



Systemwalker Service Quality Coordinator

User's Guide (Console Edition)

Windows/Solaris/Linux

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Preface

Purpose of this manual

This manual explains how to use the operation windows for Systemwalker Service Quality Coordinator, such as the Console and the Admin Console window.

Target audience

This manual is intended for users who will monitor distributed systems, create reports, and perform operations and distribution activities on the Systemwalker Service Quality Coordinator operation management client/console.

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

Organization of Systemwalker Service Quality Coordinator manuals

The Systemwalker Service Quality Coordinator manuals are organized as follows:

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

Positioning of this document

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

- Systemwalker Service Quality Coordinator Enterprise Edition V15.0.1
- Systemwalker Service Quality Coordinator Standard Edition V15.0.1
-

Abbreviations

- The term "Windows Server 2012" refers to the following products:
 - Microsoft(R) Windows Server(R) 2012 Foundation
 - Microsoft(R) Windows Server(R) 2012 Standard
 - Microsoft(R) Windows Server(R) 2012 Datacenter
- The term "Windows Server 2008" refers to the following products:
 - Microsoft(R) Windows Server(R) 2008 R2 Foundation
 - Microsoft(R) Windows Server(R) 2008 R2 Standard
 - Microsoft(R) Windows Server(R) 2008 R2 Enterprise
 - Microsoft(R) Windows Server(R) 2008 R2 Datacenter
 - Microsoft(R) Windows Server(R) 2008 Foundation
 - Microsoft(R) Windows Server(R) 2008 Standard
 - Microsoft(R) Windows Server(R) 2008 Enterprise
 - Microsoft(R) Windows Server(R) 2008 Datacenter
 - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM)
 - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM)
 - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM)
 - Microsoft(R) Windows Server(R) 2008 Standard Server Core
 - Microsoft(R) Windows Server(R) 2008 Standard without Hyper-V(TM) Server Core
 - Microsoft(R) Windows Server(R) 2008 Enterprise Server Core
 - Microsoft(R) Windows Server(R) 2008 Enterprise without Hyper-V(TM) Server Core
 - Microsoft(R) Windows Server(R) 2008 Datacenter Server Core
 - Microsoft(R) Windows Server(R) 2008 Datacenter without Hyper-V(TM) Server Core
- The term "Windows Server 2003" refers to the following products:
 - Microsoft(R) Windows Server(R) 2003 R2, Standard Edition
 - Microsoft(R) Windows Server(R) 2003 R2, Enterprise Edition
 - Microsoft(R) Windows Server(R) 2003 R2, Datacenter Edition
 - Microsoft(R) Windows Server(R) 2003, Standard Edition
 - Microsoft(R) Windows Server(R) 2003, Enterprise Edition
 - Microsoft(R) Windows Server(R) 2003, Datacenter Edition
- The term "Windows 8" refers to the following products:
 - Windows(R) 8

- Windows(R) 8 Pro
- Windows(R) 8 Enterprise
- The term "Windows 7" refers to the following products:
 - Windows(R) 7 Home Premium
 - Windows(R) 7 Professional
 - Windows(R) 7 Enterprise
 - Windows(R) 7 Ultimate
- The term "Windows Vista" refers to the following products:
 - Windows Vista(R) Home Basic
 - Windows Vista(R) Home Premium
 - Windows Vista(R) Business
 - Windows Vista(R) Enterprise
 - Windows Vista(R) Ultimate
- The term "Windows XP" refers to the following products:
 - Microsoft(R) Windows(R) XP Home Edition
 - Microsoft(R) Windows(R) XP Professional Edition
- Windows Server 2003 and Windows Server 2008 are referred to as "Windows Server 2008 and earlier".
- Windows Server 2008 and Windows Server 2012 are referred to as "Windows Server 2008 and later".
- Windows XP, Windows Vista, and Windows 7 are referred to as "Windows 7 and earlier".
- Windows Vista, Windows 7 and Windows 8 are referred to as "Windows Vista and later".
- Windows Server 2008 and earlier and Windows 7 and earlier are referred to as "Windows Server 2008/Windows 7 and earlier".
- Windows Server 2008 and later and Windows Vista and later are referred to as "Windows Server 2008/Windows Vista and later".
- Microsoft(R) SQL Server(TM) is abbreviated as "SQL Server".
- Microsoft(R) Cluster Server is abbreviated as "MSCS".
- Oracle Solaris might be described as Solaris, Solaris Operating System, or Solaris OS.
- Oracle Solaris zone might be described as Solaris container.
- Oracle WebLogic Server is abbreviated as "WebLogic Server".
- Oracle Database is abbreviated as "Oracle".
- Systemwalker Centric Manager is abbreviated as "Centric Manager".
- Systemwalker Resource Coordinator is abbreviated as "Resource Coordinator".
- Interstage Application Server is abbreviated as "Interstage".
- Symfoware Server is abbreviated as "Symfoware".
- VMware(R) ESX(R) is abbreviated as "VMware ESX" or "ESX".
- VMware(R) ESXi(TM) is abbreviated as "VMware ESXi" or "ESXi".
- VMware(R) vCenter(TM) is abbreviated as "VMware vCenter" or "vCenter".
- VMware vSphere(R) is abbreviated as "VMware vSphere".

- Versions of Systemwalker Service Quality Coordinator that operate under Windows are referred to as "Windows versions".
- Versions of Systemwalker Service Quality Coordinator that operate under Solaris are referred to as "Solaris versions".
- Versions of Systemwalker Service Quality Coordinator that operate under Linux are referred to as "Linux versions".
- Solaris and Linux versions of Systemwalker Service Quality Coordinator are referred to collectively as "UNIX versions".
- The term "Agent" is used to refer to articles common to both Agent for Server and Agent for Business.

Conventions used in this document

- Edition-specific information

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

EE

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

SE

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

Also, Systemwalker Service Quality Coordinator Enterprise Edition referred to as "EE", and Systemwalker Service Quality Coordinator Standard Edition referred to as "SE".

- Information specific to Windows or UNIX versions

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

[Windows]

This indicates that the article relates specifically to Windows versions.

[UNIX]

This indicates that the article relates specifically to UNIX versions.

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

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

S

This indicates that the article relates specifically to Solaris versions.

L

This indicates that the article relates specifically to Linux versions.

Symbols

The symbols used with commands are explained below.

[Entry example]

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

[Meaning of each symbol]

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

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

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

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Contents

Chapter 1 Admin Console Window.....	1
1.1 Console Definitions Window.....	2
1.2 Setting View.....	3
1.2.1 Setting View tree.....	6
1.2.2 Management configuration definition (ConfigurationSettings).....	8
1.2.2.1 SystemGroups.....	9
1.2.2.2 ProxyManagers.....	11
1.2.2.3 Agents.....	15
1.2.2.4 RelationTools.....	19
1.2.2.5 Resources.....	22
1.2.2.6 WebSites.....	25
1.2.2.7 Resources (URL).....	26
1.2.2.8 HTTP/PORT/DNS/SMTP.....	29
1.2.2.9 TxnIDs.....	32
1.2.2.10 TxnIDs for TxnAnalysis(Sync), TxnAnalysis(Async), and TxnAnalysis(OssJava).....	34
1.2.3 Unregistered Agents Information (UnregisteredAgents).....	36
1.2.3.1 Registering Information about Unregistered Agents.....	37
1.2.3.1.1 When Register Unregistered Agent in Bulk.....	37
1.2.3.1.2 When Register Unregistered Agent Individually.....	38
1.2.3.2 Deleting information about unregistered Agents.....	40
1.3 User Definitions Window.....	42
1.3.1 User Definition Registration.....	43
Chapter 2 Console.....	45
Chapter 3 Monitoring Window.....	49
3.1 Summary View.....	52
3.1.1 Monitor types.....	52
3.1.2 Description of the Summary Tree.....	61
3.1.2.1 Reloading the Summary tree.....	61
3.1.3 Basic operation.....	62
3.1.3.1 Manual Update and Auto Update.....	62
3.1.3.2 Opening targets in the Drilled-Down display.....	64
3.1.3.3 Display in another window and print.....	64
3.1.4 Content-related operation methods.....	64
3.2 Drilled-Down Display.....	65
3.2.1 Drilled-Down Display Types.....	65
3.2.2 Description of the Drilled-Down Tree.....	66
3.2.2.1 Reloading the Drilled-Down tree.....	67
3.2.3 Basic operation.....	67
3.2.3.1 Display in another window and print.....	68
3.2.3.2 History.....	69
3.2.3.3 Displaying resources.....	69
3.2.3.4 Invoking related tools.....	71
3.2.4 How to perform operations relating to content.....	71
3.2.4.1 Common operations.....	71
3.2.4.2 WebSites tree.....	72
3.2.4.3 Interstage(TxnAnalysis)JavaEE/Interstage(TxnAnalysis) tree.....	72
3.2.4.4 TxnAnalysis(Sync)/TxnAnalysis(Async)/TxnAnalysis(OssJava)tree.....	75
3.3 Invoking Functions Directly.....	80
3.3.1 Invoking the Summary View.....	80
3.3.2 Invoking the Drilled-Down Display.....	84
Chapter 4 Analysis/Planning Window.....	88
4.1 Types of Categories.....	88

4.2 Types of Reports.....	92
4.2.1 Planning.....	92
4.2.1.1 Virtual Aggregate.....	92
4.2.1.1.1 P2V (Physical to virtual).....	92
4.2.1.2 Effective Use of Resources.....	93
4.2.1.2.1 VMware virtual machine relocation.....	93
4.2.1.2.2 VMware resource allocation optimization.....	94
4.2.1.2.3 VMware tuning guidance.....	95
4.2.1.3 Demand Forecast.....	101
4.2.1.3.1 VMware resource pool.....	101
4.2.1.3.2 ServerView Resource Orchestrator resource pool.....	101
4.2.1.4 Increment Simulation.....	102
4.2.1.4.1 Response simulation.....	102
4.2.1.5 Generic Report.....	105
4.2.1.5.1 Generic report.....	105
4.2.2 Performance Analysis.....	105
4.2.2.1 Virtualization Software.....	105
4.2.2.1.1 VMware.....	105
4.2.2.1.2 Hyper-V.....	106
4.2.2.1.3 Linux virtualization function (KVM).....	107
4.2.2.1.4 Linux virtualization function (Xen).....	108
4.2.2.1.5 Solaris Zone.....	109
4.2.2.1.6 Solaris Zone (Solaris 10).....	109
4.2.2.2 Network.....	110
4.2.2.2.1 Systemwalker Centric Manager (Network).....	110
4.2.2.2.2 Systemwalker Network Manager.....	111
4.2.2.2.3 TcpNetwork.....	112
4.2.2.3 Storage.....	113
4.2.2.3.1 ETERNUS SF Storage Cruiser (SAN Storage).....	113
4.2.2.3.2 ETERNUS SF Storage Cruiser (NAS).....	114
4.2.2.4 OS.....	115
4.2.2.4.1 Windows.....	115
4.2.2.4.2 UNIX.....	117
4.2.2.4.3 Common to all operating systems.....	121
4.2.2.5 Web.....	121
4.2.2.5.1 Web transaction.....	121
4.2.2.6 Application.....	122
4.2.2.6.1 Interstage Application Server (IJServ Cluster).....	122
4.2.2.6.2 Interstage Application Server (Work Unit).....	123
4.2.2.6.3 Oracle WebLogic Server.....	129
4.2.2.6.4 Microsoft .NET.....	130
4.2.2.6.5 SAP NetWeaver.....	131
4.2.2.6.6 Workload.....	133
4.2.2.7 Database.....	134
4.2.2.7.1 Symfoware server.....	134
4.2.2.7.2 Oracle database.....	134
4.2.2.7.3 Microsoft SQL Server.....	136
4.2.2.8 Job.....	138
4.2.2.8.1 Systemwalker Operation Manager.....	138
4.2.2.9 Service Bus.....	140
4.2.2.9.1 Interstage Service Integrator.....	140
4.2.2.10 Service.....	140
4.2.2.10.1 Service operational information.....	140
4.2.2.10.2 End user response.....	141
4.2.2.11 Generic report.....	142
4.2.2.11.1 Generic report.....	142
4.2.3 History.....	143

4.2.3.1 History.....	143
4.2.3.1.1 History.....	143
4.3 Operating the Analysis/Planning Window.....	144
4.3.1 Scenario.....	150
4.3.1.1 Category.....	150
4.3.1.1.1 My Category Management.....	150
4.3.1.2 Report.....	152
4.3.1.2.1 Report Management.....	153
4.3.2 Conditions.....	156
4.3.2.1 Target Settings.....	156
4.3.2.1.1 Resource ID specification.....	164
4.3.2.2 Display Settings.....	166
4.3.2.2.1 Detail settings.....	168
4.3.2.3 Saving Condition Settings.....	173
4.3.3 Period.....	175
4.3.4 Display Button.....	175
4.3.5 Contents Display Area.....	176
4.4 Using the Analysis/Planning Window.....	176
4.4.1 Using Scenarios to Create Reports.....	176
4.4.2 Referring to the History of Created Reports.....	180
4.4.3 Registering a New Scenario and Saving Report Conditions.....	182
4.5 Operations Using Scenarios.....	191
4.5.1 Simulation of Aggregating Physical Servers to a Virtual Environment: [P2V (Physical to Virtual)].....	191
4.5.2 Simulating the Relocation of Virtual Machines: [VMware Virtual Machine Relocation].....	199
4.5.3 Analysis of Bottlenecks in Virtual Environment: [VMware Tuning Guidance].....	209
4.5.4 Optimization of Resources Allocated to a Virtual Machine: [Optimization of Resources Allocated to VMware].....	212
4.5.5 Future Prediction of Resource Demand: [ServerView Resource Orchestrator Resource Pool].....	215
4.5.6 Simulation of Resource Increase in Anticipation of an Increased Number of Requests: [Response Simulation].....	216
Chapter 5 Scheduled Report.....	224
5.1 Types of Reports.....	224
5.2 Scheduled Report Registration (Administrator Tasks).....	224
5.2.1 Registered Report Name.....	230
5.2.2 Category.....	230
5.2.3 Report.....	230
5.2.4 Target Settings.....	230
5.2.5 View Settings.....	230
5.2.6 Operation Buttons (to register, edit, and delete report conditions).....	230
5.2.7 Period Specifications.....	231
5.2.8 Operation Buttons (preview).....	232
5.2.9 Content Display Area.....	232
5.3 Manipulating Scheduled Reports (Administrator Tasks).....	232
5.3.1 sqcMakeReport(Scheduled Report Creation Command).....	232
5.3.2 sqcDeleteReport(Scheduled Report Deletion Command).....	235
5.3.3 Example of registration with scheduler.....	236
5.3.4 Backing up reports.....	241
5.4 Scheduled Report View.....	242
5.4.1 Search Conditions Area.....	246
5.4.2 Scheduled Reports List Display Area.....	248
5.5 Storing Reports (Administrator Tasks).....	249
Chapter 6 Notes Relating to Errors.....	251
6.1 Content Display Errors.....	251
6.1.1 How to Increase the Size of the Desktop Heap.....	251
6.1.2 Other content display errors.....	252
6.2 If "-1" is displayed as service operational information.....	253
6.3 Application errors with tcslsh84.....	254
6.4 Failure to collect server performance information.....	254

6.5 PDB maintenance processing.....	254
6.6 If Management Console buttons become inoperable.....	254
6.7 If messages output by Systemwalker Service Quality Coordinator fail to appear in the status bar.....	255
6.8 When Images and Characters Are not Displayed Correctly.....	255
Appendix A Setup Commands and Resident Processes.....	256
A.1 Server Resource Information Collection Policy Setup Command.....	256
A.2 Response/Operation Information Collection Policy Setup Command.....	257
A.3 sqcSetPolicy (Policy Application Command).....	257
A.4 Starting and Stopping Resident Processes.....	259
A.5 Automatic Startup Settings for the thttpd Service/Daemon.....	263

Chapter 1 Admin Console Window

This chapter explains how to use the **Admin Console** window

The **Admin Console** window is made up of a **Console Definitions** and a **User Definitions**. 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`

In order to communicate with the management server, a virtual directory must be registered on the Web server. Refer to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide* when setting up basic authentication in the Admin Console.

