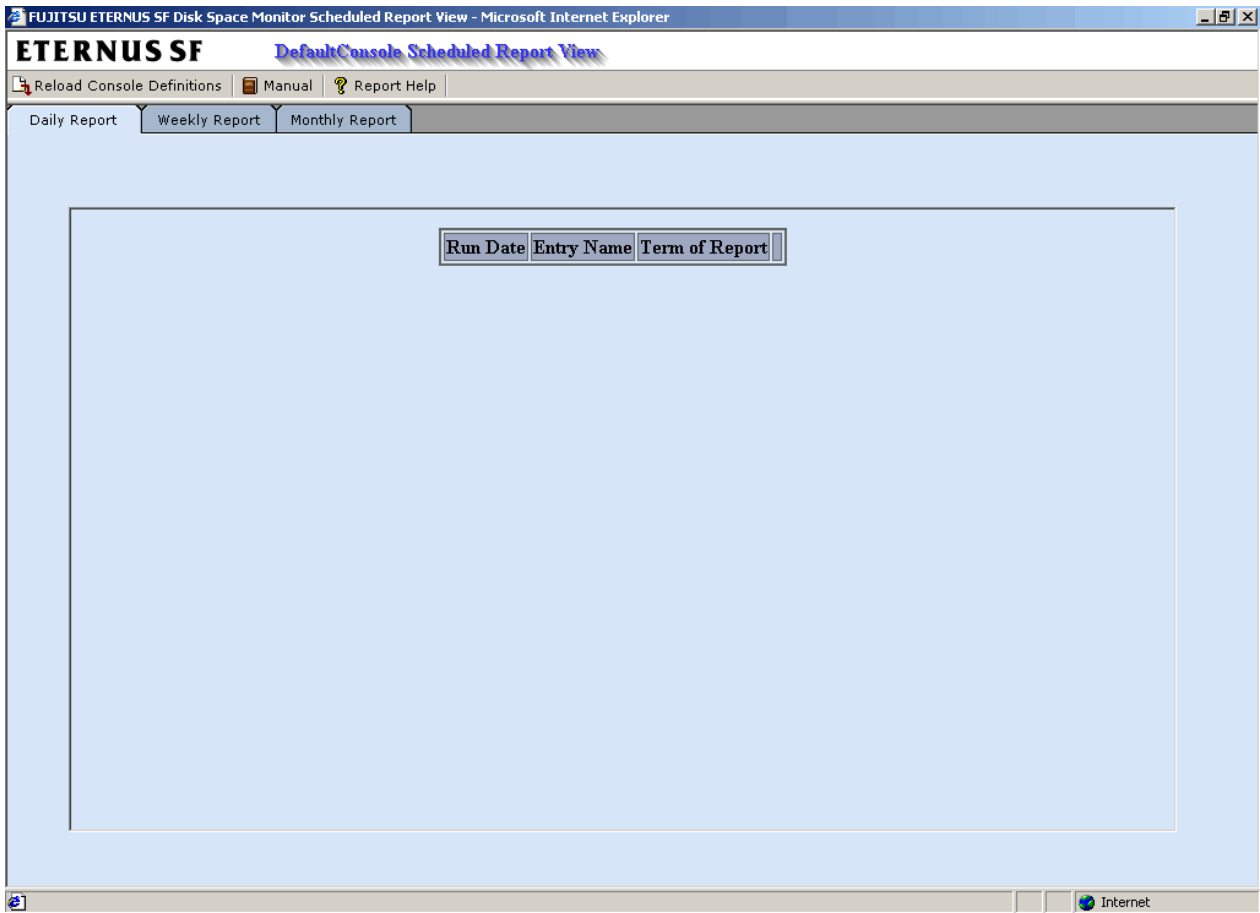
The **Display** tab provides the following button that corresponds to the operations mentioned on the previous page.

Button	Operation
Display	Displays scheduled reports created with the scheduled report creation command.

From the viewpoint of disk space maintenance, it is recommended that reports be deleted automatically by scheduling regular execution of the scheduled report deletion command

Refer to Section 8.4.2 sqcDeleteReport (scheduled report deletion command) and 8.4.2.1 Example of registration with scheduler for details on automatic deletion methods.

Point

If it is necessary to keep a report, click the **Display** button to open the display window, then use the **File** menu of the browser to save the report to any folder.

Folders to which reports have been saved can also be backed up in their entirety.

Refer to 8.4.3 Backing up reports for details.

8.3   Scheduled Report Registration View

This section explains how to use the **Scheduled Report Registration View**.

8.3.1 Starting the Scheduled Report Registration View

To display the **Scheduled Report Registration View**, first display the **Setting View** by clicking the **Setting View** button in the **Console Definitions** tab of the **Admin Console** window, and then select **Scheduled Report Registration** from the toolbar in the **Setting View**.
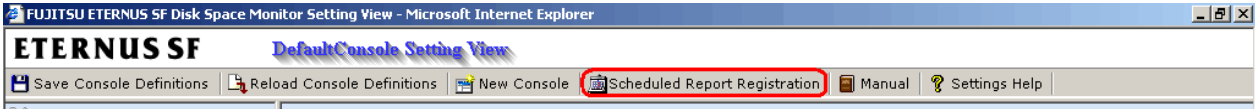
![Note]

Do not perform operations in the **Scheduled Report Registration View** using the pop-up context menu that appears when the right mouse button is clicked.

8.3.2 Window configuration

The **Scheduled Report Registration View** will appear as below.
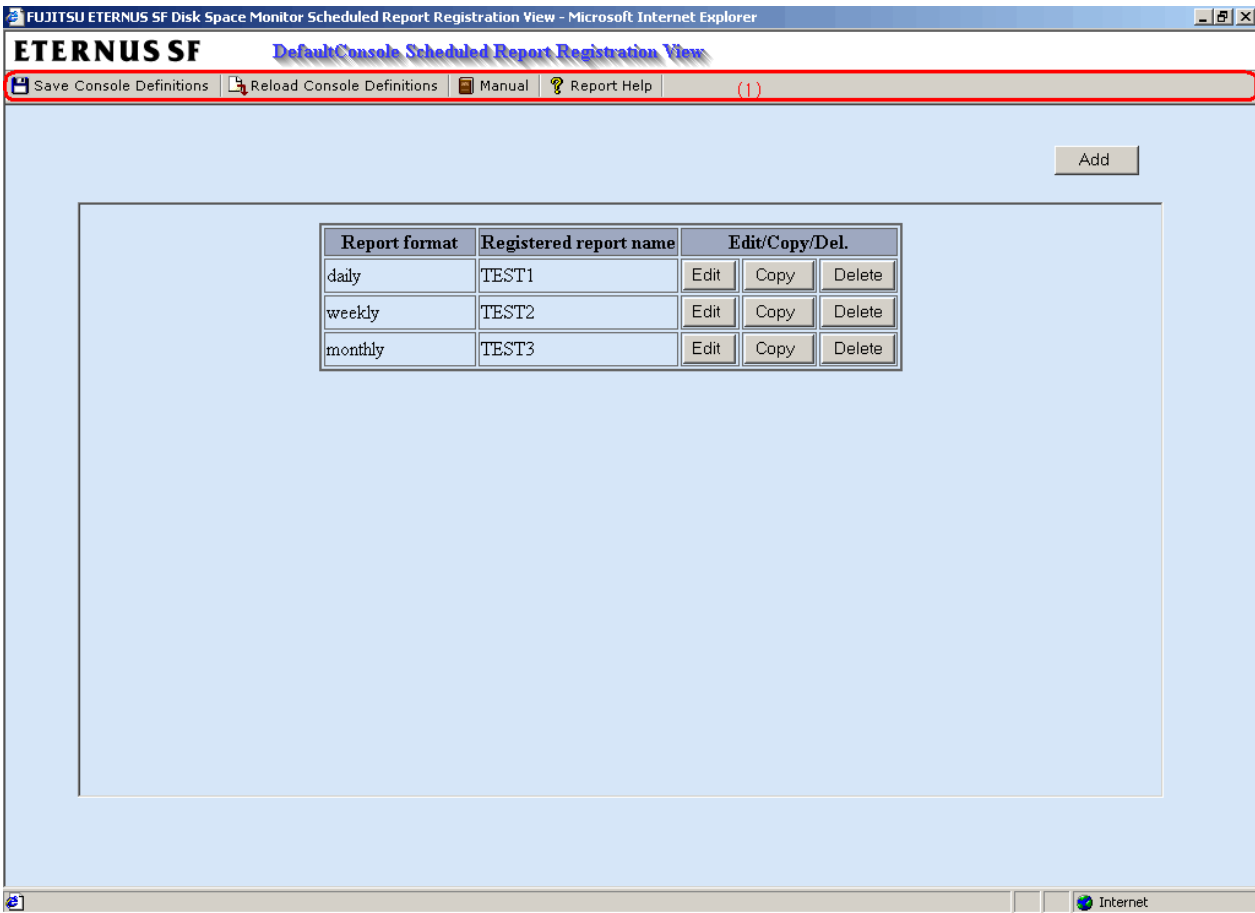
The **Scheduled Report Registration View** is organized as shown in the following table.

Item No.	Component	Description
(1)	Toolbar	The toolbar provides the following menus: ・ **Save Console Definitions**

Item No.	Component	Description

		- Saves the console definitions
		・ Reload Console Definitions
		  - Reloads the console definitions
		・ Manual
		  - Opens the User's Guide (this manual).
		・ Report Help
		  - Opens the section of the User's Guide that deals
		   with using the Report views (this chapter).

The following operations can be performed with the **Scheduled Report Registration View**:

・ Add
New scheduled reports to be created with the scheduled report creation command can be named and registered by specifying their conditions.

・ Edit
The conditions of registered scheduled reports can be edited.

・ Copy
Registered scheduled reports can be copied.

・

・ Delete
Registered scheduled reports can be deleted.

The **Scheduled Report Registration View** provides the following buttons that correspond to the operations described on the previous page.

Button	Operation
Add	Opens the report registration window in its default state so that reports created with the scheduled report creation command can be registered. The report registration window allows the user to specify the report conditions and register the report using a name. It can also be used to run a test display to check that the specified report conditions are correct. Refer to 8.5 Using the Report Creation and Registration Windows for details on how to use the report registration window.
Edit	Displays a report registration window with existing report conditions specified to enable the registered scheduled report conditions to be edited. The report registration window allows report conditions to be edited, overwritten and then registered. It is also possible to run a test display to check that the specified report conditions are correct. Refer to 8.5 Using the Report Creation and Registration Windows for details on how to use the report registration window.
Copy	Copies a registered scheduled report. When the **Copy** button is clicked, the **Copy of registered report** dialog box will be displayed. Enter the report name to be assigned to the copy, and then click the **OK** button. Refer to 8.5 Using the Report Creation and Registration Windows for details on how to use the report registration window.
Delete	Deletes a registered scheduled report.

P Point

If the registered content of a scheduled report is changed (registered, edited, copied or deleted) using the **Scheduled Report Registration View**, the **Save Console Definitions** button on the toolbar must be clicked.

8.4   Commands for Manipulating Scheduled Reports

This section explains the commands that are used to create and delete scheduled reports that have been registered.

- ・ sqcMakeReport (scheduled report creation command)
- ・ sqcDeleteReport (scheduled report deletion command)

By using these commands in combination with scheduler software such as Systemwalker Operation Manager, scheduled reports can be manipulated automatically.

Commands for manipulating scheduled reports are stored in the following location of an operation management client:

Installation directory\bin

8.4.1   sqcMakeReport (scheduled report creation command)

Function

This command creates a scheduled report that has been registered using the **Scheduled Report View**. If this command is registered with a scheduler, the operation can be performed automatically.

Created reports can be viewed in the **Scheduled Report View**.

Execution environment

This command can be run on an operation management client.

It can only be executed by a system administrator (a user with Administrator privileges).

Note

To execute this command by registering it with Task Scheduler for the Windows(R) Vista environment, select the **General** tab of the **Properties** window for the task to be registered, and then select the **Run with highest privileges** checkbox.

Syntax

sqcMakeReport	-c console_define [-g system_group] [-t begin_time	-w begin_day	-d begin_date] daily|weekly|monthly
sqcMakeReport	-c console_define [-g system_group] [-s start_day -e end_day] daily|weekly|monthly

Operand

Specifies the report format (daily, weekly or monthly).

Options

-c console_define

Specifies the console definition name for the report to be created. This parameter cannot be omitted.

-g system_group

Specifies the system group name. Only registered scheduled reports whose conditions include the specified system group will be created. If this option is omitted, all scheduled reports that have been registered will be created.

Point

By registering the command with a scheduler with this option specified, report scheduling can be performed in system group units.

-t begin_time

Specifies the time (0 to 23) that a daily report will start. A daily report will be created from 24 hours of data that commences at the specified time. If this option is omitted, the starting time defaults to "0".

-w begin_day

Specifies the day of the week (Su, Mo, Tu, We, Th, Fr, Sa) that a weekly report will start. A weekly report will be created from 7 days of data that commences on the specified day of the week. If this option is omitted, the starting day defaults to Sunday ("Su").

-d begin_date

Specifies the date (1 to 28) that a monthly report will start. A monthly report will be created from one month of data that commences on the specified date. If this option is omitted, the starting date defaults to "1".

-s start_day

This option is used to set the term of the report when executing this command manually. It specifies the starting date of the report. The format of the starting date is as follows:

YYYYMMDD

-e end_day

This option is used to set the term of the report when executing this command manually. It specifies the ending date of the report. The format of the ending date is as follows:

YYYYMMDD

Return value

Normal termination 0

Abnormal termination >0

Usage example 1

The following example shows how to generate a daily report that begins at 9:00 am. It generates only reports where Business System A is specified for the registration conditions for scheduled reports.

```
> sqcMakeReport -c DefaultConsole -g Business System A -t 9 daily
```

Usage example 2

The following uses registered scheduled reports to generate a daily report for 01 September 2004.

```
> sqcMakeReport -c DefaultConsole -s 20040901 -e 20040901 daily
```

 Note

When the report creation command is executed, a number of pop-up messages such as the one shown below may open and then close on the Windows desktop momentarily.
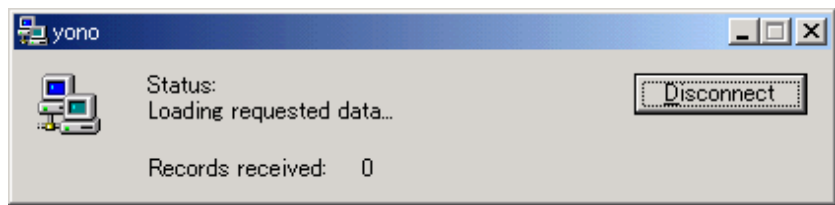
These windows are displayed when data is extracted from a PDB. They do not indicate a problem.

 Point

These pop-up windows can be prevented by specifying a different user from the usual login user in the "Run as:" option when registering the command with the scheduler.

8.4.2   sqcDeleteReport (scheduled report deletion command)

Function

This command is used to delete scheduled reports that are older than the number of days for which reports are to be stored. If this command is registered with the scheduler, it will delete scheduled reports automatically.

Execution environment

This command can be run on an operation management client.

It can only be executed by a system administrator (a user with Administrator privileges).

Syntax

```
sqcDeleteReport -c console_define -d retention_days -w retention_days -m retention_days
```

Options

-c console_define

Specifies the console definition name for the report to be deleted. This parameter cannot be omitted.

-d retention_days

Specifies the number of days (0 to 1500) to store daily reports.

-w retention_days

Specifies the number of days (0 to 1500) to store weekly reports.

-m retention_days

Specifies the number of days (0 to 1500) to store monthly reports.

Point

⸺⸺

If the number of days to store reports is set to 0, no reports in the specified report format will be deleted.

⸺⸺

Return value

Normal termination 0

Abnormal termination >0

Usage example

The following example shows the options used to specify a daily report storage period of 10 days, a weekly report storage period of 60 days and a monthly report storage period of 365 days.

```
> sqcDeleteReport -c DefaultConsole -d 10 -w 60 -m 365
```

8.4.2.1   Example of registration with scheduler

Use the scheduled report creation command and the scheduled report deletion command by registering them with software equipped with a scheduler function, such as Systemwalker Operation Manager. This section explains how to register these commands with scheduling software, using the Windows Task Scheduler as an example.

Add a new task

Double-click the **Scheduled Tasks** icon in the Control Panel to run the Task Scheduler (in the case of Windows 2003).

Select **New** and then **Scheduled Task** from the **File** menu to add a new task.
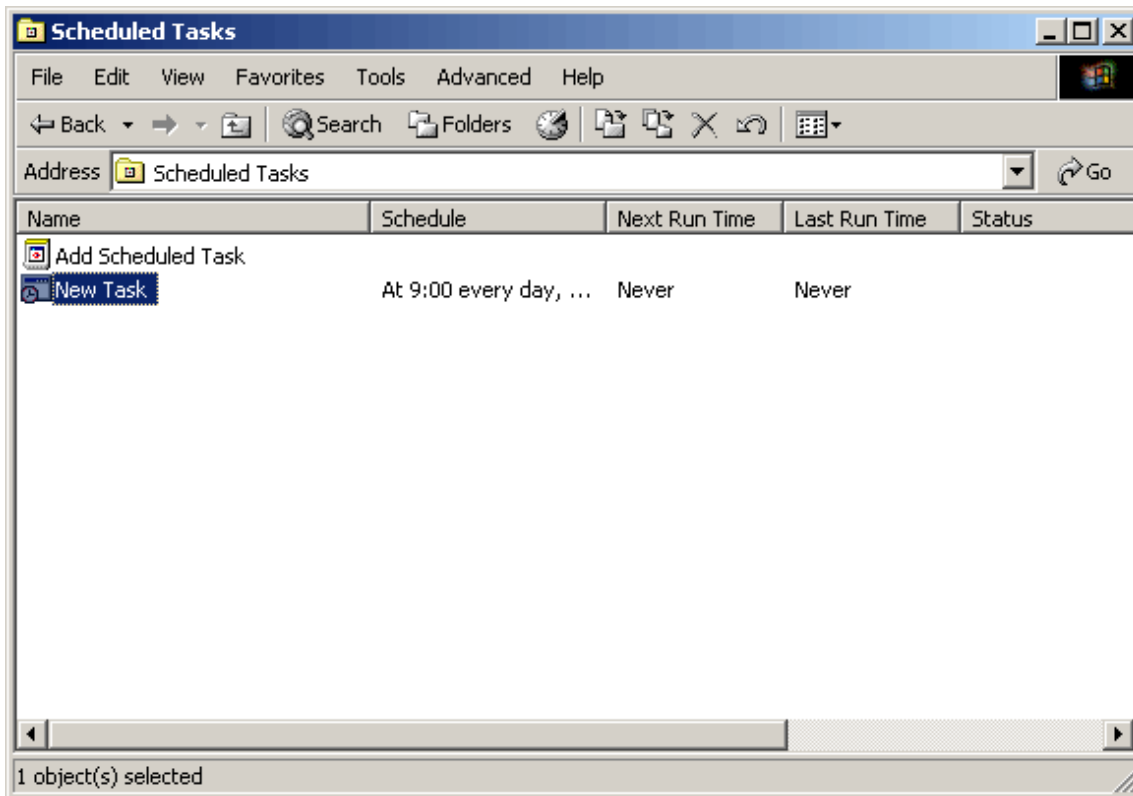
Specify a command

Right-click the new task and select **Properties** from the short-cut menu.

Select the **Task** tab, and specify in the **Run** field the scheduled report creation command (or scheduled report deletion command) with the options specified.
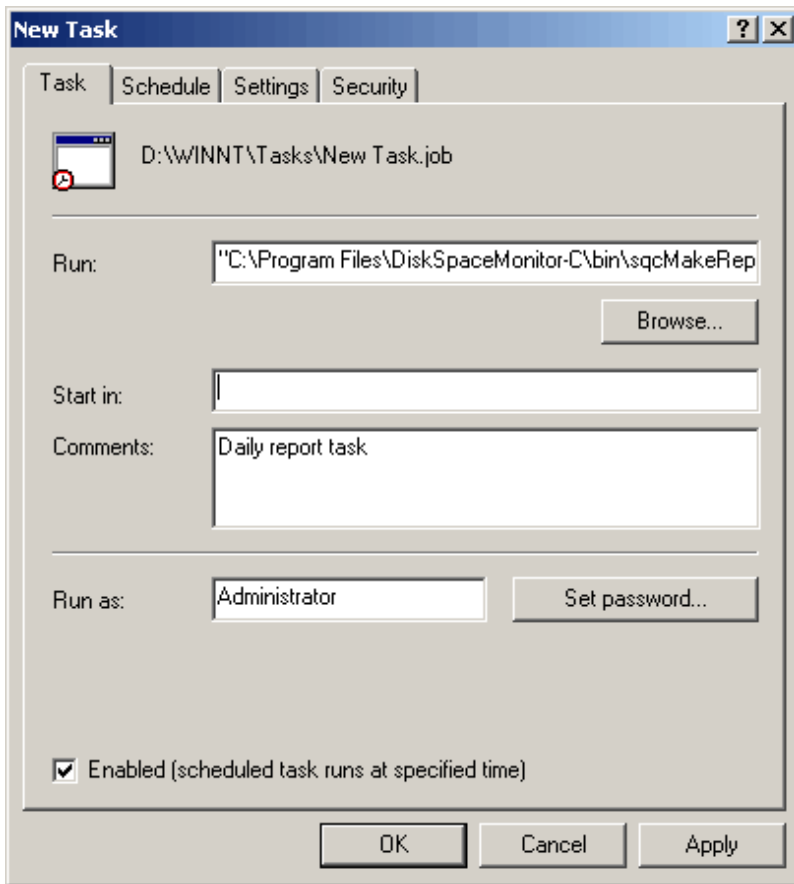
Example of an executable file name specification:

"C:\Program Files\DiskSpaceMonitor-C\bin\sqcMakeReport.exe" -c DefaultConsole daily

🅿 Point

∙∙

Specify a user with administrator privileges in the **Run as** field.

∙∙

Set a schedule

Use the **Schedule** tab to specify the startup schedule of the report creation command.

Click **OK** to finish setting the properties.
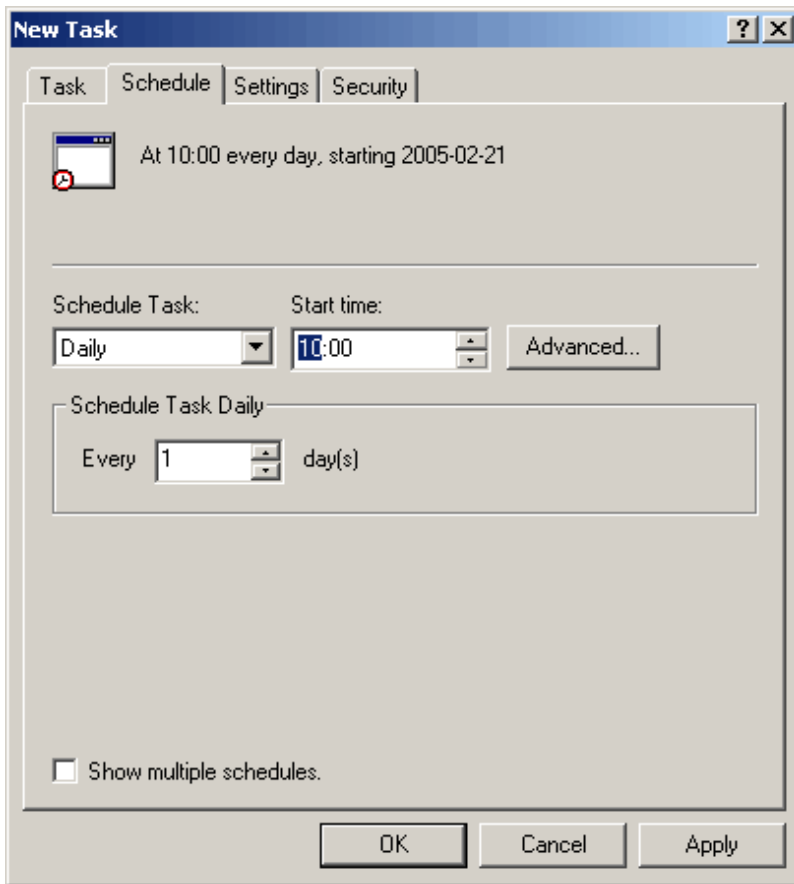
![P] Point

. . . .

To create a daily report, select **Daily** in the **Schedule Task** drop-down list. To create a weekly or monthly task, select **Weekly** or **Monthly** as appropriate.

. . . .

8.4.3   Backing up reports

From the viewpoint of disk space maintenance, it is recommended that reports be deleted automatically by scheduling regular execution of the scheduled report deletion command.

If it is necessary to retain past reports, the directory on the operation management client where the reports are stored can be backed up to another location.

Scheduled daily, weekly and monthly reports are stored in a directory named "*YYYYMMDDhhmmss_serial number*" under the following directories. (*YYYYMMDDhhmmss* is the date and time of report creation.)

・ Daily

> *Installation directory*\www\html\ConsoleEnvironments*Console definition name*\history_slc_daily

・ Weekly

> *Installation directory*\www\html\ConsoleEnvironments*Console definition name*\history_slc_weekly

・ Monthly

> *Installation directory*\www\html\ConsoleEnvironments*Console definition name*\history_slc_monthly

Example:

Installation directory\www\html\ConsoleEnvironments\DefaultConsole \history_slc_daily\20040921125900_1		

To view a report that has been backed up, open the file named "report.html" in the appropriate directory.

 Note

・ Copy directories, but do not move them. To delete a directory from its original location, use the scheduled report deletion command.

・ Even if a report that has been deleted with the scheduled report deletion command is restored to its original location, it will not appear in the list of reports. View such reports from the directory to which they have been copied.

・ The date and time shown as part of the directory name ("*YYYYMMDDhhmmss_serial number*") is based on GMT.

8.5　Using the Report Creation and Registration Windows

This section explains how to use the report creation window and report registration window. The following screen shot shows a sample report creation window.

Item No.	Component	Description
(1)	Report name specification	Specifies a name to identify the report.
(2)	Report type specification	A specification relating to the report type.
(3)	Report target specification	A specification relating to the target of the report.

Item No.	Component	Description
(4)	Specifications relating to the time and the number of display items	Specifies the time and the number of display items for the report. **P** Point • For the disk usage rate to prevent the high utilization of the disk etc, the number of data items to display in the report is extracted by a high-ranking number. For the free disk space to prevent full disk usage etc, the number of data items to display in the report is extracted by a low-ranking number. The number of data items to display to be displayed in the report is about up to 20. It becomes difficult to distinguish because the display area and the line in the report increase when the number of data items is any more. •
(5)	Operation button	Performs an operation on the report.
(6)	Content display area	When the various items are specified and the operation button is clicked, the content of the report will be displayed in this area.

The following sections explain each item in more detail.

8.5.1   Report name specification

Specify a name to identify the report.

Item name	Description
Registered Report Name	Specify a display name for identifying the report. The registered report name is used in the report list display in the New Report tab and the history list display in the Report History tab of the On-Demand Report View, and in the scheduled report list shown in the Daily/Weekly/Monthly Report tab of the Scheduled Report View. The following Shift-JIS code characters can be used for registered report names: Double-byte characters Single-byte alphanumeric characters Single-byte symbols (except for $ " ' [ ] < > / ? | ; : * \& , . =) The registered report name can be no longer than 36 characters, regardless of whether single-byte or double-byte characters are used.

8.5.2   Report type specification

Specify the type of report.

Item name	Description
Category	Specify the category and type of report.
Report Type	The Report Type list box displays choices that correspond to the selected category.

Item name	Description
	Refer to 8.7 Report Types for details on the categories and report types that can be specified.

8.5.3　　Report target specification

The items that are specified for the target of a report differ according to the report type.

The items that are specified for each report type are explained below for the different specification types.

Category	Report type	Specification type
Full system inspection	Disk space	System group specification
Categorized diagnostic report	Windows disk space	System group and server specification
	UNIX disk space	System group and server specification
	Symfoware database space	System group, server and resource ID specification
	Oracle table space	System group, server and resource ID specification
Detailed reports	Time-series display	Detailed item specification
	Correlation display	For correlation/ composition reports only
	Regression analysis display	For regression analysis display reports only
	Contour display	Detailed item specification
	Past/present time-series display	For past/present time-series items only
	Transition comparison display	For transition comparison settings only
	Composite display	For correlation/ composition reports only

System group specification

Item	Description
System Group	Select the target system group from the drop-down list box.

System group and server specification

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target server from the drop-down list box. The list box displays the servers that have been registered with the selected system group.

System group, server and resource ID specification

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target server from the drop-down list box. The list box displays the servers that have been registered with the selected system group.
Resource ID	The content of the resource ID specification differs according to the report type. The content to be entered for each report type is shown in the following table.

Detailed item specification

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target server from the drop-down list box. The list box displays the servers that have been registered with the selected system group. If ALL_SERVER is selected, all servers in the system group become objects.
Category name Field name Display a difference	Specify the target category name and field name for the report. For the field name, only options corresponding to the selected category name will be displayed. If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally. Refer to 19.2 Drill Down/Report Information for details on the category names and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for reporting. If nothing is specified, all resource IDs will be targeted. **P Point** . . . . Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example: For example, if the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA". . . . .

For correlation/composition reports only

Item		Description
System Group		Select the target system group from the drop-down list box.
Data 1 specification	Server1	Select a server containing some of the data to be displayed from the drop-down list box. The list box displays the servers that have been registered with the selected system group.

Item		Description
		If ALL_SERVER is selected, all servers in the system group become objects.
	Category name1	Specify one of the category names and field names that will be displayed.
	Field name1	For the field name, only options corresponding to the selected category name will be displayed.
	Display a difference	If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally..
		Refer to 19.2 Drill Down/Report Information for details on the category names and field names that can be specified.
	Resource ID1	Specify one of the resource IDs to be displayed.
		If nothing is specified, all resource IDs will be targeted.
		P Point
		···
		Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
		Example:
		If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".
		···
Data 2 specification	Server2	Select a server containing some of the data to be displayed from the drop-down list box.
		The list box displays the servers that have been registered with the selected system group.
		If ALL_SERVER is selected, all servers in the system group become objects.
	Category name2	Specify the other category name/field name to be displayed.
	Field name2	For the field name, only options corresponding to the selected category name will be displayed.
	Display a difference	If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally.
	Resource ID2	Specify one of the resource IDs to be displayed.
		If nothing is specified, all resource IDs will be targeted.
		P Point
		···
		Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
		···

For regression analysis display reports only

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target system group from the drop-down list box.

Item	Description
	The list box displays the servers that have been registered with the selected system group.
	If ALL_SERVER is selected, all servers in the system group become objects.
Category name	Specify the target category name and field name for the report.
Field name	For the field name, only options corresponding to the selected category name will be displayed.
Display a difference	If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally.
	Refer to 19.2 Drill Down/Report Information for details on the category names and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for reporting.
	If nothing is specified, all resource IDs will be targeted.
	## P Point
	Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
	Example:
	If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

For past/present time-series items only

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target system group from the drop-down list box.
	The list box displays the servers that have been registered with the selected system group.
	If ALL_SERVER is selected, all servers in the system group become objects.
Category name	Specify the target category name and field name for the report.
Field name	For the field name, only options corresponding to the selected category name will be displayed.
Display a difference	If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally.
	Refer to 19.2 Drill Down/Report Information for details on the category names and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for reporting.
	If nothing is specified, all resource IDs will be targeted.
	## P Point
	Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.

Item	Description
	Example:
	If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".
Report base day	Specify the base day used for comparison in the report.

For transition comparison settings only

Item	Description
System Group	Select the target system group from the drop-down list box.
Server	Select the target system group from the drop-down list box.
	The list box displays the servers that have been registered with the selected system group.
	If ALL_SERVER is selected, all servers in the system group become objects.
Category name	Specify the target category name and field name for the report.
Field name	
Display a difference	For the field name, only options corresponding to the selected category name will be displayed.
	If the **Display a difference** checkbox is selected, information for cumulative values can be displayed incrementally.
	Refer to 19.2 Drill Down/Report Information for details on the category names and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for reporting.
	If nothing is specified, all resource IDs will be targeted.
	🅿 Point
	Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
	Example:
	If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".
Report time slot	Specify the time period for which transition comparison is to be performed. The starting time and finishing time for the report can be specified.

8.5.4　Specifications relating to time and the number of display items

The specifications that relate to report time and the number of display items differ depending on whether the report is an on-demand report or a scheduled report.

The following table lists the specification for each report generation method.

On-demand report

Item name	Description

Number of data items to display in the report	Select the number of data items that will be displayed when the report is made. The number of data items can be selected as follows:
	
	・ Item number specification
	
	  - A value between 1 and 1000 can be entered for the number of items
	
	  - In this case, only the specified number of data items will be displayed.
	
	・ All items specification
	
	  - All data will be displayed.

Data interval	Select the data interval to be used during reporting.
	
	The following data intervals can be selected:
	
	・ Ten minutes
	
	  - Data retention period: 7 days
	
	  - This period is suitable for creating reports of approximately one day.
	
	・ One hour
	
	  - Data retention period: 6 weeks
	
	  - This period is suitable for creating reports of approximately one week.
	
	・ One day
	
	  - Data retention period: 53 weeks
	
	  - This period is suitable for creating reports of over one month.
	
	P Point
	
	This specification is not available with some report types.
	
	Note
	
	If a report period prior to the data retention period is specified, no data will be displayed.

Report period	Specify the period of the report. Select the minute, hour, day, month and year using a drop-down list box to select the date and time that the report will start and stop.

Scheduled report

Item name	Description

Number of data items to display in the report	Selects the number of data items that will be displayed when the report is made. The number of data items can be selected as follows:
	
	・ Item number specification
	
	  - A value between 1 and 1000 can be entered for the number of items
	
	  - In this case, only the specified number of data items will be displayed.
	
	・ All items specification
	
	  - All data will be displayed.

Report format	Select the format in which the report will be created. The following report format can be selected: ・ Daily - Basically, data will be used in 10-minute units. ・ Weekly - Basically, data will be used in 1-hour units. ・ Monthly - Basically, data will be used in 1-day units. **P Point** . . . . This specification corresponds to the report format specified by an operand of the scheduled report creation command. If "Daily" is selected, a report is created when a daily report ("daily") is specified as the report format in the scheduled report creation command. Refer to 8.4 Commands for Manipulating Scheduled Reports for details. . . . . **P Point** . . . . This specification is not available with some report types. . . . .
Test option Report period	Specify the report period to be targeted when performing a test display. Select the minute, hour, day, month and year using a drop-down list box to select the date and time that the report will start and stop.

Item name	Description
	P Point · This option is only used for test displays. It has no effect on registered reports. ·

8.5.5   Operation buttons

The operation buttons of the report creation window and the report registration window are different.

The operation buttons of each window are explained below.

Report creation window

The report creation window has the following button.

Button	Description
Generate	Creates a report using the specified report conditions. Reports are displayed in the right area of the report creation window, and they can also be viewed from the Report History tab.

While a report is being generated, the message "Now generating report" will appear in the status bar.

The **Generate** button will be disabled while this message is being displayed.

Report registration window

The report registration window has the following buttons.

Button	Description
Test	Performs a test display of a report to verify that the content of the report is displayed correctly using the specified conditions. Reports are displayed on the right side of the report registration window. **P Point** · This operation only performs a test display of a report. It is not added to the on-demand report history or the daily, weekly or monthly scheduled report displays. ·
Register	Registers report conditions under the specified name.

While a report is being generated, the message "Now generating report" will appear in the status bar.

The **Test** button will be disabled while this message is being displayed.

8.6   Content-related Operation Methods

This section explains the operations that can be performed on displayed report content.

Table sorting

When the header section of any column in a table displayed in report content is selected, the table can be sorted using the selected column as the sort key.

Sorting can be toggled between ascending and descending order.

Note

....

- Numerical sorts only operate correctly when all the values in the specified column are numerical values. Sorting cannot be performed correctly if the column includes non-numerical data such as null values.

- Date and time sorts cannot be performed correctly if the number of digits (yyyy/mm/dd hh:mm:ss, etc.) is not uniform throughout the column. Care must be taken when data has been imported from user data.

....

data download/Print Screen

The following link is located underneath the report content:

- data download
  This link enables the displayed range of data to be downloaded in CSV format.

- Print Screen
  This link is used to print the displayed content.

8.7   Report Types

Reports are divided into the following three categories according to their purpose.

Report category	Purpose
Full system inspection report	This report enables system administrators to periodically inspect the operational status of the system. Reports are generated for individual system groups.
Categorized diagnostic report	This report is for primary fault isolation of bottlenecks within servers where problems have occurred. Reports are generated for individual servers, or for individual instances within servers.
Detailed report	This report is for checking detailed information in terms of particular data.

Each category of report is provided with a number of report types, which are differentiated by the type of information that is reported.

The following table lists the different report types available for each report category.

8.7.1   Full system inspection reports

Report type	Outline
Disk space	Disk space information: ・ Disk usage rate ・ Disk Availability

Refer to 2.4 Manager and Chapter 19 Data Formats for details on the information that is displayed in reports.

8.7.2   Categorized diagnostic reports

Note

....

Reports that include UNIX in the report title are common to both Solaris and Linux.

....

Report type	Outline
Windows disk space	・ Disk usage rate
UNIX disk space	・ Disk usage rate
Symfoware database space	・ Database space usage rate
Oracle tablespace	・ Tablespace usage rate

Refer to 2.4 Manager and Chapter 19 Data Formatsfor details on the information that is displayed in reports.

8.7.3   Detailed reports

Report type	Outline
Time-series display	Displays specified field values as chronological graphs and tables.
Correlation display	Displays two specified field values as correlation graphs and regression line graphs.
Regression analysis display	Displays specified field values as regression line graphs.
Contour display	Displays specified field values as contour graphs. This assumes that data will be used over a long period of time (about one month)
Past/present time-series display	Displays a graph that allows hourly data from the past month and the past week to be compared side-by-side with the data for the base day.
Transition comparison display	Displays a graph that compares data trends for the specified date and time period.
Composite display	Displays a graph that allows two different items (such as response times and CPU usage) to be compared side-by-side.

Refer to 2.4 Manager and Chapter 19 Data Formats for details on the information that is displayed in reports.

8.8   How to Evaluate Categorized Diagnostic Reports

This section explains how to analyze the reports displayed as categorized diagnostic reports.

Note

Reports that include UNIX in the report title are common to both Solaris and Linux.

8.8.1   Windows disk space

Item	Description	Evaluation
Disk usage rate	Allows the disk usage status to be ascertained and compared.	It can be used to ascertain the usage deviation and load peaks of each disk.

8.8.2　UNIX disk space

Item	Description	Evaluation
Disk usage rate	Allows the disk usage status to be ascertained and compared.	It can be used to ascertain the usage deviation and load peaks of each disk.

8.8.3　Symfoware Database space

Item	Description	Evaluation
Symfoware database space	Allows the database space usage status to be ascertained and compared.	It can be used to ascertain the usage deviation and load peaks of each database space.

8.8.4　Oracle Tablespace

Item	Description	Evaluation
Oracle tablespace	Allows the tablespace usage status to be ascertained and compared.	It can be used to ascertain the usage deviation and load peaks of each tablespace.

8.9　Storing Reports

This section explains how to store reports.

Past reports (histories) and registered on-demand reports and scheduled reports are stored in the following directory for each console definition.

<installation directory>\www\html\ConsoleEnvironments*console definition name*

- ・ Information will not be deleted from this directory even if the console definition is deleted from the **Console Definition** window.

- ・ If a new console definition is created with the same name while the directory with this console definition name still exists, the existing report information will be inherited.
  Console definition names added here are not case sensitive.

- ・ If a console definition is copied using the **Console Definitions** window, registered on-demand reports and scheduled reports will be copied as well. However, past reports (histories) will not be copied.

Chapter 9 　　　Admin Console Window

This chapter explains how to use the **Admin Console** window.

The **Admin Console** window is made up of a **Console Definitions** window and a **User Definitions** window. Refer to the following file for details on how to start the **Admin Console** window.

> http://host name of the operation management client/SSQC/AdminConsole.html

Refer to 16.3 How to Set Up Basic Authentication for Operation Management Clientsfor details on how to set up basic authentication on the **Admin Console**.

📙 Note

・ If the browser is equipped with a pop-up blocking function, the definition window will not open in a separate window. The pop-up blocking function should be disabled in such cases.

・ The **Admin Console window** uses JavaScript. If JavaScript is not enabled, the definition window will not open in a separate window. JavaScript should be enabled in such cases.

・ Do not perform operations in the **Admin Console** window using the pop-up context menu that appears when the right mouse button is clicked.

・ Normally, to prevent the browser menu bar and address bar from being displayed, the initial window opened by specifying the URL starts the Console in a separate window and then closes. Note, however, that depending on the specifications of the browser used, the following message box may appear when the initial window closes.

The following sections present overviews of each window.

9.1 　　　Console Definitions Window

9.1.1 　　　Window configuration

The **Console Definitions** window initially appears as below.

The **Console Definitions** window is organized as shown in the following table.

Item No.	Component	Description
(1)	Toolbar	The toolbar provides the following menus: ・ **Manual** 　- Opens the User's Guide (this manual). ・ **Admin Console Help** 　- Directly opens the chapter describing how to use the **Admin Console** window (this chapter) in the User's Guide.
(2)	Console definition display area	This area displays information about console definitions that have been registered.

9.1.2　Basic operation

The **Console Definition** window contains a number of operation buttons.

The following table explains the operation of each button.

Button	Operation
Create	Creates a new console definition. After clicking this button, enter the name of the console definition to be created in the prompt that is displayed.

Button	Operation
	Only the following characters can be used for console definition names: alphanumeric characters [a-z, A-Z, 0-9], hyphens ('-') and underscores ('_'). However, hyphens ('-') cannot be used as the first character. Console definition names are not case sensitive. Console definition names must be no more than 64 characters long.
Setting View	Starts the **Setting View** for console definitions.
Console	Starts the **Console** window.
Copy	Copies the specified console definition with the specified name. After clicking this button, enter the name of the console definition to be copied in the prompt that is displayed.
Delete	Deletes the specified console definition. However, "DefaultConsole" cannot be deleted.
Reload	Displays console definitions using the latest information.

9.2   Setting View

9.2.1   Window Configuration

The **Setting View** is started from the **Setting View** button on the **Console Definitions** tab of the **Admin Console** window.
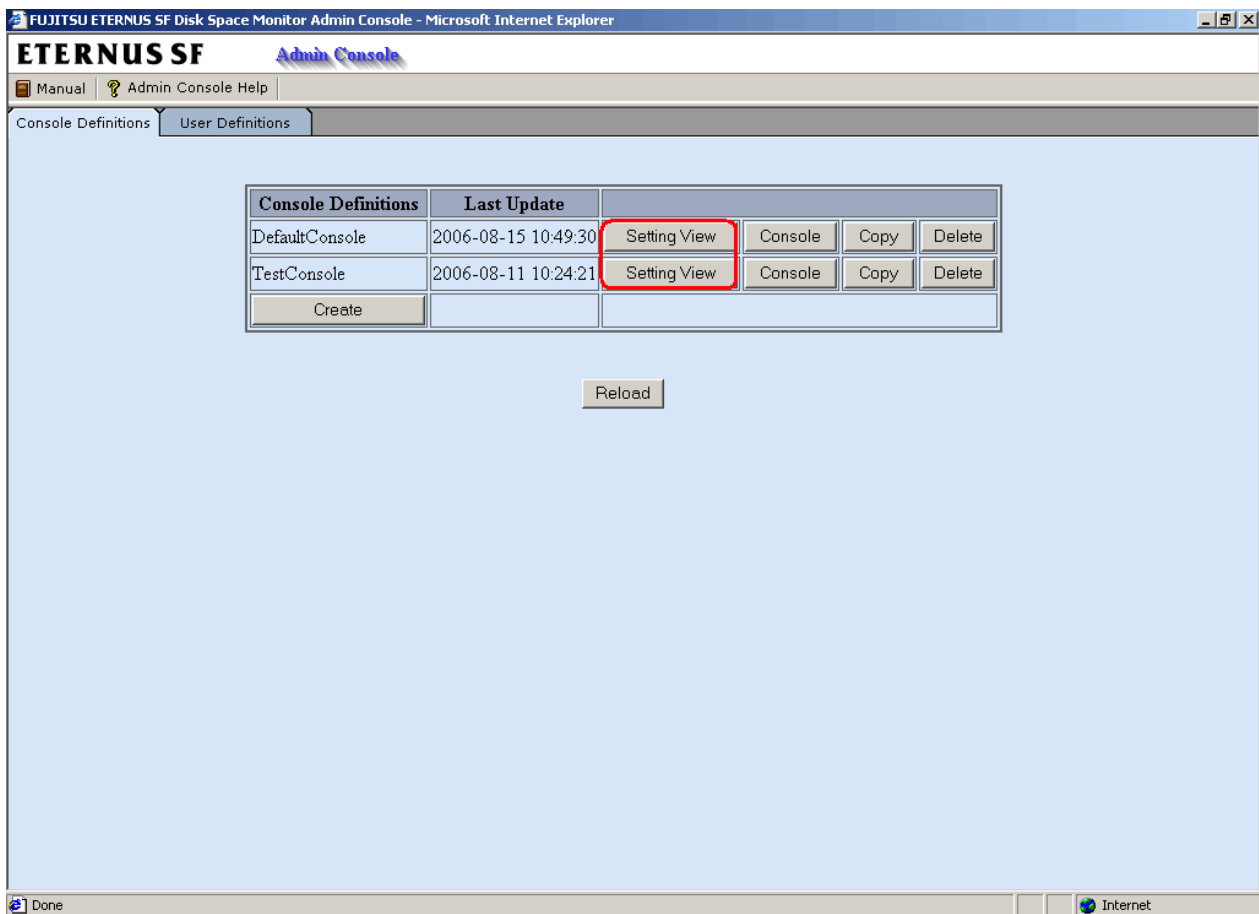
The **Setting View** will be displayed as below.
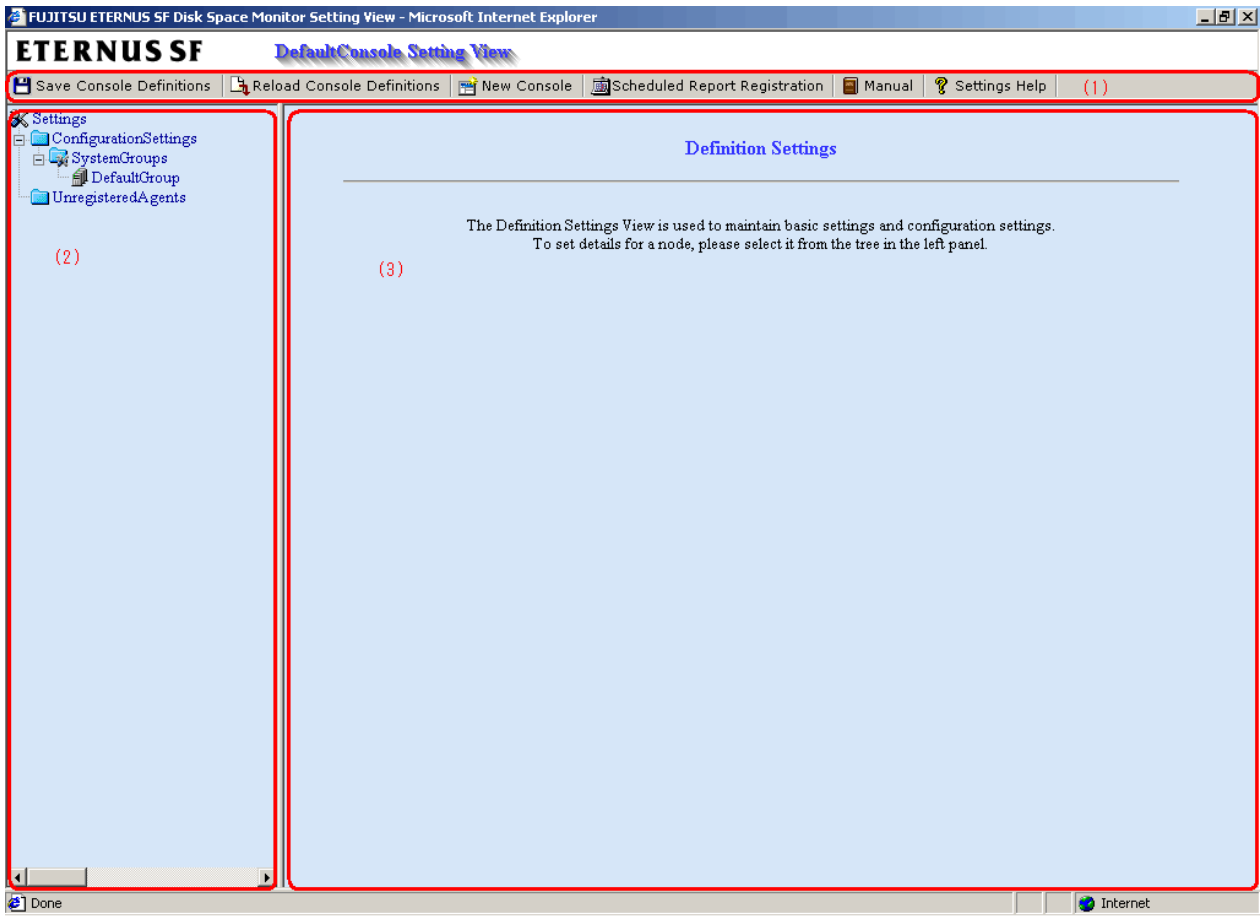
The **Setting View** is organized as shown in the following table.

Item No.	Component	Description
(1)	Toolbar	The toolbar provides the following menus: ・**Save Console Definitions** 　- Saves the console definition to the master console definitions. ・**Reload Console Definitions** 　- Reloads the master console definitions. ・**New Console** 　- Opens a new **Console** window. ・**Scheduled Report Registration** 　- Opens the **Scheduled Report Registration View**. ・**Manual** 　- Opens the User's Guide (this manual). ・**Settings Help**

Item No.	Component	Description
		- Directly opens the chapter describing how to use the **Setting View** (this chapter) in the User's Guide.
(2)	Tree display area	Displays the ETERNUS Disk Space Monitor environment configuration in a tree structure.
(3)	Setting window display area	Displays the settings window that can be used to enter information.

9.2.1.1   Setting View tree

The **Setting View** tree consists of the following levels.

Top tree	This is the default level that is displayed when the **Setting View** opens.
	It displays **Settings**, which is the root of the tree, and the system groups.
	When the system group node is selected, the display switches to the system group tree.
System group tree	This tree displays the system group and the Agents under it.
	At the top of the system group tree is a **Back** node that can be used to return to the previous level.
	When the **Agent** node is selected, the display switches to the **Agent** tree.
Agent tree	The tree displays the **Agent** and their subordinate configurations.
	At the top of the tree is a **Back** node that can be used to return to the previous level.

The following table lists the icons that are used to display the nodes making up the tree.

Icon	Meaning
	Indicates the Setting function (the root of the tree).
	Indicates that the node is used to return to the previous level.
	Indicates a folder used to store collected information.
	Indicates a system group.
	Indicates individual servers such as Agents.
	Indicates an instance defined by a middleware product, etc.
	Indicates a node for which information is to be set.
	Indicates a related tool.

9.2.2   Basic operation

The operation basically consists of selecting a node to set up in the **Definition window** tree on the left and then entering information in the settings window on the right.

Each setting window contains a number of operation buttons.

The following table explains the operation of buttons that function in the same way in different windows.

Button	Operation
Add	Opens an information window in its default state so that a new configuration definition can be added.
Edit	Opens an information window with existing information so that the existing configuration definition can be edited.
Delete	Deletes a configuration definition. If the **OK** button is clicked in response to the deletion prompt, the information will be deleted. 📘 **Point** . . . . The trees in any other Console windows that may be open at the same time are not updated automatically. . . . . It will be necessary to reload the tree using the procedures described in 7.3.1.1 Reloading the Monitor tree or 7.4.1.1 Reloading the Drill Down tree.
View	Opens an information display window.
Apply	Completes information entry and closes the window. At the same time, any information that has been added or modified will be applied to the local console definitions. 📘 **Point** . . . . The trees in any other Console windows that may be open at the same time are not updated automatically. . . . . It will be necessary to reload the tree using the procedures described in 7.3.1.1 Reloading the Monitor tree or 7.4.1.1 Reloading the Drill Down tree.
Reset	Cancels the information that has been entered and returns the window to the state that existed when it was opened.
Cancel	Cancels the information that has been entered and closes the window.
Close	Terminates viewing and closes the window.

9.2.3　Setup items

The following table lists the setup items that are available for each node of the **Setting View** tree.

Tree configuration						Location of description
Settings						-
	ConfigurationSettings					9.2.3.1 Management configuration definition (ConfigurationSettings)"
		SystemGroups				9.2.3.1.1 SystemGroups"
			Agents			9.2.3.1.2 Agents
				RelationTools		9.2.3.1.3 RelationTools
				ManagedObject		-
					Instances	-
					Resources	9.2.3.1.4 Resources

Tree configuration	Location of description
UnregisterdAgents	9.2.3.2 Unregistered Agent information (UnregisteredAgents)

9.2.3.1　　　Management configuration definition (ConfigurationSettings)

The **ConfigurationSettings** folder in the **Settings** tree is used to set the configuration information of objects to be managed.

9.2.3.1.1　　　SystemGroups

This node registers system groups.

System groups are for organizing the multiple servers that make up the system being managed.

System groups are specified as display units in the Monitor and Report views.

Managed servers must belong to a group.

The **System Group Settings** window is shown below.
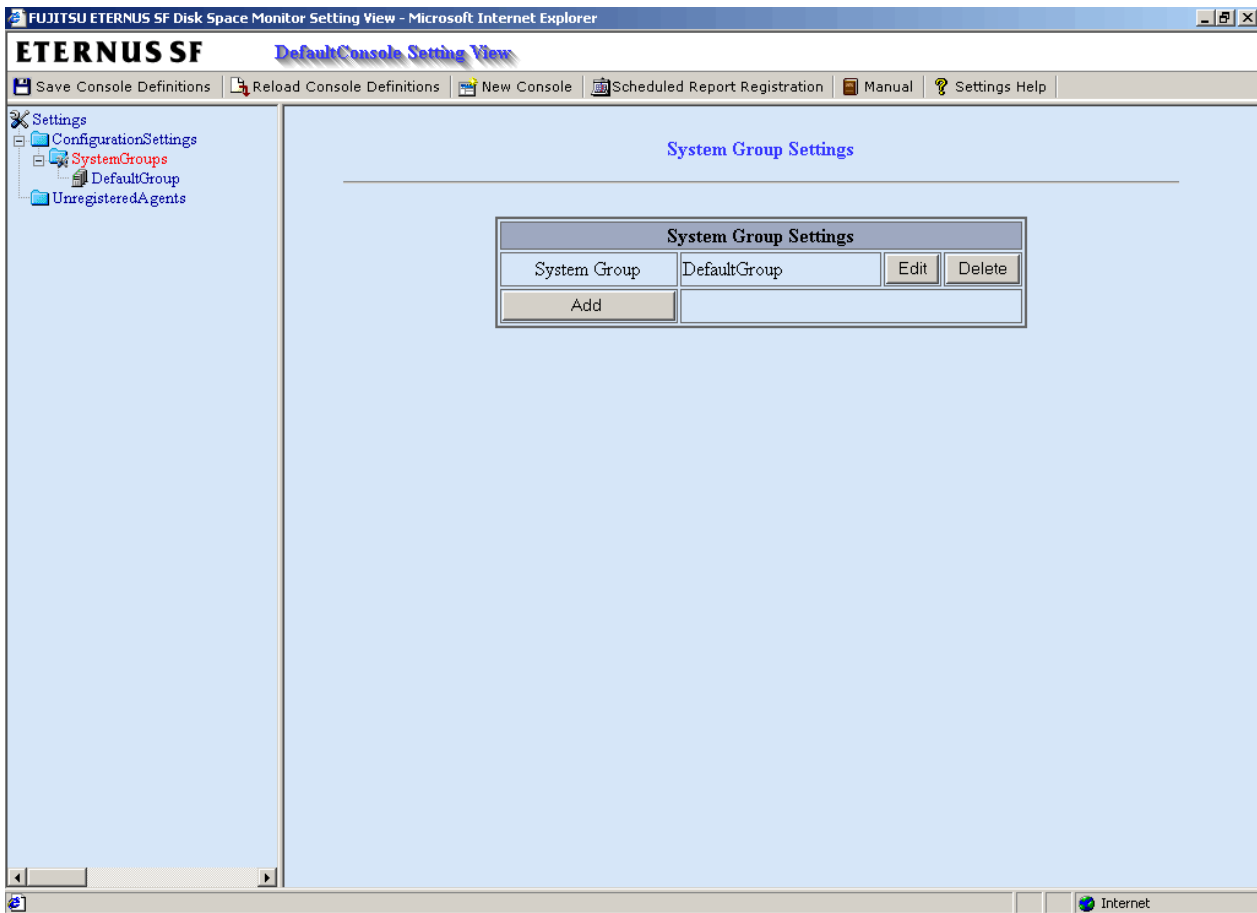
Click the **Add** button to display the **System Group Information** window, and then set a system group name.

Node name	Setting item name	Description
SystemGroups	**System Group Name**	Set a display name that will be used to identify the system group.
		Set a name that is unique within the management configuration. Note, however, that it does not matter if the same name is also used as an Agent name.
		The following Shift-JIS code characters can be used for system group names:
		Double-byte characters
		Single-byte alphanumeric characters
		Single-byte symbols (except for \: , < > $ " ' [ ] = &)
		The system group name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.

When the system group name is registered, folders named "Agents" will be created under the system group folder.

9.2.3.1.2　　　Agents

This node registers Agents that will be managed.

Point

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Agent registration can also be performed easily with the **Register Agent with System Group** window. Refer to 9.2.3.2 Unregistered Agent information (UnregisteredAgents) for details. Note that the **Register Agent with System Group** window cannot be used when "pull" operations are being performed. In such cases, use the **Agent Settings** window (shown below) instead.

. . . .
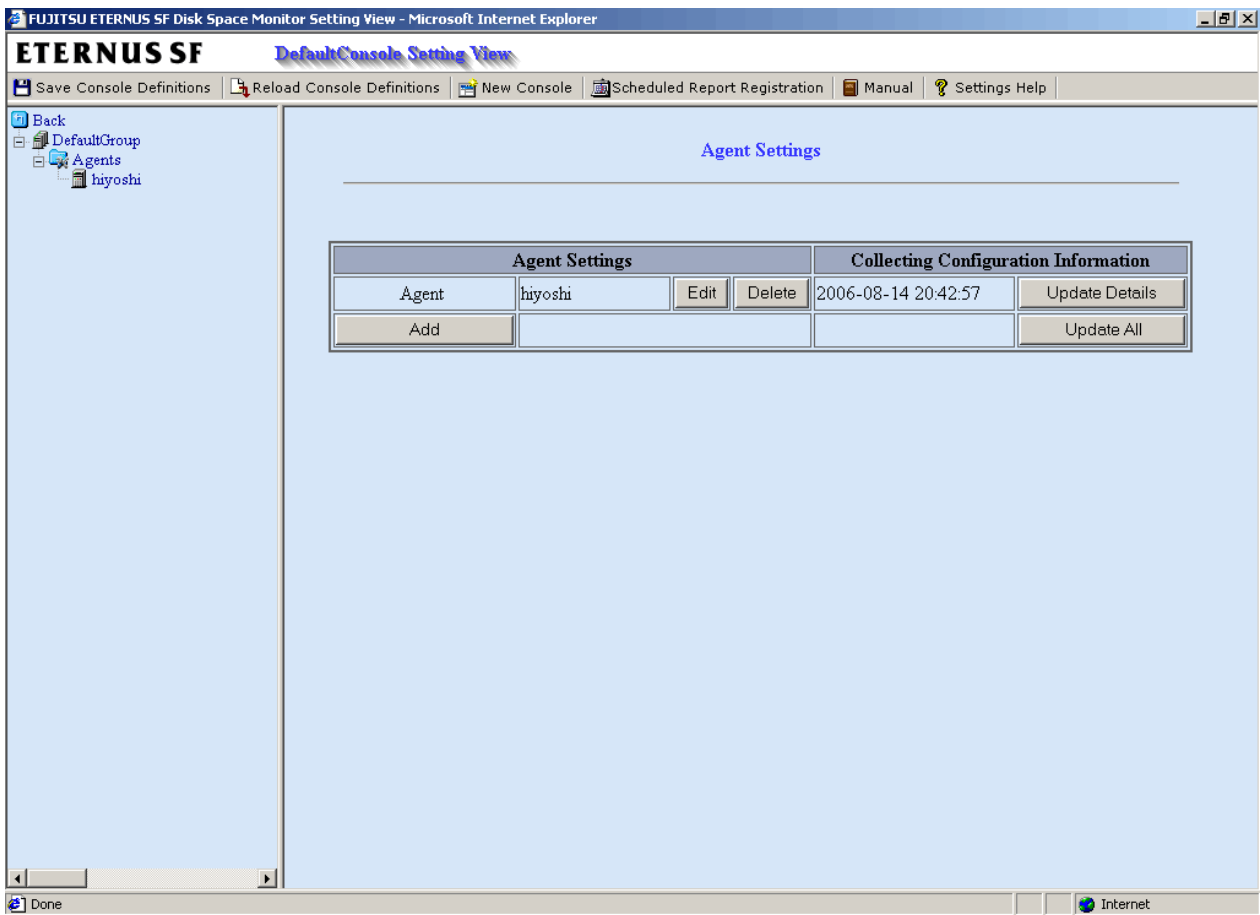
Click the **Add** button to display the **Agent Information** window, and then set information relating to the Agent.

Node name	Setting item name	Description
Agents	**Agent Name**	Specify the display name for identifying the Agent.
		Set a name that is unique within the management configuration. Note, however, that it does not matter if the same name is also used as a system group name.
		The following Shift-JIS code characters can be used for Agent names:
		Double-byte characters
		Single-byte alphanumeric characters
		Single-byte symbols (except for \: , < > $ " ' [ ] = &)
		The Agent name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.
	System Name	Specify the identifier for the Agent.
		The same system name cannot be registered more than once within a single group, but identical system names can be registered in different groups.

Node name	Setting item name	Description
		P Point . . . . If a single Agent is used in multiple businesses, it is possible to create a system group for each business and to register the same Agent with each one. However, a different character string should be used in the Agent name (display name). . . . . The identifier is the name that is displayed by the *sqcSetPolicy* policy application command. Refer to Chapter 13 Creating and Applying Collection Policiesfor details on the policy application command. **Note** . . . . For clustered Agent operations, specify either a physical host name or a physical IP address. . . . .

Next, click either the **Update Details** or the **Update All** button to collect the configuration information from the Agents on the managed server. This configuration information is used for management purposes. If this operation is successful, the date and time that the configuration information was collected will be displayed to the left of the button.

Note
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If the collection of configuration information fails, the collection date will not be updated. Check that the system name is correct, and that the Agent collection policy has been correctly created and applied.
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P Point
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If the following message appears in the **Collecting Configuration Information** window, the problems listed below may be the cause.

couldn't open socket: connection timed out

- The IP address of the Manager that was specified at installation time is incorrect.

- The Manager (its resident processes) is not running.
. . . .

When configuration information is collected, a folder named **ManagedObject** is created in the Agent that performed the collection.

The configuration information targeted for collection by the Agent will be displayed within the **ManagedObject** folder.

P Point
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The configuration information that is collected here refers to the managed object configuration information (resource configuration information) explained in Chapter 13 Creating and Applying Collection PoliciesTherefore, collection policies described in Chapter 13 Creating and Applying Collection Policiesmust be created and applied on the Agent in advance.

Also, the configuration information collection explained here must be performed each time collection policies are created and applied.
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For Chapter 12 Configuring Communication Environment with the Pull Method another preliminary task must be performed before the settings in this window can be used to collect the configuration information. Perform the following procedure, and then click either the **Update All** or the **Update Details** button in the **Setting View**.

Procedure: Copy the managed object configuration information file from the managed server to the operation management client.

・ The location of the file on the managed server is as follows:

[Windows]

Variable file directory\control\ManagedConf_XXXX.xml

[Solaris][Linux]

/etc/opt/FJSVssqc/ManagedConf_XXXX.xml

"XXXX" refers to the name that was specified with the *-h* option when the 13.2 Applying Policies was executed. If the *-h* option was omitted, then this will be the host name of the system where this command was executed.