The **Console Definitions** window initially appears as below.

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.

Window configuration

(1)

(2)

(3)

Console Definition Name	Last Update	Setting View	Console	Copy	Delete
ABCD_LTD	2010-09-08 13:29:08	Setting View	Console	Copy	Delete
DefaultConsole	2005-12-31 16:00:00	Setting View	Console	Copy	Delete

Create

Reload

Basic configuration

Admin Console is organized as shown in the following table.

Item No.	Component	Description
(1)	Global navigation	The toolbar provides the following menu: - Manual Opens the manual.
(2)	Console Definitions tab	This tab displays information about registered console definitions.
(3)	User Definitions tab	Create and change users in this tab.

The following sections present an overview of each of these windows.

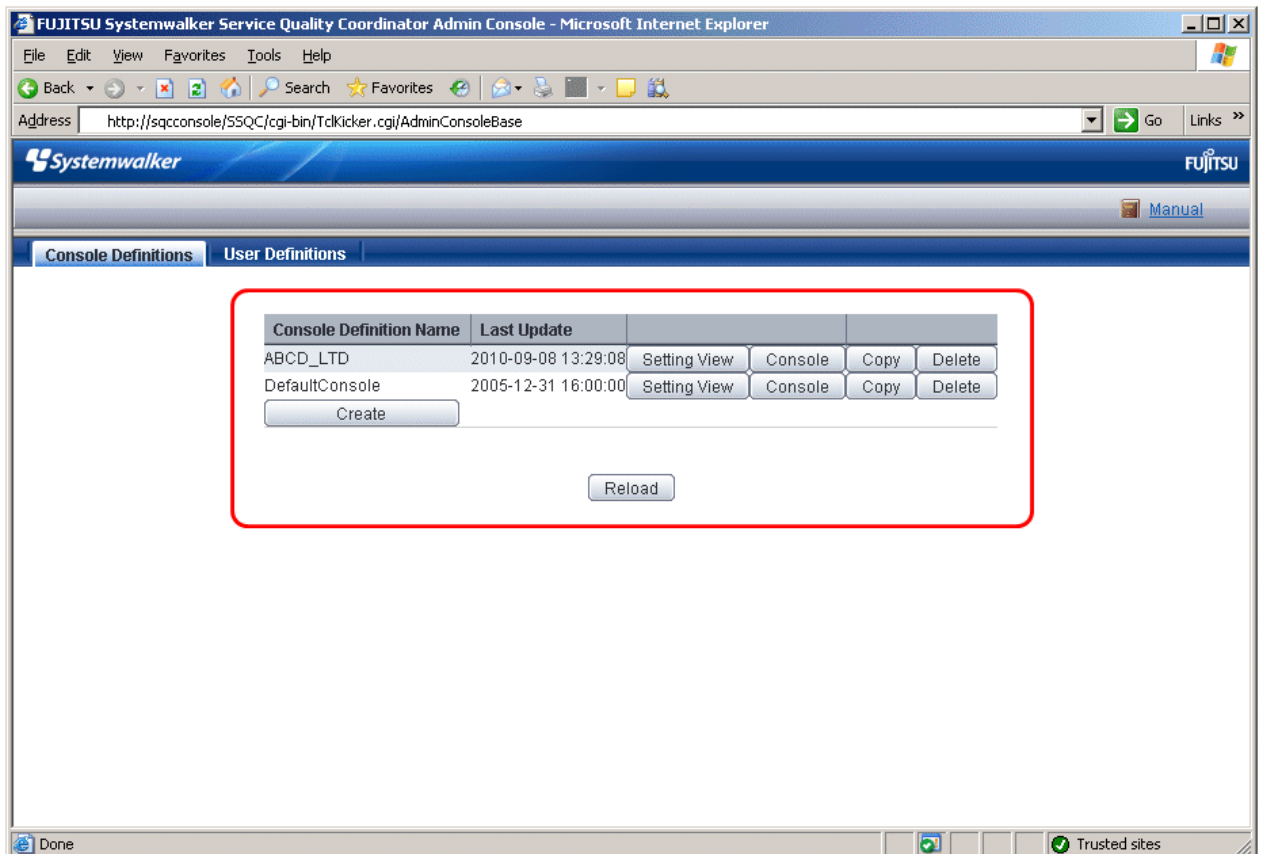
1.1 Console Definitions Window

This section explains the **Console Definitions** window.

The **Console Definitions** window can be used to create and edit console definitions, and to display the **Setting View** and the **Console** window.

The **Console Definitions** window initially appears as below.

Window configuration



Basic operation

The **Console Definition** window contains a number of operation buttons.

The following table explains the operation of each button.

Button	Operation
Create	<p>Creates a new console definition.</p> <p>After clicking this button, enter the name of the console definition to be created in the prompt that is displayed.</p> <p>Only the following characters can be used for console definition names: alphanumeric characters [a-z, A-Z, 0-9], hyphens ('-') and underscores ('_').</p> <p>However, hyphens ('-') cannot be used as the first character.</p> <p>Console definition names are not case sensitive.</p> <p>Console definition names must be no more than 64 characters long.</p> <p>Existing console definition names cannot be used.</p>
Setting View	<p>Starts the Setting View for console definitions.</p>
Console	<p>Starts the Console window.</p>
Copy	<p>Copies the specified console definition with the specified name.</p> <p>After clicking this button, enter the name of the console definition to be copied in the prompt that is displayed.</p> <p>Existing console definition names cannot be used.</p>
Delete	<p>Deletes the specified console definition.</p> <p>However, "DefaultConsole" cannot be deleted.</p>
Reload	<p>Displays console definitions using the latest information.</p>

Point

- Starting time of Console gets longer according to the number of Agents.

It takes about 15 seconds when it manages 300 Agents, in case of that CPU of the Operation Management Client is Xeon 3.3 GHz only as a guide (It depends on CPU performance and other conditions).

To shorten starting time of Console, create multiple console definitions and divide the Agents to register.

- The console definition can be done by the command. Refer to "sqcSetupConsoleDefine (Console Definition Configuration Command)" in the *Reference Guide*.

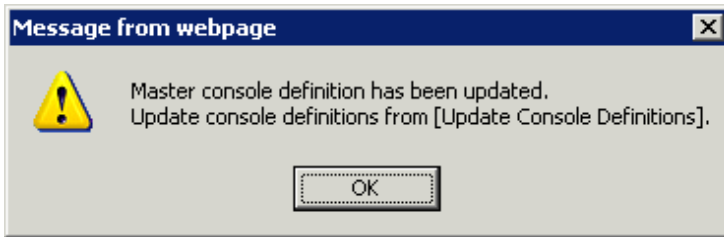
1.2 Setting View

This section explains the **Setting View**.

The **Setting View** is opened by clicking the **Setting View** button on the **Console Definitions** tab of the **Admin Console**.

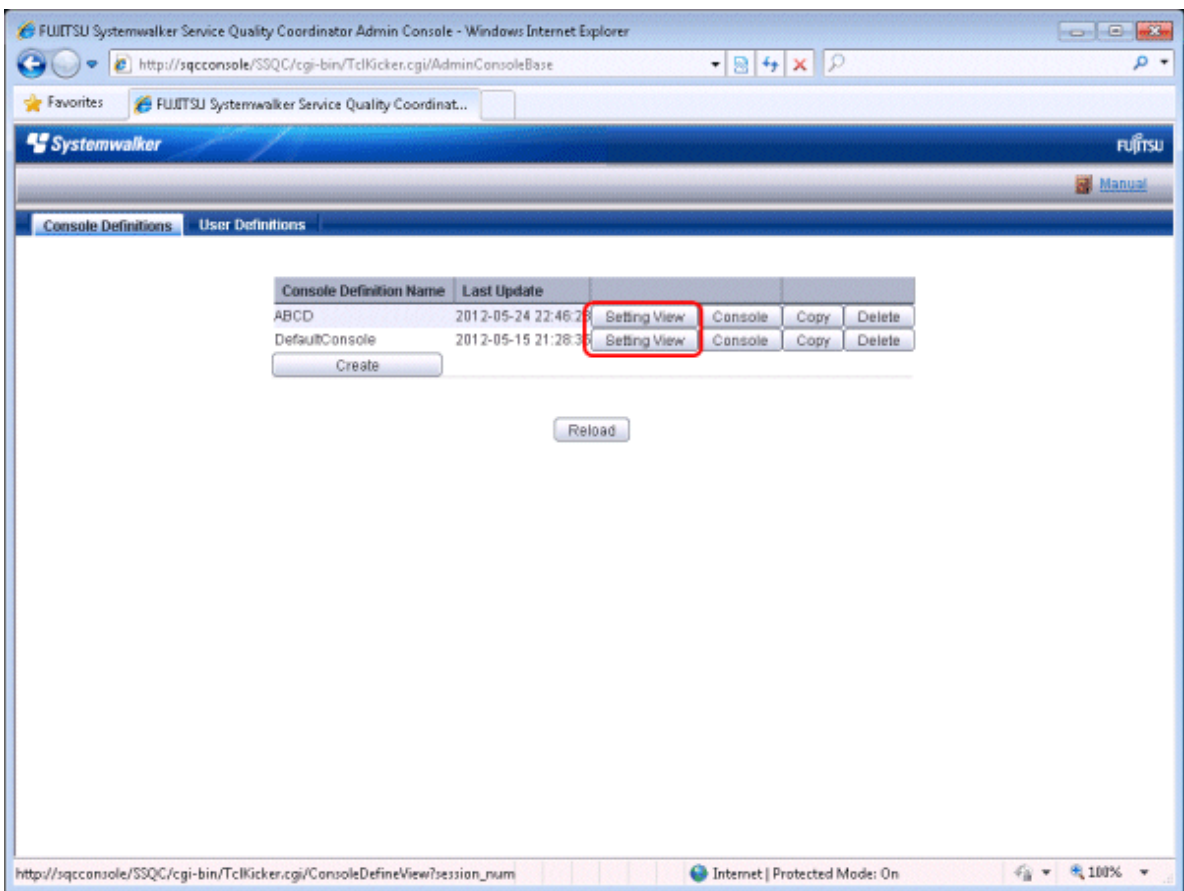
Note

When the definition window is started, the message below might be displayed.



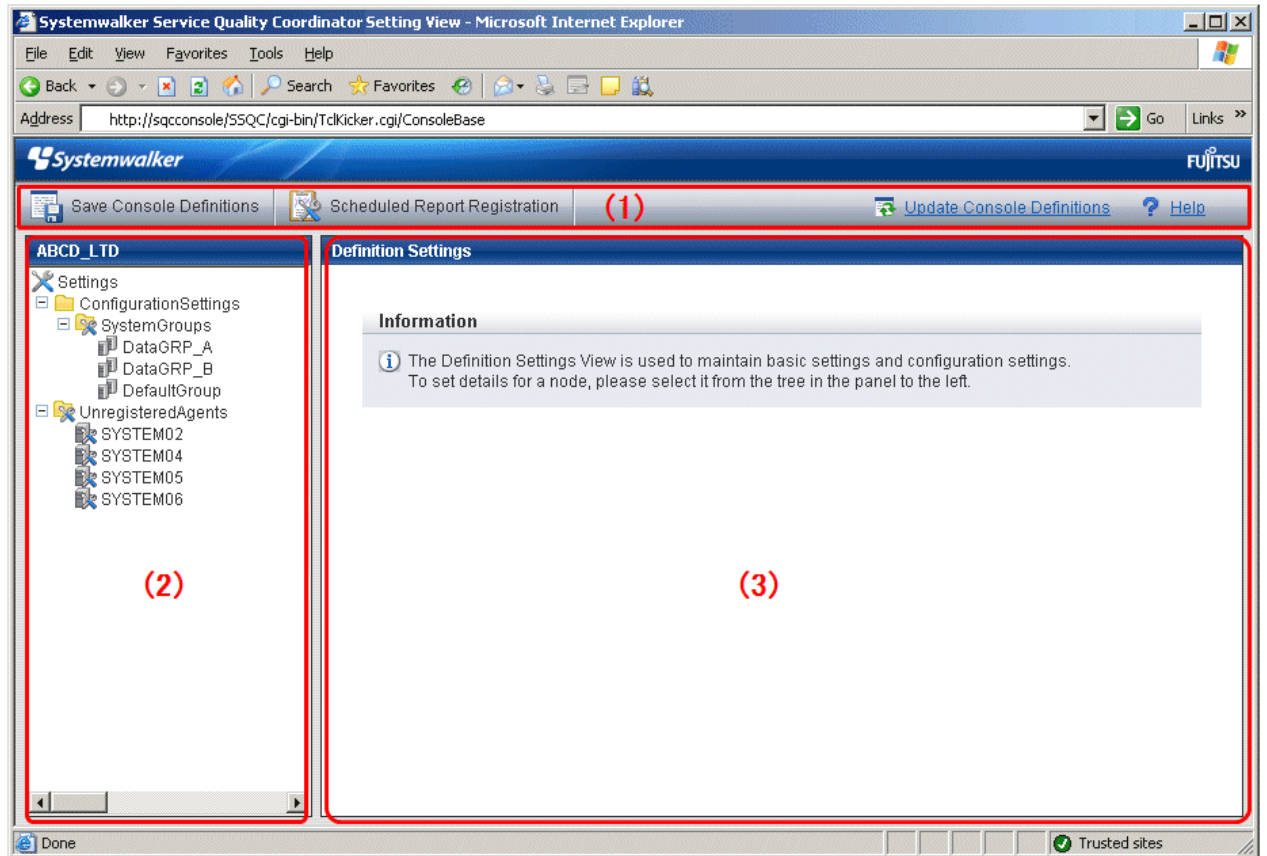
In this case, click **OK** and then click **Update Console Definition** on the displayed definition window.