・ Copy this file to the following location on the operation management client.

Installation directory\www\managedconf\ManagedConf_XXXX.xml

9.2.3.1.3   RelationTools

When Agents are registered, a folder named "RelationTools" will be created.

To call the related tools (that can be called from URLs) from this product's **Drill Down** view, set up this folder as well.

The **Related Tool Settings** window is shown below.
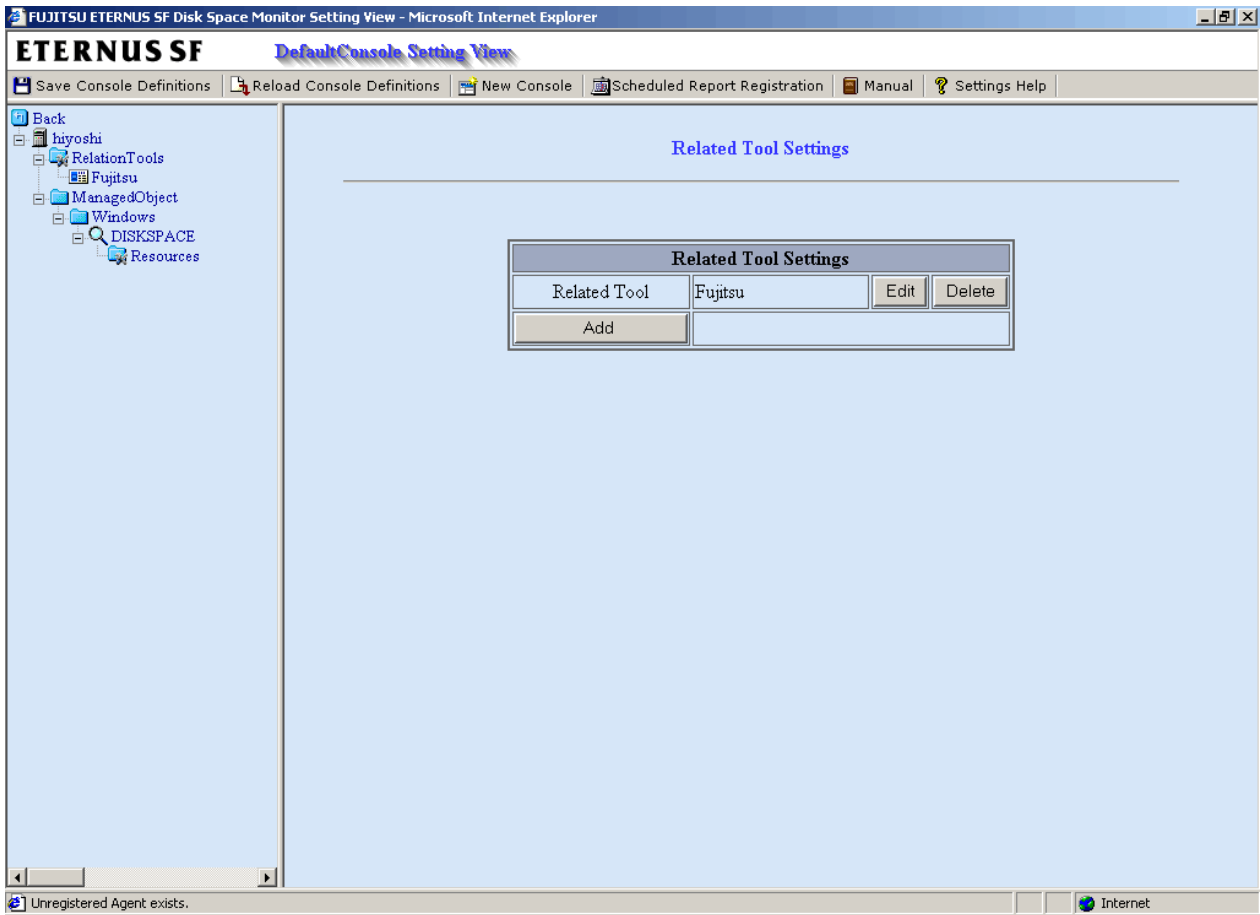
Click the **Add** button to display the **Related Tool Information** window, and then set information relating to the related tool.

Related Tool Information

Related Tool Name [   ]

URL [   ]

[Apply] [Reset] [Cancel]

Node name	Setting item name	Description
RelationTools	**Related Tool Name**	Specify the display name for identifying the tool.
		The following Shift-JIS code characters can be used for related tool names:
		Double-byte characters
		Single-byte alphanumeric characters
		Single-byte symbols (except for \: , < > $ " ' [ ] = &)
		The related tool name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.
	URL	Specify the URL to call.

9.2.3.1.4　　　　Resources

This node is defined when it is necessary to display more specific resource content than the standard display unit in the **Drill Down** view of this product.

Refer to 7.4.2.3 Displaying resources for details on displaying resources with the Drill Down function.
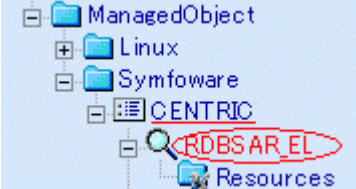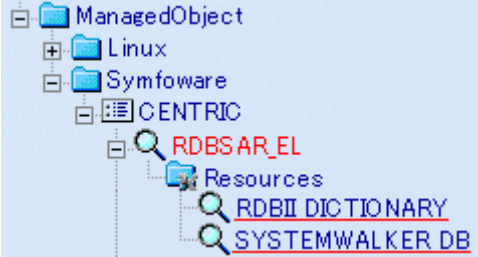
The **Resource Settings** window is shown below.
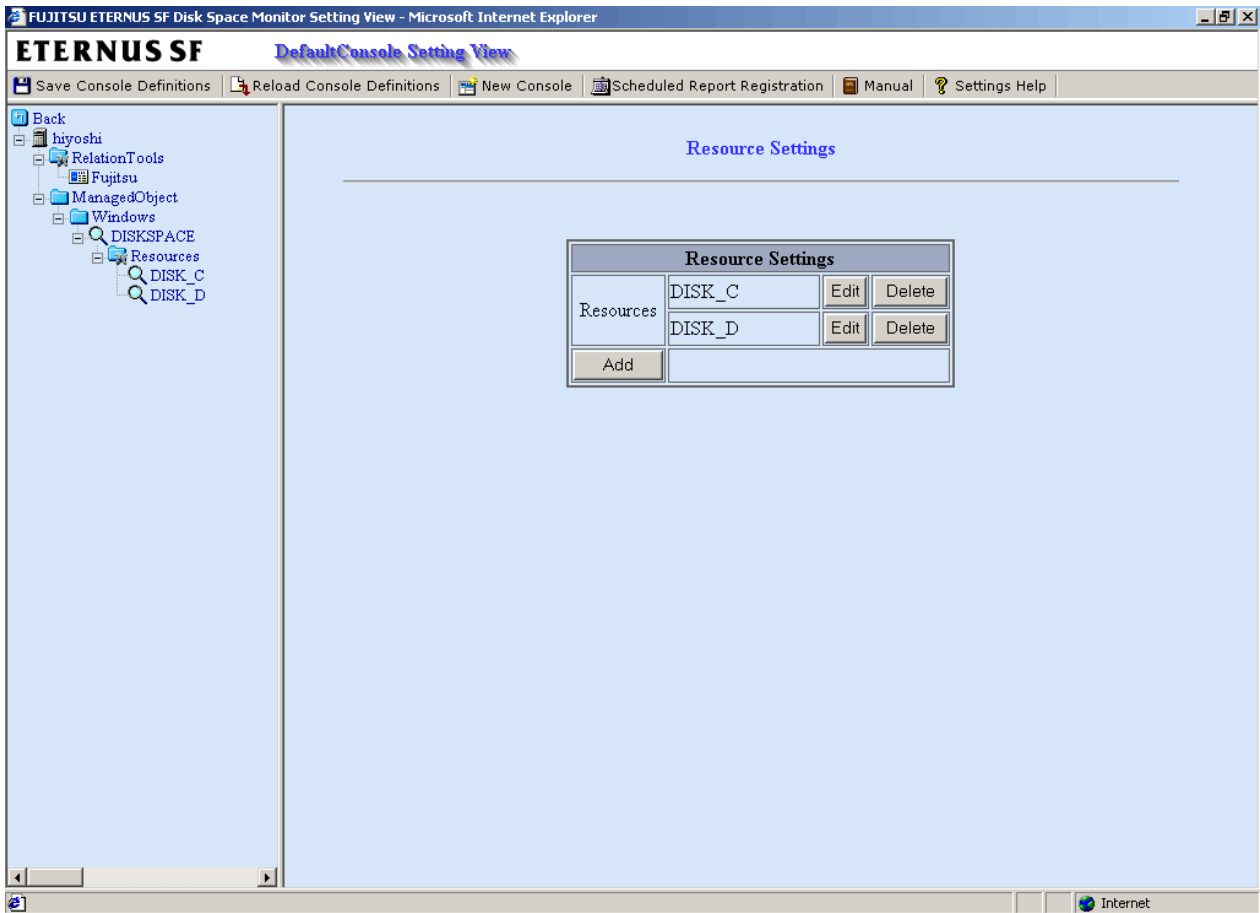
Click the **Add** button to display the **Resource Information** window, and then set information relating to the resource.

Node name	Setting item name	Description
Resources	**Resource Name**	Specify the display name for identifying the resource.
		Set a name that is unique within the target **Resources** folder
		The following Shift-JIS code characters can be used for resource names:
		Double-byte characters
		Single-byte alphanumeric characters
		Single-byte symbols (except for \, < > $ " ' [ ] = &)
		The resource name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.
	Resource ID	This is a character string displayed in the **Resource ID** column of the drill down content that is used to filter display items by the resource.

Node name	Setting item name	Description
		Point If the resource ID consists of multiple strings separated by colons (":") and the separated strings appear in the Drill Down tree between the **ManagedObject** node and the target node as nodes that represent instances, specify the strings below the instance node. Example: When "RDBSAR_EL" is selected, the following strings are displayed in the **Resource ID** column of the drill down content: In addition, "CENTRIC" appears in the tree as a node that represents an instance. In this case, specify "RDBII_DICTIONARY" and "SYSTEMWALKER_DB" that appear below "CENTRIC". **Point** Resource IDs can be filtered using a prefix. Instead of specifying the entire resource ID, it is possible to specify only the initial portion that needs to be matched. Specify a resource ID name that is unique within the **Resources** folder. Up to 64 characters (alphanumeric characters and symbols) can be used for the resource ID except for the following: \, < > " $ ' [ ] = &

9.2.3.2   Unregistered Agent information (UnregisteredAgents)

The **UnregisteredAgents** folder in the **Settings** tree displays the system names of Agents that have been fully installed on the Agent side but have not been registered with the management configuration definition on the operation management client side.

When an Agent that is displayed in the tree is selected, the **Register Agent with System Group** window will be displayed.

If this window is used to specify one or more system groups where Agents will be allocated, the Agents will be identified automatically, and they can then be collectively registered with appropriate system groups and their configuration information collected.

 Point

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If there is an unregistered Agent, the message "Unregistered Agent exists" will flash in the status bar of the **Setting View**, the **Console** window, and the **Report** view. This means that the existence of an unregistered Agent can be seen even if the **Setting View** is not open.

This message will stop being displayed when all unregistered Agents have been allocated to system groups.

. . . .

 Point

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If unnecessary Agents appear in the **UnregisteredAgents** folder and the message "Unregistered Agent exists" is displayed, use the *sqcPDBerase* command (described in 18.3 sqcPDBerase (Data Deletion Command))to delete the data from the PDB. This will stop those Agents and the message from being displayed.

. . . .

The **Register Agent with System Group** window is shown below.
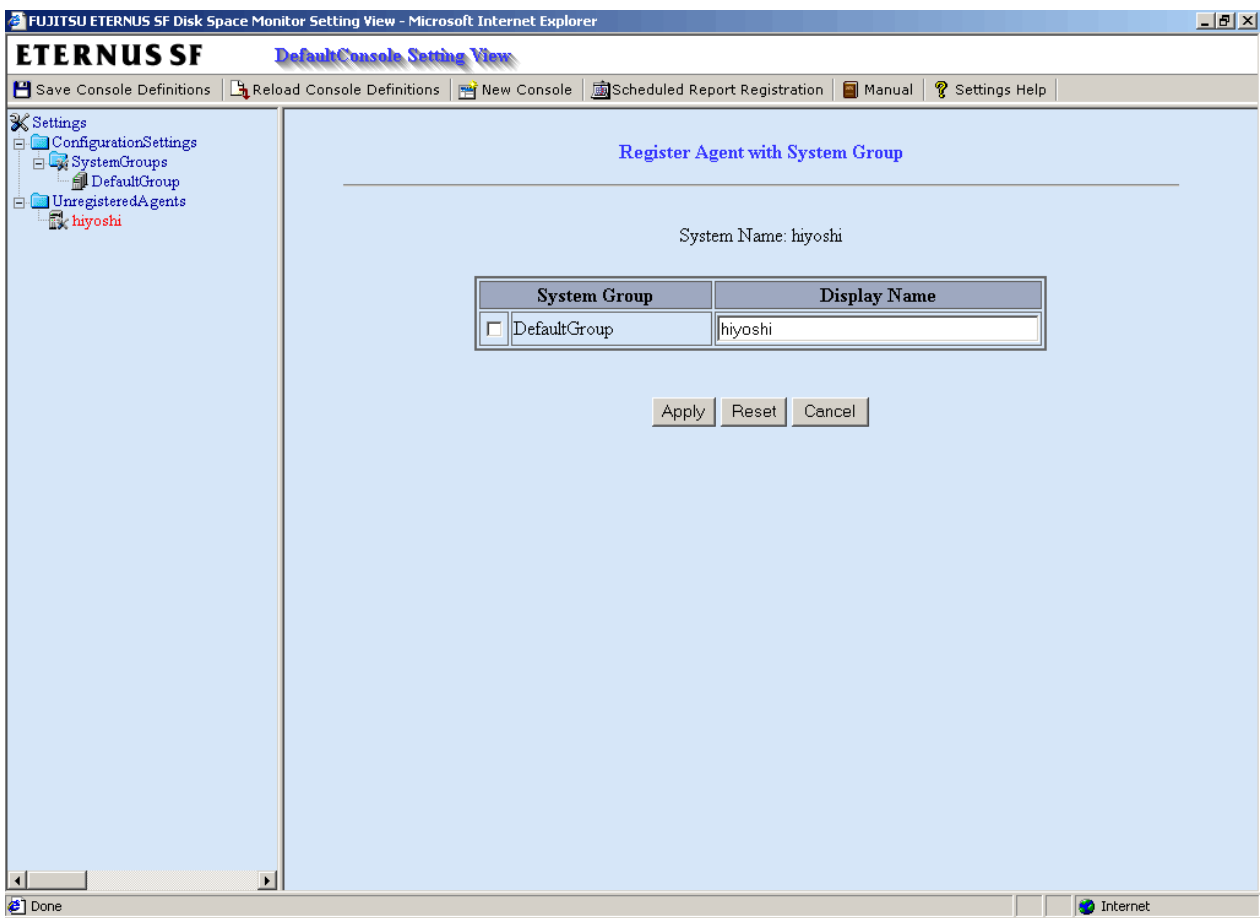
Node name	Setting item name	Description
Host name of unregistered agent	**System Group**	Select the checkbox for the system group to which the unregistered Agent is to be allocated.
	Display Name	This corresponds to the Agent name specified in the **Agent Information** window. Set a name that is unique within the management configuration. (The system name is set by default.)

Node name	Setting item name	Description
		The following Shift-JIS code characters can be used for display names: Double-byte characters Single-byte alphanumeric characters Single-byte symbols (except for \: , < > $ " ' [ ] = &) The display name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.

P Point

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If the system group is not yet registered, a group called "DefaultSystemGroup" will be displayed.

The process of allocating Agents to DefaultSystemGroup will cause a system group named "DefaultSystemGroup" to be automatically created at the same time.

. . . .

9.2.3.2.1　　Deleting information about unregistered Agents

This section explains the procedure for deleting Agents listed in the UnregisteredAgents tree from Console.

Preconditions

This function is only valid if there is only one set of configuration management information registered in the PDB of the Manager environment that the operation management client is connected to. Agents will only be deleted from the PDB in the Manager environment that the operation management client is connected to.

If there are multiple sets of configuration management information, use the sqcPDBerase command (described in 18.3 sqcPDBerase (Data Deletion Command) to delete the data from the PDB so that it is not displayed.

If the operation management client is connected to a Manager in a two-tier configuration model, only the Manager that the operation management client is connected to will be affected.
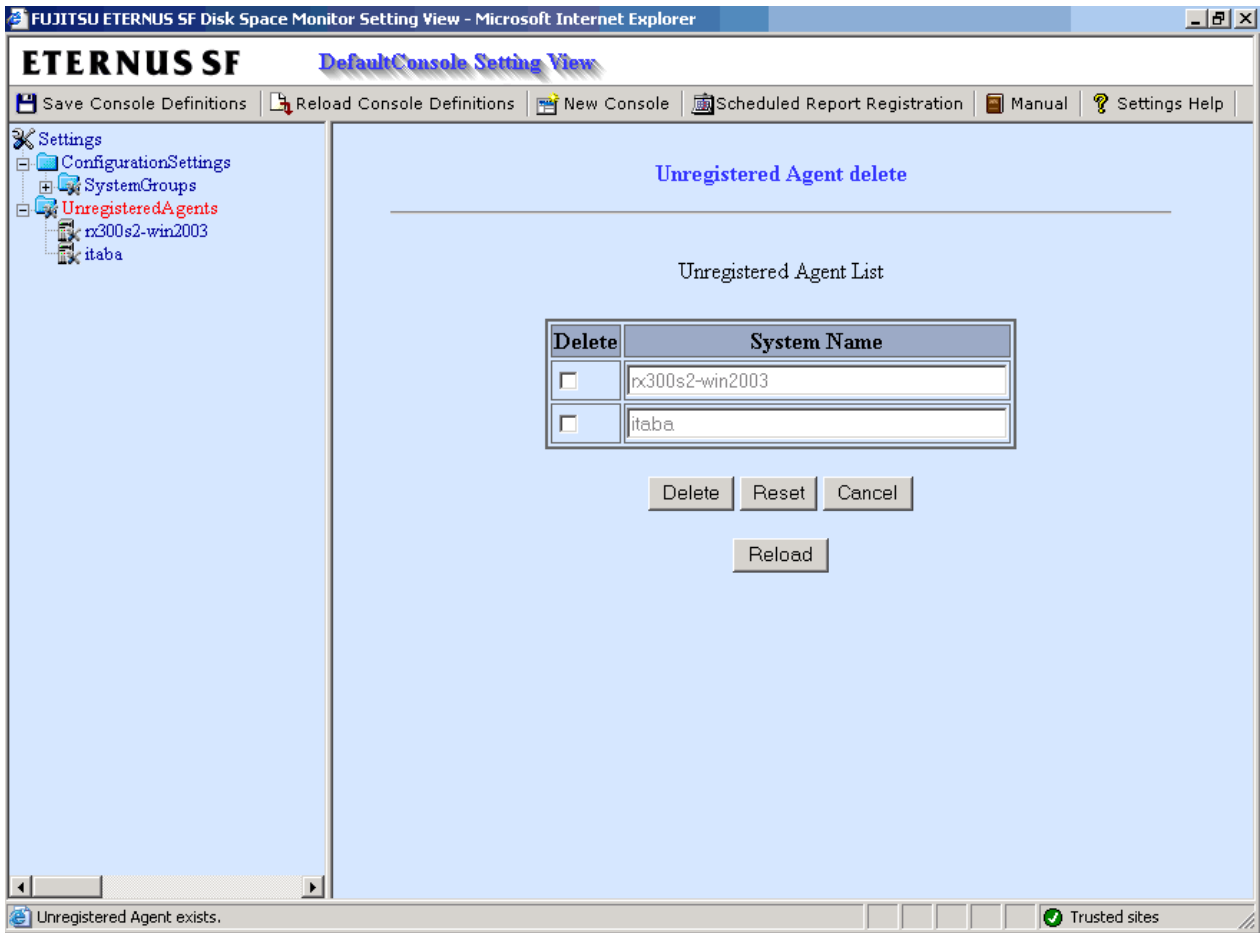
Node name	Setting item name	Setting content
Host name of the unregistered Agent	Delete	Select the checkboxes for the unregistered Agents to be deleted.
	Display name	The display names for the unregistered agents are displayed in the **Unregistered Agent List Registration** window.

Procedure

1. Click on the **Unregistered** tree to display the **Unregistered Agent List Registration** window in the pane on the right-hand side of the window.

2. Select which Agents to delete.

   Select the checkboxes on the left-hand side of the names of the unregistered Agents to be deleted. Multiple Agents can be specified.

3. Click on the **Delete** button at the bottom of the window.

   The following confirmation dialog box will be displayed.
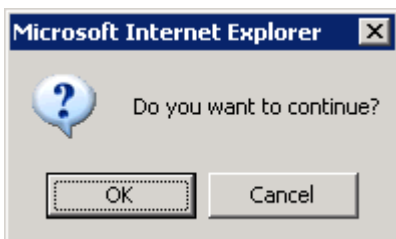
Click the **OK** button to start the deletion processing.

Click the **Cancel** button to return to the original window without performing deletion processing.

🅿 Point

If the **Unregistered** tree is clicked in an environment where multiple console definitions have been made, a window will be displayed indicating that this function cannot be used.
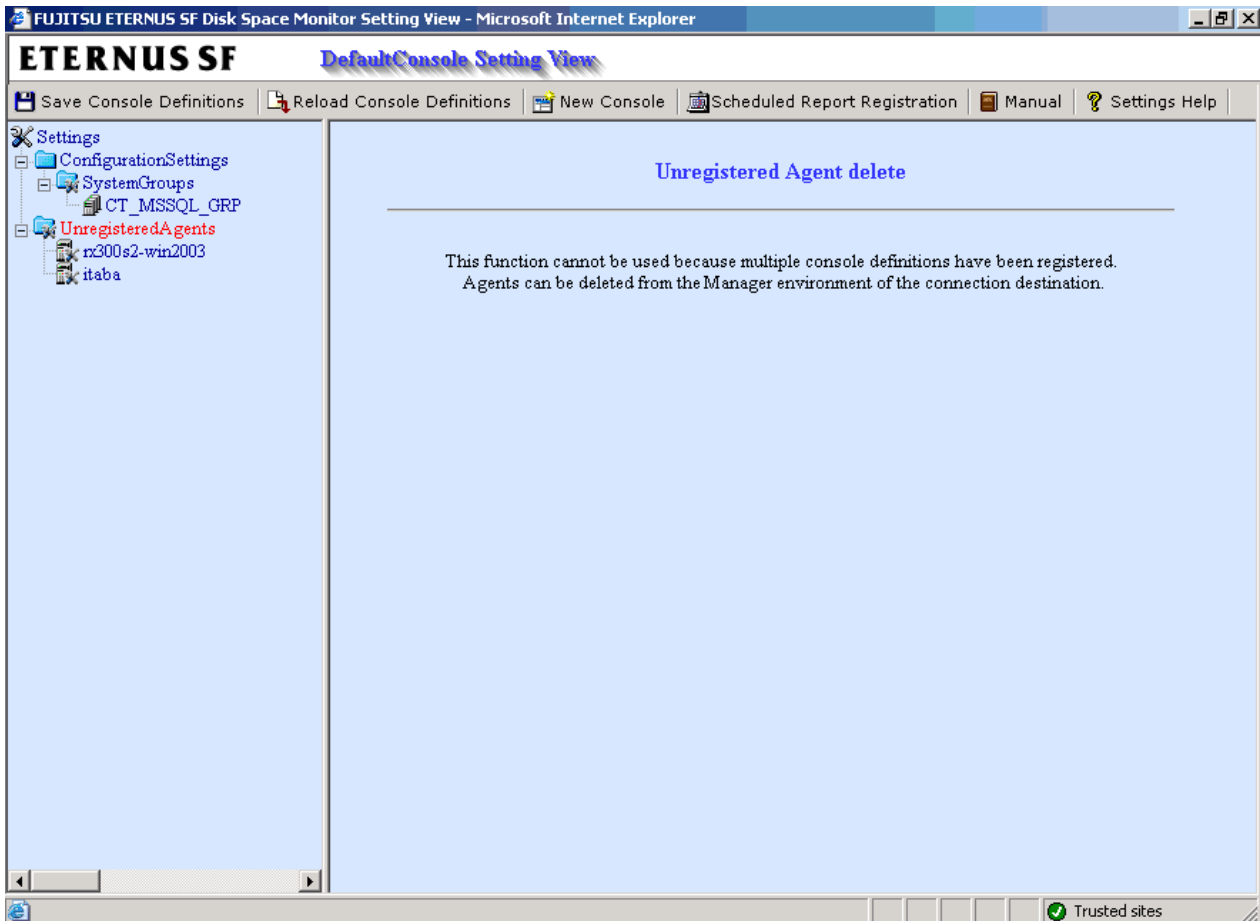
Deleting Agents that have already been registered with SystemGroups

1. Select the SystemGroups tree where the Agents are registered, and display the Agent list window.

2. Clicking on the **Delete** button next to the name of an Agent moves the Agent from the **SystemGroups** tree to the **UnregisteredAgents** tree.

3. Delete the Agent using the procedure in Section , "9.2.3.2.1 Deleting information about unregistered Agents".

Reregistering Agents or Proxy Managers that have been deleted

To enable Agents that have been deleted using this function to be registered in the Console again, execute "13.2 Applying Policies" in the environment for the Agent.

9.3 User Definitions Window

9.3.1 Window Configuration

The **User Definitions** window initially appears as below.

The **User Definitions** window is organized as shown in the following table.

Item No.	Component	Description

(1)	Toolbar	The toolbar provides the following menus:
		
		・ **Manual**
		
		   - Opens the User's Guide (this manual).
		
		・ **Admin Console Help**
		
		   - Directly opens the chapter describing how to use the **Admin Console** window (this chapter) in the User's Guide.

(2)	User definition display area	This area displays information about user definitions that have been registered. For user definitions for which a launch HTML file has been created, a tick will be displayed in the **Launching HTML** column.

- 143 -

9.3.2　Basic operation

The **User Definitions** window contains a number of operation buttons.

The following table explains the operation of each button.

Button	Operation
Register	Registers a new user definition. After clicking this button, enter the name of the user definition to be created in the prompt that is displayed. The following Shift-JIS code characters can be used for user names: Double-byte characters Single-byte alphanumeric characters Single-byte symbols (except for $ \" ' , : [ ] < > = & / * ?) Note, however, that "AdminConsole" cannot be used as a user name. User names are not case sensitive. The user name can be no longer than 64 characters, regardless of whether single-byte or double-byte characters are used.
Console Definitions Assign	Assigns the console definition to be used by this user.
Create HTML	Generates the HTML file that is opened when the user starts the Console. To set up basic authentication for users' launch HTML files, refer to 16.3 How to Set Up Basic Authentication for Operation Management Clients
Copy	Copies the specified user definition with the specified name. After clicking this button, enter the name of the user definition to be copied in the prompt that is displayed. **Note** Launch HTML cannot be copied.
Delete	Deletes the specified user definition.
Reload	Displays user definitions using the latest information.

9.3.3　Assigning console definitions

Assign console definitions using the **Console Definitions Assign** window that is displayed when the **Console Definitions Assign** button is clicked.
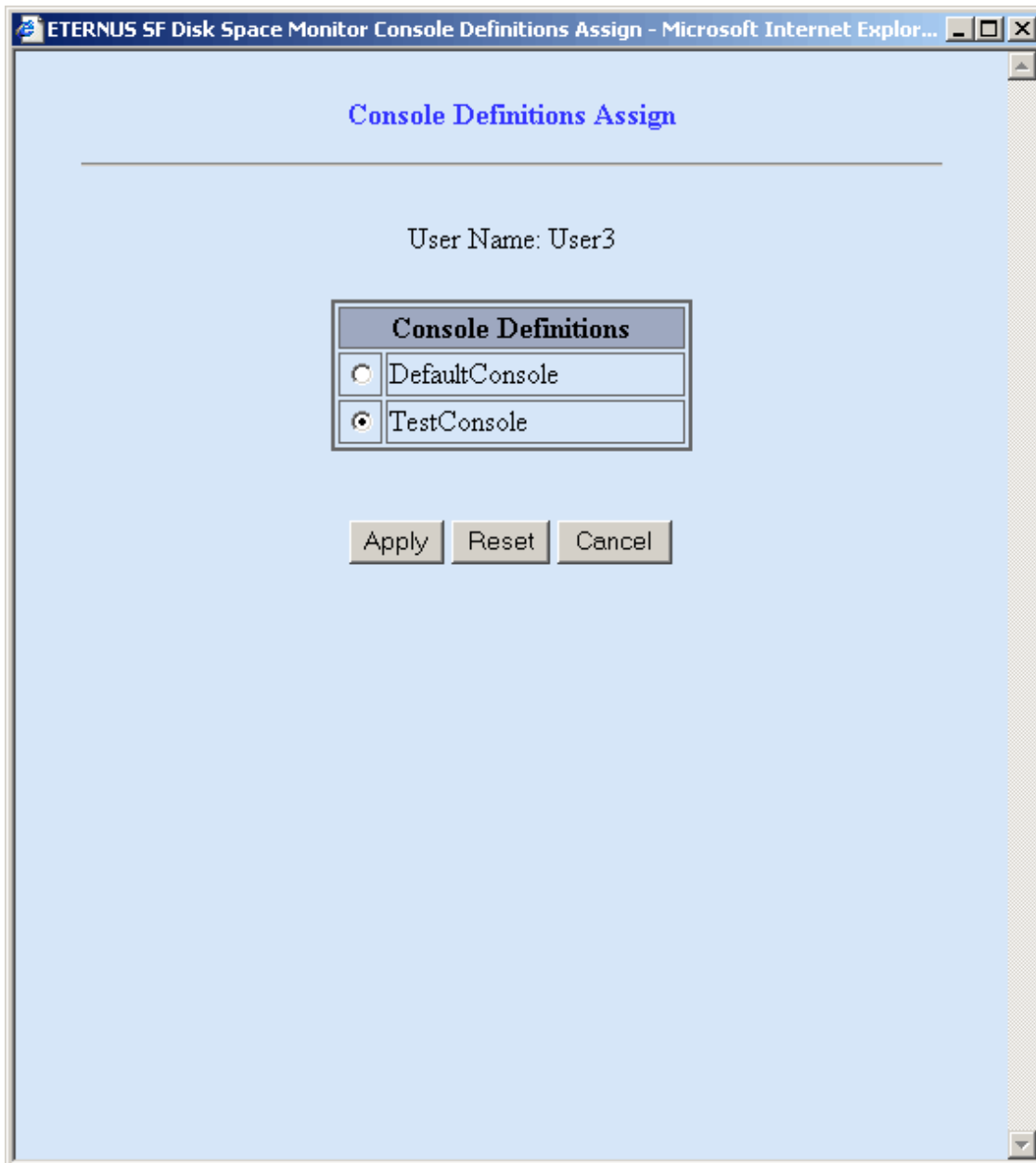
Setting item name	Description
Console Definitions	Select the radio button for the console definition to be assigned from the list of current console definitions.

When a console definition is assigned, the **Admin Console** is reloaded at the same time, and the console definition that has been assigned is added to the line for the user.

Part 4   Installation (Advanced)

Chapter 10   Defining Thresholds

This product can define thresholds for threshold monitoring. These thresholds are defined on Managers, Agents. If monitored item values exceed the defined thresholds, an alarm will be generated.

🅿 Point
. . . .
Refer to 10.2 Alarm Action Definitions Definitions" for details on how to define alarm action executed when thresholds are exceeded.
. . . .

10.1   Threshold Monitoring Definitions

10.1.1   Storage location

The storage location of the definition file is as follows:

[Windows]

Variable file directory\control\alertconfig.txt

[Solaris][Linux]

/etc/opt/FJSVssqc/alertconfig.txt

Edit the above file according to the following definition method.

📒 Note
. . . .
After this file has been placed in this location, its presence will be periodically checked (every 5 minutes) and recognized by this product, and then the definitions will be incorporated automatically. For this reason, edit this file from a different location, and place it in the storage location above when all of the definitions have been completed.
. . . .

10.1.2   How to make the definitions

This file is in CSV format. Each item that will be subject to threshold monitoring is defined on a separate line.

Column	Description
1	The threshold monitoring ID. Use a unique ID for each line.
2	The record number for the item being monitored. See the next table for record number values.
3	Field name + record number of the item being monitored. Example: To monitor field name "freepc" with record number "1018", specify "freepc1018". See the next table for field name and record number values.
4	Define the resource ID of the resource being monitored. The resource ID can be seen in the **Resource ID** column by displaying the content of the target node in the Console's **Drill Down** view. Wildcards can also be used in the resource ID. For example, if the resource ID is "aaabbbccc", then any of the following specifications will match this resource ID: "aaabbbccc", "aaa*", "aa?bb?cc?", "???bbb???", or "[abc]aa[abc]bb[abc]cc", and so on.

Column	Description
5	Define the name that will be used to send notifications regarding the monitored item.
6	Define the start time for the time period during which thresholds will be monitored. Use the following format: HH:MM:SS This value cannot be omitted.
7	Define the end time for the time period during which thresholds will be monitored. Use the following format: HH:MM:SS This value cannot be omitted. To monitor thresholds continuously (24 hours a day), specify "00:00:00" for both the start time and the end time.
8	Define the threshold violation count (N), which is the number of times (within the standard sampling count) that the threshold has to be exceeded before an alert will be notified.
9	Define the standard sampling count (M) for determining alert notifications. The maximum standard sampling count is 9 and the minimum value is 1. Specify an integer between 1 and 9 inclusive. If the sampling count is 1, define the threshold violation count as 1 as well. Define the threshold violation count (N) and the standard sampling count (M) so that the following relationship exists: N ≧ M/2
10	Warning threshold
11	Error threshold
12	Define either "<" or ">". >: Sends an alert notification if the value exceeds the threshold (useful for monitoring disk space, etc.). <: Sends an alert notification if the value drops below the threshold (useful for monitoring disk unused rate, etc.).

The correspondence between record numbers and field names for monitored items

[Windows]

Category	Record number	Field name	Item description
WIN_DISKSP ACE	1018	free	Free disk capacity (bytes)
		total	Total disk capacity (bytes)
		freepc	Free space % on disk (average for interval)

[Solaris][Linux]

Category	Record number	Field Name	Item description
UX_DISKSPAC E	1002	dtotfils	Total files in the filesystem by mount point [df]<snapshot>
		duseblks	Used blocks in the filesystem by mount point [df]<snapshot>
		dfrefils	Free files in the filesystem by mount point [df]<snapshot>
		davlblks	Free user blocks in the filesystem by mount point [df]<snapshot>
		dblksiz	Block size of the filesystem by mount point

Category	Record number	Field Name	Item description
		dtotblk	Total blocks in the filesystem by mount point [df]<snapshot>
		dusebyts	Used bytes in the filesystem by mount point
		dusembs	Used megabytes in the filesystem by mount point [df]<snapshot>
		davlbyts	Free user bytes in the filesystem by mount point [df]<snapshot>
		davlmbs	Free user megabytes in the filesystem by mount point [df]<snapshot>
		dtotbyts	total bytes in the filesystem by mount point [df]<snapshot>
		dtotmbs	total megabytes in the filesystem by mount point [df]<snapshot>
		dfreepc	Free space % in the filesystem by mount point [df]<snapshot>

P Point

. . . .

The information shown in the above tables is displayed in the **Monitor** view of the **Console** window and represents resource information relating to the operating system. Other items can also be used for threshold monitoring. In such cases, refer to Chapter 19 Data Formats and specify the corresponding record number and field name.

. . . .

10.1.3 Sample definition

A sample alertconfig.txt definition is shown below.

[Windows]

```
1,1018,freepc1018,*,FreeSpace,00:00:00,00:00:00,1,1,20,5,<
```

[Solaris][Linux]

```
1,1002,dfreepc1002,*,FreeSpace,00:00:00,00:00:00,1,1,20,5,<
```

10.2 Alarm Action Definitions

Once threshold monitoring is defined, any threshold violation will result in an action to report the violation to the administrator. The following action types are available:

- Event log/syslog

- Systemwalker Centric Manager message linkage

- Mail

- Trap

- Execution of user-specified command

When installation is complete, the event log/syslog or Systemwalker Centric Manager message linkage is set up according to the answer that the user provides in response to the queries given by the installer.

10.2.1   Storage location

The storage location of this definition file is as follows:

[Windows]

```
Installation directory\bin\threshold.bat
```

[Solaris][Linux]

```
/opt/FJSVssqc/bin/threshold.sh
```

10.2.2   Definition method

10.2.2.1   Defining the action type

The execution of actions is controlled by an ON/OFF specification. When an action is set to ON, it will be executed. More than one action can be set to ON.

Definition content	Meaning
EVENTLOG="ON" or SYSLOG="ON"	Event log or syslog
OPAPOST2="OFF"	Systemwalker Centric Manager message linkage
MAIL="OFF"	Mail
TRAP="OFF"	Trap
OTHER="OFF"	Execution of user-specified command

10.2.2.2   When MAIL is selected

[Windows]

Define the parameters associated with Windows mail notifications.

Definition content	Meaning
MAILSMTPSRV="00.00.00.00"	Address of the SMTP server
MAILSMTPPRT="25"	Port of the SMTP server
MAILFROM="aa@xx.co.jp"	Address of sender ("From")

Definition content	Meaning
MAILTO="bb@xx.co.jp"	Address of recipient ("To")
MAILPOP3PRT="110"	POP3 server port (if POP authentication is required)
MAILPOP3SRV="00.00.00.00"	POP3 server address (if POP authentication is required)
MAILAUTHTYPE="Pop"	Specify "Pop" if POP authentication is required.
MAILUSERID=""	User ID (if POP authentication is required)
MAILPASSWD=""	Password (if POP authentication is required)
MAILCC="cc@xx.co.jp, dd@xx.co.jp"	"Cc" address of mail
MAILBCC="ee@xx.co.jp, ff@xx.co.jp"	"Bcc" address of mail
MAILSUB="ETERNUS SF Disk Space Monitor threshold %MSGINFO%:%2(%3)"	"Subject" of mail The following variable parameters (% followed by characters) can be specified: %MSGINFO%: Error type %2: System name %5: Measurement value %6: Threshold %7: Number of times detected %8: Criterion for the number of times detected

[Solaris][Linux]

Define the parameters associated with Solaris/Linux mail notifications.

Definition content	Meaning
MAILSMTPSRV="00.00.00.00"	Address of the SMTP server
MAILSMTPPRT="25"	Port of the SMTP server
MAILFROM="aa@xx.co.jp"	Address of sender ("From")
MAILTO="bb@xx.co.jp"	Address of recipient ("To")
MAILPOP3PRT="110"	POP3 server port (if POP authentication is required)
MAILPOP3SRV="00.00.00.00"	POP3 server address (if POP authentication is required)
MAILAUTHTYPE="Pop"	Specify "Pop" if POP authentication is required.
MAILUSERID=""	User ID (if POP authentication is required)
MAILPASSWD=""	Password (if POP authentication is required)
MAILCC="cc@xx.co.jp, dd@xx.co.jp"	"Cc" address of mail
MAILBCC="ee@xx.co.jp, ff@xx.co.jp"	"Bcc" address of mail
MAILSUB="ETERNUS SF Disk Space Monitor threshold $MSGINFO:$2($3)"	"Subject" of mail The following variable parameters ($ followed by characters) can be specified: $MSGINFO: Error type $2: System name

Definition content	Meaning
	$5: Measurement value
	$6: Threshold
	$7: Number of times detected
	$8: Criterion for the number of times detected

10.2.2.3   When TRAP is selected

Define the parameters associated with trap notifications.

Definition content	Meaning
TRAPAGT="$2"	Address of Trap agent
TRAPDEST="hostname"	Address of Trap destination
TRAPCOMMUNITY="public"	Trap community name
TRAPENTERPRISE="1.3.6.1.4.1.211"	Enterprise value of Trap
TRAPGENERIC="6"	Generic value of Trap
TRAPSPECIFIC="1"	Specific value of Trap
TRAPOBJNAME="1.3.6.1.4.1.211"	Object name
TRAPOBJTYPE="2"	Object type

10.2.2.4   When OTHER is selected

It is possible to execute a command specified by the user.

Specify the command name on the following line:

```
SQCOTHEREXE=""
```

Edit the processing that begins on the following line according to the specifications of the command:

```
if "%OTHER%"==""ON"" (
```

Chapter 11 Managing User Data

This chapter explains how to manage user-specific data such as business data and system operational data.

P Point

Any data whose format matches certain conditions can be stored in this product's PDB. Data stored in the PDB can be displayed using this product's Monitor, Drill Down and Report functions.
The "certain conditions" above refers to the following conditions.

- The fields in each record are delimited by commas (CSV format).

- There is a new line for each record.

- Each record has the same format.

- Each record contains a resource ID that identifies the record.

11.1 Defining User Data

In order to manage user data, a user data definition file must be created.

11.1.1 Definition location

The user data definition file is a text file. Use a text editor such as Notepad to create and edit the file. The path to the file is as follows:

[Windows]

Variable file directory\control\udataconf.ini

[Solaris][Linux]

/etc/opt/FJSVssqc/udataconf.ini

11.1.2 Definition format

Create the user data definition file using the following format.

Syntax

[MIDDLEWARE_CONF]

XML=ON | OFF

[SELECT_RECORDID]

UDATA_1=ON | OFF

UDATA_2=ON | OFF

UDATA_3=ON | OFF

UDATA_4=ON | OFF

UDATA_5=ON | OFF

P Point

- The vertical bars "|" mean "or". That is, either one option or the other can be specified.

- Blank lines are treated as comments.

・ Lines that start with a hash "#" are treated as comments.

Description

[MIDDLEWARE_CONF]

Specifies whether to manage user data.

XML=ON | OFF

The meanings of each option are as follows:

Option	Meaning
ON	Manages user data.
OFF	Does not manage user data.

The default value is OFF.

[SELECT_RECORDID]

Selects the record IDs in the PDB that will be used to manage the user data.

Five types of record ID have been prepared - UDATA_1 to UDATA_5 (including SUM_UDATA_1 to SUM_UDATA_5 for each of these). Select which of these record IDs to use.

UDATA_1=ON | OFF

UDATA_2=ON | OFF

UDATA_3=ON | OFF

UDATA_4=ON | OFF

UDATA_5=ON | OFF

The meanings of each option are as follows:

Option	Meaning
ON	Selects the record ID. If a record ID is selected, the corresponding SUM_UDATA_1 to SUM_UDATA_5 are also selected.
OFF	Do not select the record ID.

The default value is ON.

P Point

Set record IDs that will not be used to OFF.

Example

The following example shows a definition for managing two types of user data.

[Windows][Solaris][Linux]

```
[MIDDLEWARE_CONF]
XML=ON
[SELECT_RECORDID]
UDATA_1=ON
UDATA_2=ON
```

UDATA_3=OFF

UDATA_4=OFF

UDATA_5=OFF

11.2　Setup

To apply user data definitions, a collection policy must be created and applied by executing the *sqcRPolicy* and *sqcSetPolicy* commands, and configuration information must be obtained using the **Setting View**.

Refer to Chapter 13 Creating and Applying Collection Policies for details on creating and applying collection policies.

Refer to 9.2.3.1.2 Agents, for details on how to obtain configuration information.

11.3　Storing User Data in the PDB

Use the *sqcPDBcload* command to store user data in the PDB.

Refer to Chapter 18 PDB Commandsfor details on how to use this command.

11.4　Display

Information about user data can be displayed using the following method.

Monitor view of the **Console** window	Use the "UserDataMonitor" folder in the **Monitor** tree.
Drill Down view of the **Console** window	Use the "UserData" folder in the **Drill Down** tree.
Report view	Displays detailed reports.

Chapter 12 Configuring Communication Environment with the Pull Method

This product usually uses the communication mode in which data is "pushed" from Agents 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.

P Point

Pull type communications are initiated by the Manager, which polls the Agents and pulls the results from them. These communications use the HTTP protocol and so require an HTTP communications environment on the Agents.

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.

P Point

- The communications mode ("push" or "pull") is selected at installation time.

- For push communications, Agents send data autonomously, and so no particular definitions need to be made. For pull communications, definitions for the Agents 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.

- This chapter also explains how to switch between communication modes.

12.1 HTTP Pull Operations

The following two operations are required to perform HTTP pull operations.

- Definitions for pull communications (on the Manager)
- Executing the setup command for pull communications (on the Agents)

These procedures are explained below.

12.1.1 Definitions for pull communications

Make these definitions using the following method:

12.1.1.1 Storage location

The storage location of the definition file is as follows:

[Windows]

Variable file directory\control\agentlist.cfg

[Solaris][Linux]

/etc/opt/FJSVssqc/agentlist.cfg

Edit this file using the following definition method.

12.1.1.2 Definition method

Add the following entry for each unit of pull communications.

```
Host name[/SQC], port number
```

・ Use a name that can be communicated to for the host name. IP addresses can also be used.

・ The "/SQC" after the host name is an alias that is required if the HTTP communications environment on the Agent uses a general HTTP service such as Apache. This alias is not required if the HTTP service provided with ETERNUS SF Disk Space Monitor is used.

・ If the HTTP service provided with ETERNUS SF Disk Space Monitor is used as the HTTP communications environment on the Agent, then the port number will be set to 23440 by default.
To change this port number, edit the following definition file (change the "port=23440" section), and then restart the thttp service.

[Windows]

```
variable file directory\control\thttpd.conf
```

[Solaris][Linux]

```
/etc/opt/FJSVssqc/thttpd.conf
```

・ If there are multiple Agent servers, enter each Agent server on consecutive lines.

・ If a hash "#" is added to the start of a line, the line is commented out.

Note

・ If the target Agents are running on a cluster system, define physical host names or physical IP address rather than logical host names or logical IP addresses.

12.1.1.3   Definition example

An example definition for agentlist.cfg is shown below.

```
[AgentList]
host.company.co.jp,23440
100.100.100.100,23440
host2.company.co.jp/SQC,80
#100.100.100.100, 23440
```

12.1.2   Executing the setup command for pull communications

[Windows]

Log in to the system with Administrator privileges, and set up a pull communication environment using the method below. (This will increase the risk of security.)

1. Execute the following two commands:

```
C:/> installation directory\bin\sqcSetFileSec.exe -u variable file directory\temp
```

```
C:/> installation directory\bin\sqcSetFileSec.exe -u variable file directory \spool
\Delayxfer
```

2. Restart dcm, and then start thttpd if the thttpd service is to be used.

[Solaris][Linux]

Log in to the system with superuser privileges, and execute the following setup command for pull communications. (This will increase the risk of security.)

1. Execute the following command.

/opt/FJSVssqc/bin/pullsetup.sh

2. Restart dcm, and then start thttpd if the thttpd service is to be used

12.2   Switching between Push and Pull Communication Modes

This section explains how to switch between push and pull communication modes once operations are already underway.

12.2.1   Changing from pull to push communications

12.2.1.1   Tasks required on the Manager

Delete the 12.1.1 Definitions for pull communications

12.2.1.2   Tasks required on the Agent

1. Stop dcm, and then stop thttpd if the thttpd service is being used.

2. Change the content of the following definition file.

   The storage location of the definition file is as follows:

   [Windows]

Variable file directory\control\DSAconfiguration.txt

   [Solaris][Linux]

/etc/opt/FJSVssqc/DSAconfiguration.txt

   Change this definition file as below.

   Add the following section:

[DsaForwarder]
execute_style=on
path=dsa_forwarder.exe

```
input=SQC3PDBDSREG

input=SQC3PDBCONSOL

input=SQC3PDBRYG

input=SQC3PDBXML

server= Specify the 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

[DsaForwarder_sum]

execute_style=on

path=dsa_forwarder.exe

input=SQC3PDBDSREG

input=SQC3PDBSUMMARY

input_expire=1

server= Specify the address of the Manager here.

port=2344

connect_timeout=30

send_timeout=30

retry_count=30

retry_sleep=30

retry_no_sleep=30
```

Delete 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
```

📝 Note

The example above is for the Windows edition. For the Solaris edition/Linux edition, specify "path" as "/opt/FJSVssqc/bin/dsa_forwarder".

3. Execute the following commands.

   [Windows]

   Log in to the system with Administrator privileges, and change from a pull communications environment to a push communications environment using the following method.

   Execute the following two commands:

   ```
   C:/> installation directory\bin\sqcSetFileSec.exe variable file directory\temp
   ```

   ```
   C:/> installation directory\bin\sqcSetFileSec.exe variable file directory\spool\Delayxfer
   ```

   [Solaris][Linux]

   Log in to the system with superuser privileges, and change from a pull communications environment to a push communications environment using the following method.

   Execute the following command.

   ```
   /opt/FJSVssqc/bin/pullsetup.sh -u
   ```

4. Restart dcm.

📘 See

Refer to 5.2 Agent of Chapter 5 How to Start and Stop Resident Processes for details on how to restart dcm.

📝 Note

If redundancy operations are being conducted, first temporarily cancel the redundancy operation mode, then switch between push and pull communications, and then set up the redundancy operation mode again.

Refer to 4.3.1.1 Manager setup command for redundant Manager operations.

12.2.2 Changing from push to pull communications

12.2.2.1 Tasks required on the Manager

Make the 12.1.1 Definitions for pull communications

12.2.2.2 Tasks required on the Agent

1. Stop dcm, and then stop thttpd if the thttpd service is being used.

📘 See

Refer to 5.2 Agent of Chapter 5 How to Start and Stop Resident Processes for details on how to stop dcm and thttpd.

2. Change the content of the following definition file.

   The storage location of the definition file is as follows:

   [Windows]

   > *Variable file directory*\control\DSAconfiguration.txt

   [Solaris][Linux]

   > /etc/opt/FJSVssqc/DSAconfiguration.txt

   Change this definition file as below.

   Delete the following section:

   > [DsaForwarder]
   >
   > execute_style=on
   >
   > path=dsa_forwarder.exe
   >
   > input=SQC3ALERTS
   >
   > 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
   >
   > [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

   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
```

📒 Note

The example above is for the Windows edition. For the Solaris edition/Linux edition, specify "path" as "/opt/FJSVssqc/bin/dsa_file" and "out_dir" as "/var/opt/FJSVssqc/DelayXfer". For the "out_dir" item, specify the absolute path to the "Delayxfer" directory (under the directory where the Agent has been installed).

3. Execute the following commands.

   [Windows]

   Log in to the system with Administrator privileges, and set up a pull communications environment using the method below. (This will increase the risk of security.)

   Execute the following two commands.

   ```
   C:/> installation directory\bin\sqcSetFileSec.exe -u variable file directory\temp
   ```

   ```
   C:/> installation directory\bin\sqcSetFileSec.exe -u variable file directory\spool
   \Delayxfer
   ```

   [Solaris][Linux]

   Log in to the system with superuser privileges, and execute the following setup command for pull communications. (This will increase the risk of security.)

   Execute the following command.

   ```
   /opt/FJSVssqc/bin/pullsetup.sh
   ```

4. Restart dcm, and then start thttpd if the thttpd service is to be used.

📘 See

Refer to 5.2 Agent of Chapter 5 How to Start and Stop Resident Processes for details on how to restart dcm and thttpd.

Note

・ Web server settings are required for HTTP pull operations. Refer to Chapter 16 Setting up an HTTP Communication Environment

・ If redundancy operations are being conducted, first temporarily cancel the redundancy operation mode, then switch between pull and push communications, and then set up the redundancy operation mode again.

Refer to 4.3.1.1 Manager setup command for redundant Manager operations.

Part 5   Reference

Chapter 13   Creating and Applying Collection Policies

After the Managers and Agents have been installed, collection policies need to be created and applied to start information collection.

🅿 Point
....

- ・ There are basically one kinds of information that can be collected.

    - Server resource information (which can be collected by Agents)

- ・ Collection policies are first created and then applied, as shown in the following diagram.

- ・ Collection policies that have been applied once can be temporarily changed.

- ・ The commands corresponding to these operations are provided.
....
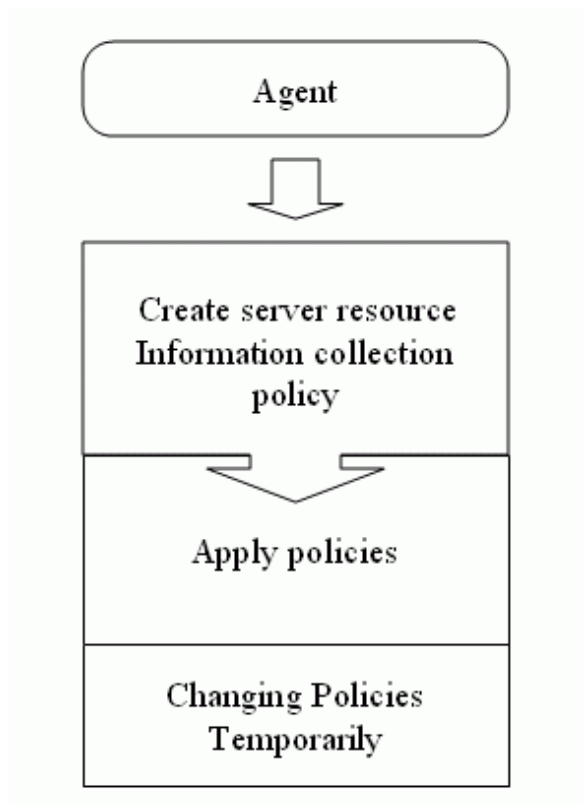
This chapter explains how to execute the commands involved in each of these steps.

📒 Note
....

Information does not start being collected until collection policies are created. Be sure to create policies first and then apply them.
....

13.1   Creating Server Resource Information Collection Policies

Server resource information collection policies are created using the following two types of information.

- ・ Managed object configuration information (resource configuration information)
  This information indicates which resources within the server are being managed (server information/middleware information). It is detected automatically when the *sqcRPolicy* command is executed.

Note

If the server is running as a cluster system, execute this command on both nodes. However, make sure that the middleware to be managed is running when the command is executed, and fail the cluster system over to the node where the policies are being created before executing the command.

- Template
  This template defines the performance items for which information will be always collected. It is provided as the following file when this product is installed:

  [Windows]

  Variable file directory\control\template.dat

  [Solaris][Linux]

  /etc/opt/FJSVssqc/template.dat

[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 ETERNUS SF Disk Space Monitor DCM service starts (before information starts being collected).

The specification for the command that creates server resource information collection policies is explained below.

[Command name]

sqcRPolicy: Creates server resource information collection policies

[Syntax]

[Windows]

Installation directory\bin\sqcRPolicy.exe

[Solaris][Linux]

Note

Log in as a superuser to execute this command.

/opt/FJSVssqc/bin/sqcRPolicy.sh

[Function]

This command creates server resource information collection policies, and, at the same time, checks the installation status of the middleware being managed. The following middleware and associated resources can be managed:

[Windows][Solaris][Linux]

- Symfoware Sever
  RDB system name

[Options]

None.

[Termination status]

Normal termination 0
Abnormal termination 1

If this command terminates normally, the following message will be output:

- "(Success): sqcRPolicy succeeded."

  If this command terminates abnormally, the following message will be output:

- "(Error): The file was not able to be created because of insufficient file access."
  (File access error such as no available disk space or access privileges)

  In some situations, the following messages may also be output:

- "(Success): Middleware product <*middleware name*> has been detected.
  The configuration definitions for the detected middleware has been added."
  (The <*middleware name*> middleware has been detected.)

[Usage example]

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcRPolicy

(Success) : Middleware product <Symfoware Server> has been detected.

The configuration definitions for the detected middleware has been added.

(Success) : sqcRPolicy succeeded.

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

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcRPolicy.sh

(Success) : Middleware product <Symfoware Server> has been detected.

The configuration definitions for the detected middleware has been added.

(Success) : SqcRPolicy succeeded.

#
```

[File]

If this command is successful, the following file will be created:

[Windows]

> *Variable file directory*\control\MiddlewareConf.xml

[Solaris][Linux]

> /etc/opt/FJSVssqc/MiddlewareConf.xml

[Note]

To detect the middleware, each middleware product must be running when this command is executed.

By default, information on RDBINF_AP of Symfoware Database is not collected. Please set "14.4 How to Set up Symfoware Server" when you collect information on RDBINF_AP. Please refer to "19.2 Drill Down/Report Information" for details of RDBINF_AP.

There is no problem in operation though the content that detects the middleware not supported might be displayed when the command is executed.

13.2   Applying Policies

Once policies have been prepared, they can be applied. The specification for the policy application command is explained below.

[Command name]

sqcSetPolicy: Applies policies

[Syntax]

[Windows]

> *Installation drectory*\bin\sqcSetPolicy.exe [-h host name]

[Solaris][Linux]

📌 Note

. . . .

Log in as a superuser to execute this command.

> /opt/FJSVssqc/bin/sqcSetPolicy.sh [-h *host name*]

. . . .

[Function]

This command applies policies. The system name can be specified using the *-h* option. If the *-h* option is omitted, the host name will be set.

📌 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 18.3 sqcPDBerase (Data Deletion Command). However, in this case, performance information that has already been collected cannot be displayed.

. . . .

🔔 Note

Make sure that this product's DCM service has been stopped before applying policies. If policies are applied (that is, if this command is executed) while the DCM service is still running, the command will terminate abnormally. Refer to Chapter 5 How to Start and Stop Resident Processes for details on how to stop the DCM service.

[Options]

Option	Meaning
[-h host name]	Use this option to specify a new 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. (The current node and the standby node need to be managed using a single system name.) ・ Where the server is an Agent in a cluster system that uses node name inheritance. (Each node needs to be managed using separate names.)

[Termination status]

Normal termination 0
Abnormal termination 1

If this command terminates normally, the following message will be output:

・ "(Success): sqcSetPolicy succeeded."

If this command terminates abnormally, the following messages will be output:

・ "(Error): The file was not able to be created because of insufficient file access rights or disk space."
(File access error such as no available disk space or access privileges)

・ "(Error): There is an error in section [Section : XXX] of the template file sqcSetPolicy Template define error."
(There is an error with a template definition.)

・ "(Error): DCM is running and so sqcSetPolicy can not be run. Please stop dcm and retry sqcSetPolicy."
(The DCM service/daemon is running.)

・ "(Error): There is no available policy to apply."
(No valid policies can be found to apply, or sqcRPolicy is yet to be executed.)

🔔 Note

If these error messages are displayed, the policies for the policy settings message displayed before the error messages will not take effect.

[Usage example]

[Windows]

```
For normal termination

C:\Program Files\DiskSpaceMonitor\bin>sqcSetPolicy

This Computer Name is "XXXX"

The policy has been set for the <YYYY>

(Success) : sqcSetPolicy succeeded.

For abnormal termination
```

```
C:\Program Files\DiskSpaceMonitor\bin>sqcSetPolicy

This Computer Name is "XXXX"

(Error ) : There is an error in section [Section:ZZZZ] of the template file.
```

[Solaris][Linux]

```
For normal termination

# cd /opt/FJSVssqc/bin/

# ./sqcSetPolicy.sh

This Host Name is "XXXX"

The policy has been set for the <YYYY>

(Success) : sqcSetPolicy succeeded.

For abnormal termination

# cd /opt/FJSVssqc/bin/

# ./sqcSetPolicy.sh

This Host Name is "XXXX"

(Error) : There is an error in section [Section : ZZZZ] of the template file sqcSetPolicy Template
define error.
```

"XXXX" refers to the name specified with the -h option. If the -h option is omitted, the host name of the system where this command was executed will be displayed.

"YYYY" indicates the middleware that has been detected. A separate line will be displayed for each middleware product that is detected.

"ZZZZ" indicates the section of the template file where the definition error was found.

[File]

If this command is successful, the following files will be created according to the content of the managed object configuration information file.

[Windows]

```
Variable file directory\control\ManagedConf_XXXX.xml
```

"XXXX" refers to the name specified with the -h option. If the -h option was omitted, the computer name of the system where the command was executed will be set.

[Solaris][Linux]

```
/etc/opt/FJSVssqc/ManagedConf_XXXX.xml
```

"XXXX" refers to the name specified with the -h option. If the -h option was omitted, the host name of the system where the command was executed will be set.

🅿 Point

• •

Start the service/daemon after applying the policy. This configuration information must then be updated in the **Console** window.

Refer to Chapter 5 How to Start and Stop Resident Processes for details on how to start the service/daemon and Chapter 9 Admin Console Window for details on how to update configuration information.

• •

13.3　Changing Policies Temporarily

Policies can be changed after they have been applied and started operating (while collection is running). Specifically, once information collection policies for the following middleware products have been created and applied, collection can be stopped (by specifying "off") and started (by specifying "on").

- ・ Symfoware Server
- ・ Oracle Database Server

🅿 Point

....

Use temporary policy changes to control information collection behavior according to the operation mode of jobs or cluster systems.

....

[Command name]

sqcMdPolicy: Changes policies temporarily

[Syntax]

[Windows]

```
Installation directory\bin\sqcMdPolicy.exe on|off -c Type [ -i instance-name ]
```

[Solaris][Linux]

📋 Note

....

Log in as a superuser to execute this command.

```
/opt/FJSVssqc/bin/sqcMdPolicy.sh on|off -c Type [ -i instance-name ]
```

....

[Function]

This command temporarily changes policies. Specify the management target with the -c option and the instance name with the -i option.

[Options]

Options	Meaning
on|off	Specify either of the following types of changes: ・ on: Enables the target policy ・ off: Disables the target policy
-c Type	Specify either of the following management targets: ・ sym: Symfoware Server ・ ora: Oracle Database Server
[-i instance-name]	Specify the instance name for the management target specified by the -c option. If this option is omitted, all instances of the management target will be managed. ・ sym: RDB system name

Options	Meaning
	📒 Note
	....
	If the RDB system does not have a name, specify "-i @default".
	・ ora: Oracle instance name (SID)
	....

[Termination status]

Normal termination 0
Abnormal termination >0

1. A parameter has been specified incorrectly.

2. The memory required for processing could not be allocated.

3. There is no policy to be changed.

4. An internal error has occurred.

5. An error has occurred with file access.

[Usage example]

[Windows]

```
C:\Program Files\DiskSpaceMonitor\bin>sqcMdPolicy on -c sym -i RDBSystem
```

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/
# ./sqcMdPolicy.sh off -c ora -i orcl
```

Chapter 14 Resource Configuration Information (MiddlewareConf.xml)

The resource configuration information file is in XML format.

🅿 Point

・ This file is created using the *sqcRPolicy* command, which is used to create server resource information collection policies. In normal situations, this file does not need to be viewed.

・ However, after the resource configuration information file has been created with this command, it is possible to delete managed objects by editing the contents of the file. Edit the file when it is necessary to do so.
The file can be easily edited with the XML editor that can be found in the following directory of the ETERNUS SF Disk Space Monitor CD-ROM:

```
<CD-ROM>
   |
   +-tools
       |
       +-xml
           |
           +-OpeneXeed.exe
```

📖 Note

To view the Solaris version/Linux version of the CD-ROM directly in a Windows machine, perform the following procedure:

1. Insert the Solaris version/Linux version of the CD-ROM into the CD-ROM drive of the Window machine.

2. Copy the following file to any directory:

```
<CD-ROM>
   |
   +-FJSVssqc
       |
       +-tools.exe
```

3. The copied file is self-extracting. Double-click the file to begin the extraction process.
Decompressing the file will create a directory structure identical to that on the CD-ROM. To use the XML editor, execute the following file:

```
<CD-ROM>
   |
   +-tools
       |
       +-xml
           |
           +-OpeneXeed.exe
```

📖 Note

Before attempting to edit the configuration information file, always make a backup of the original file by renaming it. The original file will be needed to restore managed objects that have been deleted.

14.1 Storage Location

The storage location of the configuration information file is as follows:

[Windows]

Variable file directory\control\MiddlewareConf.xml

[Solaris][Linux]

/etc/opt/FJSVssqc/MiddlewareConf.xml

14.2 Definition Method

The configuration information file is created with the *sqcRPolicy* command, which is used to create server resource information collection policies. It is possible to delete managed objects by editing the contents of this file after it has been created. In this case, delete managed objects for each unit of tag information, as described below.