The update might take a few moments, depending on the number of registered Agents.



The **Setting View** will be displayed as below.

Window configuration



Procedure

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

Item No.	Component	Description
(1)	Global navigation	The toolbar provides the following menus: <ul style="list-style-type: none"> - Save Console Definitions Saves the console definition. - Register Scheduled Report Opens a new Console window. - Update Console Definition Reloads console definitions. - Help Open the <i>User's Guide (Console Edition)</i>.
(2)	Tree display area	Displays the Systemwalker Service Quality Coordinator environment configuration in a tree structure.
(3)	Setting window display area	Displays the settings window that can be used to enter information.



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.

The following table shows the behavior of the buttons that are common to each setting window.

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	<p>Deletes a configuration definition. If the OK button is clicked in response to the deletion prompt, the information will be deleted.</p> <p> Point</p> <p>.....</p> <p>The trees in any other Console windows that may be open at the same time are not updated automatically.</p> <p>It will be necessary to reload the tree using the procedures described in "3.1.2.1 Reloading the Summary tree" or "3.2.2.1 Reloading the Drilled-Down tree".</p> <p>.....</p>
View	Opens an information display window.
Apply	<p>Completes information entry and closes the window.</p> <p>At the same time, any information that has been added or modified will be applied to the local console definitions.</p> <p> Point</p> <p>.....</p> <p>The trees in any other Console windows that may be open at the same time are not updated automatically.</p> <p>It will be necessary to reload the tree using the procedures described in "3.1.2.1 Reloading the Summary tree" or "3.2.2.1 Reloading the Drilled-Down tree".</p> <p>.....</p>
Reset	Clears any checkboxes that have been selected, and any text that has been entered.
Cancel	Cancels the information that has been entered and closes the window.
Close	Terminates viewing and closes the window.









1.2.1 Setting View tree

The **Setting View** tree consists of the following levels.

Level	Description
Top tree	<p>This is the default level that is displayed when the Setting View opens.</p> <p>It displays Settings, which is the root of the tree, and the system groups.</p> <p>When the system group node is selected, the display switches to the system group tree.</p>

Level	Description
System group tree	<p>This tree displays the system group and the Proxy Managers and Agents under it.</p> <p>At the top of the system group tree is a Back node that can be used to return to the previous level.</p> <p>When the Proxy Manager or Agent node is selected, the display switches to the Proxy Manager or Agent tree.</p>
Proxy Manger tree	<p>The tree displays the Proxy Manager or Agent and their subordinate configurations.</p> <p>With regard to SAN Storage, the AffinityGroup and RAIDGroup nodes are also divided into different levels.</p> <p>At the top of the tree is a Back node that can be used to return to the previous level.</p>
Agent tree	

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 Proxy Managers and Agents.
	Indicates an instance defined by a middleware product, etc.
	Indicates a node for which information is to be set.
	Indicates a related tool.

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	"1.2.2 Management configuration definition (ConfigurationSettings)"
SystemGroups	"1.2.2.1 SystemGroups"
ProxyManagers	"1.2.2.2 ProxyManagers"
RelationTools	"1.2.2.4 RelationTools"
ManagedObject	--
ResponseCondition	--
WebSites	"1.2.2.6 WebSites"
Resources(URL)	"1.2.2.7 Resources (URL)"
ServiceCondition	--

Tree configuration		Location of description
	HTTP	"1.2.2.8 HTTP/PORT/DNS/SMTP"
	PORT	
	DNS	
	SMTP	
Agents		"1.2.2.3 Agents"
RelationTools		"1.2.2.4 RelationTools"
ManagedObject		--
<i>Instances</i>		--
	Resources	"1.2.2.5 Resources"
Interstage(TxnAnalysis)JavaEE		--
	<i>Server Instances</i>	--
	TxnIDs	"1.2.2.9 TxnIDs"
Interstage(TxnAnalysis)		--
	<i>Work Units</i>	--
	TxnIDs	"1.2.2.9 TxnIDs"
TxnAnalysis(Sync/Async/OssJava)		--
	TxnTime	--
	TxnIDs	"1.2.2.10 TxnIDs for TxnAnalysis(Sync), TxnAnalysis(Async), and TxnAnalysis(OssJava)"
UnregisteredAgents		"1.2.3 Unregistered Agents Information (UnregisteredAgents)"

1.2.2 Management configuration definition (ConfigurationSettings)

The **ConfigurationSettings** folder in the **Settings** tree is used to set the configuration information of objects to be managed. Be sure to make the following settings.

- [1.2.2.1 SystemGroups](#)
- [1.2.2.2 ProxyManagers](#)
- [1.2.2.3 Agents](#)

Make the following settings if necessary.

- [1.2.2.4 RelationTools](#)
- [1.2.2.5 Resources](#)
- [1.2.2.6 WebSites](#)
- [1.2.2.7 Resources \(URL\)](#)
- [1.2.2.8 HTTP/PORT/DNS/SMTP](#)
- [1.2.2.9 TxnIDs](#)

- 1.2.2.10 TxnIDs for TxnAnalysis(Sync), TxnAnalysis(Async), and TxnAnalysis(OssJava)

1.2.2.1 SystemGroups

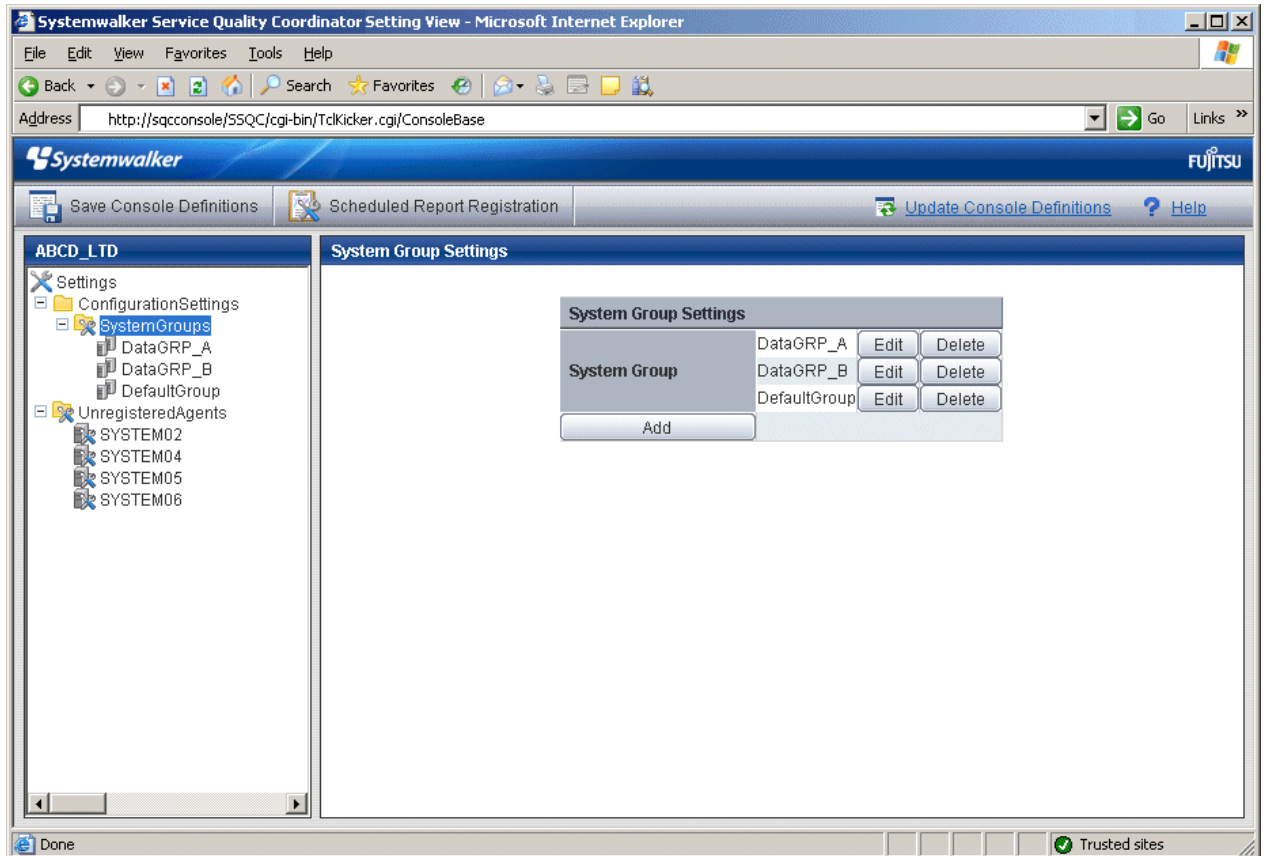
This node registers system groups.

System groups are for organizing the multiple servers that make up the system being managed.

System groups are specified as display units in the summary, analysis, and scheduled report views.

Managed host must belong to a group.

The **System Group Settings** window is shown below.



Procedure

1. 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	<p>Set a display name that will be used to identify the system group.</p> <p>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 or a Proxy Manager name.</p> <p>The following characters can be used for system group names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &)

Node name	Setting item name	Description
		Platform dependent characters cannot be used. The system group name can be no longer than 64 characters.

- When the systems group is registered, the ProxyManagers and Agents folders are created under the system group folder.

 **Point**

- It takes longer time to display graphs including system group information like Summary view, according to the number of Agents registered to the system group.

It takes about 60 seconds when it manages 50 Agents, in case of that CPU of the Operation Management Client is Xeon 3.3 GHz only as a guide (It depends on the kind of monitor, period of data to be displayed, CPU performance of the Operation Management Client, and other conditions).

To shorten the time to display, create multiple system groups and divide the Agents to register.

- The registers systems group can be done by the command. Refer to "sqcSetupConsoleDefine (Console Definition Configuration Command)" in the *Reference Guide*.

1.2.2.2 ProxyManagers

This node registers Proxy Managers that will be managed.

If end user response information and server operational information is not to be collected, there is no need to set up this folder.

 **Point**

To collect information with a Manager and not a Proxy Manager, register the Manager as a Proxy Manager.

Proxy Manager registration can also be performed easily with the **Register Agent with System Group** window. Refer to "1.2.3 Unregistered Agents 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 **Proxy Manager Settings** window (shown below) instead.

Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Go Links

Address http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ConsoleBase

Systemwalker FUJITSU

Save Console Definitions Scheduled Report Registration Update Console Definitions Help

ABCD_LTD

- Back
- DefaultGroup
 - ProxyManagers
 - ProxyManager_A
 - ProxyManager_B
 - Agents
 - Agent_A
 - Agent_B
 - Agent_C
 - ManagedObject
 - TxnAnalysis(Sync)
 - TxnTime
 - TxnIDs
 - TxnAnalysis(Async)
 - TxnTime
 - TxnIDs

Proxy Manager Settings

Proxy Manager Settings				Collecting Configuration Information	
Proxy Manager	ProxyManager_A	Edit	Delete	2010-09-08 11:54:07	Update Details
	ProxyManager_B	Edit	Delete	2010-09-08 11:54:17	Update Details
Add					Update All


Done Trusted sites

Procedure

1. Click the **Add** button to display the **Proxy Manager Information** window, and then set information relating to the Proxy Manager.

The screenshot shows a web browser window displaying a dialog box titled "Proxy Manager Information". The dialog box contains two text input fields: "Proxy Manager Name" and "Host name". Below these fields are three buttons: "Apply", "Reset", and "Cancel". The browser's address bar shows "http://127.0.0.1 - FUJITSU Systemwalker Service Quality Coordinator Proxy Manager...". The status bar at the bottom of the browser window shows "Done" and "Trusted sites".

Node name	Setting item name	Description
ProxyManagers	Proxy Manager Name	<p>Specify the display name for identifying the Proxy Manager.</p> <p>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 or an Agent name.</p> <p>The following characters can be used for Proxy Manager names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &)

Node name	Setting item name	Description
		<p>Platform dependent characters cannot be used.</p> <p>The Proxy Manager name can be no longer than 64 characters.</p>
	Host Name	<p>Specify the identifier for the Proxy Manager.</p> <p>The same system name cannot be registered more than once within a single group, but identical host names can be registered in different groups.</p> <p> Point</p> <p>.....</p> <p>If a single Proxy Manager is used in multiple businesses, it is possible to create a system group for each business and to register the same Proxy Manager with each one. However, a different character string should be used in the ProxyManager name (display name).</p> <p>.....</p> <p>The identifier is a name that is displayed by the Policy Application Command. Refer to "A.3 sqcSetPolicy (Policy Application Command)" for details on the Policy Application Command.</p>

- Next, click either the **Update All** or the **Update Details** button to collect configuration information from the Proxy Managers. 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**

.....