The key steps in using the XML editor on the ETERNUS SF Disk Space Monitor CD-ROM to edit the configuration information file are as follows:

- ・ Check each tag in the tree of the XML editor (View:XML Structure).

- ・ To define an attribute, select the tag to be edited on the tree and then double-click the attribute name to be defined in its displayed location (View:XML Data). Alternatively, an attribute can also be defined by using the **Edit Attributes** window displayed, clicking the right mouse button, and selecting **Edit** from the context menu that appears.

- ・ Individual tags can be added easily by using **Copy** and **Paste** from the **Edit** menu or by using **Duplicate** or **Copy**/**Paste** from the right-click context menu.
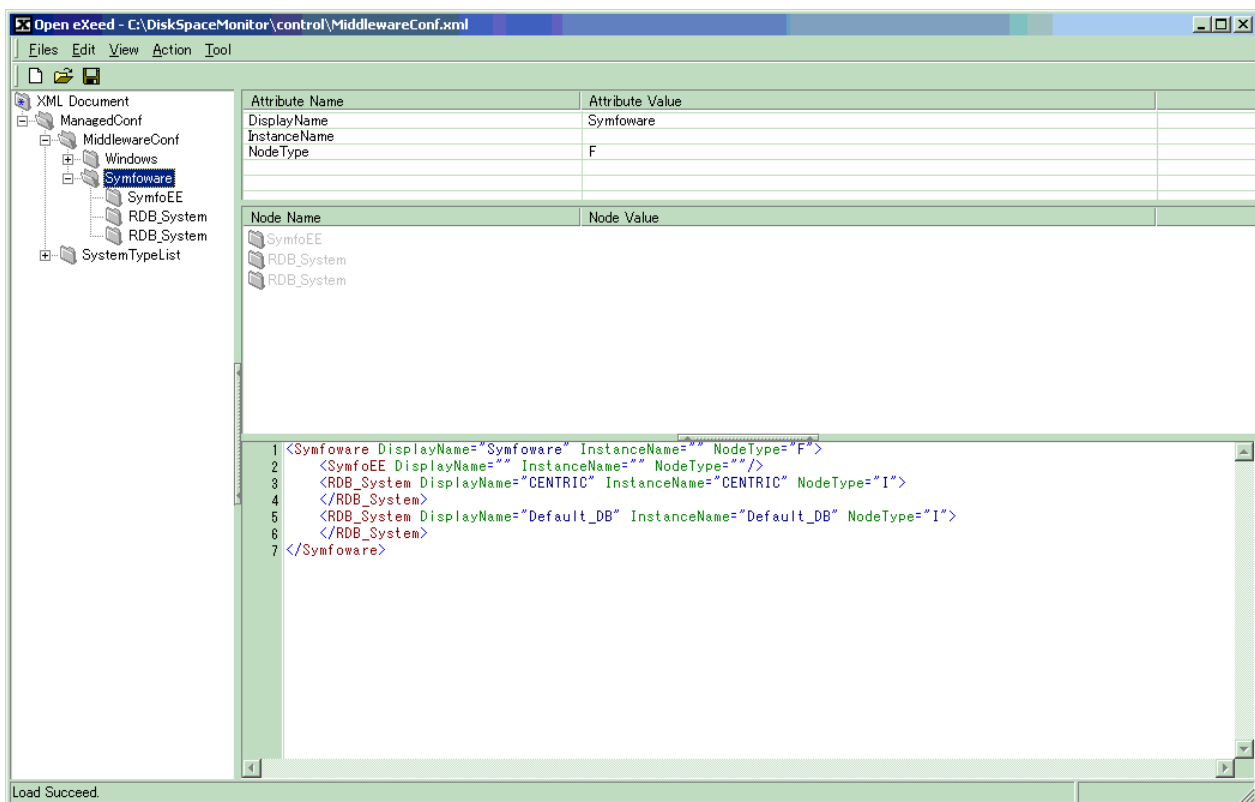
The following table shows the tag information that is defined in this file.

Tag name	Management target
Symfoware	Symfoware Server information

14.3　Supplementary Notes

The *sqcRPolicy* command, which is used to create server resource information collection policies, updates resource information with the collection results of the operating system and middleware that have been detected.

To exclude a middleware product that is targeted for management, delete all the resource information that is enclosed by the tags of the middleware.

🅿 Point
. . . .

To restore management of a middleware product that has been deleted, copy the relevant section from the backup of the original configuration information file to the current configuration information file.
. . . .

14.4　How to Set up Symfoware Server

When information on RDBINF_AP of Symfoware Server is collected, the following information is defined.

1. The database space names to be collected are examined.

📖 See
. . . .

Refer to the *Symfoware Server RDB Administrator's Guide* for details.
. . . .

2. Open the resource configuration information file (MiddlewareConf.xml).

```
<Symfoware DisplayName="Symfoware" InstanceName="" NodeType="F">

<SymfoEE DisplayName="" InstanceName="" NodeType=""/>

<RDB_System DisplayName="GYOMU" InstanceName="GYOMU"
NodeType="I">

<DB DisplayName="DB_A" InstanceName="DB_A" NodeType="I">

</DB>

</RDB_System>

</Symfoware>
```

🅿 Point
. . . .

When Symfoware Server is detected, content between <Symfoware> and <DB> tag is generated automatically.
. . . .

3. Define the information of the database space to be collected in <DB> tag.

Item	Contents
Modification part	between <DB> and </DB> tag
Syntax	<DB_Space DisplayName="DSPACE-A" InstanceName="DSPACE-A" NodeType="I"> </DB_Space>

Item	Contents
	![P] **Point** ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・ Define the the database space names to be collected in the DisplayName attribute and the InstanceName attribute. NodeType is fixed by "I". ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・

The following is a sample definition:

```
<Symfoware DisplayName="Symfoware" InstanceName="" NodeType="F">

<SymfoEE DisplayName="" InstanceName="" NodeType=""/>

<RDB_System DisplayName="GYOMU" InstanceName="GYOMU"
NodeType="I">

<DB DisplayName="DB_A" InstanceName="DB_A" NodeType="I">

<DB_Space DisplayName="DSPACE-A" InstanceName="DSPACE-A"
NodeType="I">

</DB_Space>

<DB_Space DisplayName="DSPACE-B" InstanceName="DSPACE-B"
NodeType="I">

</DB_Space>

</DB>

</RDB_System>

</Symfoware>
```

![Note icon] **Note**

・・

This file is initialized when the sqcRPolicy command is executed.

It is necessary to correct it again.

・・

Chapter 15　　Collection Template

15.1　Storage Location

The storage location of the definition file is as follows:

[Windows]

Variable file directory\control\template.dat

[Solaris][Linux]

/etc/opt/FJSVssqc/template.dat

15.2　Definition Method

This definition specifies items that are always to be collected.

🈁 **Note**

. . . .

Definitions must be added to this definition file in order to make the following middleware products subject to management.

Management target	Name of the section in this definition file	Reference
Oracle Database Server	[ORA]	15.3 How to Set up Oracle Database Server

. . . .

[Windows]

```
:
###########################################
# Oracle Information
[ORA]
DCAID="ORA"
SID=""
USERNAME=""
PASS=""
VER="*.*.*"
:
###########################################
# Policy Control
###########################################
:
[ATTR::DB]
GROUP="SYMSAR,SYMINF,SYMSPCINF,ORA"
```

```
:
```

[Solaris]

```
:
#########################################
# Oracle Information
[ORA]
DCAID="ORA"
SID=""
USERNAME=""
PASS=""
VER="*.*.*"
:
#########################################
# Policy Control
#########################################
:
[ATTR::DB]
GROUP="SYMSAR,SYMINF,SYMSPCINF,ORA"
:
```

[Linux]

```
:
#########################################
# Oracle Information
[ORA]
DCAID="ORA"
SID=""
USERNAME=""
PASS=""
VER="*.*.*"
:
#########################################
# Policy Control
#########################################
:
[ATTR::DB]
GROUP="SYMSAR,SYMINF,SYMSPCINF,ORA"
:
```

15.3　How to Set up Oracle Database Server

To make Oracle a management target, define the following keys for the [ORA] section:

Item	Description	Definition example
[ORA]	The section name. Do not change this item.	ORA
DCAID	A specific ID for monitoring Oracle. Do not change this item.	"ORA"
SID	Set the Oracle instance name. **P Point** . . . . The name that is specified here is attached to the beginning of the resource ID.	ORCL
USERNAME	Enter the ID for the user that will access Oracle and obtain information from the dynamic performance view (an administrator user that has been granted a DBA role). The Oracle default is usually "system". If the default is to be changed, refer to 15.3.1 How to create a new user that can access the Oracle dynamic performance view.	system
PASS	Enter the password for the user that will access Oracle and obtain information from the dynamic performance view (an administrator user that has been granted a DBA role). The Oracle default is usually "manager". If the default is to be changed, refer to 15.3.1 How to create a new user that can access the Oracle dynamic performance view.	manager
VER	Specify the version of the Oracle instance to be monitored. Use the format "X.X.X".	9.2.0
ORAHOME	Set the value of ORACLE_HOME for the Oracle database to be monitored.	/opt/app/9iee/product/9.2.0

The following is a sample definition:

```
:
#########################################
# Oracle Information
[ORA]
DCAID="ORA"
SID = ORCL
USERNAME = system
PASS = manager
VER = 9.2.0
ORAHOME="/opt/app/9iee/product/9.2.0"
```

```
:
```

To monitor more than one instance of Oracle, perform the following steps:
· ·

1. Add the relevant section and set its parameters.

   The section can be freely defined within a template, but the user should ensure that the section name is not duplicated. In the following example, the section name "ORA2" will be added.
   ·

   Even when monitoring multiple Oracle instances, the value of the DCAID key must remain as "ORA".
   ·

   <Definition example >

   ```
   :
   ##########################################
   # Oracle Information
   [ORA]
   DCAID="ORA"
   SID = ORCL
   USERNAME = system
   PASS = manager
   VER = 9.2.0
   ORAHOME="/opt/app/9iee/product/9.2.0"
   [ORA2]
   DCAID="ORA"
   SID = ORCL2
   USERNAME = system
   PASS = manager
   VER = 9.2.0
   ORAHOME="/opt/app/9iee/product/9.2.0"
   :
   ```

2. Add the section added in step 1 above to the GROUP key of the ATTR::DB section. If the definition is as shown in the above example, amend as follows:

   Before definition:

   ```
   :
   [ATTR::DB]
   GROUP="SYMSAR,SYMPS,ORA"
   :
   ```

After definition:

```
:
[ATTR::DB]
GROUP="SYMSAR,SYMPS,ORA,ORA2"
:
```

15.3.1 How to create a new user that can access the Oracle dynamic performance view

Note

....

This operation is not required if the default ID and PASSWORD for Oracle are used.

....

To create a new user that can access the Oracle dynamic performance view, enter the following SQL command from svrmgr1 using an Oracle administrator ID (usually "system").

In the following example, the necessary privileges are given to a user with ID "id1" and password "pass1".

```
create user id1 identified by pass1;
grant dba to id1;
grant connect to id1;
```

Chapter 16   Setting up an HTTP Communication Environment

ETERNUS SF Disk Space Monitor 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:

Operation management client	Always required.
Manager	・ Not Required.
Agent	・ Required when communicating with the Manager using the pull method and using a general HTTP service instead of the thttpd function provided with ETERNUS SF Disk Space Monitor.

Note

Check that the Web server connection timeout period is set to a value not less than 300 seconds. If the setting is less than 300 seconds, the error message "Cannot Find Server or DNS Error" may appear when the **Report** view is displayed. This confirmation is particularly important for Microsoft® Internet Information Server 6.0, which has a standard timeout setting of only 120 seconds.

If the connection timeout is set to 300 seconds or more, set the CGI script timeout to 300 seconds or more as well. The standard setting is 300 seconds.

16.1   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
Agent	SQC	**[Windows]** *Installation directory*\www **[Solaris][Linux]** /opt/FJSVssqc/www

16.2   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 five Web servers as examples:

・ Microsoft® Internet Information Server

・ Apache HTTP Server 1.3.26

・ Netscape® Enterprise Server 3.0

・ Interstage HTTP Server (bundled with Interstage Application Server)

・ InfoProvider Pro (bundled with Interstage Application Server)

16.2.1   For Microsoft® Internet Information Server

This section explains the Microsoft(R) Internet Information Service settings that are needed when using ETERNUS SF Disk Space Monitor.

[Windows]

16.2.1.1   Create a virtual directory.

Before performing this procedure

The WWW Service (World Wide Web Publishing Service) must be running if the following setup commands are to be executed. Also check that the sites specified as "Existing Web sites" actually exist.

P Point

. . . .

Conditions under which the virtual directory will be set up automatically

Under the following conditions, the virtual directory will be set up automatically during installation. (The WWW Service (World Wide Web Publishing Service) must be started in advance.)

- ・ When an operation management client is installed

- ・ When Agent is installed with HTTP Pull operation selected

However, if IIS6.0 is installed, and the sqc~setc.bat commands are executed as additional commands, these commands will not be executed automatically and so will need to be executed manually.

If IIS7.0 is installed, and the sqc~setc_iis7.bat commands are executed as additional commands, these commands will not be executed automatically and so will need to be executed manually.

. . . .

Note

. . . .

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

- ・ IIS is not installed

- ・ Windows Scripting Host is not assigned (Microsoft(R) Internet Information Service 5.0, 5.1 or 6.0)

- ・ The command line management tool (appCmd.exe) is not installed (Microsoft(R) Internet Information Service 7.0)

- ・ The setting has already been specified

. . . .

Commands to be executed

Run the following commands to perform the required settings.

- ・ Operation management client:

> *<Installation directory>*\bin\sqcSetIISreg.exe -c

- ・ Agent:

> *<Installation directory>*\bin\sqcSetIISreg.exe -a

Microsoft® Internet Information Service (IIS) 6.0:

If Microsoft® Internet Information Service (IIS) version 6.0 is used, execute the following command after sqcSetIISreg.exe.

IIS 6.0 is bundled with Windows Server 2003 as a standard feature.

> **Note**
>
> ....
>
> Execute these commands after switching to the installation directory.
>
> ....

- Operation management client:

> *Installation directory*\bin\sqccsetc.bat

- Agent:

> *Installation directory*\bin\sqcasetc.bat

Microsoft(R) Internet Information Service (IIS) 7.0

If Microsoft(R) Internet Information Service 7.0 is used, execute the following command after sqcSetIISreg.exe.

> **Note**
>
> ....
>
> Execute the command after switching to the installation directory.
>
> Note that in Windows(R) Vista or Microsoft(R) Windows Server(R) 2008, this command must be executed by a user 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:

> *Installation directory*\bin\sqccsetc_iis7.bat

- Agent:

> *Installation directory*\bin\sqcasetc_iis7.bat

16.2.1.2   Handler mapping settings

Handler mapping settings are needed when Microsoft(R) Internet Information Service 7.0 is used.

Before performing this procedure

Before handler mapping can be set up, **CGI** must be enabled under **Application Development Function** in the **World Wide Web Service** section of the Internet Information Service.

Before attempting to carry out the following procedure, check the **CGI** setting and enable it if necessary.

Procedure

1. Select the virtual directory named "SSQC" in the settings window of Microsoft(R) Internet Information Service.

2. Click **Handler mapping** in the function pane on the right.

3. Select **Add module map** from the operation menu on the right.

4. Set the following information in the **Add Module Map** dialog box and click the **OK** button:

   - Request path: *.cgi

   - Module: CgiModule

   - Name: CGI-.cgi

16.2.1.3　　　Directory security settings

Procedure

Microsoft(R) Internet Information Service (IIS) 5.0, 5.1 or 6.0:

Set up Microsoft(R) Internet Information Service 5.0, 5,1 and 6.0 as follows:

1. Select the virtual directory named "SSQC" in the settings window of Microsoft(R) Internet Information Service.

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 Service (IIS) 7.0

Set up Microsoft(R) Internet Information Service 7.0 as follows:

1. Select the virtual directory named "SSQC" in the settings window of Microsoft(R) Internet Information Service.

2. 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 Section "16.3 How to Set Up Basic Authentication for Operation Management Clients" if it is necessary to restrict access to the Management Console.
....

16.2.2　　For Apache HTTP Server 1.3.26

[Windows]

1. 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

📋 Note
....
If the user's environment differs from that shown above, adjust accordingly.
....

2. 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.

3. Apply the settings.

Overwrite the previous file and close the editor. Restart Apache HTTP Server if it is running.

[Solaris][Linux]

1. Open the configuration file in the editor.

2. 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.
> ....

3. 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

4. Apply the settings.

   Overwrite the previous file and close the editor. Restart Apache HTTP Server if it is running.

16.2.3   For Netscape® Enterprise Server 3.0

[Windows]

1. Open the Server Administration Page by selecting the following items from the **Start** menu:

   Start

   Programs

   Netscape SuiteSpot

   Administration

> **Note**
> ....
> If the user's environment differs from that shown above, adjust accordingly.
> ....

2. 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 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

16.2.4   Interstage HTTP Server (bundled with Interstage Application Server)

[Windows]

1. Use the editor to open the Interstage HTTP Server environment definition file.

Edit the environment definition file stored at the following location.

```
C:\Interstage\F3FMihs\conf\httpd.conf
```

Note: When the default installation path is used

2. 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
. . . .
Change the settings for access privileges and so on if necessary.
. . . .

3. Apply the settings.

Overwrite the previous file and close the editor. Restart Interstage HTTP Server if it is running.

[Solaris][Linux]

1. Use the editor to open the Interstage HTTP Server environment definition file.

Edit the environment definition file stored at the following location.

```
/etc/opt/FJSVihs/conf/httpd.conf
```

Note: When the default installation path is used

2. 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**

....

Change the settings for access privileges and so on if necessary.

....

3. Apply the settings.

   Overwrite the previous file and close the editor. Restart Interstage HTTP Server if it is running.

16.2.5   For InfoProvider Pro (bundled with Interstage Application Server)

[Windows]

1. Use the editor to open the InfoProvider Pro environment definition file.

2. Set up 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. Apply 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 the equivalent of 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 *ETERNUS SF Disk Space Monitor 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. 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. Apply the settings.
   Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

[Solaris][Linux]

1. Use the editor to open the InfoProvider Pro environment definition file.

2. Set up 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. Apply 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 the equivalent of 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 *ETERNUS SF Disk Space Monitor 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. 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. Apply the settings.
   Overwrite the previous file and close the editor. Restart InfoProvider Pro if it is running.

16.3 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)

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 IIS.

1. Registering a user account with Windows

   Register a user account for accessing the Admin Console launch HTML or a user launch HTML file.

   - The user that accesses the Admin Console can either be a newly created account or the account with Administrator privileges that is usually used.

   - No specifications need to be made if the account type (access permissions) for the account created here (for accessing the Admin Console or a user launch HTML file) is the same as the account that can allow read permissions for the file that is set up in Step 2 "Making access control settings to files" below.

   Register a user by running **User Accounts** (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

   > 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.

   The method for making access control settings to files is as follows:

   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 Server.

   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.

This completes the settings for basic authentication.

Chapter 17   Maintaining the Operating Environment

This chapter explains how to maintain operation definitions and databases.

17.1   Operation Definitions

17.1.1   Managers, Agents

The operation definitions of Managers and Agents are stored in the following location. Backup and restore operations should be performed on the entire directory and not on individual files.

[Windows]

```
Variable file directory\control
```

[Solaris][Linux]

```
/etc/opt/FJSVssqc
```

📝 **Note**

. . . .

If 4.3 Redundant Manager Operation Model is being conducted, perform a backup at each Manager. If 4.4 Cluster System Operation Model is being performed, perform the backup at the current system (the node that is conducting management tasks).

. . . .

17.1.2   Operation management client

The operation definitions for operation management clients are stored in the following location. Backup operations should be performed on the entire directory and not on individual files.

[Windows]

```
Installation directory\www\
```

17.2   Database (PDB)

17.2.1   Backup and restore

Managers include a database (PDB) file. There are two ways of backing up and restoring the PDB, as shown below. Combine these methods as appropriate to the operation.

📝 **Note**

. . . .

If 4.3 Redundant Manager Operation Model is being conducted, perform a backup at each Manager. If 4.4 Cluster System Operation Model is being performed, perform the backup at the current system (the node that is conducting management tasks).

. . . .

17.2.1.1   PDB files

This method is for backing up the performance database files only. To restore these files, place the files that have been backed up in the same location as the original files.

The PDB files are stored in the following directory:

[Windows]

> *Variable file directory*\data\

[Solaris][Linux]

> /var/opt/FJSVssqc/PDB/

The following files are generated in this directory:

File name	Description
pdb.dat	This is a single file for storing management data.
pdb_SUMMARY.dat	This is a single file for storing monitor data.
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.
pdb_other.dat	This is a single file for storing control data.

P Point

・ For PDB files, move all of the "*.dat" files in the directory above together.

・ Do not change the file names of the "*.dat" files that have been moved.

17.2.1.2   Archive files

This method backs up the archive files that are output for the purpose of conducting daily backups.

[Windows]

> Variable file directory\spool\BackupPDBinsert

[Solaris][Linux]

> /var/opt/FJSVssqc/BackupPDBinsert

The following file is output to the above directory.

> pdbinsert_%SYSTEM%_%N%.txt

%SYSTEM%: System name

%N%: File number

A new archive file is created every 24 hours, or whenever the DCM service/daemon is executed. Note that file numbers (represented by %N%) increment cyclically between 1 and 3. This makes it possible to archive information for up to three days.

To restore an archive file, change the file extension from "txt" to "tmp" and then copy the file to the following directory:

[Windows]

```
Variable file directory\transfer\DsaPDBWriter
```

[Solaris][Linux]

```
/var/opt/FJSVssqc/temp/DsaPDBWriter
```

![Note icon] **Note**

. . . .

Before performing the backup and restore operations, stop the DCM service/daemon. Refer to Chapter 5 How to Start and Stop Resident Processes for details on the methods used to stop and start the service/daemon

. . . .

17.2.2   Moving the perform database (PDB)

Use the following procedure if the performance database needs to be moved to another location for some reason.

1. Stop resident processes
    Stop resident processes before moving the performance database. Refer to Chapter 5 How to Start and Stop Resident Processes for information on how to stop resident processes.

2. Move the performance database file
    Move the performance database files from the following directory to a desired directory:

    [Windows]

    ```
    Variable file directory\data\
    ```

    [Solaris][Linux]

    ```
    /var/opt/FJSVssqc/PDB/
    ```

3. Edit the definition file
    Change the database path in the following definition file:

    [Windows]

    ```
    Variable file directory\control\DSAconfiguration.txt
    ```

    [Solaris][Linux]

    ```
    /etc/opt/FJSVssqc/DSAconfiguration.txt
    ```

    Change the following database path in the definition file to a new path. (The following example is for Windows.)

    ```
    [DsaPDBWriter]

    database=C:\Program Files\DiskSpaceMonitor\data\pdb.dat

    [DsaPDBWriter_sum]

    database=C:\Program Files\DiskSpaceMonitor\data\pdb.dat

    [DsaPDBReader]

    database=C:\Program Files\DiskSpaceMonitor\data\pdb.dat

    [PDBMANAGE]
    command=pdb_manage.exe -d "C:\Program Files\DiskSpaceMonitor\data
    \pdb.dat"
    ```

4. Edit the pdbmgr.txt
    Change the database path in the following definition file:

    [Windows]

```
Variable file directory\setup\pdbmgr.txt
```

[Solaris][Linux]

```
/opt/FJSVssqc/setup/pdbmgr.txt
```

Change the following database path in the definition file to a new path. (The following example is for Windows.)

```
[PDBMANAGE]

command=pdb_manage.exe -d "C:\Program Files\DiskSpaceMonitor\data\pdb.dat"
```

5. Start resident processes
   Refer to Chapter 5 How to Start and Stop Resident Processes for information on how to start resident processes.

17.3 Changing the IP Address of a Manager

If the IP address of the Manager is changed for some reason, the following two operations must be performed.

- ・ Changing the IP address of the Manager that is recognized by Agents

- ・ Changing the IP address of the Manager that is recognized by operation management clients

17.3.1 Changing the IP address of the Manager that is recognized by Agents

Change the IP address of the Manager in the following definition file on the Agents.

P Point

 ·

This modification is required for "push" operations only. For "pull" operations, there is no need to modify this definition file. Refer toChapter 12 Configuring Communication Environment with the Pull Method for details on "pull" operations.

 ·

Note

 ·

Make sure that this product's DCM service is stopped before editing this file. If this file is edited while the DCM service is still running, the changes made may not be reflected. Refer to Chapter 5 How to Start and Stop Resident Processes for details on how to stop the DCM service.

 ·

[Windows]

```
Variable file directory\control\DSAconfiguration.txt
```

[Solaris][Linux]

```
/etc/opt/FJSVssqc/DSAconfiguration.txt
```

In this definition file, change the IP address of the Manager (two locations) as shown below.

```
[DsaForwarder]

:

server=127.0.0.1

:

[DsaForwarder_sum]

:
```

```
server=127.0.0.1

:
```

🅿 Point

. . . .

Services/daemons must be restarted after this file is changed. Refer to Chapter 5 How to Start and Stop Resident Processes for details on how to start services.

. . . .

17.3.2 Changing the IP address of the Manager that is recognized by operation management clients

The IP address of the Manager can be changed by executing the following command on an operation management client:

[Windows]

```
Installation directory\bin\sqcSetMgrInfo.exe -p IPaddress
```

17.4 Migrating Managers

If a Manager with an existing operating environment is migrated to another Manager for some reason, there are two types of migration, as follows:

- 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.

- Inhering 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.

17.4.1 Inheriting only the configuration information for the source Manager

Perform the following procedure:

1. Extract configuration information from the PDB of the source Manager
   Output configuration information from the source Manager to a file as described in 18.4 sqcPDBexport (Configuration Information Export Command) Note that the host name of the destination Manager must be specified in the **-n** option.

2. Install the destination Manager
   Install the destination Manager from scratch as described in 4.1.1 Tasks required for Manager installation.

3. Import the configuration information into the destination Manager
   Place the configuration information file that was output in step 1 in the following folder on the destination Manager.

   [Windows]

   ```
   Variable file directory\transfer\DsaPDBWriter
   ```

   [Solaris][Linux]

   ```
   /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 ".tmp" file will be deleted.

4. Make any changes to the IP address of the Manager
   If the IP address of the Manager has changed, change the IP address settings at this point.
   Perform this task by referring to 17.3 Changing the IP Address of a Manager.

17.4.2　Inhering the PDB from the source Manager as well

Perform the following procedure:

1. Back up the PDB on the source Manager
   Back up the PDB file on the source Manager as described in 17.2.1.1 PDB files.

2. Extract configuration information from the source PDB
   Output the configuration information from the source PDB to a file as described in 18.4 sqcPDBexport (Configuration Information Export Command) Note that the host name of the destination Manager must be specified in the **-n** option.

3. Install the destination Manager
   Install the destination Manager from scratch as described in 4.1.1 Tasks required for Manager installation. However, do not start resident processes as explained in 4.1.1.2 How to start and verify the program.

4. Copy the PDB from the source Manager to the destination Manager
   Copy the source PDB that was backed up in step 1 to the same path on the destination Manager.

5. Copy the configuration information from the source Manager to destination Manager.
   Place the configuration information file that was output by step 2 in the following folder on the destination Manager.

   [Windows]

Variable file directory\transfer\DsaPDBWriter

   [Solaris][Linux]

/var/opt/FJSVssqc/temp/DsaPDBWriter

6. Start the resident processes on the destination Manager
   Start the resident processes as described in Chapter 5 How to Start and Stop Resident Processes. Also, make sure that the resident processes are running correctly.

7. Make any changes to the IP address of the Manager
   If the IP address of the Manager has changed, change the IP address settings at this point.
   Perform this task by referring to 17.3 Changing the IP Address of a Manager.

Chapter 18   PDB Commands

This chapter explains the commands that are used to access a PDB.

The following four commands are used to access PDBs:

- ・ CSV output command

- ・ User data input command

- ・ Data deletion command

- ・ Configuration information export command

All of these commands are located in the following path.

[Windows]

Installation directory\bin

[Solaris][Linux]

/opt/FJSVssqc/bin

The operation of each of these commands is explained in the following sections.

18.1   sqcPDBcout (CSV Output Command)

Function

This command outputs data stored in a PDB (Monitor information or Drill Down/Report information) to CSV format. The command is executed with parameters that specify the conditions to use when extracting information.

Execution environment

This command can be executed on Managers and operation management clients.

Note that only the users with system administrator (superuser or Administrator) privileges are permitted to execute this command.

Syntax

For Managers

[Windows]

Installation directory\bin\sqcPDBcout.exe	-R record-id [-sys system] [-rid resource-id] [-tmbin time] [-tmfin time] [-intval interval] [-h on|off]
Installation directory\bin\sqcPDBcout.exe	-f sql-file [-h on|off]

[Solaris][Linux]

/opt/FJSVssqc/bin/sqcPDBcout.sh	-R record-id [-sys system] [-rid resource-id] [-tmbin time] [-tmfin time] [-intval interval] [-h on|off]
/opt/FJSVssqc/bin/sqcPDBcout.sh	-f sql-file [-h on|<u>off</u>]

For operation management clients

Installation directory\bin\sqcPDBcout.exe	-R record-id -name manager [-sys system] [-rid resource-id] [-tmbin time] [-tmfin time] [-intval interval] [-h on|off]
Installation directory\bin\sqcPDBcout.exe	-f sql-file -name manager [-h on|off]

Options

-R record-id

This mode specifies data extraction conditions as options. Specify the record ID in "record-id". Refer to Chapter 19 Data Formatsfor details on record IDs.

-f sql-file

This mode specifies data extraction conditions in SQL. Specify the path to a file containing SQL in "sql-file".

Refer to the following usage example for details on the syntax for SQL statements. Also, refer to Chapter 19 Data Formats for details on table names specified with the FROM clause.

Refer to the following output results for details on field names specified with the SELECT and WHERE clauses.

-name manager

This mode specifies a Manager. Specify in "manager" the host name of a Manager that has the PDB data to be output.

-sys system

Specify the name of the system for which data is to be extracted. If this option is omitted, the data of all systems will be targeted.

-rid resource-id

Specify the ID of the resource for which data is to be extracted. If this option is omitted, the data of all resources will be targeted.

-tmbin time

Specify the extraction start time using GMT (Greenwich Mean Time). If this option is omitted, all the data in the PDB, from the oldest to the newest, will be extracted.

The following format is used to specify the time:

"YYYY-MM-DD hh:mm:ss" (YYYY: year; MM: month; DD: day; hh: hour; mm: minute; ss: second)

-tmfin time

Specify the extraction end time using GMT (Greenwich Mean Time). If this option is omitted, all the data in the PDB, from the newest to the oldest, will be extracted.

The following format is used to specify the time:

"YYYY-MM-DD hh:mm:ss" (YYYY: year; MM: month; DD: day; hh: hour; mm: minute; ss: second)

-intval interval (can be specified only for Drill Down/Report information)

Specify the interval data type of the data that is to be extracted. If this option is omitted, all the interval data will be targeted.

There are three interval data types: 600, 3600 and 86400

-h on\|off

Specify whether to display header information at the beginning of the output result. If this option is omitted, header information is not displayed.

Output results

When header information is attached to the beginning of output results, information such as the following will be displayed.

For Monitor information:

```
system_name,record_id,resource_id,start_date_time,end_date_time,end_time,data_num1,data_num2,data_num3,data_num4,data_num5,data_num6,data_num7,data_text1
```

For Drill Down/Report information:

```
system_name,record_id,resource_id,start_date_time,end_date_time,consol_flag,consol_interval,coverage,data_num1,data_num2,data_num3,data_num4,data_num5,data_num6,data_num7,data_text1,data_text2,data_text3,data_text4,data_text5
```

The items that appear in header information are explained below.

system_name

The system name

record_id

The record ID. Refer to Chapter 19 Data Formats for details.

resource_id

The resource ID

start_date_time

The collection start time using GMT (Greenwich Mean Time)

end_date_time

The collection end time using GMT (Greenwich Mean Time)

end_time (for Monitor information only)

The time component of the collection end time

time_flag (only if the -f option is specified)

Internal control information

time_zone (only if the -f option is specified)

Internal control information

daylight_saving (only if the -f option is specified)

Internal control information

cycle_nr (only if the -f option is specified, and for Monitor information only)

Internal control information

consol_flag (for Drill Down/Report information only)

The interval type

consol_interval (for Drill Down/Report information only)

The interval time

coverage (for Drill Down/Report information only)

The data coverage rate. For example, a coverage rate of 1 indicates no lost data. A coverage rate of 0.9 indicates that 10% of data has been lost.

data_num1 to data_num7

The numerical value of each field. Refer to Chapter 19 Data Formats for details.

data_text1 to data_text5

The text of each field. Refer to Chapter 19 Data Formats for details.

Return values

Normal termination 0

Abnormal termination 1

Usage example 1

The following execution example uses the option specification (-R) as an extraction condition.

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcPDBcout -R WIN_DISKSPACE -sys server1 -rid C:\-
tmbin "2004-07-01 10:00:00" -intval 3600 -h off

server1,WIN_DISKSPACE,C:\,2004-07-01 11:00:00,2004-07-01
12:00:00,2,3600,1,74857984,2113864192,,,,,,,,,,

server1,WIN_DISKSPACE,C:\,2004-07-01 12:00:00,2004-07-01
13:00:00,2,3600,1,105043456,2113864192,,,,,,,,,,
```

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcPDBcout.sh -R WIN_DISKSPACE -sys server1 -rid C:\-tmbin "2004-07-01 10:00:00" -intval
3600 -h off

server1,WIN_DISKSPACE,C:\,2004-07-01 11:00:00,2004-07-01
12:00:00,2,3600,1,74857984,2113864192,,,,,,,,,,

server1,WIN_DISKSPACE,C:\,2004-07-01 12:00:00,2004-07-01
13:00:00,2,3600,1,105043456,2113864192,,,,,,,,,,LABRET,WIN_DISKSPACE,C:\,2004-07-01
12:00:00,2004-07-01 13:00:00,2,3600,1,105043456,2113864192,,,,,,,,,,
```

Usage example 2

The following execution example uses the SQL file specification (-f) as an extraction condition.

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcPDBcout -f C:\sql.txt

server1,WIN_DISKSPACE,C:\,2004-07-01 11:00:00,2004-07-01
12:00:00,2,3600,1,74857984,2113864192,,,,,,,,,,

server1,WIN_DISKSPACE,C:\,2004-07-01 12:00:00,2004-07-01
13:00:00,2,3600,1,105043456,2113864192,,,,,,,,,,
```

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcPDBcout.sh -f /tmp/sql.txt

server1,WIN_DISKSPACE,C:\,2004-07-01 11:00:00,2004-07-01
12:00:00,2,3600,1,74857984,2113864192,,,,,,,,,,

server1,WIN_DISKSPACE,C:\,2004-07-01 12:00:00,2004-07-01
13:00:00,2,3600,1,105043456,2113864192,,,,,,,,,,
```

In this case, the content of sql.txt is as follows:

```
select * from resource_data where record_id='WIN_DISKSPACE' AND system_name='LABRET'
AND consol_interval=3600;
```

18.2 sqcPDBcload (User Data Input Command)

Function

This command saves user data in the PDB.

Execution environment

This command can be executed on Managers and Agents.

Note that only the users with system administrator (superuser or Administrator) privileges are permitted to execute this command.

Syntax

[Windows]

Installation directory\bin\sqcPDBcload.exe	-u udata-file -i conv-file

[Solaris][Linux]

/opt/FJSVssqc/bin/sqcPDBcload.sh	-u udata-file -i conv-file

Options

-u udata-file

Specifies the user data file (CSV file) to be stored in a PDB.

-i conv-file

Specifies the data conversion definition file (as an ini file). A data conversion file specifies rules for converting user data to the record format used in a PDB. The following is an example:

```
[USERDATA]
consol_flag=2
record_id=1
col_resource_id=2,5
col_start_date_time=6
col_data_num1=10
col_data_num2=9
col_data_text1=4
```

Data conversion definition file (conv-file)

Refer to Chapter 19 Data Formats for details on the format of created records.

consol_flag

Specifies the data type. The data types listed below are available. The display functions and retention periods of each data type are different. Refer to Chapter 2 and so it must be started in orderProduct Architecture and specify an appropriate data type for storing data.

0: Monitor data

1: Resource data (10 minutes)

2: Resource data (1 hour)

3: Resource data (24 hours)

If 0 is specified, record "SUM_UDATA_n" is created.

If 1, 2 or 3 is specified, record "UDATA_*n*" is created.

record_id

Specifies which record between "SUM_DATA_1" and "SUM_DATA_5" or between "U_DATA_1" and "U_DATA_5" is to be created.

col_resource_id

Specifies the field number of the user data file that will be set as a resource ID. A resource ID is a unique identifier for identifying a record.

In the case of process information, for example, the process name is used as the resource ID.

It is also possible to connect multiple fields and use these together as a resource ID. If "col_resource_id=2,5" is specified, fields 2 and 5 are used in combination as the resource ID.

col_start_date_time

Specifies the field number that will be set as the collection start time.

Note that data is stored in the following format:

'MM-DD-YYYY [hh:[mm[:ss]]]'

(YYYY: year; MM: month; DD: day; hh: hour; mm: minute; ss: second)

"col_data_num1" to "col_data_num7" (or to "col_data_num14" if the Record ID is "UDATA_4" or "UDATA_5")

Specifies the field number of the user data file data (numerical) to be stored in field "smud*n*data1" to "smud*n*data7" or "ud*n*data1" to "ud*n*data7" (or to "ud*n*data14" if the Record ID is "UDATA_4" or "UDATA_5").

"col_data_text1" to "col_data_text5"

Specifies the field number of the user data file data (text) to be stored in field "smud*n*txt1" or "ud*n*txt1" to "ud*n*txt5".

Examples of data conversion definition files and the records that are created

Data conversion definition file specification	Created record		Remarks
	Record ID	Field Name	
consol_flag=0 record_id=1 col_data_num3=9	SUM_UDATA_1	smud1data3	・ If "0" is specified for consol_flag, record "SUM_DATA_*n*" is created. ・ If "1" is specified for record_id, record "SUM_DATA_1" is created. ・ If "9" is specified for col_data_num3, the 9th field of the CSV file is stored in field "sumud1data3".
consol_flag=1 record_id=1 col_data_num3=9	UDATA_1	ud1data3	・ If 1, 2 or 3 is specified for console_flag, record "UDATA_*n*" is created. ・ If "1" is specified for record_id, record "UDATA_1" is created. ・ If "9" is specified for col_data_num3, the 9th field of the CSV file is

Data conversion definition file specification	Created record		Remarks
	Record ID	Field Name	
			stored in field "ud1data3".
consol_flag=3 record_id=2 col_data_num3=9	UDATA_2	ud2data3	• If 1, 2 or 3 is specified for console_flag, record "UDATA_n" is created. • If "2" is specified for record_id, record "UDATA_2" is created. • If "9" is specified for col_data_num3, the 9th field of the CSV file is stored in field "ud2data3".

Return values

Normal termination 0

Abnormal termination 1

Notes

User data will not be stored in a PDB in the following cases:

- • The data in the field number specified by col_resource_id is empty.

- • The data in the field number specified by col_start_date_time is in the wrong format.

- • The format of the collection start time does not match the format used by the PDB.

Example

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcPDBcload -u C:\temp\udata.csv -i C:\temp\conv.ini

sqcPDBcload succeeded
```

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcPDBcload.sh -u /tmp/udata.csv -i /tmp/conv.ini

sqcPDBcload succeeded.
```

In this case, the content of udata.csv is as follows:

```
2004-09-09 10:00:00,kaminaka,2,octets,data,767872,28856,22400
```

The content of conv.ini is as follows:

```
[USERDATA]

consol_flag=2

record_id=1
```

```
col_resource_id=2,3

col_start_date_time=1

col_data_num1=6

col_data_num2=7

col_data_text1=4
```

18.3   sqcPDBerase (Data Deletion Command)

Function

This command deletes the data in a PDB that relates to a specified system.

When this command is executed, the user will be prompted to confirm the deletion. Enter either "Y" (Yes) to delete the applicable data or "N" (No) to cancel.

Execution environment

This command can be executed on Managers.

Note that only the users with system administrator (superuser or Administrator) privileges are permitted to execute this command.

Syntax

[Windows]

| *Installation directory*\bin\sqcPDBerase.exe | system [-r record_id] |

[Solaris][Linux]

| /opt/FJSVssqc/bin/sqcPDBerase.sh | system [-r record_id] |

Operand

system

Specifies the name of the system from which data is to be deleted.

Option

-r record_id

Specify the ID of the record to be deleted. Refer to Chapter 19 Data Formats for details on record IDs.

Return values

Normal termination 0

Abnormal termination 1

Usage example

[Windows]

```
C:\>cd C:\Program Files\DiskSpaceMonitor\bin

C:\Program Files\DiskSpaceMonitor\bin>sqcPDBerase TEST1

Do you erase data of system_name"TEST1"?(Y/N)

y

sqcPDBerase succeeded
```

```
C:\Program Files\DiskSpaceMonitor\bin>sqcPDBerase TEST1 -r UDATA_1

#########The conditions to erase###########

Record ID : UDATA_1

##########################################

Do you erase data of system_name"TEST1"?(Y/N)

y

sqcPDBerase succeeded.
```

[Solaris][Linux]

```
# cd /opt/FJSVssqc/bin/

# ./sqcPDBerase.sh TEST1

Do you erase data of system_name"TEST1"?(Y/N)

y

sqcPDBerase succeeded.
```

```
# ./sqcPDBerase.sh TEST1 -r UDATA_1

#########The conditions to erase###########

Record ID : UDATA_1

##########################################

Do you erase data of system_name"TEST1"?(Y/N)