If the collection of configuration information fails, the collection date will not be updated. Check that the host name is correct, and that the Proxy Manager collection policy has been correctly created and applied.

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 Proxy Manager that performed the collection.

The **ManagedObject** folder displays the following information targeted for collection by the Proxy Manager:

- End user response information
- Service operational information

 **Point**

.....

The configuration information that is collected here refers to the managed object configuration information (response and configuration information for managed objects) explained in "[A.2 Response/Operation Information Collection](#)

[Policy Setup Command](#)" Therefore, collection policies described in "[A.2 Response/Operation Information Collection Policy Setup Command](#)" must be created and applied on either the Manager or the Proxy Manager in advance.

Also, the configuration information collection explained here must be performed each time collection policies are created and applied.

.....

[For "Pull" communications]

For "pull" operations, 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 storage directory\control\ManagedConf_XXXX.xml`

[UNIX]

`/etc/opt/FJSVssqc/ManagedConf_XXXX.xml`

"XXXX" refers to the name that was specified with the `-h` option when the "[A.3 sqcSetPolicy \(Policy Application Command\)](#)" 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`

Point

The registers Proxy Manager and configuration information is collected can be done by the command. Refer to "[sqcSetupConsoleDefine \(Console Definition Configuration Command\)](#)" and "[sqcGetXMLConfig \(Configuration Information Collection Command\)](#)" in the *Reference Guide*.

.....

1.2.2.3 Agents

This node registers Agents that will be managed.

Point

Agent registration can also be performed easily with the **Register Agent with System Group** window. Refer to "[1.2.3 Unregistered Agents 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.

.....

The **Agent Settings** window is shown below.

Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Go Links

Address http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ConsoleBase

Systemwalker FUJITSU

Save Console Definitions Scheduled Report Registration Update Console Definitions Help

ABCD_LTD

- Back
- DefaultGroup
 - ProxyManagers
 - ProxyManager_A
 - ProxyManager_B
 - Agents
 - Agent_A
 - Agent_B
 - Agent_C
 - ManagedObject
 - TxnAnalysis(Sync)
 - TxnTime
 - TxnIDs
 - TxnAnalysis(Async)
 - TxnTime
 - TxnIDs

Agent Settings

Agent Settings				Collecting Configuration Information	
Agent	Agent_A	Edit	Delete	2010-09-08 11:54:07	Update Details
	Agent_B	Edit	Delete	2010-09-08 11:54:17	Update Details
	Agent_C	Edit	Delete	2010-09-08 11:54:02	Update Details
Add					Update All


Done Trusted sites

Procedure

1. Click the **Add** button to display the **Agent Information** window, and then set information relating to the Agent.

The screenshot shows a web browser window with the title "http://127.0.0.1 - Systemwalker Service Quality Coordinator Agent Settings - Micros...". The main content area is titled "Agent Information" and contains two text input fields: "Agent Name" and "Host Name". Below these fields are three buttons: "Apply", "Reset", and "Cancel". The browser's status bar at the bottom shows "Done" and "Trusted sites".

Node name	Setting item name	Description
Agents	Agent Name	<p>Specify the display name for identifying the Agent.</p> <p>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 or a ProxyManger name.</p> <p>The following characters can be used for Agent names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &) <p>Platform dependent characters cannot be used.</p> <p>The Agent name can be no longer than 64 characters.</p>

Node name	Setting item name	Description
	Host Name	<p>Specify the identifier for the Agent.</p> <p>The same host name cannot be registered more than once within a single group, but identical system names can be registered in different groups.</p> <p>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).</p> <p>The identifier is a name that is displayed by the Policy Application Command. Refer to "A.3 sqcSetPolicy (Policy Application Command)" for details on the Policy Application Command.</p> <p> Point</p> <p>.....</p> <p>For clustered Agent operations, specify either a physical host name or a physical IP address.</p> <p>.....</p>

- 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.

 **Point**

.....

If the collection of configuration information fails, the collection date will not be updated. Check that the host name is correct, and that the Agent collection policy has been correctly created and applied.

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.

 **Point**

.....

The configuration information that is collected here refers to the managed object configuration information (resource configuration information) explained in "[A.1 Server Resource Information Collection Policy Setup Command](#)". Therefore, collection policies described in "[A.1 Server Resource Information Collection Policy Setup Command](#)" must 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.

.....

[For "Pull" communications]

For "pull" operations, 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 storage directory\control\ManagedConf_XXXX.xml
```

[UNIX]

```
/etc/opt/FJSVssqc/ManagedConf_XXXX.xml
```

"XXXX" refers to the name that was specified with the *-h* option when the "[A.3 sqcSetPolicy \(Policy Application Command\)](#)" 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
```

Point

.....

The registers Agent and configuration information is collected can be done by the command. Refer to "sqcSetupConsoleDefine (Console Definition Configuration Command)" and "sqcGetXMLConfig (Configuration Information Collection Command)" in the *Reference Guide*.

.....

1.2.2.4 RelationTools

When Proxy Managers and 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 Drilled-Down display, set up this folder as well.

The **Related Tool Settings** window is shown below.

Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Refresh Print Mail Stop

Address http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ConsoleBase Go Links >>

Systemwalker FUJITSU

Save Console Definitions Scheduled Report Registration Update Console Definitions Help

ABCD_LTD

- Back
- Agent_C
 - RelationTools
 - Fujitsu
 - ManagedObject
 - Windows
 - DISKSPACE
 - Resources
 - DISC_C
 - DISK_D
 - PROCESS
 - Resources
 - LOGDISKBUSY
 - Resources
 - PHYDISKBUSY
 - Resources
 - MEMORY
 - Resources
 - PAGEFILE
 - Resources
 - CPUBUSY
 - Resources
 - NET_INTERFACE
 - Resources

Related Tool Settings

Related Tool Settings			
Related Tool	Fujitsu	Edit	Delete
Add			

Done Trusted sites

Procedure

1. Click the **Add** button to display the **Related Tool Information** window, and then set information relating to the related tool.

The screenshot shows a web browser window displaying a dialog box titled "Related Tool Information". The dialog box contains two text input fields: "Related Tool Name" and "URL". Below these fields are three buttons: "Apply", "Reset", and "Cancel". The browser's address bar shows "http://127.0.0.1 - Systemwalker Service Quality Coordinator Agent Related Tool Setti...". The status bar at the bottom of the browser window shows "Done" and "Trusted sites".

Node name	Setting item name	Description
RelationTools	Related Tool Name	<p>Specify the display name for identifying the tool.</p> <p>The following characters can be used for related tool names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &) <p>Platform dependent characters cannot be used.</p> <p>The related tool name can be no longer than 64 characters.</p> <p>Existing related tool name cannot be used.</p>

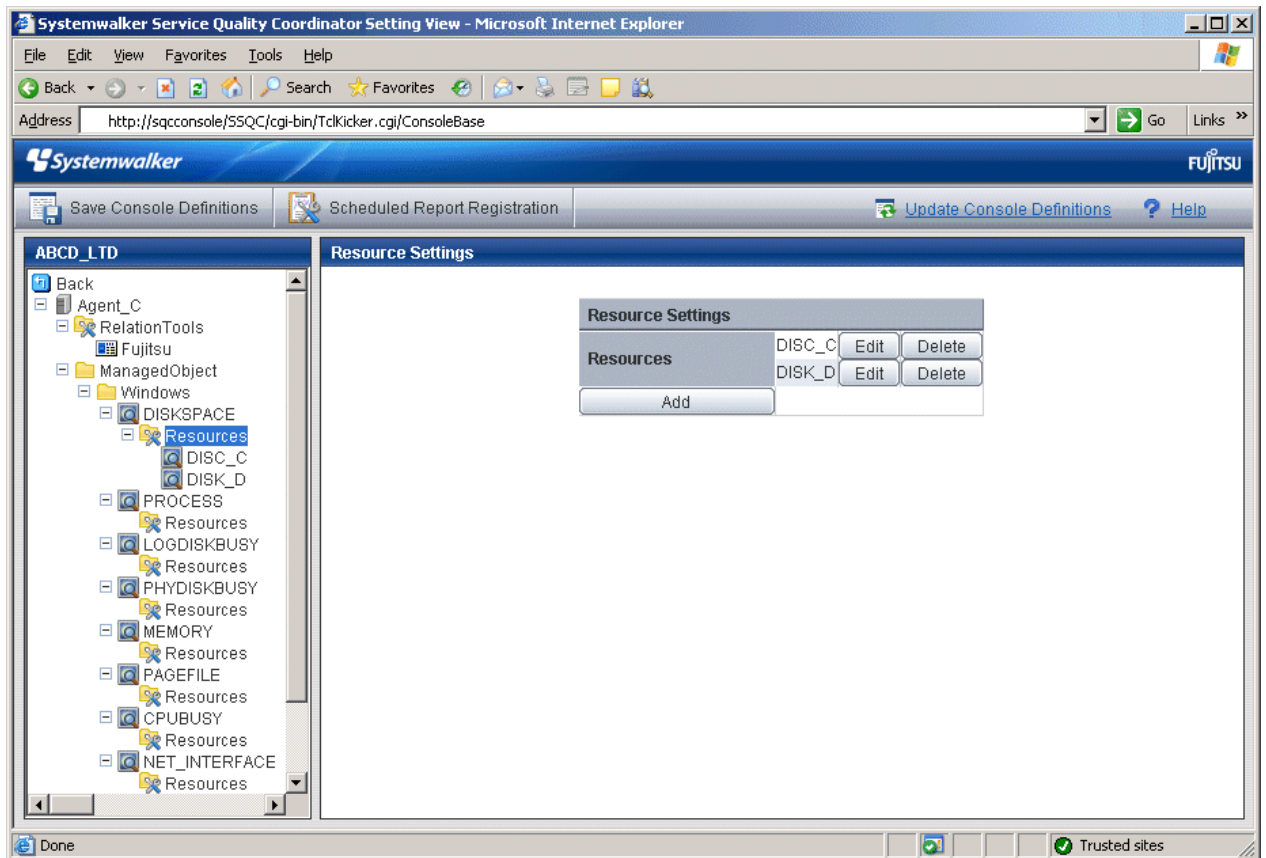
Node name	Setting item name	Description
	URL	Specify the URL to call.

1.2.2.5 Resources

This node is defined when it is necessary to display more specific resource content than the standard display unit in the Drilled-Down display of this product.

Refer to "3.2.3.3 Displaying resources" for details on displaying resources with the Drilled-Down display function.

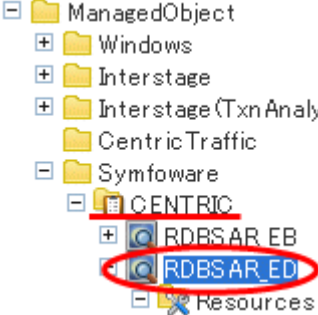
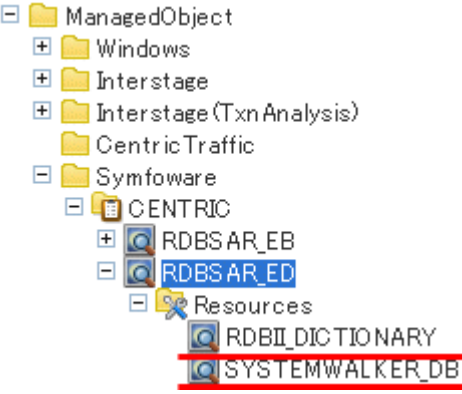
The **Resource Settings** window is shown below.



Procedure

1. 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	<p>Specify the display name for identifying the resource.</p> <p>Set a name that is unique within the target Resources folder</p> <p>The following characters can be used for resource names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ , < > \$ " ' [] = &) <p>Platform dependent characters cannot be used.</p> <p>The resource name can be no longer than 64 characters.</p>
	Resource ID	<p>This is a character string displayed in the Resource ID column of the Drilled-Down display content that is used to filter display items by the resource.</p>

Node name	Setting item name	Description
		<p>If the resource ID consists of multiple strings separated by colons (":") and the separated strings appear in the Drilled-Down tree between the ManagedObject node and the target node as nodes that represent instances, specify the strings below the instance node.</p> <p>Example:</p> <p>When "RDBSAR_ED" is selected, the following strings are displayed in the Resource ID column of the Drilled-Down display content:</p> <div data-bbox="608 611 1230 757" style="border: 1px solid black; padding: 5px;"> <p>Resource ID</p> <p>CENTRIC:RDBII_DICTIONARY:RDBII_SYSTEMDIC</p> <p>CENTRIC:SYSTEMWALKER_DB:SYSTEMWALKER_SP</p> </div> <p>In addition, "CENTRIC" appears in the tree as a node that represents an instance.</p>  <p>In this case, specify "RDBII_DICTIONARY" and "SYSTEMWALKER_DB" that appear below "CENTRIC".</p>  <p>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.</p> <p>Specify a resource ID name that is unique within the Resources folder.</p> <p>Up to 64 characters (alphanumeric characters and symbols) can be used for the resource ID except for the following: \ , < > " \$ ' [] = &</p>