y

sqcPDBerase succeeded.
```

18.4 sqcPDBexport (Configuration Information Export Command)

Function

This command outputs configuration information in a PDB to a file.

Configuration information is information that represents the Manager name, the Agent name, and the type of information collected by that Agent.

Configuration information that is output can be used in the following situations:

- ・ When, to transfer a Manager to a separate machine, the configuration information in a PDB taken from the original Manager to a new Manager is rewritten with the name of the new Manager

- ・ When a PDB is initialized (recreated), but the configuration information of the previous environment is used as is

Execution environment

This command can be executed on Managers.

Note that only the users with system administrator (superuser or Administrator) privileges are permitted to execute this command.

Syntax

[Windows]

Installation directory\bin\sqcPDBexport.bat	-o folder_path [-n host_name]

/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.

Return values

Normal termination 0

Abnormal termination 1

Usage example

[Windows]

C:\>cd C:\Program Files\DiskSpaceMonitor\bin
C:\Program Files\DiskSpaceMonitor\bin>sqcPDBexport -o C:\temp -n HOSTNAME

To store the output configuration information file (agententry.tmp) in a PDB, place the file in the following directory and start the DCM service.

Variable file directory\transfer\DsaPDBWriter

[Solaris][Linux]

cd /opt/FJSVssqc/bin/
./sqcPDBexport.sh -o /tmp -n HOSTNAME

To store the output configuration information file (agententry.tmp) in a PDB, place the file in the following directory and start the DCM service.

/var/opt/FJSVssqc/temp/DsaPDBWriter

The configuration information will be stored in the PDB within approximately 60 seconds. The agententry.tmp file will then be deleted.

Chapter 19　Data Formats

19.1　Monitor Information

This is the information that is displayed in the **Monitor** view of the **Console** window.

> 🅿 Point
> ・ The record numbers and field names used in threshold monitoring are shown in the "Record No." and "Field Name" columns, respectively, in the following tables. Note, however, that the user data information shown in 19.1.2 UserDataMonitor cannot be used in threshold monitoring.
>
> ・ This information is collected every ten minutes.

> 📝 Note
> ・ It is not possible to display text information.
>
> ・ In the monitor display of the console, it is not because all information shown here is displayed. There might be information not used for the display of the calculation result of two or more information, and the display.

19.1.1　SpaceMonitor

The information of SpaceMonitor is used the information of WIN_DISKSPACE in 19.2.1 Windows reports for the Windows folder and UX_DISKSPACE in 19.2.2 UNIX reports for the Solaris & Linux folder

19.1.2　UserDataMonitor

Table name	Record ID	Field Name	Source	Unit of Measure	Description
summary_data	SUM_UDATA_1	smud1data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		smud1data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		smud1data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		smud1data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		smud1data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		smud1data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		smud1data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		smud1txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
summary_data	SUM_UDATA_2	smud2data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		smud2data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		smud2data 3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		smud2data 4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		smud2data 5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		smud2data 6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		smud2data 7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		smud2txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
summary_data	SUM_UDAT A_3	smud3data 1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		smud3data 2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		smud3data 3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		smud3data 4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		smud3data 5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		smud3data 6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		smud3data 7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		smud3txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
summary_data	SUM_UDAT A_4	smud4data 1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		smud4data 2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		smud4data 3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		smud4data 4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		smud4data 5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		smud4data 6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		smud4data 7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		smud4txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
summary_dat	SUM_UDAT A_5	smud5data 1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		smud5data 2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		smud5data 3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		smud5data 4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		smud5data 5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		smud5data 6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		smud5data 7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		smud5txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file

19.2   Drill Down/Report Information

This information is displayed in the **Drill Down** and **Report** views of the **Console** window.

Point

・ The record numbers and field names used in threshold monitoring are shown in the "Record No." and "Field Name" columns, respectively, in the following tables. Note, however, that the user data information shown in 19.2.5 Detailed reports (UDATA1 to 5) for the UserData folder cannot be used in threshold monitoring.

・ Information that is updated at 10-minute intervals is displayed in the **Drill Down** and **Report** views, and information that is updated at 60-minute/1,440-minute intervals is displayed in the **Report** view.

Note

Text information cannot be displayed.

19.2.1   Windows reports for the Windows folder

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
Resource_data	WIN_DISKSPACE	1018	free	disk	bytes	Free disk capacity (bytes)
			total	disk	bytes	Total disk capacity (bytes)
			freepc	disk	percent	Free space % on disk (average for interval)<snapshot>

19.2.2　UNIX reports for the Solaris & Linux folder

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
resource_data_wide	UX_DISKSPACE	1002	dtotfils	df	files	Total files in the filesystem by mount point [df]<snapshot>
			duseblks	df	blocks	Used blocks in the filesystem by mount point [df]<snapshot>
			dfrefils	df	files	Free files in the filesystem by mount point [df]<snapshot>
			davlblks	df	blocks	Free user blocks in the filesystem by mount point [df]<snapshot>
			dblksiz	df	number	Block size of the filesystem by mount point
			dtotblk	df	blocks	Total blocks in the filesystem by mount point [df]<snapshot>
			dusebyts	df	bytes	Used bytes in the filesystem by mount point
			dusembs	df	MB	Used megabytes in the filesystem by mount point [df]<snapshot>
			davlbyts	df	bytes	Free user bytes in the filesystem by mount point [df]<snapshot>
			davlmbs	df	MB	Free user megabytes in the filesystem by mount point [df]<snapshot>
			dtotbyts	df	bytes	total bytes in the filesystem by mount point [df]<snapshot>
			dtotmbs	df	MB	total megabytes in the filesystem by mount point [df]<snapshot>
			dfreepc	df	percent	Free space % in the filesystem by mount point [df]<snapshot>
			fsname	df	-	Name of file system

Note

. . . .

・ The filesystem of the following filesystem types is not displayed.

・ [Solaris] autofs,nfs,proc,fd,mntfs,devfs,ctfs,objfs,lofs

・ [Linux] autofs,devpts,ncpfs,nfs,proc,smb,swap,usbdevfs

. . . .

19.2.3　Symfoware reports for the Symfoware folder

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
resource_data_uwide	RDBSAR_EL	FJ1011	BiBlock	rdbsar -e -l (-g)	-	Number of blocks written to the BI log area
			AiBlock	rdbsar -e -l (-g)	-	Number of blocks written to the AI log area
			BiWrite	rdbsar -e -l (-g)	-	Number of writes to the BI log area
			AiWrite	rdbsar -e -l (-g)	-	Number of writes to the AI log area

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
			IxWrite	rdbsar -e -l (-g)	-	Number of writes to the index section
			RcpOver	rdbsar -e -l (-g)	-	Number of times that the recovery log has overflowed
			TrnOver	rdbsar -e -l (-g)	-	Number of times that the transaction entry has been detected as being in danger of used up
			BiOver	rdbsar -e -l (-g)	-	Number of times that the BI log area has been detected as being in danger of used up
			LongTrn	rdbsar -e -l (-g)	-	Number of times that long transactions have been detected
			BufReq	rdbsar -e -l (-g)	-	Number of requests sent to buffer control
			ArcReq	rdbsar -e -l (-g)	-	Number of requests sent to archive control
			DirReq	rdbsar -e -l (-g)	-	Number of RDB directory update requests made in order to reduce the size of the effective AI log
			IxReq	rdbsar -e -l (-g)	-	Number of log index section rewrites made in order to reduce the size of the effective AI log
			StqReq	rdbsar -e -l (-g)	-	Number of write requests sent from buffer control to the BI log
			EmpBI	rdbsar -e -l (-g)	Kbytes	Current amount of free BI logs
			EmpAI	rdbsar -e -l (-g)	Kbytes	Current amount of free AI logs
			EmpEntry	rdbsar -e -l (-g)	-	Current number of free transaction entries
			PostBI	rdbsar -e -l (-g)	-	Number of BI log write completion synchronization requests from transactions
			PostAI	rdbsar -e -l (-g)	-	Number of AI log write completion synchronization requests from transactions
			DryBI	rdbsar -e -l (-g)	-	Number of times that the entire area of a cyclic BI log buffer cycles without anything having been written to it
			DryAI	rdbsar -e -l (-g)	-	Number of times that the entire area of a cyclic AI log buffer cycles without anything having been written to it
			DryAIArc	rdbsar -e -l (-g)	-	Number of times that the entire area of a cyclic AI log buffer cycles without anything having been written to the archive log
			elLogGroupName	rdbsar -e -l (-g)	-	The log group name for the temporary log file or archive log file where performance data has been collected
resource_data	RDBSPCINF_PD	FJ1020	Static	rdbspcinf -p/-d	Kbytes	Amount of database space allocated statically
			Dynamic	rdbspcinf -p/-d	Kbytes	Amount of database space allocated dynamically
			FreeSize	rdbspcinf -p/-d	Kbytes	Amount of free database space
			pdDBName	rdbspcinf -p/-d	-	Database name

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
			pdDBSpaceName	rdbspcinf -p/-d	name	Database space name
resource_data _twide	RDBINF _AP	FJ1021	apUsed	rdbinf -a -p	%	Percentage of database space used
			apFree	rdbinf -a -p	%	Percentage of free database space
			apSize	rdbinf -a -p	-	Size of the database space
			apDBName	rdbinf -a -p	-	Database name
			apDBSpaceName	rdbinf -a -p	-	Database space name
			apCondition	rdbinf -a -p	-	Database usage status and DSI usage status
			apStateK	rdbinf -a -p	-	Type of operational information that has been set in the database space
			apStateT	rdbinf -a -p	-	Setting target of operational information that has been set in the database space
			apCause	rdbinf -a -p	-	Reason why operational information was set

19.2.4　Oracle reports for the Oracle folder

Table name	Record ID	Record No.	Field Name	Source	Unit of Measure	Description
resource_data	ORA_TSS	1032	tsall	ora	Mbytes	Total space allocated to tables
			tsused	ora	Mbytes	Total space allocated to each table
			tsfree	ora	Mbytes	Total free table space
resource_data	ORA_OSE	1034	iniext	ora	Kbytes	Total amount of space initially allocated to the object
			nxtext	ora	Kbytes	Total amount of space needed for the next extent of object size
			totsz	ora	Kbytes	Current size of the object
			totext	ora	extents	Total number of extents made
resource_data	ORA_DFS	1035	dfbytes	ora	Mbytes	Amount of space used by Oracle data files
			dfblocks	ora	blocks	Number of blocks used by Oracle data files
			dffile	ora	-	File ID and data file name

19.2.5　Detailed reports (UDATA1 to 5) for the UserData folder

Table name	Record ID	Field Name	Source	Unit of Measure	Description
resource_data	UDATA_1	ud1data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		ud1data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		ud1data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		ud1data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		ud1data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		ud1data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		ud1data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		ud1txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
		ud1txt2	sqcPDBcload	text	Data specified for col_data_txt2 in sqcPDBcload data conversion definition file
		ud1txt3	sqcPDBcload	text	Data specified for col_data_txt3 in sqcPDBcload data conversion definition file
		ud1txt4	sqcPDBcload	text	Data specified for col_data_txt4 in sqcPDBcload data conversion definition file
		ud1txt5	sqcPDBcload	text	Data specified for col_data_txt5 in sqcPDBcload data conversion definition file
resource_data	UDATA_2	ud2data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		ud2data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		ud2data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		ud2data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		ud2data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		ud2data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		ud2data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		ud2txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
		ud2txt2	sqcPDBcload	text	Data specified for col_data_txt2 in sqcPDBcload data conversion definition file
		ud2txt3	sqcPDBcload	text	Data specified for col_data_txt3 in sqcPDBcload data conversion definition file
		ud2txt4	sqcPDBcload	text	Data specified for col_data_txt4 in sqcPDBcload data conversion definition file
		ud2txt5	sqcPDBcload	text	Data specified for col_data_txt5 in sqcPDBcload data conversion definition file
resource_data	UDATA_3	ud3data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		ud3data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		ud3data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		ud3data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		ud3data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		ud3data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		ud3data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		ud3txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
		ud3txt2	sqcPDBcload	text	Data specified for col_data_txt2 in sqcPDBcload data conversion definition file
		ud3txt3	sqcPDBcload	text	Data specified for col_data_txt3 in sqcPDBcload data conversion definition file
		ud3txt4	sqcPDBcload	text	Data specified for col_data_txt4 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		ud3txt5	sqcPDBcload	text	Data specified for col_data_txt5 in sqcPDBcload data conversion definition file
resource_data	UDATA_4	ud4data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		ud4data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		ud4data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		ud4data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		ud4data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		ud4data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		ud4data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		ud4data8	sqcPDBcload	number	Data specified for col_data_num8 in sqcPDBcload data conversion definition file
		ud4data9	sqcPDBcload	number	Data specified for col_data_num9 in sqcPDBcload data conversion definition file
		ud4data10	sqcPDBcload	number	Data specified for col_data_num10 in sqcPDBcload data conversion definition file
		ud4data11	sqcPDBcload	number	Data specified for col_data_num11 in sqcPDBcload data conversion definition file
		ud4data12	sqcPDBcload	number	Data specified for col_data_num12 in sqcPDBcload data conversion definition file
		ud4data13	sqcPDBcload	number	Data specified for col_data_num13 in sqcPDBcload data conversion definition file
		ud4data14	sqcPDBcload	number	Data specified for col_data_num14 in sqcPDBcload data conversion definition file
		ud4txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		ud4txt2	sqcPDBcload	text	Data specified for col_data_txt2 in sqcPDBcload data conversion definition file
		ud4txt3	sqcPDBcload	text	Data specified for col_data_txt3 in sqcPDBcload data conversion definition file
		ud4txt4	sqcPDBcload	text	Data specified for col_data_txt4 in sqcPDBcload data conversion definition file
		ud4txt5	sqcPDBcload	text	Data specified for col_data_txt5 in sqcPDBcload data conversion definition file
resource_data	UDATA_5	ud5data1	sqcPDBcload	number	Data specified for col_data_num1 in sqcPDBcload data conversion definition file
		ud5data2	sqcPDBcload	number	Data specified for col_data_num2 in sqcPDBcload data conversion definition file
		ud5data3	sqcPDBcload	number	Data specified for col_data_num3 in sqcPDBcload data conversion definition file
		ud5data4	sqcPDBcload	number	Data specified for col_data_num4 in sqcPDBcload data conversion definition file
		ud5data5	sqcPDBcload	number	Data specified for col_data_num5 in sqcPDBcload data conversion definition file
		ud5data6	sqcPDBcload	number	Data specified for col_data_num6 in sqcPDBcload data conversion definition file
		ud5data7	sqcPDBcload	number	Data specified for col_data_num7 in sqcPDBcload data conversion definition file
		ud5data8	sqcPDBcload	number	Data specified for col_data_num8 in sqcPDBcload data conversion definition file
		ud5data9	sqcPDBcload	number	Data specified for col_data_num9 in sqcPDBcload data conversion definition file
		ud5data10	sqcPDBcload	number	Data specified for col_data_num10 in sqcPDBcload data conversion definition file
		ud5data11	sqcPDBcload	number	Data specified for col_data_num11 in sqcPDBcload data conversion definition file
		ud5data12	sqcPDBcload	number	Data specified for col_data_num12 in sqcPDBcload data conversion definition file

Table name	Record ID	Field Name	Source	Unit of Measure	Description
		ud5data13	sqcPDBcload	number	Data specified for col_data_num13 in sqcPDBcload data conversion definition file
		ud5data14	sqcPDBcload	number	Data specified for col_data_num14 in sqcPDBcload data conversion definition file
		ud5txt1	sqcPDBcload	text	Data specified for col_data_txt1 in sqcPDBcload data conversion definition file
		ud5txt2	sqcPDBcload	text	Data specified for col_data_txt2 in sqcPDBcload data conversion definition file
		ud5txt3	sqcPDBcload	text	Data specified for col_data_txt3 in sqcPDBcload data conversion definition file
		ud5txt4	sqcPDBcload	text	Data specified for col_data_txt4 in sqcPDBcload data conversion definition file
		ud5txt5	sqcPDBcload	text	Data specified for col_data_txt5 in sqcPDBcload data conversion definition file

Chapter 20 　　 Messages

This chapter explains the messages that are output by this product.

These messages are output to the event log for Windows (type: application) or to syslog for Solaris and Linux.

There are the following three types of message, depending on the platform being used.

Type	Related section
Messages common to Windows, Solaris, and Linux	20.1 Common Messages
Windows-specific messages	20.2 Windows-specific Messages
Solaris/Linux-specific messages	20.3 Solaris/Linux-specific Messages

Refer to the messages for the platform being used.

[Windows]

The following table lists the source names used by events for the Windows edition.

No.	Source name
1	DSA_Cmd
2	DSA_Event
3	DSA_Execute
4	DSA_File
5	DSA_Forwarder
6	DSA_Listener
7	DSA_Logfile
8	DSA_Manager
9	DSA_Spacemon
10	DSA_TIS
11	SSQC
12	SSQC DSA_Openreg
13	SSQC DSA_ORA
14	SSQC DSA_REG
15	SSQC License_tool
16	SSQC PDB_Reader
17	SSQC PDB_Writer

20.1　 Common Messages

This section explains messages that are common to Windows, Solaris, and Linux.

Two event IDs are shown in the "Event ID" column. The top event ID is for Window and the bottom one is for Solaris and Linux.

Event ID	Category	Message	Action
0560 DSA0560W OCM0560W	Warning	Invalid troubleshooting group number %1 for record type %2. Defaulted to group %3.	Contact a systems engineer.
0561 DSA0561W OCM0561W	Warning	No Troubleshooting route code exists for group %1. Defaulted to group %2.	Contact a systems engineer.
0602 DSA0602E OCM0602E	Error	Invalid parameter '%1'.	Contact a systems engineer.
1000 DSA1000I OCM1000I	Information	%1 started.	No action required.
1001 DSA1001I OCM1001I	Information	%1 stopped.	No action required.
1050 DSA1050W OCM1050W	Warning	Cannot load tracing settings because '%1' file path or tracing output directory information is not specified or invalid. Tracing is disabled.	Processing continues. Take action if necessary.
1051 DSA1051W OCM1051W	Warning	Cannot load tracing settings because of problems with openning the file '%1'. Tracing is disabled.	Processing continues. Take action if necessary.
1052 DSA1052W OCM1052W	Warning	Entry is rejected in '%1', line %2 - %3. Tracing is disabled for %4.	Processing continues. Take action if necessary.
1251 DSA1251W OCM1251W	Warning	Failed to start DSA '%1' (%2) %3	Contact a systems engineer.
1254 DSA1254W OCM1254W	Warning	DSA '%1' (%2) terminated unexpectedly	Contact a systems engineer.
1302 DSA1302E OCM1302E	Error	Stopping DCM. Free disk space reached critical threshold.	Reserve enough free disk space, and then restart resident processes.

Event ID	Category	Message	Action
1303 DSA1303E OCM1303E	Error	Stopping DCM. Disk space usage reached critical threshold.	Reserve enough free disk space, and then restart resident processes.
1304 DSA1304E OCM1304E	Error	Too many attempts to start process. DCM cannot restart %1.	Contact a systems engineer.
1470 DSA1470W OCM1470W	Warning	DSA: %1. Thread %2. Invalid counter data received from registry. Counter name %3. Instance name %4	This is not a problem if it does not occur too frequently.
1471 DSA1471W OCM1471W	Warning	DSA: %1. Thread %2. Experienced long delays reading registry. Interval data may be missing	This is not a problem if it does not occur too frequently.
1472 DSA1471W OCM1471W	Warning	DSA: %1. Thread %2. No data found for counter '%3', object '%4'.	Contact a systems engineer.
1473 DSA1473I OCM1473I	Information	DSA: %1. Thread %2. Found counter '%3', object '%4' in title database.	No action required.
1474 DSA1474I OCM1473I	Information	DSA: %1. Thread %2. Found data for counter '%3', object '%4'.	No action required.
1475 DSA1475W OCM1475W	Warning	Failed to open the "bad" file.%nVerify that the configuration parameters 'bad_file_dir' and 'bad_file_name' are specified correctly.%nBad file logging is disabled.	Contact a systems engineer.
1476 DSA1476W OCM1476W	Warning	DSA: %1. Thread %2. Record '%3' not found in file.	Contact a systems engineer.
1550 DSA1550E OCM1550E	Error	DSA: %1. Thread %2. Fatal error setting arguments for DSA. DSA will terminate.	Contact a systems engineer
1551 DSA1551E OCM1551E	Error	DSA: %1. Thread %2.%n,Parameter '%3' is incorrect. DSA will terminate.	Contact a systems engineer
1552 DSA1552E	Error	DSA: %1. Thread %2.%n,Fatal error getting data from DSA. DSA will terminate.	Contact a systems engineer

Event ID	Category	Message	Action
OCM1552E			
1553 DSA1553E OCM1553E	Error	DSA: %1. Thread %2.%n,Fatal error writing output record from DSA. DSA will terminate.	Contact a systems engineer
1554 DSA1554E DSA1554E	Error	Failed to open a TIS session. DSA will terminate.%n,1%.	Contact a systems engineer
1555 DSA1555E OCM1555E	Error	TIS processing failed. DSA will terminate.%n,%1%n,Record:%n,2%.	Contact a systems engineer
1700 DSA1700E OCM1700E	Error	DSA Initialization failed - Disconnect the client.	Contact a systems engineer.
1701 DSA1701E OCM1701E	Error	Failed to open PDB database: %1.	Contact a systems engineer.
1800 DSA1800I OCM1800I	Information	PDB database is created successfully.	No action required.
1900 DSA1900E OCM1900E	Error	Failed to open PDB database: %1.	Contact a systems engineer.
1901 DSA1901E OCM1901E	Error	Failed to execute SQL statement: %1.	Contact a systems engineer.
1902 DSA1902E OCM1902E	Error	Failed to create PDB database, SQL file execution failed: %1.	Contact a systems engineer.
1903 DSA1903E OCM1903E	Error	Failed to create PDB database, TRD file execution failed: %1.	Contact a systems engineer.
1904 DSA1904E OCM1904E	Error	Failed to receive an input DSA record.	Contact a systems engineer.
1905 DSA1905E OCM1905E	Error	Error processing an input DSA record.	Contact a systems engineer.
1906 DSA1906E	Error	Failed to execute transaction against the PDB database: %1.	This message is usually output if errors occur

Event ID	Category	Message	Action
OCM1906E			while records are being written to the database. If the message indicated by %1 is "database is locked", this message is sometimes output when there is a conflict between writing collected data and reading display content. However, this is not a problem if it does not occur too frequently.
1907 DSA1907E OCM1907E	Error	Failed to update PDB database, SQL file execution failed: %1.	Contact a systems engineer.
1908 DSA1908E OCM1908E	Error	Failed to update PDB database, TRD file execution failed: %1.	Contact a systems engineer.
1909 DSA1909E OCM1909E	Error	Database update error. Failed to create field_name_backup table: %1.	Contact a systems engineer.
1910 DSA1910E OCM1910E	Error	Database update error. Failed to delete field_name_backup table: %1.	Contact a systems engineer.
1911 DSA1911E OCM1911E	Error	Failed to allocate memory block: out of memory.	Contact a systems engineer.
1912 DSA1912E OCM1912E	Error	Failed to attach database '%1': %2.	Contact a systems engineer.
1913 DSA1913E OCM1913E	Error	Failed to create data database, SQL file execution failed: %1.	Contact a systems engineer.
1914 DSA1914E OCM1914E	Error	Failed to execute system register SQL against the PDB database: %1.	Contact a systems engineer.
1915 DSA1915E OCM1915E	Error	Failed to read the PDB database configuration from the system_database table.	Contact a systems engineer.
1916 DSA1916E	Error	Failed to detach database '%1': %2.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM1916E			
1917 DSA1917E OCM1917E	Error	Failed to open database file '%1': %2.	Contact a systems engineer.
1918 DSA1918E OCM1918E	Error	Failed to read the PDB database tables information from the system_tables table.	Contact a systems engineer.
1919 DSA1919E OCM1919E	Error	Failed to access/create PDB database directory '%1': %2	Contact a systems engineer.
2000 DSA2000I OCM2000I	Information	The module received the Stop signal.	No action required.
2001 DSA2001I OCM2001I	Information	Remote server is %1 on port %2.	No action required.
2002 DSA2002I OCM2002I	Information	Listening on port %1.	No action required.
2003 DSA2003E OCM2003E	Information	Listening on port %1, address %2	No action required.
2050 DSA2050W OCM2050 W	Warning	Too many incoming connections (%1). Disconnecting the client.	Processing continues. Take action if necessary.
2070 DSA2070W OCM2070 W	Warning	Cannot load random seed file %1	Contact a systems engineer.
2100 DSA2100E OCM2100E	Error	DSA initialization failed with code %1.	Contact a systems engineer.
2101 DSA2101E OCM2101E	Error	The module halted due to an unrecoverable error.	Contact a systems engineer.
2102 DSA2102E OCM2102E	Error	No server name specified.	Contact a systems engineer.

Event ID	Category	Message	Action
2103 DSA2103E OCM2103E	Error	No port or service name specified.	Contact a systems engineer.
2200 DSA2200I OCM2200I	Information	TIS information message=%1.	No action required.
2250 DSA2250I OCM2250I	Information	Parameter '%1' is invalid. Default of %2 used.	No action required.
2251 DSA2251W OCM2251W	Warning	The command '%1' produced the stderr output: %2	Contact a systems engineer.
2252 DSA2252W OCM2252W	Warning	DSA Library rejected a record with error=%1. Record='%2'	Contact a systems engineer.
2253 DSA2253W OCM2253W	Warning	Command ended with return code=%1. Command='%2'	Contact a systems engineer.
2254 DSA2254I OCM2254I	Information	File is empty: '%1'.	No action required.
2255 DSA2255I OCM2255I	Information	No execute permission to command '%1'.	No action required.
2256 DSA2256I OCM2256I	Information	TIS warning message=%1.	No action required.
2257 DSA2257I OCM2257	Information	The command '%1' is not on an NTFS volume. There is no security.	No action required.
2258 DSA2258I OCM2258I	Information	Command '%1' may be written to by users other than '%2'. This is a potential security problem.	No action required.
2259 DSA2259W	Warning	Command '%1' exceeded the execution wait time of %2 and has been terminated	Processing continues. Take action if necessary.

Event ID	Category	Message	Action
OCMA2259 W			
2300 DSA2300E OCM2300E	Error	The DSA function %1 failed with error: %2	Contact a systems engineer.
2301 DSA2301E OCM2301E	Error	The input record is invalid: %1	Contact a systems engineer.
2302 DSA2302E OCM2302E	Error	No default or input command is specified for record: %1	Contact a systems engineer.
2303 DSA2303E OCM2303E	Error	Failed to terminate command '%1'. Error=%2	Contact a systems engineer.
2304 DSA2304E OCM2304E	Error	Failed to get the return code for the command '%1'. System error: %2	Contact a systems engineer.
2305 DSA2305E OCM2305E	Error	Memory allocation failed for a block size of %1	Contact a systems engineer.
2306 DSA2306E OCM2306E	Error	Failed to open bad file. DSA error=%1	Contact a systems engineer.
2307 DSA2307E OCM2307E	Error	Invalid specified or default '%1=%2'	Contact a systems engineer.
2308 DSA2308E OCM2308E	Error	Unable to obtain the path to the working directory.	Contact a systems engineer.
2309 DSA2309E OCM2309E	Error	Command '%1' is not processed.	Contact a systems engineer.
2310 DSA2310E OCM2310E	Error	At least one each of a RDF and TDF file must be specified if TIS processing is required.	Contact a systems engineer.
2311 DSA2311E OCM2311E	Error	Invalid parameter format: '%1=%2'.	Contact a systems engineer.

Event ID	Category	Message	Action
2312 DSA2312E OCM2312E	Error	Failed to find %1 file '%2'.	Contact a systems engineer.
2313 DSA2313E OCM2313E	Error	Failed to open file '%1'. Command '%2' is not processed. Error = %3.	Contact a systems engineer.
2314 DSA2314E OCM2314E	Error	Maximum command process time of %1 seconds exceeded. Command aborted: %2	Contact a systems engineer.
2315 DSA2315E OCM2315E	Error	Internal error: Invalid parameter passed to a function.	Contact a systems engineer.
2316 DSA2316E OCM2316E	Error	TIS interface error=%1.	Contact a systems engineer.
2317 DSA2317E OCM2317E	Error	TIS error=%1	Contact a systems engineer.
2318 DSA2318E OCM2318E	Error	Failed to execute command %1. Error=%2.	Contact a systems engineer.
2319 DSA2319E OCM2319E	Error	Command to be executed is empty.	Contact a systems engineer.
2320 DSA2320E OCM2320E	Error	The command '%1' could not be expanded.	Contact a systems engineer.
2321 DSA2321E OCM2321E	Error	The command '%1' expanded to a size greater than the maximum allowable size of %2.	Contact a systems engineer.
2322 DSA2322E OCM2322E	Error	Failed to find command '%1'.	Contact a systems engineer.
2326 DSA2326E OCM2326E	Error	Failed to open file '%1'. Error = %2.	Contact a systems engineer.
2327 DSA2327E	Error	Entry point '%1' not found in module '%2'. Error=%3.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM2327E			
2330 DSA2330E OCM2330E	Error	Failed to read from file '%1'. Error=%2.	Contact a systems engineer.
2500 DSA2500E OCM2500E	Error	Invalid parameters.	Contact a systems engineer.
2501 DSA2501E OCM2501E	Error	WSAStartup failed.	Contact a systems engineer.
2502 DSA2502E OCM2502E	Error	Failed to write a record into a temporary output file.	Contact a systems engineer.
2503 DSA2503E OCM2503E	Error	Failed to access the output file '%1'	Contact a systems engineer.
2504 DSA2504E OCM2504E	Error	Failed to delete the old output file '%1'	Contact a systems engineer.
2505 DSA2505E OCM2505E	Error	Failed to rename the file '%1' to '%2'.	Contact a systems engineer.
2506 DSA2506E OCM2506E	Error	Failed to open the temporary output file '%1'	Contact a systems engineer.
2507 DSA2507E OCM2507E	Error	Failed to append file '%1' to '%2'.	Contact a systems engineer.
2508 DSA2508E OCM2508E	Error	Failed to access/create output directory '%1': %2.	Contact a systems engineer.
2700 DSA2700E OCM2700E	Error	Unable to connect to the server. All %1 attempts failed.	Check whether the Manager is running correctly.
2701 DSA2701E OCM2701E	Error	Unable to transmit data to the server. All %1 attempts failed.	Check whether the Manager is running correctly.

Event ID	Category	Message	Action
2702 DSA2702E OCM2702E	Error	Login rejected by the server.	Check whether the Manager is running correctly.
2900 DSA2900E OCM2900E	Error	DSA initialization failed with code %1. Disconnecting the client.	Contact a systems engineer.
3000 DSA3000I OCM3000I	Warning	TIS information message=%1.	Contact a systems engineer.
3050 DSA3050W OCM3050 W	Warning	Parameter '%1' is invalid. Default of %2 used.	Contact a systems engineer.
3052 DSA3052W OCM3052 W	Warning	'%1' ignored when '%2' is specified.	Contact a systems engineer.
3053 DSA3053W OCM3053 W	Warning	Failed to find command '%1'.	Contact a systems engineer.
3054 DSA3054W OCM3054 W	Warning	No execute permission to command '%1'.	Contact a systems engineer.
3057 DSA3057W OCM3057 W	Warning	Processing is not complete for %1 commands as they were terminated due to a stop event	This message can be ignored.
3058 DSA3058W OCM3058 W	Warning	File is empty: '%1'.	Contact a systems engineer.
3059 DSA3059W OCM3059 W	Warning	Command '%1' is not processed.	Contact a systems engineer.
3060 DSA3060W OCM3060 W	Warning	Command '%1' produced the error output: %2.	Contact a systems engineer.

Event ID	Category	Message	Action
3061 DSA3061W OCM3061W	Warning	DSA Library rejected a record with error=%1. Record='%2'.	Contact a systems engineer.
3062 DSA3062W OCM3062W	Warning	Command ended with return code=%1. Command='%2'.	Contact a systems engineer.
3063 DSA3063W OCM3063W	Warning	Failed to set environment variable '%1'. Interval commands may fail.	Contact a systems engineer.
3064 DSA3064W OCM3064W	Warning	'%1' is only valid with '%2=%3'. Parameter ignored.	Contact a systems engineer.
3065 DSA3065W OCM3065W	Warning	TIS warning message=%1.	Contact a systems engineer.
3066 DSA3066W OCM3066W	Warning	The command '%1' is not on an NTFS volume. There is no security.	Contact a systems engineer.
3067 DSA3067W OCM3067W	Warning	Command '%1' may be written to by users other than '%2'. This is a potential security problem	Contact a systems engineer.
3068 DSA3068W OCM3068W	Warning	Unable to obtain security information for command '%1'. Error=%2.	Contact a systems engineer.
3069 DSA3069W OCM3069W	Warning	A dependant command '%1' failed. Stopped executing commands and processing outputs in this set.	Contact a systems engineer.
3070 DSA3070W OCM3070W	Warning	A sequential command '%1' failed. Stopped executing commands in this set.	Contact a systems engineer.
3071 DSA3071W	Warning	A dependant command '%1' has timed out and will be cancelled. Stopped executing	Contact a systems engineer.

Event ID	Category	Message	Action
OCM3071 W		commands and processing outputs in this set.	
3072 DSA3072W OCM3072 W	Warning	A sequential command '%1' has timed out and will be cancelled. Stopped executing commands in this set.	Contact a systems engineer.
3073 DSA3073W OCM3073 W	Warning	Maximum command process time of %1 seconds exceeded. Command aborted: %2.	Contact a systems engineer.
3074 DSA3074W OCM3074 W	Warning	Failed to execute command %1. Error=%2.	Contact a systems engineer.
3075 DSA3075W OCM3075 W	Warning	Unbuffered output cannot be specified with parser dependant mode. Record output is reset to buffered.	Contact a systems engineer.
3100 DSA3100E OCM3100E	Error	The DSA function '%1' failed. Error='%2'.	Contact a systems engineer.
3101 DSA3101E OCM3101E	Error	The specified end date and time of '%1' is not greater than the start date and time of '%2'.	Contact a systems engineer.
3102 DSA3102E OCM3102E	Error	The specified interval is not valid: '%1=%2'.	Contact a systems engineer.
3104 DSA3104E OCM3104E	Error	Invalid specified or default '%1=%2'.	Contact a systems engineer.
3105 DSA3105E OCM3105E	Error	Invalid parameter format: '%1=%2'.	Contact a systems engineer.
3106 DSA3106E OCM3106E	Error	Unable to convert date and/or time '%1=%2' parameter to valid time.	Contact a systems engineer.
3108 DSA3108E OCM3108E	Error	Failed to parse the bad file name '%1'.	Contact a systems engineer.

Event ID	Category	Message	Action
3109 DSA3109E OCM3109E	Error	The parameter '%1=%2' is less than zero.	Contact a systems engineer.
3110 DSA3110E OCM3110E	Error	Failed to find %1 file '%2'.	Contact a systems engineer.
3111 DSA3111E OCM3111E	Error	At least one each of a RDF and TDF file must be specified if TIS processing is required.	Contact a systems engineer.
3115 DSA3115E OCM3115E	Error	Unable to obtain the path to the working directory.	Contact a systems engineer.
3116 DSA3116E OCM3116E	Error	Failed to find command '%1'.	Contact a systems engineer.
3117 DSA3117E OCM3117E	Error	Failed to load module '%1'. Error=%2.	Contact a systems engineer.
3118 DSA3118E OCM3118E	Error	Entry point '%1' not found in module '%2'. Error=%3.	Contact a systems engineer.
3119 DSA3119E OCM3119E	Error	The module '%1' failed to initialize. Error=%2.	Contact a systems engineer.
3120 DSA3120E OCM3120E	Error	The command '%1' could not be expanded.	Contact a systems engineer.
3121 DSA3121E OCM3121E	Error	The command '%1' expanded to a size greater than the maximum allowable size of %2.	Contact a systems engineer.
3123 DSA3123E OCM3123E	Error	Command to be executed is empty.	Contact a systems engineer.
3125 DSA3125E OCM3125E	Error	Failed to create file '%1'. Command '%2' is not processed. Error=%3.	Contact a systems engineer.
3126 DSA3126E	Error	Failed to open file '%1'. Command '%2' is not processed. Error = %3.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM3126E			
3127 DSA3127E OCM3127E	Error	Failed to read from file '%1'. Error=%2.	Contact a systems engineer.
3129 DSA3129E OCM129E	Error	Failed to execute command %1. Error=%2	This is not a problem if it does not occur too frequently.
3130 DSA3130E OCM3130E	Error	Failed to obtain the return code for the command '%1'. Error=%2	Contact a systems engineer.
3131 DSA3131E OCM3131E	Error	Maximum command process time of %1 seconds exceeded. Command aborted: %2	This is not a problem if it does not occur too frequently.
3132 DSA3132E OCM3132E	Error	Failed to terminate command '%1'. Error=%2	Contact a systems engineer.
3133 DSA3133E OCM3133E	Error	Memory allocation failed for a block size of %1.	Contact a systems engineer.
3136 DSA3136E OCM3136E	Error	Failed to open bad file. DSA error=%1.	Contact a systems engineer.
3138 DSA3138E OCM3138E	Error	TIS interface error=%1.	Contact a systems engineer.
3139 DSA3139E OCM3139E	Error	TIS errors=%1	This is not a problem if it does not occur too frequently.
3140 DSA3140E OCM3140E	Error	Failed to set TIS tag data.	Contact a systems engineer.
3141 DSA3141E OCM3141E	Error	Parser failed to return any commands.	Contact a systems engineer.
3142 DSA3142E OCM3142E	Error	Parser returned error=%1.	Contact a systems engineer.
3144 DSA3144E	Error	A dependant command '%1' has timed out and will be cancelled. Stopped executing	Contact a systems engineer.

Event ID	Category	Message	Action
OCM3144E		commands and processing outputs in this set	
3146 DSA3146E OCM3146E	Error	A sequential command '%1' has timed out and will be cancelled. Stopped executing commands in this set	Contact a systems engineer.
3147 DSA3147E OCM3147E	Error	The number of errors has exceeded the maximum of %1.	Contact a systems engineer.
3150 DSA3150E OCM3150E	Error	Internal error: Invalid parameter passed to a function.	Contact a systems engineer.
3151 DSA3151E OCM3151E	Error	The parameter '%1' could not be expanded.	Contact a systems engineer.
3200 DSA3200E OCM3200E	Error	Failed to open TIS session. %1.	Contact a systems engineer.
3201 DSA3201E OCM3201E	Error	Failed to receive an input DSA record.	Contact a systems engineer.
3202 DSA3202E OCM3202E	Error	Error processing record with TIS. %1	Contact a systems engineer.
3203 DSA3203E OCM3203E	Error	Failed to output the processed records.	Contact a systems engineer.
3204 DSA3204E OCM3204E	Error	Error processing input records.	Contact a systems engineer.
3205 DSA3205E OCM3205E	Error	Error getting checkpoint data from TIS. %1.	Contact a systems engineer.
3206 DSA3206E OCM3206E	Error	Error getting start checkpoint data.	Contact a systems engineer.
3207 DSA3207E OCM3207E	Error	Configuration parameter '%1' is invalid.	Contact a systems engineer.

Event ID	Category	Message	Action
3208 DSA3208E OCM3208E	Error	Failed to load %1.%n,2%.	Contact a systems engineer.
3209 DSA3209E OCM3209E	Error	Entry point '%1' was not found in %2.	Contact a systems engineer.
3210 DSA3210E OCM3210E	Error	Initialization of %1 failed with code %2.	Contact a systems engineer.
3211 DSA3211E OCM3211E	Error	No compound data definitions found.	Contact a systems engineer.
3212 DSA3212E OCM3212E	Error	Failed to read the compound data definition file %1.%n2.	Contact a systems engineer.
3213 DSA3213E OCM3213E	Error	Out of memory.	Contact a systems engineer.
3214 DSA3214E OCM3214E	Error	Invalid definition in the compound data definition file %1.%n Processing stopped at line %2.	Contact a systems engineer.
3215 DSA3215E OCM3215E	Error	A required '%1' statement is missing in the compound data definition file %2.%n,Processing stopped at line %3.	Contact a systems engineer.
3216 DSA3216E OCM3216E	Error	A required 'DATA' or 'LIST' statement is missing in the compound data definition file %1.%n,Processing stopped at line %2.	Contact a systems engineer.
3217 DSA3217E OCM3217E	Error	Duplicate variable '%1' was found in the compound data definition file %2.%n,Processing stopped at line %3.	Contact a systems engineer.
3218 DSA3218E OMC3218E	Error	Duplicate ID '%1' was found in the compound data definition file %2.%n,Processing stopped at line %3.	Contact a systems engineer.
3219 DSA3219E OCM3219E	Error	Failed to create the TIS script file %1.%n, 2%.	Contact a systems engineer.
3220 DSA3220E	Error	Variable '%1' was not defined in the compound data definition file %2.%n,Processing stopped at line %3.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM3220E			
3300 DSA3300W OCM3300W	Warning	Failed to open "bad file" specified in module configuration. Logging into "Bad file" is disabled.	Contact a systems engineer.
3600 DSA3600I OCM3600I	Information	Free disk space on path %1 is no longer under threshold	No action required.
3601 DSA3601I OCM3601I	Information	Used disk space on path %1 is no longer above threshold	No action required.
3602 DSA3602I OCM3602I	Information	Age of files in %1 is no longer above threshold.	No action required.
3603 DSA3603I OCM3603I	Information	File sizes in %1 are no longer above threshold.	No action required.
3604 DSA3604I OCM3604I	Information	Number of files in %1 is no longer above threshold.	No action required.
3605 DSA3605I OCM3605I	Information	Available number of i-nodes on path %1 is no longer under threshold.	No action required.
3650 DSA3650W OCM3650W	Warning	Free disk space on path %1 reached warning level of %2 MB	Reserve enough free disk space.
3651 DSA3651W OCM3651W	Warning	Used disk space on path %1 reached warning level of %2 MB	Reserve enough free disk space.
3652 DSA3652W OCM3652W	Warning	Age of files in %1 reached warning level of %2 minutes.	Contact a systems engineer.
3653 DSA3653W OCM3653W	Warning	A file size in %1 reached warning level of %2 MB.	Contact a systems engineer.

Event ID	Category	Message	Action
3654 DSA3654W OCM3654 W	Warning	Number of files in %1 reached warning level of %2.	Contact a systems engineer.
3655 DSA3655W OCM3655 W	Warning	Available number of i-nodes on path %1 reached warning level of %2.	Contact a systems engineer.
3656 DSA3656W OCM3656 W	Warning	Available number of i-nodes on path %1 reached warning level of %2%%.	Contact a systems engineer.
3700 DSA3700E OCM3700E	Error	DSA record type is not specified.	Contact a systems engineer.
3702 DSA3702E OCM3702E	Error	At least one path must be specified for monitoring.	Contact a systems engineer.
3703 DSA3703E OCM3703E	Error	Monitoring parameter '%1' must be of the following form:%n <warning limit>,<critical limit>,<path to monitor>	Contact a systems engineer.