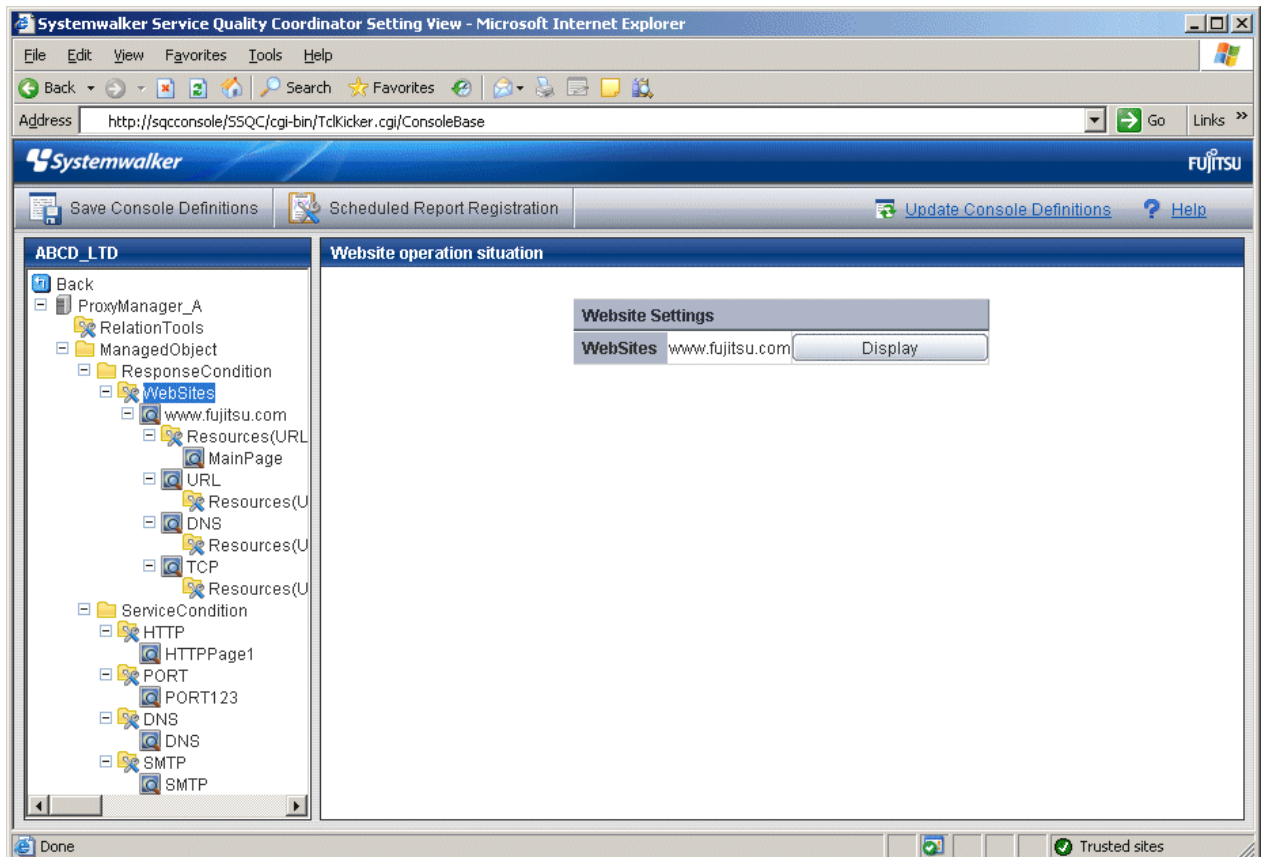
1.2.2.6 WebSites

By obtaining the configuration information, it becomes possible to check the configuration information relating to end user response management that was obtained from a Proxy Manager.

Precondition of function

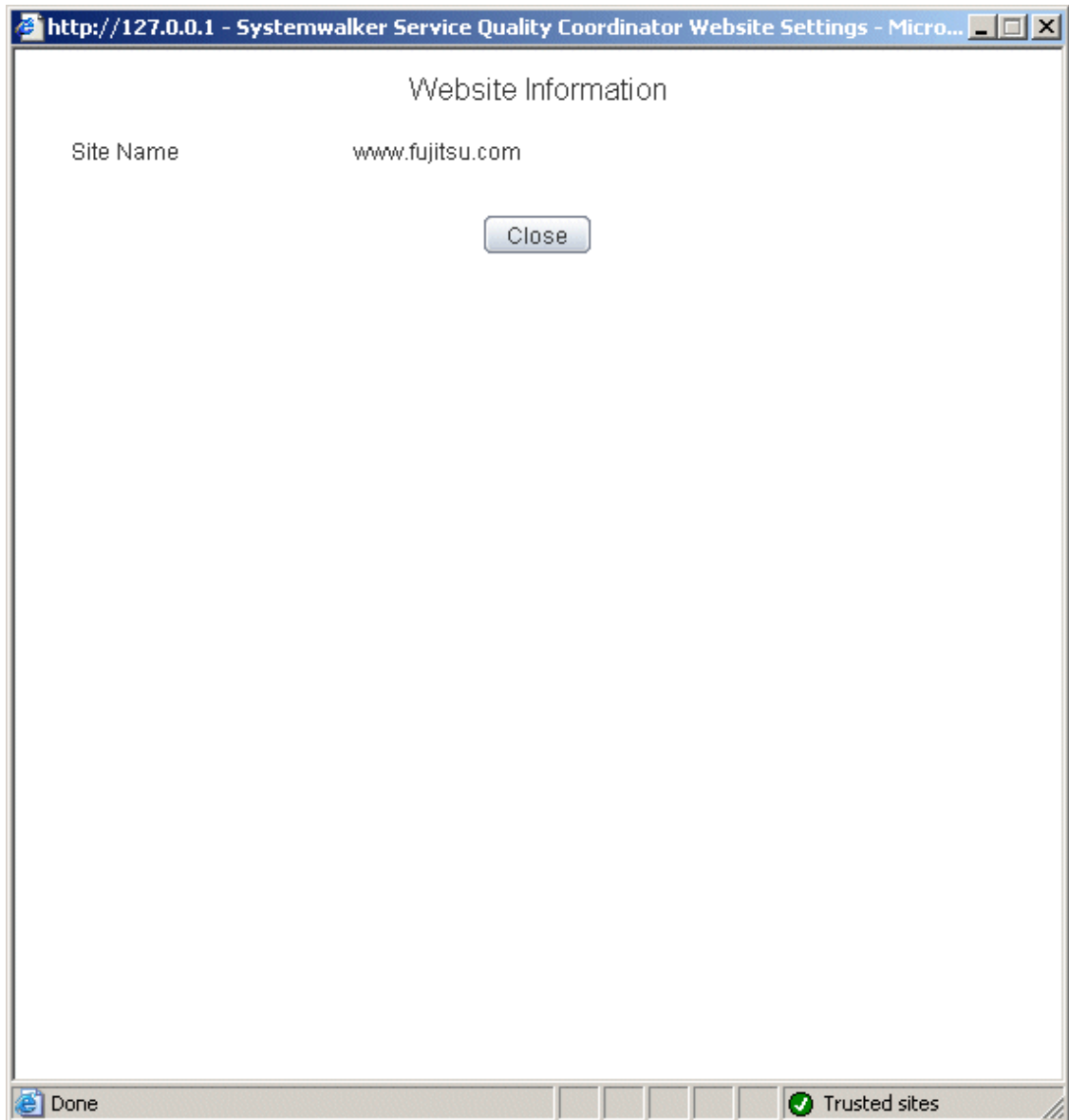
This node is displayed only if "Managed object configuration information (response and managed object configuration information)" explained in "A.2 Response/Operation Information Collection Policy Setup Command" has been defined.

The **Web site operation status** window is shown below.



Procedure

1. Click the **View** button to display a Web site information window.



Node name	Display item name	Displayed content
WebSites	Site Name	Displays the site name defined by end user response management on a Manager or Proxy Manager.

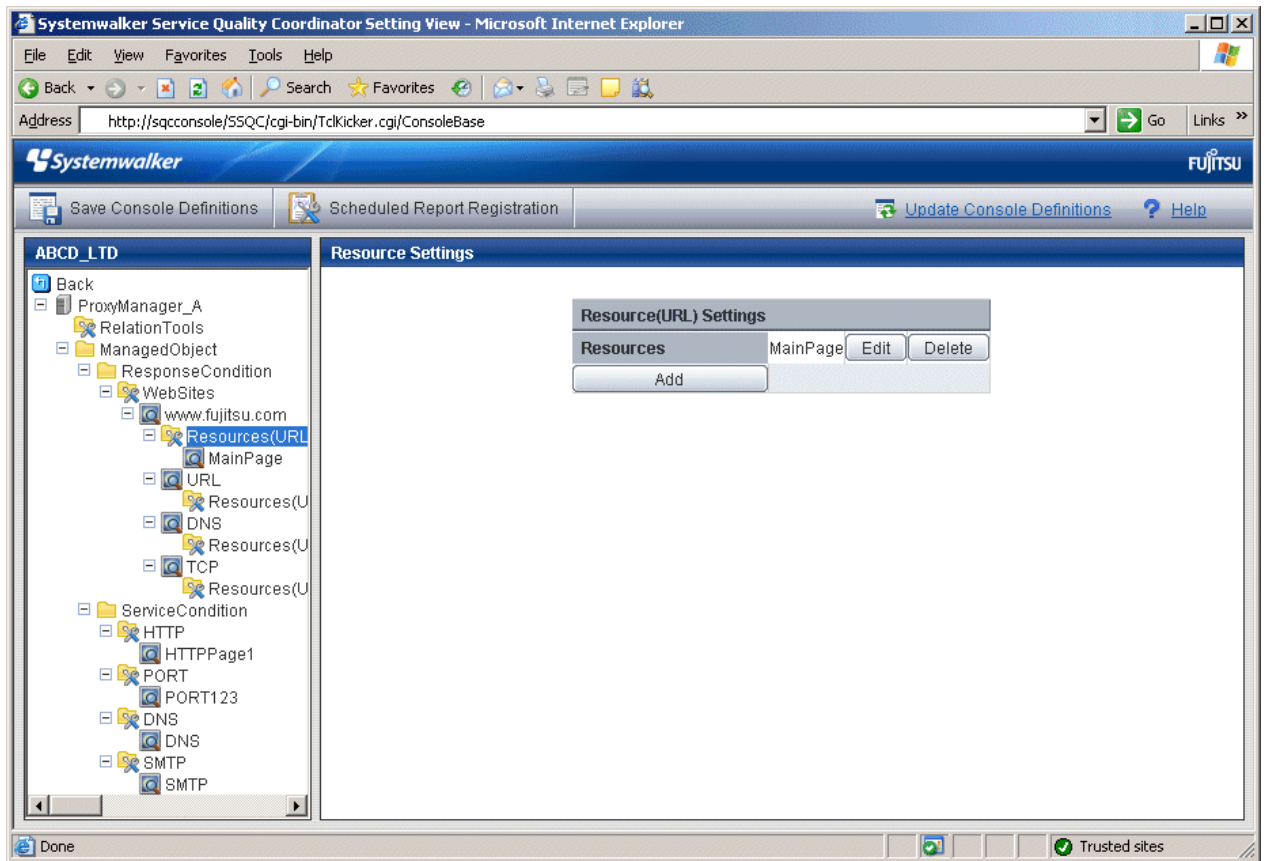
1.2.2.7 Resources (URL)

This node is defined when it is necessary to display more specific resource content than the standard display unit in the Drilled-Down display of this product.

The URL of a Web page that has been fully downloaded (i.e., no error occurs when the Web page is displayed and the display is not interrupted) is set as a specific resource.

Refer to "[3.2.3.3 Displaying resources](#)" for details on displaying resources with the Drilled-Down display function.

The **Resource(URL) Settings** window is shown below.



Procedure

1. Click the **Add** button to display the **Resource(URL) Information** window, and then set information relating to the resource.

The screenshot shows a web browser window with the address bar displaying 'http://127.0.0.1 - Systemwalker Service Quality Coordinator Resource Information - ...'. The main content area contains a dialog box titled 'Resource(URL) Information'. Inside the dialog, there are three text input fields labeled 'Resource Name', 'Resource ID(URL1)', and 'Resource ID(URL2)'. Below these fields are three buttons: 'Apply', 'Reset', and 'Cancel'. The browser's status bar at the bottom shows 'Done' and 'Trusted sites'.

Node name	Setting item name	Description
Resources(URL)	Resource Name	<p>Specify the display name for identifying the resource.</p> <p>Set a name that is unique within the target Resources folder</p> <p>The following characters can be used for resource names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ , < > \$ " ' [] = &) <p>Platform dependent characters can not be used.</p> <p>The resource name can be no longer than 64 characters.</p>

Node name	Setting item name	Description
	Resource ID (URL1)	Normally, set URL1 only.
	Resource ID (URL2)	<p>Note, however, that different URLs can point to the same Web page, as shown in the following example:</p> <p>http://www.fujitsu.com/SQC/ http://www.fujitsu.com/SQC/index.html</p> <p>To view these two URLs together as a single Web page, use URL2 in combination with URL1 and set as follows:</p> <p>URL1: /SQC/ URL2: /SQC/index.html</p> <p>Up to 64 characters (alphanumeric characters and symbols) can be used for the resource ID except for the following:</p> <p>\$ \ " ' [] < > = & ^ { } () # * ; ? ,</p>

1.2.2.8 HTTP/PORT/DNS/SMTP

These nodes can be used to verify the configuration information of service operation management that is collected from a Proxy Manager.

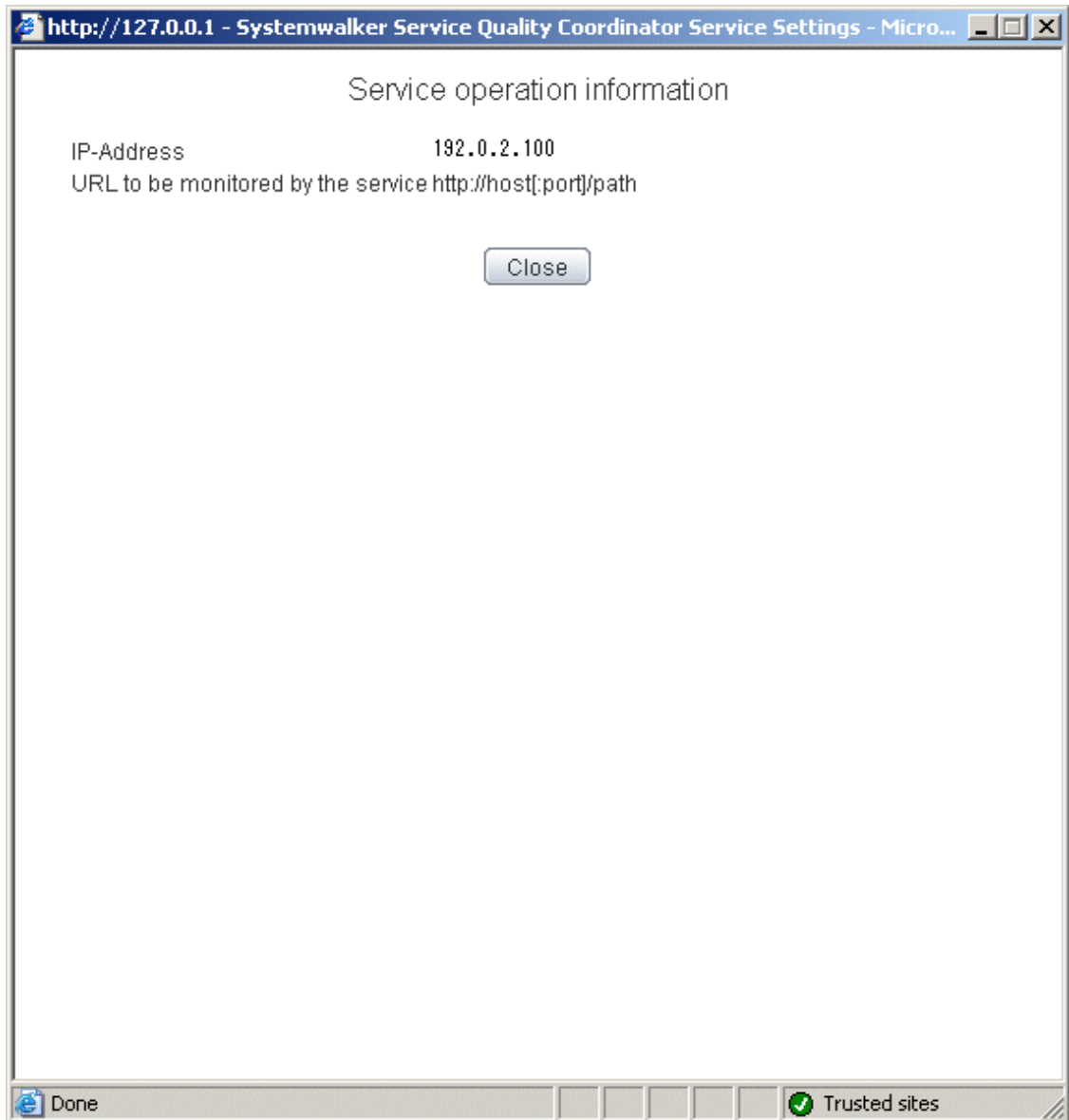
Precondition of function

These nodes are displayed only if "Managed object configuration information (response and managed object configuration information)" explained in "A.2 Response/Operation Information Collection Policy Setup Command" has been defined.

The **Service Operation Status** window is shown below.

Procedure

1. Click the **View** button to display a service information window.



Node name	Display item name	Displayed content
HTTP	IP-Address	Displays the IP address defined by HTTP service operation management on a Manager or Proxy Manager.
	URL to be monitored by the service	Displays the URL to be subject to service monitoring defined by HTTP service operation management on a Manager or Proxy Manager.
PORT	IP-Address	Displays the IP address defined by port service operation management on a Manager or Proxy Manager.
	Port	Displays the port defined by port service operation management on a Manager or Proxy Manager.

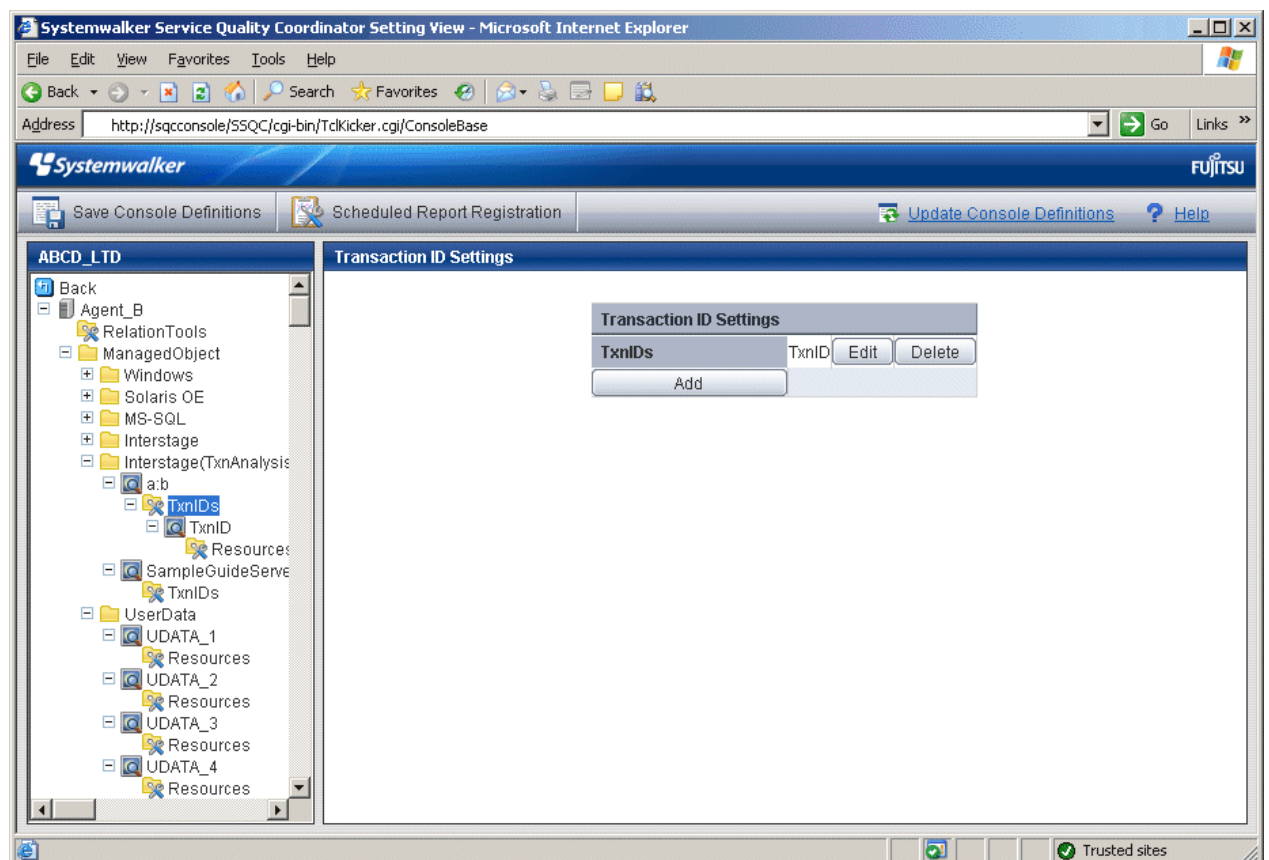
Node name	Display item name	Displayed content
DNS	IP-Address	Displays the IP address defined by DNS service operation management on a Manager or Proxy Manager.
	Port	Displays the port defined by DNS service operation management on a Manager or Proxy Manager.
	Resolved DNS host name	Displays the host name resolved by DNS that is defined by DNS service operation management on a Manager or Proxy Manager.
SMTP	IP-Address	Displays the IP address defined by SMTP service operation management on a Manager or Proxy Manager.
	Port	Displays the IP address defined by SMTP service operation management on a Manager or Proxy Manager.

1.2.2.9 TxnIDs

This node is defined when it is necessary to display content that focuses on specific transaction IDs when displaying transaction breakdown analysis from the **Interstage(TxnAnalysis)JavaEE/Interstage(TxnAnalysis)** node in the Drilled-Down display of this product.

For an overview of transaction breakdown analysis, refer to "Transaction breakdown analysis" in the *User's Guide* and "[3.2.4.3 Interstage\(TxnAnalysis\)JavaEE/Interstage\(TxnAnalysis\) tree](#)" of this manual.


The **Transaction ID Settings** window is shown below.



Procedure

1. Click the **Add** button to display the **Transaction ID Information** window, and then set a transaction ID.

Node name	Setting item name	Description
TxnIDs	Transaction ID	<p>Confirm the multiple transaction IDs that are displayed when an upper level Server Instance node or Work Unit node is selected, and then set the transaction ID to be viewed.</p> <p>Extract and specify the transaction ID part from the resource IDs displayed in the Resource ID column of the content displayed by selecting the Server Instance node or the Work Unit node.</p> <p>Resource ID</p> <ul style="list-style-type: none"> - Server Instance name:transaction ID:component type: ... - Work Unit name:transaction ID:component type:...

Node name	Setting item name	Description
		<p>The transaction ID format transaction number(process ID)</p> <p> Point</p> <p>.....</p> <p>The transaction number is a serial number within the process. If Work Unit process concurrency is set to a value of 2 or more, there is a chance that the transaction number will be duplicated. For this reason, the process ID should be specified as well.</p> <p>.....</p> <p>The transaction ID and subsequent resource IDs are filtered using their prefix. It is possible to specify the component type after the transaction ID.</p> <p>Set a transaction ID that is unique within the target TxnIDs folder.</p> <p>Up to 64 characters (alphanumeric characters and symbols) can be used for the transaction ID except for the following: \\, <> " \$ ' [] = &</p>

1.2.2.10 TxnIDs for TxnAnalysis(Sync), TxnAnalysis(Async), and TxnAnalysis(OssJava)

This node is defined when it is necessary to display content that focuses on specific transaction IDs when displaying transaction breakdown analysis from the **Interstage (Sync)**, **Interstage (Async)** or **TxnAnalysis(OssJava)** node in the Drilled-Down display of this product.

For an overview of transaction breakdown analysis, refer to "[3.2.4.3 Interstage\(TxnAnalysis\)JavaEE/Interstage\(TxnAnalysis\) tree](#)" of this manual.

The **Transaction ID Settings** window is shown below.

Systemwalker Service Quality Coordinator Setting View - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Home

Address http://sqaconsole/SSQC/cgi-bin/TdKicker.cgi/ConsoleBase Go Links

Systemwalker Fujitsu

Save Console Definitions Scheduled Report Registration Update Console Definitions Help

ABCD_LTD

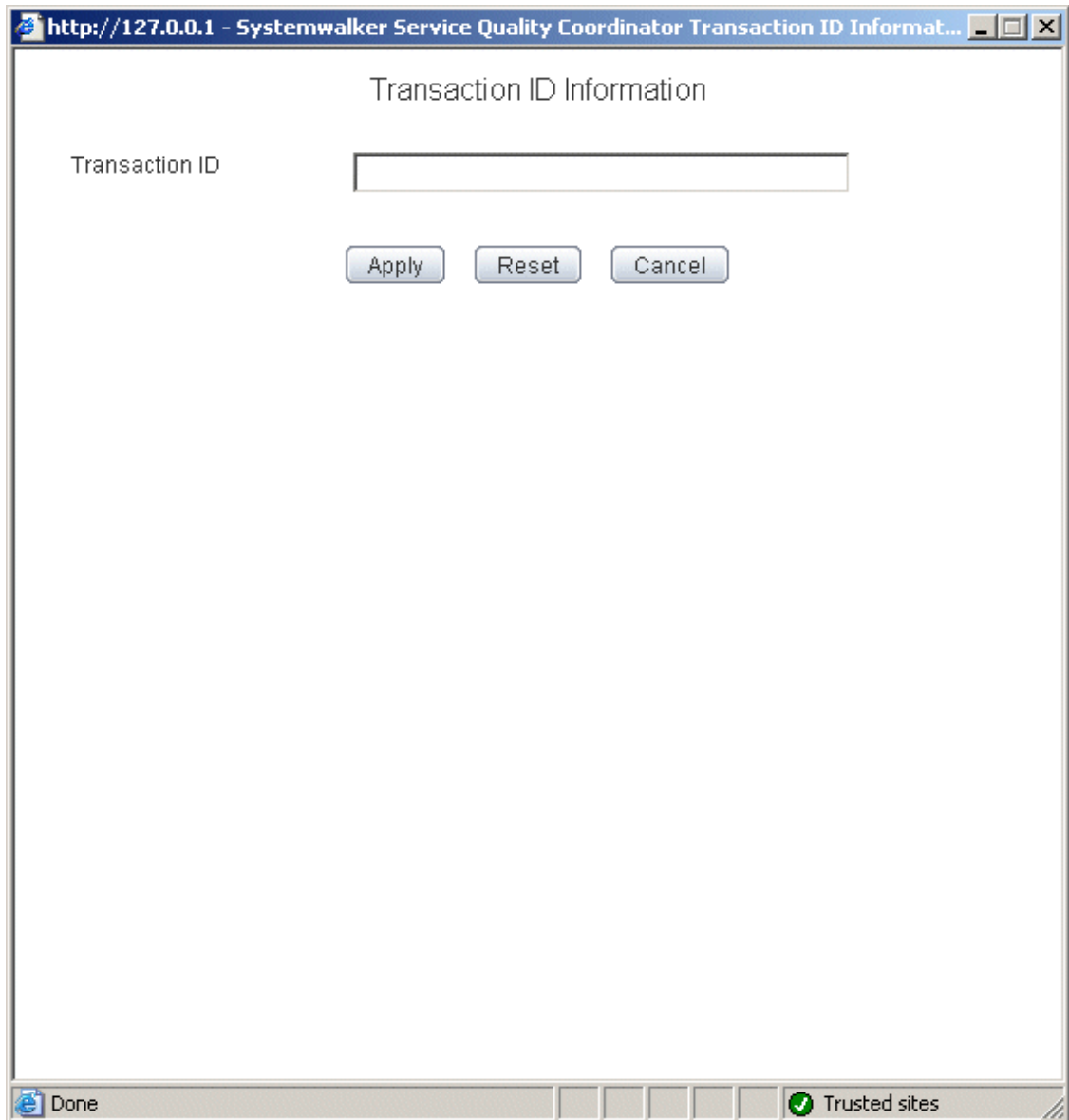
- Back
- DefaultGroup
 - ProxyManagers
 - ProxyManager_A
 - ProxyManager_B
 - Agents
 - Agent_A
 - Agent_B
 - Agent_C
 - ManagedObject
 - TxnAnalysis(Sync)
 - TxnTime
 - TxnIDs
 - TxnAnalysis(Async)
 - TxnTime
 - TxnIDs
 - TxnID_Async_1
 - TxnID_Async_2

Transaction ID Settings

Transaction ID Settings			
TxnIDs	TxnID_Async_1	Edit	Delete
	TxnID_Async_2	Edit	Delete
Add			

Procedure

1. Click the **Add** button to display the **Transaction ID Information** window, and then set a transaction ID.



Node name	Setting item name	Description
TxnIDs	Transaction ID	Set the transaction ID by referring to the TransactionID_map in the Drilled-Down display window, which shows the correspondences between transaction IDs and the context IDs for transactions.