3704 DSA3704E OCM3704E	Error	Free disk space on path %1 reached critical level of %2 MB	Resident processes will stop in order to protect the system. Reserve enough free disk space, and then restart resident processes.
3705 DSA3705E OCM3705E	Error	Free disk space on path %1 reached critical level of %2 MB	Resident processes will stop in order to protect the system. Reserve enough free disk space, and then restart resident processes.
3706 DSA3706E OCM3706E	Error	Age of files in %1 reached critical level of %2 minutes.	Contact a systems engineer.
3707 DSA3707E OCM3707E	Error	A file size in %1 reached critical level of %2 MB.	Contact a systems engineer.
3708 DSA3708E OCM3708E	Error	Number of files in %1 reached critical level of %2.	Contact a systems engineer.
3709 DSA3709W	Warning	Available number of i-nodes on path %1 reached critical level of %2.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM3709W			
3710 DSA3710W OCM3710W	Warning	Available number of i-nodes on path %1 reached critical level of %2%%.	Contact a systems engineer.
3800 DSA3800E OCM3800E	Error	Failed to open TIS session. %1.	Contact a systems engineer.
3801 DSA3801E OCM3801E	Error	Event type name parameter is not specified in the DSA_EVENT configuration.	Contact a systems engineer.
3802 DSA3802E OCM3802E	Error	Failed to initialize event transfer.	Contact a systems engineer.
3803 DSA3803E OCM3803E	Error	Error processing record with TIS. %1.	Contact a systems engineer.
3804 DSA3804E OCM3804E	Error	Failed to output the processed records.	Contact a systems engineer.
3805 DSA3805E OCM3805E	Error	Failed to receive an input event.	Contact a systems engineer.
3806 DSA3806E OCM3806E	Error	Error processing input records.	Contact a systems engineer.
3900 DSA3900W OCM3900W	Warning	Failed to open "bad file" specified in module configuration. Logging into "Bad file" is disabled.	Contact a systems engineer.
4220 DSA4220E OCM4220E	Error	Could not read registry. Some registry performance data may be incorrect.	Contact a systems engineer.
4221 DSA4221E OCM4221E	Error	Memory allocation failed for a block size of %1.	Contact a systems engineer.
4425 DSA4425W	Warning	No action is specified for DSA_HELPER.%n,Set	Contact a systems engineer.

Event ID	Category	Message	Action
OCM4425W		execute_style=off for the DSA if you do not need it.	
4450 DSA4450E OCM4450E	Error	Failed to open %1: %2.	Contact a systems engineer.
4750 DSA4750E OCM4750E	Error	SQLPLUS_PARSER: function is called with invalid parameters.	Contact a systems engineer.
4751 DSA4751E OCM4751E	Error	SQLPLUS_PARSER: the configuration parameter '%1' is not specified or is incorrect.	Contact a systems engineer.
4752 DSA4752E OCM4752E	Error	SQLPLUS_PARSER: the configuration parameter '%1' is too long..	Contact a systems engineer.
4753 DSA4753E OCM4753E	Error	SQLPLUS_PARSER: failed to decrypt the password.	Contact a systems engineer.
4754 DSA4754E OCM4754E	Error	SQLPLUS PARSER: not enough memory.	Contact a systems engineer.
5000 DSA5000I OCM5000I	Information	Connected to DBMS as user %1	No action required.
5050 DSA5050W OCM5050W	Warning	Oracle restart detected. Interval data is being discarded.	Data has been discarded because Oracle has restarted, but no action is required.
5100 DSA5100E OCM5100E	Error	DBMS connection failed%n Error message: %1%n User name:%2%n SID: %3%n ORACLE_HOME: %4	Check the user name, SID, password, and other settings. Check also if the target SID is operating.
5101 DSA5101E OCM5101E	Error	Configuration parameter '%1' is missing or invalid.	Contact a systems engineer.
5102 DSA5102E OCM5102E	Error	Unable to load command file: %1%n,2%.	Contact a systems engineer.
5103 DSA5103E	Error	Syntax error before or at line %1 of file %2%n,3%.	Contact a systems engineer.

Event ID	Category	Message	Action
OCM5103E			
5104 DSA5104E OCM5104E	Error	Syntax error before or at line %1 of file %2%n,Unexpected end of file.	Contact a systems engineer.
5105 DSA5105E OCM5105E	Error	Syntax error before or at line %1 of file %2%n,No record ID or type given.	Contact a systems engineer.
5106 DAS5106E OCM5106E	Error	Syntax error before or at line %1 of file %2%n,Type must be either COLUMN or ROW.	Contact a systems engineer.
5107 DSA5107E OCM5107E	Error	Syntax error before or at line %1 of file %2%n,'PKEY' keyword expected.	Contact a systems engineer.
5108 DSA5108E OCM5108E	Error	Syntax error before or at line %1 of file %2%n,'SAMPLE' or 'INTERVAL' keyword expected.	Contact a systems engineer.
5109 DSA5109E OCM5109E	Error	Syntax error before or at line %1 of file %2%n,A comma ( ) expected.	Contact a systems engineer.
5110 DSA5110E OCM5110E	Error	Syntax error before or at line %1 of file %2%n,'DELIM' keyword expected.	Contact a systems engineer.
5111 DSA5111E OCM5111E	Error	Syntax error before or at line %1 of file %2%n,SQL statement must be SELECT.	Contact a systems engineer.
5112 DSA5112E OCM5112E	Error	Cannot access V$INSTANCE synonym, interval data may be incorrect after Oracle restart.%n %1	Contact a systems engineer.
5113 DSA5113E OCM5113E	Error	Cannot allocate enough memory.	Contact a systems engineer.
5114 DSA5114E OCM5114E	Error	SQL parsing error: %1%n,Character offset: %2%n,SQL statement:%n%3.	Contact a systems engineer.
5115 DSA5115E OCM5115E	Error	Too many bind variables (%1), maximum is %2%nSQL statement:%n%3	Contact a systems engineer.

Event ID	Category	Message	Action
5116 DSA5116E OCM5116E	Error	Too many select-list items (%1), maximum is %2%n,SQL statement:%n, 3%.	Contact a systems engineer.
5117 DSA5117E OCM5117E	Error	An error occurred at parameter ID %1.	Contact a systems engineer.
5118 DSA5118E OCM5118E	Error	An error occurred at parameter ID %1%n,SQL statement should return only one variable.	Contact a systems engineer.
5119 DSA5119E OCM5119E	Error	SQL execution failed: %1%n,SQL statement:%n,2%.	Contact a systems engineer.
5120 DSA5120E OCM5120E	Error	Failed to open the Oracle oratab file %1%n %2	Check the settings in the Oratab file.
5121 DSA5121E OCM5121E	Error	Failed to find %1 in the Oracle oratab file %2	Check the settings in the Oratab file.
5122 DSA5122E OCM5122E	Error	Failed to write data records.	Contact a systems engineer.
5200 DSA5200I OCM5200I	Information	A remote file has been accepted and saved locally.%n Remote host: %1%n Remote file name: %2%n Local file name: %3	No action required.
5201 DSA5201I OCM5201I	Information	An update file has been accepted from a remote system and saved locally.%n Remote host: %1%n Remote file name: %2%n The update is being passed to DSUpdate for processing.	No action required.
5300 DSA5300E OCM5300E	Error	Failed to allocate memory block: out of memory.	Contact a systems engineer.
5301 DSA5301E OCM5301E	Error	Invalid parameter: %1.	Contact a systems engineer.
5302	Error	%1 parameter was not specified.	Contact a systems engineer.

Event ID	Category	Message	Action
DSA5302E OCM5302E			
5303 DSA5303E OCM5303E	Error	Failed to open PDB database: %1.	Contact a systems engineer.
5304 DSA5304E OCM5304E	Error	Failed to read the PDB database configuration from the system_database table.	Contact a systems engineer.
5305 DSA5305E OCM5305E	Error	Failed to create PDB database, SQL file execution failed: %1.	Contact a systems engineer.
5306 DSA5306E OCM5306E	Error	Internal error: %1.	Contact a systems engineer.
5309 DSA5309E OCM5309E	Error	Failed to execute transaction against the PDB database: %1.	Contact a systems engineer.
5551 DSA5551E OCM5551E	Error	Failed to allocate memory block: out of memory.	Contact a systems engineer.
5554 DSA5554E OCM5554E	Error	Failed to read the PDB database configuration from the system_database table	Contact a systems engineer.
5555 DSA5555E OCM5555E	Error	Failed to read the PDB database tables information from the system_tables table	Contact a systems engineer.
5559 DSA5559E DSA5559E	Error	Failed to output DSA record '%1', code: %2.	Contact a systems engineer.
5560 DSA5560E OCM5560E	Error	Failed to output DSA records, DsaPutEnd() failed, code: %1.	Contact a systems engineer.
5561 DSA5561E OCM5561E	Error	Failed to read timezone information from 'system' table in old database: %1.	Contact a systems engineer.
6101	Error	Monitoring value of Object(%3) is above than upper error level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times: %8)	This message is the alert of threshold monitor.

Event ID	Category	Message	Action
		Monitoring value of Object(%3) is below than lower error level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
6102	Warning	Monitoring value of Object(%3) is above than upper warning level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
		Monitoring value of Object(%3) is below than lower warning level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
6103	Information	Monitoring value of Object(%3) is below than upper error level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
		Monitoring value of Object(%3) is above than lower error level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
		Monitoring value of Object(%3) is below than upper warning level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.
		Monitoring value of Object(%3) is above than lower warning level. (Device Name:%2, Detect Value:%5, Threshold Value:%6, Detect Times:%7, Detect Check Times:%8)	This message is the alert of threshold monitor.

20.2   Windows-specific Messages

[Windows]

This section explains messages that are specific to Windows.

Event ID	Category	Message	Action
1200	Information	Started DSA '%1' (%2)	No action required.
1201	Information	Stopping DCM by user request	No action required.
1202	Information	Sending stop signal to DSA '%1'	No action required.
1203	Information	Collection Parameters loaded OK.	No action required.

Event ID	Category	Message	Action
1204	Information	DCAs started.	No action required.
1205	Information	The DSA %1 started.	No action required.
1206	Information	Loading environment settings from registry.	No action required.
1207	Information	Reading DMAN parameters from: %1.	No action required.
1208	Information	Reading collection parameters from: %1.	No action required.
1209	Information	Service Control Dispatcher started.	No action required.
1210	Information	Service stopped.	No action required.
1211	Information	DCA: %1 has had its parameters changed.	No action required.
1212	Information	DCA: %1 has had its sample interval changed.	No action required.
1213	Information	DCA: %1 has been removed from the list of running DCAs.	No action required.
1214	Information	DCA: %1 has been restarted with a new DCA DLL.	No action required.
1215	Information	DCA: %1 is a new DCA added to the list of running DCAs.	No action required.
1216	Information	ollection parameter reload monitor is running. Thread: %1.	No action required.
1217	Information	Collection parameter reload request received.	No action required.
1218	Information	Delay transfer active. Data is being written to: %1.	No action required.
1219	Information	Opening Delay transfer file: %1.	No action required.
1220	Information	About to get data from DCA: %1 Thread: %2.	No action required.
1221	Information	Got data from DCA: %1 Thread: %2.	No action required.
1222	Information	Service Done event triggered. Cleanup and stop.	No action required.
1223	Information	Check start/end limits - outside Limits. Do not collect data. %nDCA: %1, Thread ID: %2.	No action required.
1224	Information	Debug trace: DCA: %1, Thread ID: %2.%nMessage: %3	No action required.
1225	Information	Disk space monitor is running. Thread: %1.	No action required.
1226	Information	Stopping DCM. User requested.	No action required.
1227	Information	DCM added TIS script %1 successfully.	No action required.

Event ID	Category	Message	Action
1228	Information	DCM is not configured to use a default TIS script.	No action required.
1250	Warning	Wrong configuration of module '%1'. Parameter '%2' is incorrect. The module will not be started.	Contact a systems engineer.
1252	Warning	DSA configuration file has no valid entries	Contact a systems engineer.
1253	Warning	DSA '%1' has no module path. DSA skipped.	Processing continues. Take action if necessary.
1255	Warning	Unable to change directory to %1	Contact a systems engineer.
1256	Warning	Parameter 'status_file' is incorrect. It must be a relative path.	Contact a systems engineer.
1257	Warning	Failed to create status file '%1': %2	Contact a systems engineer.
1258	Warning	The value of the registry setting '%1' must be numeric.%n The default value of no limit will be used.	Processing continues. Take action if necessary.
1259	Warning	Free disk space warning threshold of %1 MB reached.	Processing continues. Take action if necessary.
1260	Warning	Disk space usage warning threshold of %1 MB reached.	Processing continues. Take action if necessary.
1261	Warning	Failed to start process %1.	Processing continues. Take action if necessary.
1262	Warning	DSA Library rejected a record, %1 Record data=%2.	Processing continues. Take action if necessary.
1263	Warning	Command '%1' returned: %2.	Contact a systems engineer.
1300	Error	Cannot start DCM. %1 system call failed with the following error:%n %2	Contact a systems engineer.
1301	Error	Failed to reload the configuration file	Contact a systems engineer.
1305	Error	Errors in command line arguments. Stopping.	Contact a systems engineer.
1306	Error	Cannot write pid file (%1). Check file permissions.	Check the permissions for the file indicated by the message.
1307	Error	Failed to set a signal handler.	Contact a systems engineer.
1308	Error	Stopping DCM. Cannot set service status. %1	Contact a systems engineer.

Event ID	Category	Message	Action
1309	Error	GetProcAddress failed for function: %1.	Contact a systems engineer.
1310	Error	Stopping DCM. Cannot open delayed transfer file: %1.	Contact a systems engineer.
1311	Error	Stopping DCM. Cannot seek to end of delayed transfer file: %1.	Contact a systems engineer.
1312	Error	Fatal error setting arguments for DCA %1.%nDCA will terminate.	Contact a systems engineer.
1313	Error	Fatal error getting data from DCA %1.%nDCA will terminate.	Contact a systems engineer.
1314	Error	Exception error processing data from DCA %1.	Contact a systems engineer.
1315	Error	Exception error in %1 thread. %nThread terminated.	Contact a systems engineer.
1316	Error	Stopping DCM. Free disk space critical threshold of %1 MB reached.	Check the status of the disk.
1317	Error	Stopping DCM. Disk space usage critical threshold of %1 MB reached.	Check the status of the disk.
1318	Error	Disk '%1' appears to be an unknown or invalid type.%n Disk space will not be monitored.	Check the status of the disk.
1319	Error	Unable to determine the disk drive.%n Disk space will not be monitored.	Check the status of the disk.
1320	Error	Unable to determine the free space on the disk drive '%1'.%n Error=%2.%n Disk space will not be monitored.	Check the status of the disk.
1321	Error	Wait on stop event failed in disk space check thread.%n Error=%1.%n Disk space will not be monitored.	Check the status of the disk.
1322	Error	Stopping DCM, configuration error. %1	Contact a systems engineer.
1323	Error	Stopping DCM, could not create thread for %1.	Contact a systems engineer.
1324	Error	Stopping DCM, could not open file %1.	Contact a systems engineer.
1325	Error	Stopping DCM, could not seek to end of file %1.	Contact a systems engineer.
1326	Error	Stopping DCM, could not write to file. %1.	Contact a systems engineer.

Event ID	Category	Message	Action
1327	Error	Too many attempts to start process. DCM cannot restart %1.	Contact a systems engineer.
1328	Error	Stopping DCM. Fatal Windows error calling function %1.	Contact a systems engineer.
1329	Error	An exception occurred during TIS record processing. Data=%1	Contact a systems engineer.
1330	Error	Error processing data from DCA %1. Data=%2	Contact a systems engineer.
1331	Error	Stopping DCM. TTD file error. %1.	Contact a systems engineer.
1332	Error	Stopping DCM. TRD file error. %1.	Contact a systems engineer.
1333	Error	Stoping DCM. Error opening local PDB. %1.	Contact a systems engineer.
1334	Error	Stopping DCM. Fatal DSA error. %1.	Contact a systems engineer.
1400	Information	DCA: %1 started.	No action required.
1401	Information	DCA: %1 ended.	No action required.
1402	Information	DCA: %1. Thread %2 started.	No action required.
1403	Information	DCA: %1. Thread %2 ended.	No action required.
1404	Information	DCA: %1. Thread %2. Creating title database.	No action required.
1405	Information	DCA: %1. Thread %2. Deleting title database.	No action required.
1406	Information	DCA: %1. Thread %2. Processing map file %3.	No action required.
1450	Warning	DCA: %1. Thread %2. Type/ Subtype '%3' not found in file.	Processing continues. Take action if necessary.
1451	Warning	DCA: %1. Thread %2. Object '%3' not found in title database.	Processing continues. Take action if necessary.
1452	Warning	DCA: %1. Thread %2. Counter '%3' not found in title database for object '%4'.	Processing continues. Take action if necessary.
1453	Warning	DCA: %1. Thread %2. Counter type for '%3' not supported by DCA.	Processing continues. Take action if necessary.
1454	Warning	DCA: %1. Thread %2. File '%3' not found.	Processing continues. Take action if necessary.
1455	Warning	DCA: %1. Thread %2. Syntax error at line number %3 of file %4.	Processing continues. Take action if necessary.
1456	Warning	DCA: %1. Thread %2. Syntax error in file %4. Line is:%n"%3"	Processing continues. Take action if necessary.
1457	Warning	DCA: %1. Thread %2. Syntax error at %3 in file %5. Line is: %n"%4"	Processing continues. Take action if necessary.

Event ID	Category	Message	Action
1458	Warning	DCA: %1. Thread %2. Syntax error at %3 in file %5. Line is: %n"%4".%nThe keyword SAMPLE or INTERVAL is expected.	Processing continues. Take action if necessary.
1459	Warning	DCA: %1. Thread %2. Syntax error at %3 in file %5. Line is: %n"%4".%n',' is expected.	Processing continues. Take action if necessary.
1460	Warning	DCA: %1. Thread %2. Syntax error at %3 in file %5. Line is: %n"%4".%nThe keyword 'DELIM=' is expected.	Processing continues. Take action if necessary.
1461	Warning	DCA: %1. Thread %2. Syntax error at %3 in file %5. Line is: %n"%4".%nThe delimiter '' is expected.	Processing continues. Take action if necessary.
1462	Warning	DCA: %1. Thread %2. Field count mismatch for dmanID = %3. SQL returned %4 fields and map file defined %5 fields.	Processing continues. Take action if necessary.
1463	Warning	DCA: %1. Thread %2. Field count mismatch for dmanID = %3.%n Number of rows returned by SQL differs from the number of fields defined by map file.	Processing continues. Take action if necessary.
1464	Warning	DCA: %1. Thread %2. Unsupported data type (%3).	Processing continues. Take action if necessary.
1465	Warning	DCA: %1. Thread %2. Data type mismatch for corresponding fields.	Processing continues. Take action if necessary.
1466	Warning	DCA: %1. Thread %2. Cannot get previous counter value to calculate delta.	Processing continues. Take action if necessary.
1467	Warning	DCA: %1. Thread %2. Registry counter type: PERF_100NSEC_TIMER_INV exceeds sample period. %nSample period = %3 sec, counter = %4 sec.	Processing continues. Take action if necessary.
1468	Warning	DCA: %1. Thread %2. Failed to remove file '%4'. Error=%5	Processing continues. Take action if necessary.
1469	Warning	DCA: %1. Thread %2. %3 file is empty.	Processing continues. Take action if necessary.
1500	Error	DCA: %1. Thread %2. SetArgs cannot open registry.	Contact a systems engineer.
1501	Error	DCA: %1. Thread %2. SetArgs cannot open registry name.	Contact a systems engineer.

Event ID	Category	Message	Action
1502	Error	DCA: %1. Thread %2. Error reading counters from registry. Error code = %3.	Contact a systems engineer.
1503	Error	DCA: %1. Thread %2. Error reading title names from registry. Error code = %3.	Contact a systems engineer.
1504	Error	DCA: %1. Thread %2. Error opening database %3, %4.	Contact a systems engineer.
1505	Error	DCA: %1. Thread %2. Error opening snapshot for dmanID = %3.	Contact a systems engineer.
1506	Error	DCA: %1. Thread %2. Error reading performance data block. RegQueryValueEx result = %3.	Contact a systems engineer.
1507	Error	DCA: %1. Thread %2. Invalid performance data block returned by RegQueryValueEx.	Contact a systems engineer.
1508	Error	DCA: %1. Thread %2. Invalid number of objects returned by RegQueryValueEx.	Contact a systems engineer.
1510	Error	DCA: %1. Thread %2. Performance data dumped to %3.	Contact a systems engineer.
1511	Error	DCA: %1. Thread %2. %3.	Contact a systems engineer.
1512	Error	DCA: %1. Thread %2. Fatal Exception occurred in %3 processing.	Contact a systems engineer.
1513	Error	DCA: %1. Thread %2. Invalid argument string passed by DCM.	Contact a systems engineer.
1514	Error	DCA: %1. Thread %2. Contents of parameter file are invalid.	Contact a systems engineer.
1515	Error	DCA: %1. Thread %2. Memory allocation failed for a block size of %3.	Contact a systems engineer.
1516	Error	DCA: %1. Thread %2. TIS error = %3.	Contact a systems engineer.
1517	Error	DCA: %1. Thread %2. TIS file error = TIS_ERROR_OPEN for file '%3'. File error=%4.	Contact a systems engineer.
1518	Error	DCA: %1. Thread %2. TIS file error = TIS_ERROR_PARSE in file '%3'.	Contact a systems engineer.
1519	Error	DCA: %1. Thread %2. TIS Parse error = %3 for record '%4'.	Contact a systems engineer.
1520	Error	DCA: %1. Thread %2. TIS unknown error = %3.	Contact a systems engineer.

Event ID	Category	Message	Action
1521	Error	DCA: %1. Thread %2. TIS error = %3 when removing the TDF file '%4'.	Contact a systems engineer.
1522	Error	DCA: %1. Thread %2. TIS error = %3 when adding the %4 file '%5'.	Contact a systems engineer.
1523	Error	DCA: %1. Thread %2. Invalid length %3 for argument '%4'.	Contact a systems engineer.
1524	Error	DCA: %1. Thread %2. Parameter for argument '%3' is not enclosed in double quotes.	Contact a systems engineer.
1525	Error	DCA: %1. Thread %2. Invalid argument '%3'.	Contact a systems engineer.
1526	Error	DCA: %1. Thread %2. Number of arguments passed is incorrect.	Contact a systems engineer.
1527	Error	DCA: %1. Thread %2. Mandatory argument(s) missing.	Contact a systems engineer.
1528	Error	DCA: %1. Thread %2. '%3' registry setting is missing or empty.	Contact a systems engineer.
1529	Error	DCA: %1. Thread %2. Unable to obtain the system name.	Contact a systems engineer.
1530	Error	DCA: %1. Thread %2. Specified file %3 does not exist.	Contact a systems engineer.
1531	Error	DCA: %1. Thread %2. %3 file '%4' was not opened. Error=%5.	Contact a systems engineer.
1532	Error	DCA: %1. Thread %2. File exception occurred when copying file '%3' to the file '%4'. Error= %5.	Contact a systems engineer.
1534	Error	DCA: %1. Thread %2. File exception occurred when reading file '%3'. Error=%4.	Contact a systems engineer.
1535	Error	DCA: %1. Thread %2. Failed to validate the arguments.	Contact a systems engineer.
1536	Error	DCA: %1. Thread %2. Failed to read the required registry values.	Contact a systems engineer.
1537	Error	DCA: %1. Thread %2. Initialisation failed.	Contact a systems engineer.
1538	Error	DCA: %1. Thread %2. Failed to run the command %3. Error=%4.	Contact a systems engineer.
1539	Error	DCA: %1. Thread %2. Maximum command execution time for interval of %3 seconds exceeded. Process aborted.	Contact a systems engineer.

Event ID	Category	Message	Action
1540	Error	DCA: %1. Thread %2. Error parsing line, missing matching quote character, ".	Contact a systems engineer.
5450	Error	Failed to open PDB database '%1': %2.	Contact a systems engineer.
5451	Error	Failed to read the PDB database configuration from the system_database table.	Contact a systems engineer.
5452	Error	Failed to obtain list of database files to delete.	Contact a systems engineer.
5453	Error	Failed to delete old database file '%1': %2.	Contact a systems engineer.
5454	Error	Failed to read information about PDB tables from the system_tables table.	Contact a systems engineer.
5455	Error	Management for table '%1' failed. Wrong data for management type %2. Data: '%3'.	Contact a systems engineer.
5456	Error	Management for table '%1' failed. Unknown management type %2.	Contact a systems engineer.
5457	Error	Management for table '%1' in database file '%2' failed. Execution of management SQL returned error. Management SQL: '%3'. Error: '%4'. Management type: %5. Management data: '%6'.	Contact a systems engineer.
6000	Information	The scheduler function has been activated.	No action required.
6001	Information	The scheduler function has been stopped.	No action required.
6002	Information	The scheduler function has been stopped because of a shut-down operation.	No action required.
6030	Warning	Collection of partial performance information has failed. Function name = %1	Processing continues. Take action if necessary.
6060	Error	Service setup processing has failed. Cause code = %1	Contact a systems engineer.
6061	Error	Activation of the schedule function has failed. Cause code = %1	Contact a systems engineer.
6062	Error	An error occurred in stop processing of scheduler function. Cause code = %1	Contact a systems engineer.
6063	Error	An error occurred during execution of scheduler function. Function name = %1, Cause code = %2	Contact a systems engineer.

Event ID	Category	Message	Action
6064	Error	An error occurred in performance information collection processing. Function name = %1, Cause code = %2	Contact a systems engineer.

20.3　Solaris/Linux-specific Messages

[Solaris][Linux]

This section explains messages that are specific to Solaris and Linux

Event ID	Category	Message	Action
DSA0006 E OCM0006 E	Error	Could not open file <file>: <reason>	Check file permissions. If the reason cannot be determined, contact a systems engineer.
DSA0041 E OCM0041 E	Error	Unable to write to file <file>: <reason>	Check disk space in the <spooldir> directory and file permissions. If the reason cannot be determined, contact a systems engineer.
DSA0100 E OCM0100 E	Error	TIS: Unable to allocate a memory block	Contact a systems engineer.
DSA0101 E OCM0101 E	Error	TIS: Missing RDF or TDF file name	This error could occur for several reasons. There are several files used by TIS (such as dcm.trd and dcm.ttd) that are installed with the product - they may have been moved or deleted, or had their permissions changed. The collect.txt file may have been incorrectly modified to specify an invalid (or missing) '.tdf' filename. Attempt to correct the error, otherwise Contact a systems engineer.
DSA0102 E OCM0102 E	Error	TIS: Session not established	Contact a systems engineer.
DSA0103 E OCM0103 E	Error	TIS: Invalid control block	Contact a systems engineer.
DSA0104 E OCM0104 E	Error	TIS: The field defined in the RDF as a CLOCK field contains invalid data	Contact a systems engineer.

Event ID	Category	Message	Action
DSA0105 E OCM0105 E	Error	TIS: Invalid stream number	Contact a systems engineer.
DSA0106 E OCM0106 E	Error	TIS: Buffer size too small	Contact a systems engineer.
DSA0107 E OCM0107 E	Error	TIS: Syntax error in file <file>	TDF and RDF files are normally installed or created by the application. If a script for an action set file template was modified, correct the error and retry the operation. Otherwise contact a systems engineer.
DSA0109 E OCM0109 E	Error	TIS: Error stream returned as follows: <text>	Typically this message will contain detailed text for a previous error, such as a "parse" error. If the reason cannot be determined from the message text, contact a systems engineer.
DSA0110 E OCM0110 E	Error	TIS: Parse error = <error>	If the reason cannot be determined from the message text, contact a systems engineer.
DSA0111 E OCM0111 E	Error	TIS: Unspecified error = <error_code>	Contact a systems engineer.
DSA0150 W OCM0150 W	Warning	DSA: No more input records.	This is a warning. If displayed by DSA Listener, confirm the system has network connectivity. If displayed repeatedly on a system, stop and restart DCM to ensure all DSAs are running on the system.
DSA0151 E OCM0151 E	Error	DSA: Unknown record type.	This event occurs when an undefined record appears in internal processing.
DSA0152 E OCM0152 E	Error	DSA: Invalid function parameter.	Check the DSAconfiguration.txt settings, or revert to the last known good copy of the file. Otherwise, contact a systems engineer.
DSA0153 E OCM0153 E	Error	DSA: Invalid function usage	Check the DSAconfiguration.txt settings, or revert to the last known good copy of the file. Otherwise, contact a systems engineer.
DSA0154 E OCM0154 E	Error	DSA: The configuration file cannot be opened or has an invalid format	A plain text file named 'DSAconfiguration.txt' needs to be in the *<basedir>/control* directory AND each entry in this file needs to have the format

Event ID	Category	Message	Action
			described in the default 'DSAconfiguration.txt' file.
DSA0155 E OCM0155 E	Error	DSA: Unable to allocate a memory block	Free up memory on the system by closing applications not required, or consider adding additional memory to the system.
DSA0156 E OCM0156 E	Error	DSA: Internal record transfer failure	Contact a systems engineer.
DSA0157 E OCM0157 E	Error	DSA: Internal library error	Contact a systems engineer.
DSA0158 E OCM0158 E	Error	DSA: Interrupted operation	Stop and restart DCM. If the problem persists, consult a systems engineer.
DSA0159 E OCM0159 E	Error	DSA: Processing failure	Contact a systems engineer.
DSA0160 E OCM0160 E	Error	Unexpected error = <error>	Contact a systems engineer, providing details of the error message.
DSA0161 E OCM0161 E	Error	DSA: <DSA> not stopped	Issue the 'ps -e' command to obtain the pid of the DSA process, then issue 'kill -9 <pid>' command to stop the process. Contact a systems engineer if this occurs other than rarely.
DSA0162 E OCM0162 E	Error	DSA: Output record to DSA too long	Contact a systems engineer, providing details of the error message.
DSA0300 E OCM0300 E	Error	Number of arguments passed by DCMD is incorrect	Contact a systems engineer.
DSA0301 E OCM0301 E	Error	Error in arguments passed by DCMD	The most likely cause is an error in the parameters specified for a DCA in the collect.txt file. Note: Not all command parameters are valid for all Unix system types.
DSA0305 E	Error	Failure in popen system call	Contact a systems engineer.

Event ID	Category	Message	Action
OCM0305 E			
DSA0307 E OCM0307 E	Error	Failure to read from a opened pipe	Contact a systems engineer if this message is seen frequently.
DSA0308 E OCM0308 E	Error	Unable to expand the process table (realloc)	Contact a systems engineer.
DSA0313 E OCM0313 E	Error	Bad host name <hostname>	Correct the host name in the dca_net.cmd file and re-run.
DSA0315 W OCM0315 W	Warning	Error in argument passed by DCMD: %s	Correct the argument in the collect.txt file and re-run.
DSA0318 E OCM0318 E	Error	Unable to open the DCA specific parameter file	Edit the collect file and at the appropriate entry for the DCA enter a valid parameter file name that the DCA can use.
DSA0324 E OCM0324 E	Error	Error in opening /etc/mnttab file	Contact a systems engineer.
DSA0325 W OCM0325 W	Warning	Error in statvfs system call. Error = <error>. Mount point = %s.	Contact a systems engineer.
DSA0348 W OCM0348 W	Warning	Unsupported argument [<argument>] for this platform ignored	Remove the unsupported switch from the collect.txt file template.
DSA0350 E OCM0350 E	Error	Unable to write to file	Check file permissions. Correct the problem and re-run.
DSA0358 E OCM0358 E	Error	Error in forking/executing the <process>. Error=<error>	Contact a systems engineer.
DSA0366 E	Error	Error in opening collection parameter file	・ This message is output when Agents are started without policies having been set up. Check whether policies have been set up correctly.

Event ID	Category	Message	Action
OCM0366 E			· This message is output when the "dcmstart.args" file cannot be accessed. Check the access rights and the existence of the file.
DSA0387 E OCM0387 E	Error	Record ID missing or invalid	This may occur if the file written by a DCA is corrupted, perhaps by a system or application crash. Otherwise, contact the system administrator.
DSA0388 E OCM0388 E	Error	malloc failed	Contact a systems engineer.
DSA0389 E OCM0389 E	Error	realloc failed	Contact a systems engineer.
DSA0406 E OCM0406 E	Error	Environmental variable(s) not available	Check that */etc/opt/ssqc/ssqc.conf* has been modified correctly.
DSA0426 E OCM0426 E	Error	Error in allocating memory (malloc)	Contact a systems engineer.
DSA0503 E OCM0503 E	Error	Error in determining host from inet address	Contact a systems engineer.
DSA0506 E OCM0506 E	Error	Error in getting host name details using gethostbyname system call or requested hostname not found	Refer to the *UNIX TCP/IP* manual for conditions under which the above call fails and contact the system administrator.
DSA0513 E OCM0513 E	Error	Error in set signal disposition using signal system call	Contact a systems engineer.
DSA0516 E OCM0516 E	Error	Error in executing kill system call	Contact a systems engineer.
DSA0539 E OCM0539 E	Error	Error in opening the dca .cmd file	If the file does not exist, create it. If it does exist, check the access permissions.

Event ID	Category	Message	Action
DSA0540 E OCM0540 E	Error	Wrong format in the dca .cmd file. \<file\>	Correct the contents of the .cmd file in the /\<basedir\>/control directory.
DSA0541 E OCM0541 E	Error	SQL error in the dca .cmd file. \<file\>	Correct the contents of the .cmd file in the /\<basedir\>/control directory.
DSA0543 E OCM0543 E	Error	Bad data received from UNIX. \<command\>	This message is output when the output results of a command are in an unexpected format. This may happen in the following situations. ・ When a command that uses a timer is executed, but the execution results are not returned within the collection interval, because of temporary load on the server or some other reason. ・ When the output format of a command has changed because a new version of the command is now being used. ・ When a working file for internally storing the execution results of commands is damaged, due to system panic or some other reason.
DSA0544 E OCM0544 E	Error	Input buffer capacity exceeded	Contact a systems engineer.
DSA0545 E OCM0545 E	Error	Command failed to complete	Contact a systems engineer.
DSA0550 W OCM0550 W	Warning	Input records not in sequence	This indicates that the raw data appears to be wrong and cannot be evaluated. ・ The result of I/O error in the console command output. 　- Check space allocations for the temporary directory. ・ The specification of an invalid command path. 　- Check the specification of the command path. ・ The wrong command being accessed in the search path.

Event ID	Category	Message	Action
			- Check that the correct command is found first in the system search path. · A change in the system specification of the command output. - Inform SERC.
DSA0551W OCM0551W	Warning	Transaction '%s' timed out	A script transaction has timed out. This is dependant upon the timeout value specified in the script for that transaction type. If the transaction timeout is set to the maximum, this probably indicates that the script is hanging up or looping. If necessary run tracing and check the timing of events.
DSA0552E OCM0552E	Error	Variable name <variable name> not found	Check the configuration file, correct the spelling or add the variable and re-run.
DSA0553E OCM0553E	Error	Variable <variable value> not quoted	Check the configuration file, identify and correct the problem and re-run.
DSA0554E OCM0554E	Error	Variable <variable value> too long	Check the configuration file, identify and correct the problem and re-run.
DSA0556W OCM0556W	Warning	Data for interval discarded due to '%s'. Command=%s	This message is output when the status changes within the monitoring interval due to the specification for an operating system command and information is not collected. Some collected data will be lost, but this is not really a problem. If this happens frequently, contact a systems engineer.

DSA0557W
 	
OCM0557W
	Warning	Bad data received from command '%s': %s	This indicates that the raw data appears to be wrong and cannot be evaluated.
			
			· The system is busy or overloaded.
			
			   - If this is a problem, consider reducing the amount of data collected.
			
			· The result of I/O error in the console command output.
			
			   - Check space allocations for the temporary directory.
			
			· The specification of an invalid command path.

Event ID	Category	Message	Action

			- Check the specification of the command path.
			
			· The wrong command being accessed in the search path.
			
			    - Check that the correct command is found first in the system search path.
			
			· A change in the system specification of the command output.
			
			    - Inform SERC.

DSA0558E OCM0558E	Error	Error accessing the PDB	Correct the problem if possible, otherwise contact the system administrator.
DSA0559W OCM0559W	Warning	Bad SQL Statement	If a file template containing SQL has been modified incorrectly, correct it, otherwise contact a systems engineer.
DSA0566E OCM0566E	Error	Maximum command execution time of sample interval exceeded	ETERNUS SF Disk Space Monitor executes the commands provided by the operating system and middleware, analyzes the output results, and stores them as performance information. This message is output when the commands do not terminate in 30 seconds for some reason (such as the machine remaining in high load status). No action is required unless this message continues to be output.
DSA0600E OCM0600E	Error	Scripting error detected at line %s in script '%s': %s	A TIS scripting error occurred and been trapped. Check the script logic.
DSA0601E OCM0601E	Error	Failed to open the Oracle oratab file	Check that the *oratab* file exists (for example /var/opt/oracle/oratab) and that the user specified in the *<basedir>/ control/dca_ora.cmd* file has the necessary access permissions.
DSA0603E OCM0603E	Error	Failed to find <sid> in the Oracle oratab file	Check that the *oratab* file has not been corrupted, then either (a) have the Oracle systems administrator set up a sid with the name of *sid*, or (b) change the collect.txt file to specify the appropriate *sid*.
DSA0604E OCM0604E	Error	Failed to connect to DBMS with username '<username>', sid '<sid>', ORACLE_HOME '<environment value>'	Correct the error and, in the case of a command file or collect file error, re-start DCM.

Event ID	Category	Message	Action
DSA0618 E OCM0618 E	Error	Unrecognizable field type.	Edit the sql file in the \<basedir>/control directory used to create the pdb (default is 'createpdb.sql'), and check all field types specified are compatible for SQLite databases.
DSA0619 E OCM0619 E	Error	Unexpected return from SQL statement.	Edit the sql file in the \<basedir>/control directory used to create the pdb (default is 'createpdb.sql'), and check all statements.
DSA0620 W OCM0620 W	Warning	Oracle restart detected. Interval data is being discarded.	This is a warning only. No corrective action is needed.
DSA0621 E OCM0621 E	Error	Cannot access V$INSTANCE synonym, interval data may be incorrect after Oracle restart. \<Oracle error text>	Contact a systems engineer.
DSA0641 E OCM0641 E	Error	Error in trying to fork a process	Contact a systems engineer.
DSA0642 E OCM0642 E	Error	Error trying to perform setsid system call	Contact a systems engineer.
DSA0643 E OCM0643 E	Error	Polling error	If the problem persists, contact a network administrator.
DSA0644I OCM0644 I	Information	SIGHUP Signal received	No action required.
DSA0700 E OCM0700 E	Error	Environment variable PERFMGR_BASEDIR has not been set. Stopping.	This variable is normally automatically set by programs by reading the */etc/opt/ssqc/ssqc.conf* file. Check that the */etc/opt/ssqc/ssqc.conf* file has been modified correctly.
DSA0701 E OCM0701 E	Error	Call to uname failed. Cannot get host name. Stopping.	This is an internal Unix fault. Refer to your system documentation.
DSA0702 E OCM0702 E	Error	Collect file name not supplied. Specify '-c collect.txt' in dcmstart.args.	Specify the -c collect file parameter in *\<basedir>/control/dcmstart.args*, i.e. -c*collect.txt*.

Event ID	Category	Message	Action
DSA0703 E OCM0703 E	Error	Errors in command line arguments. Stopping.	This message is output when the *dcmd* command cannot be executed because of a problem with a command line parameter. Contact a systems engineer if the problem cannot be resolved from the information in the message.
DSA0704 E OCM0704 E	Error	Errors in collect file. Line <number> ignored. Fields: <fields>	The number of the line that is in error is displayed along with the fields that caused the error. Check the syntax of the line in question and correct any errors. Restart DCM.
DSA0705I OCM0705 I	Information	All DCAs have stopped as requested. Stopping DCMD.	This is not an error. It logs when the DCM found that all the DCAs had stopped.
DSA0707I OCM0707 I	Information	Signaling DCAs to stop	This is not an error. It logs when the DCM signaled the DCAs to stop.
DSA0709 W OCM0709 W	Warning	Collect file has no valid entries.	Ensure that collect.txt is correctly specified in the *<basedir>/control/ dcmstart.args* file. Inspect collect.txt and correct any entries in error; ensure that at least one collection entry is specified.
DSA0712 E OCM0712 E	Error	<DCA/DSA><ID> stopped unexpectedly. Restarting.	This message is output when the monitoring process cannot be started because of a problem with a definition or the environment, and an attempt to restart is made. No action is required unless "SSQC1304E" is output after this message.
SSQC1304 E	Error	Too many attempts to start process. DCM cannot restart %1.	This message is output when the monitoring process cannot be started even though attempts to restart it have been made.
DSA0713 E OCM0713 E	Error	<DCA/DSA><ID> keeps stopping. It will not be restarted.	If the reason cannot be determined from previous errors, contact a systems engineer.
DSA0714 E OCM0714 E	Error	Cannot write pidfile. Check file permissions.	Check the */<basedir>/control/* directory permissions. Correct the problem and re-run.
DSA0715 E OCM0715 E	Error	atexit() failed	Contact a systems engineer.

Event ID	Category	Message	Action
DSA0716 W OCM0716 W	Warning	File system free threshold reached. \<directory\>	Reduce the space usage of the file system by, for example, deleting redundant files.
DSA0717 E OCM0717 E	Error	Insufficient free file system space. \<directory\>	Reduce the space usage of the file system by, for example, deleting redundant files and re-starting DCM.
DSA0718 W OCM0718 W	Warning	Usage threshold reached. \<directory\>	Reduce the space usage in the *directory* by, for example, deleting redundant files.
DSA0719 E OCM0719 E	Error	Usage too large. \<directory\>	Reduce the space usage in the *directory* by, for example, deleting redundant files and re-starting DCM.
DSA0720 E OCM0720 E	Error	PERFMGR_SPOOLDIR not set	Set and export PERFMGR_SPOOLDIR in file */etc/opt/ssqc/ssqc.conf* and re-run.
DSA0721 E OCM0721 E	Error	PERFMGR_SPOOLDIR directory not found	Set and export PERFMGR_SPOOLDIR in file */etc/opt/ssqc/ssqc.conf* and re-run. Check that the specified directory exists and that it is accessible.
DSA0722 E OCM0722 E	Error	Too many corrupted files.	This may occur if the file written by a DCA is corrupted, perhaps by a system or application crash. It may be necessary to delete the corrupt file or files from the spool directory. Otherwise, contact the system administrator.
DSA0723 E OCM0723 E	Error	PERFMGR_DSADIR not set.	Set and export PERFMGR_DSADIR in file */etc/opt/ssqc/ssqc.conf* and re-run.
DSA0724 E OCM0724 E	Error	PERFMGR_DSADIR not found	Check that the directory specified by PERFMGR_DSADIR in file */etc/opt/ssqc/ssqc.conf* exists and that it is accessible.
DSA0725 E OCM0725 E	Error	More than \<maximum\> valid \<DCA/DSA\> entries specified	Inspect the appropriate file (collect.txt for DCAs or DSAconfiguration.txt for DSAs) and ensure that fewer than *maximum* entries are defined.
DSA0726 W OCM0726 W	Warning	Unable to change the directory to \<dir_name\>	Ensure that *\<basedir\>/bin* exists and has suitable permissions. Otherwise contact a systems engineer.

Event ID	Category	Message	Action
DSA0727 E OCM0727 E	Error	DSA configuration file has no valid entries	Inspect DSAconfiguration.txt and correct any entries in error, ensuring that at least one DSA is specified. (This error can occur after a user comments out existing entries for testing purposes and all entries are accidentally marked as comments, or if all entries contain errors.)
6330	Error	Syntax error was found in side definitionfile.(file=%1, line=%2)	Contact a systems engineer.
6331	Error	Error occurred so stopped. (detail=%1, errno=%2)	Contact a systems engineer.
6333	Information	Definition file has been changed so it was reloaded.	No action required.

Index