1.2.3 Unregistered Agents Information (UnregisteredAgents)

The UnregisteredAgents tree in the Settings tree displays the host 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. (This also applies to agents for Agent-based Monitoring, agents for Agentless Monitoring and Proxy Managers.)

Point

If Systemwalker Service Quality Coordinator is linked with Systemwalker Resource Coordinator (server provisioning) (refer to "Linking to Systemwalker Resource Coordinator (server provisioning)"), a host name will be displayed in the form "*server group name-host name*" when server resource allocation (software image distribution to managed servers) is performed.

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 **Analysis** window. 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.

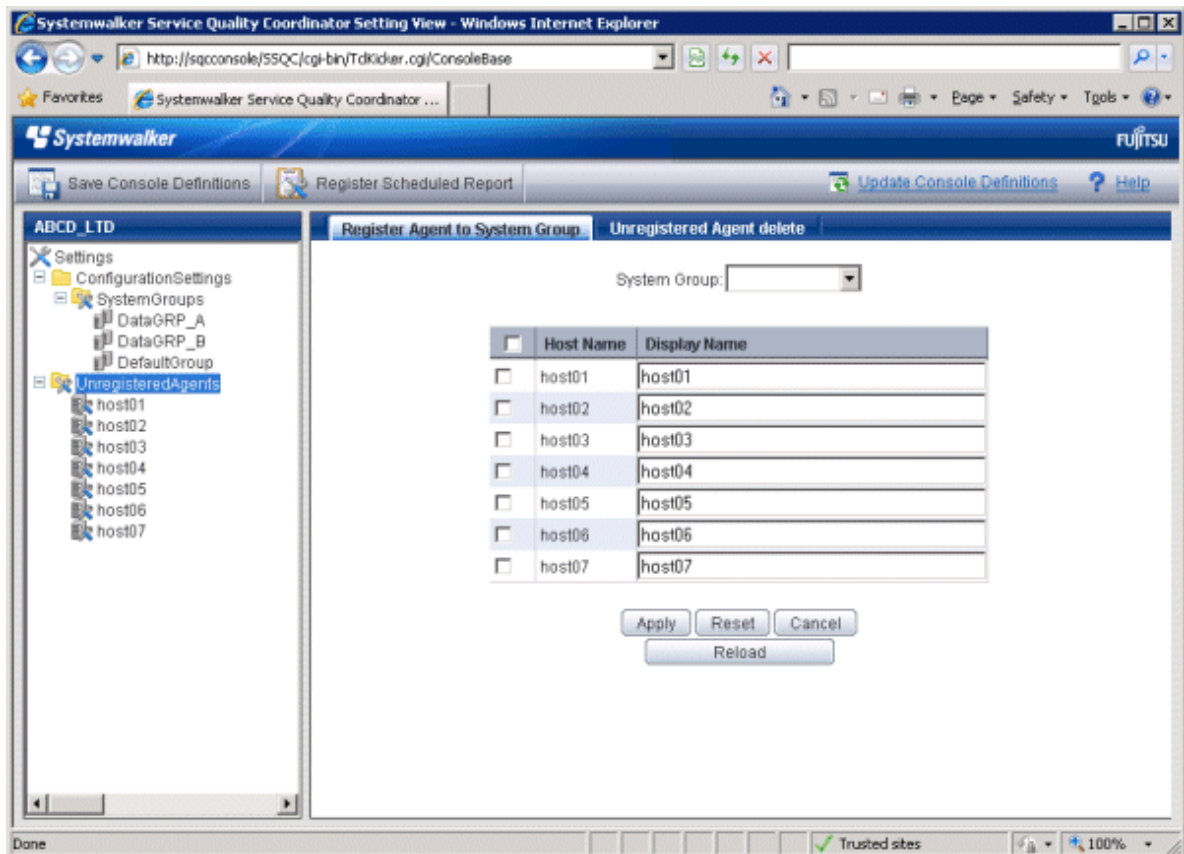
1.2.3.1 Registering Information about Unregistered Agents

1.2.3.1.1 When Register Unregistered Agent in Bulk

Unregistered Agent can be distributed to the one specified system group in bulk. As a result, Agent or Proxy Manager (or the both) is distinguished automatically, and registration and collection of the configuration information are done together.

Starting

If Unregistered Agents tree is clicked on the definition display tree, [Register Agent to System Group] screen will be displayed.



Node name	Setting item name	Description
Unregistered Agents	System Group	Specify the system group of the registration destination.
	Display Name	This corresponds to the Agent name specified in the Agent Information window.

Node name	Setting item name	Description
		<p>Set a name that is unique within the management configuration. (The system name is set by default.)</p> <p>The following characters can be used for display names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &) <p>Platform dependent characters cannot be used.</p> <p>The display name can be no longer than 64 characters.</p>

Procedure

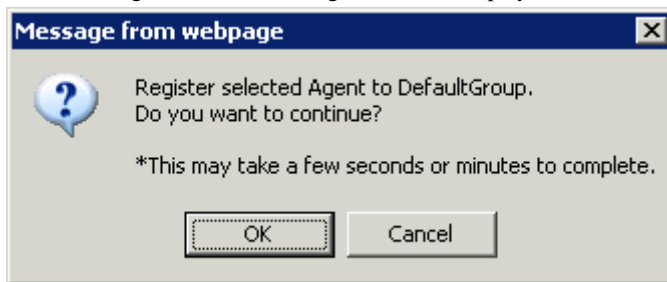
1. Specify the system group of the registration destination

If the system group is not yet registered, a group called "DefaultGroup" will be displayed.

The process of allocating Agents to DefaultGroup will cause a system group named "DefaultGroup" to be automatically created at the same time.

2. Check the check box of the Agent to distribute. If the checkbox on the table title is clicked, checkbox of all Agent will be on or off.
3. Click the **Apply** button.

The following confirmation dialog box will be displayed.



Click the **OK** button, then the registration is done.

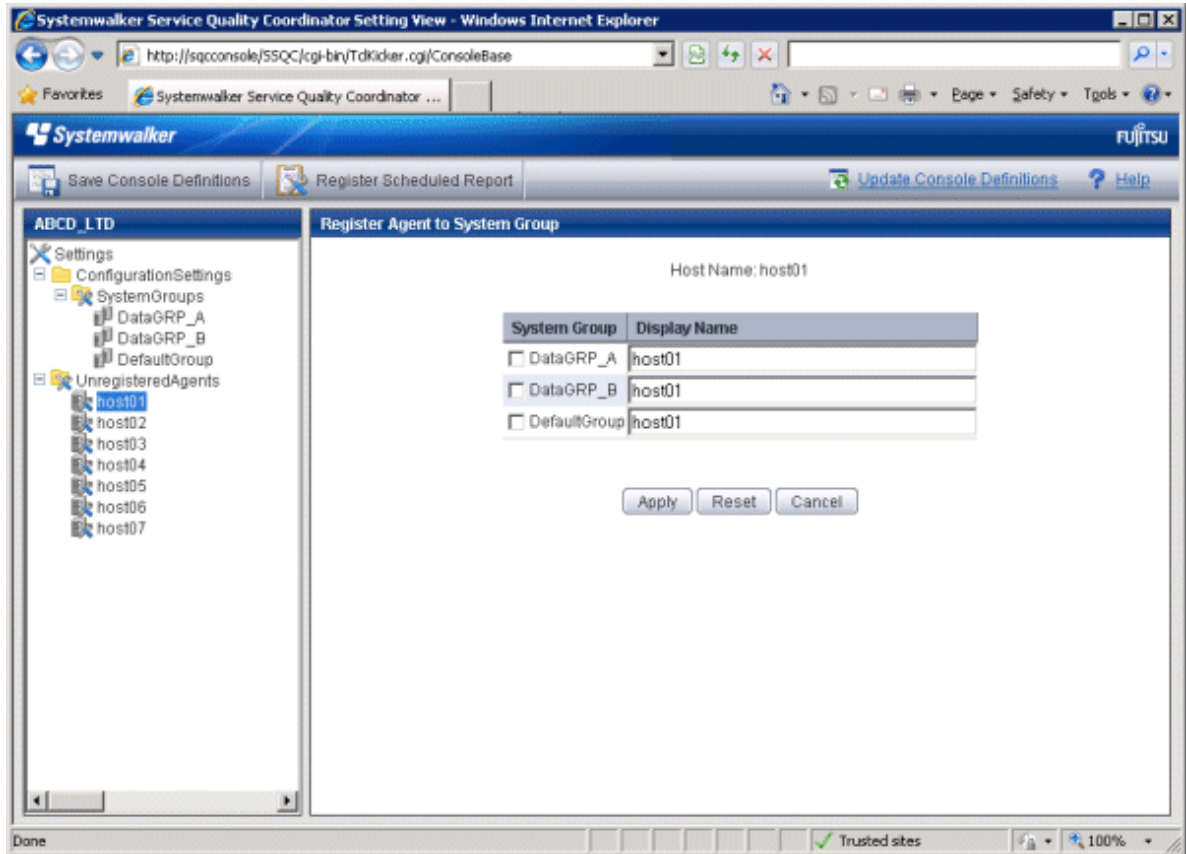
Click the **Cancel** button to return to the original window without performing registration processing.

1.2.3.1.2 When Register Unregistered Agent Individually

Unregistered Agent can be distributed to the specified system groups. As a result, Agent or Proxy Manager (or the both) is distinguished automatically, and registration and collection of the configuration information are done together.

Starting

If an Agent displayed under the Unregistered Agents tree is clicked on the definition display tree, [Register Agent to System Group] screen will be displayed.



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	<p>This corresponds to the Agent name specified in the Agent Information window.</p> <p>Set a name that is unique within the management configuration. (The system name is set by default.)</p> <p>The following characters can be used for display names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \ : , < > \$ " ' [] = &) <p>Platform dependent characters cannot be used.</p> <p>The display name can be no longer than 64 characters.</p>

Procedure

Select the checkboxes for the system groups to which the unregistered Agents are to be allocated, and then click the **Apply** button below the image.

If the system group is not yet registered, a group called "DefaultGroup" will be displayed.

The process of allocating Agents to DefaultGroup will cause a system group named "DefaultGroup" to be automatically created at the same time.

1.2.3.2 Deleting information about unregistered Agents

This section explains the procedure for deleting Agents (including Proxy Managers) listed in the UnregisteredAgents tree from Console.

Preconditions

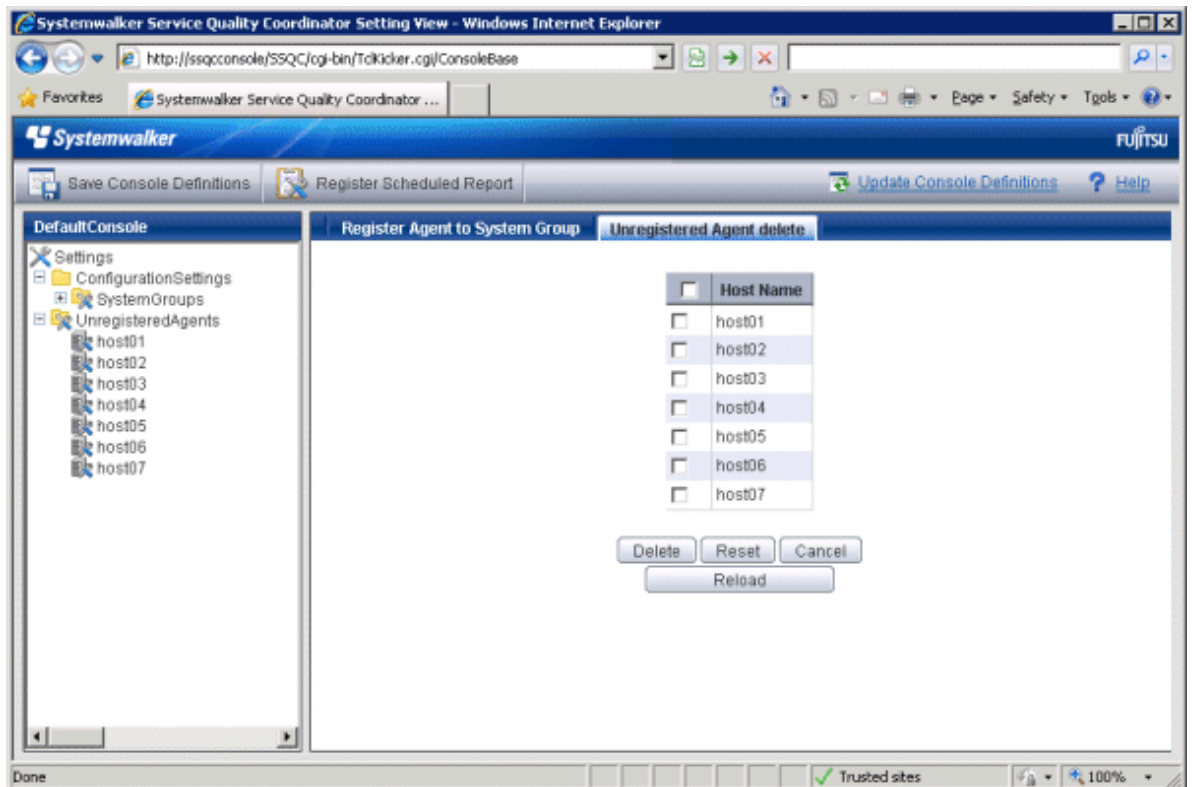
This function is only valid if there is only one set of console definitions registered in the PDB of the Manager environment that the operation management client is connected to. Agents will only be deleted from the PDB in the Enterprise Manager or Manager environment that the operation management client is connected to.

If there are multiple sets of console definitions, use the sqcPDBerase command (described in "sqcPDBerase (Data Deletion Command)" in the *Reference Guide*) 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.

Starting

1. If Unregistered Agents tree is clicked on the definition display tree, [Register Agent to System Group] screen will be displayed.
2. If [Unregistered Agent delete] tab is clicked, [Unregistered Agent delete] screen will be displayed.



Node name	Setting item name	Setting content
UnregisteredAgents	Delete	Select the checkboxes for the unregistered Agents to be deleted.
	Host Name	The display names for the unregistered agents are displayed in the Unregistered Agent List Registration window.

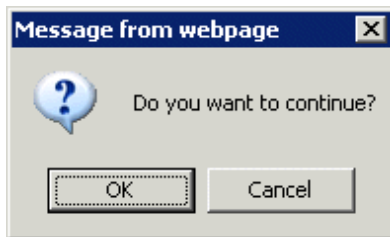
Procedure

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.

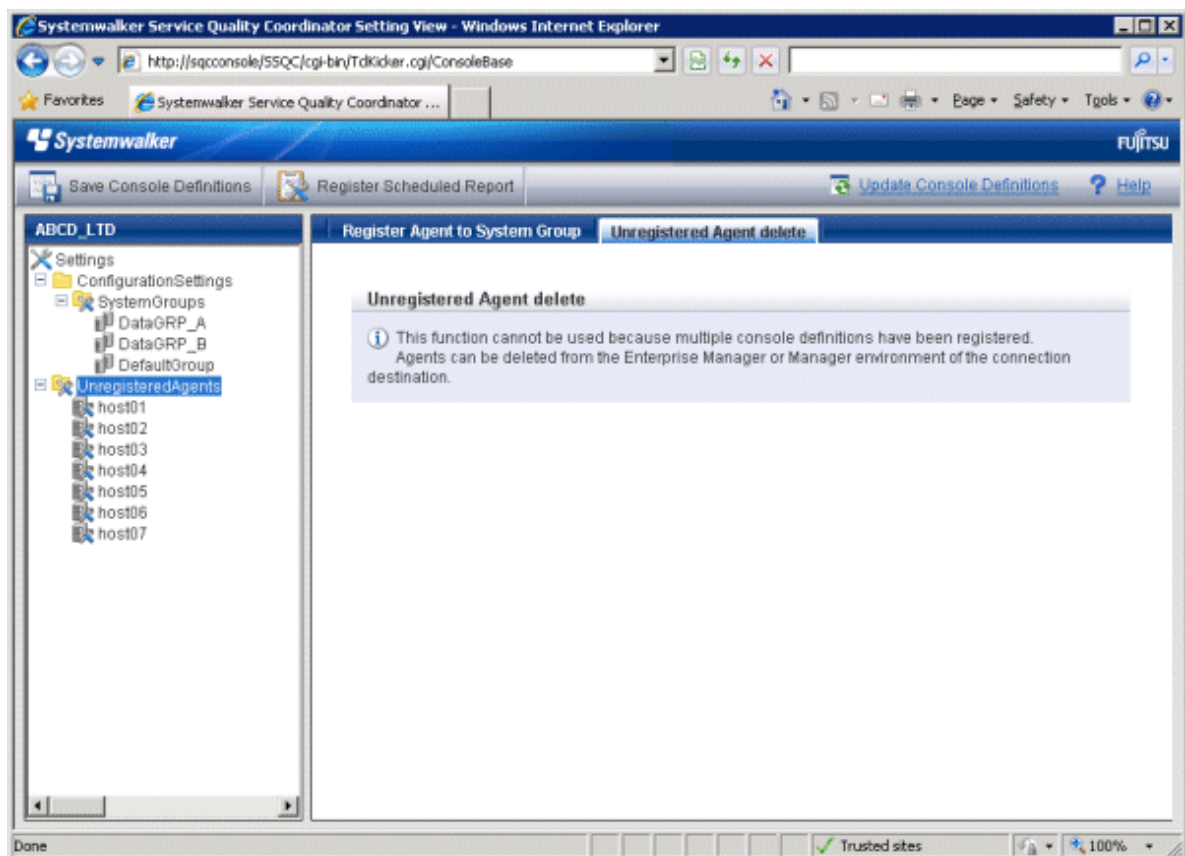


Click the **OK** button to start the deletion processing.

Click the **Cancel** button to return to the original window without performing deletion processing.

Point

If the **Unregistered agent delete** tab 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 and Proxy Managers that have already been registered with SystemGroups

1. Select the SystemGroups tree where the Agents or Proxy Managers are registered, and display the Agent/Proxy Manager list window.
2. Clicking on the **Delete** button next to the name of an Agent (or Proxy Manager) moves the Agent (or Proxy Manager) from the **SystemGroups** tree to the **UnregisteredAgents** tree.
3. Delete the Agent (or Proxy Manager) using the procedure in Section, "[1.2.3.2 Deleting information about unregistered Agents](#)".

Reregistering Agents or Proxy Managers that have been deleted

To enable Agents (or Proxy Managers) that have been deleted using this function to be registered in the Console again, execute "[A.3 sqcSetPolicy \(Policy Application Command\)](#)" in the environment for the Agent (or Proxy Manager).

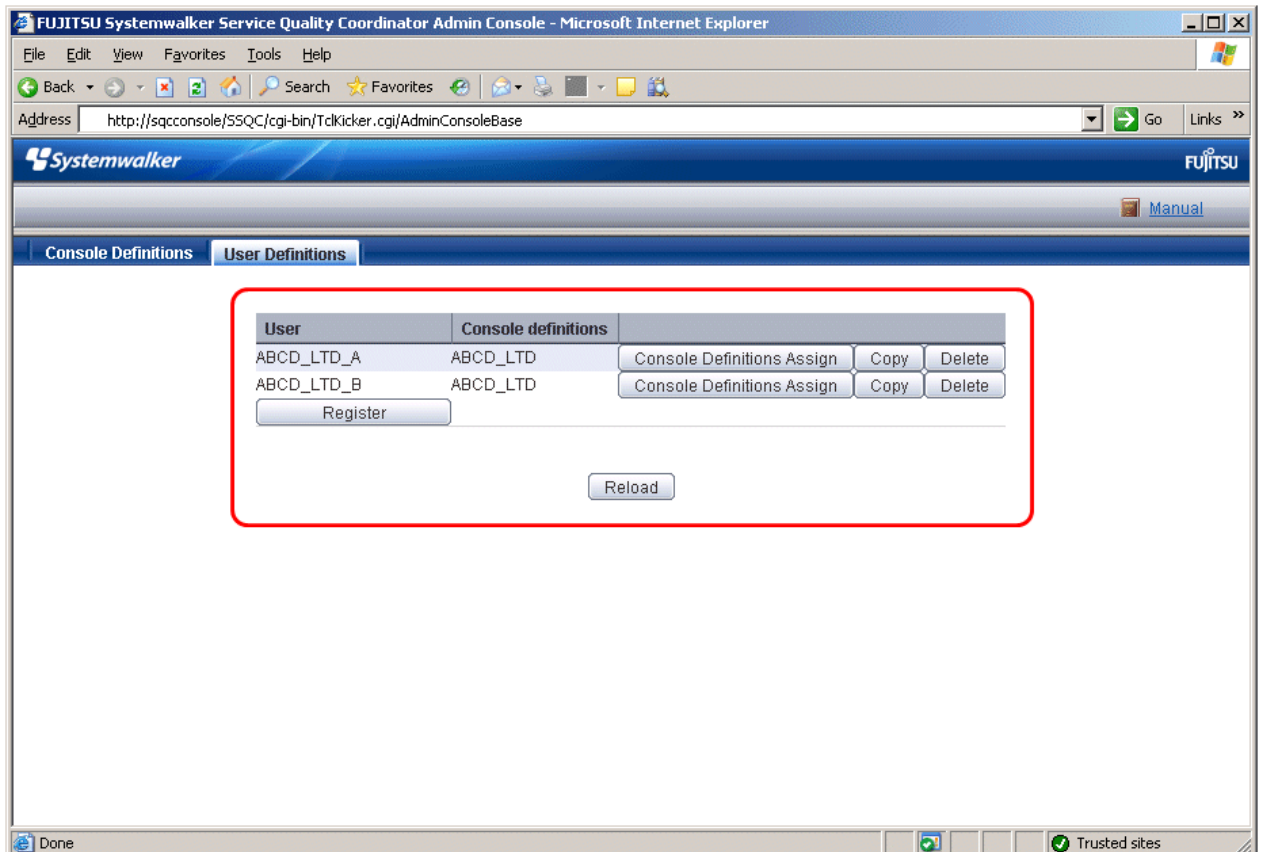
1.3 User Definitions Window

This section explains the **User Definitions** window.

The **User Definitions** window can be used to create or edit user definitions, or to make settings for each user.

The **User Definitions** window is displayed by clicking the **User Definitions** tab in the **Management Console**.


Window Configuration



Basic operation

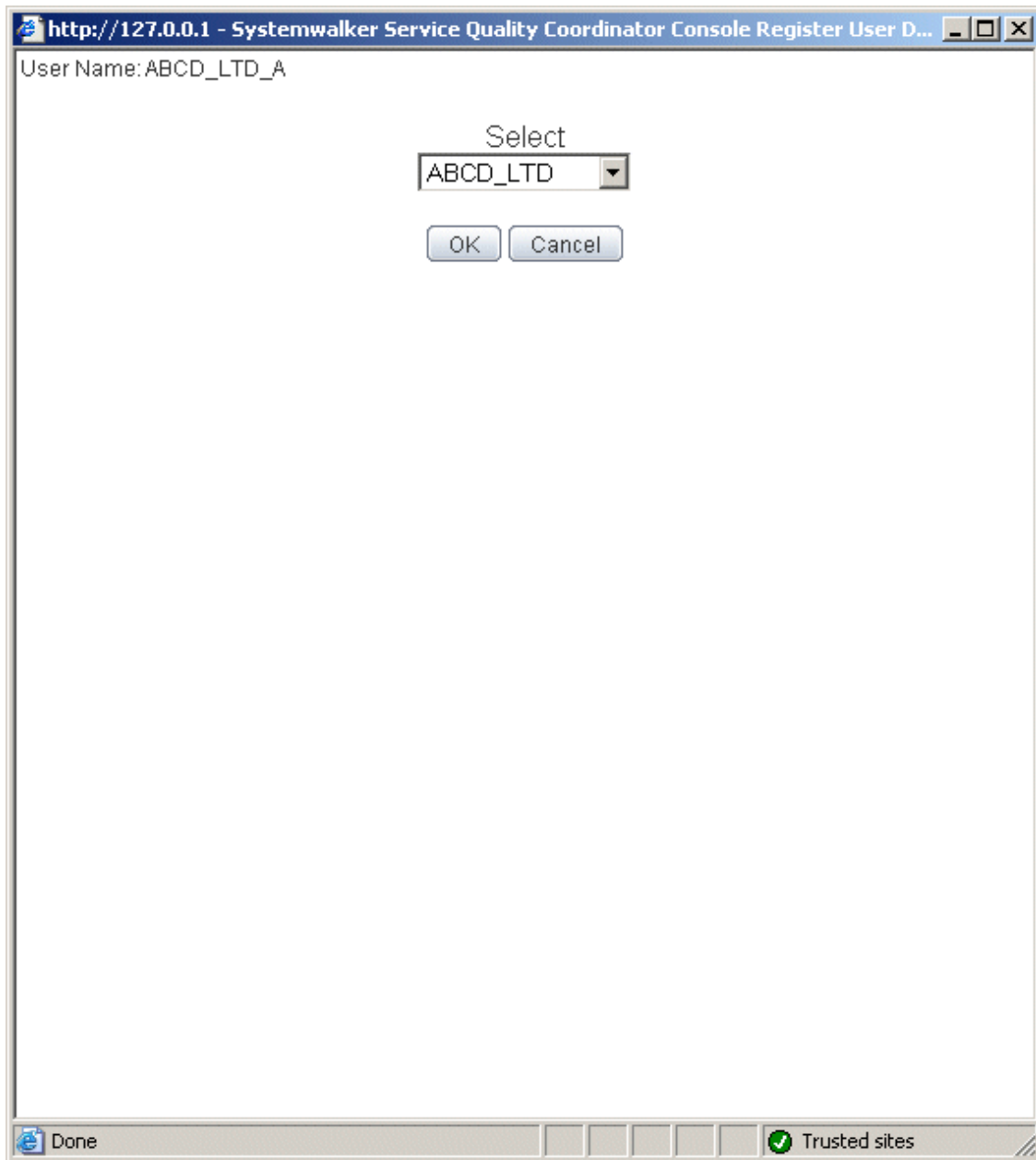
The **User Definitions** window contains a number of operation buttons.

The following table explains the operation of each button.

Button	Operation
Register	<p>Registers a new user definition.</p> <p>After clicking this button, enter the name of the user definition to be created in the prompt that is displayed.</p> <p>The following characters can be used for user names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (other than \$\"";:[]<>=&/*?) <p>Platform dependent characters cannot be used.</p> <p>"AdminConsole" and "admin" cannot be used as a user name.</p> <p>User names are not case sensitive.</p> <p>The user name can be no longer than 64 characters.</p> <p>Existing user names cannot be used.</p>
Console Definitions Assign	<p>Assigns the console definition to be used by this user. Generates the HTML that is started when a user starts the Console. To set up basic authentication for the HTML that users start, refer to "How to Set Up Basic Authentication for Operation Management Clients" in the <i>Installation Guide</i>.</p>
Copy	<p>Copies the specified user definition with the specified name.</p> <p>After clicking this button, enter the name of the user definition to be copied in the prompt that is displayed.</p> <p>Existing user names cannot be used.</p> <p> Note</p> <hr style="border-top: 1px dotted orange;"/> <p>Launch HTML cannot be copied.</p> <hr style="border-top: 1px dotted orange;"/>
Delete	<p>Deletes the specified user definition.</p>
Reload	<p>Displays user definitions using the latest information.</p>

1.3.1 User Definition Registration

Select the console definition to be used from the **Register User Definition** window that appears when the **Console Definitions Assign** button is clicked.



Setting item name	Description
Console Definitions	Select the console definition to be used from the list of current console definitions.

An html file with the user name is created when a user definition is registered, and at the same time, the Admin Console is reloaded and the console definition that has been assigned is added to the line for the user.

Chapter 2 Console

This chapter explains the Operation Management Client console.

This is the main window of the product. It is composed of the global header, the global navigation bar, and a display area. The display area contains the following three types of display, which are explained in chapters 3 and 4:

- **Monitoring** window
- **Analysis/Planning** window
- **Scheduled Report View**

Starting the Console

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

```
http://Host name for operation management client/SSQC/AdminConsole.html
```

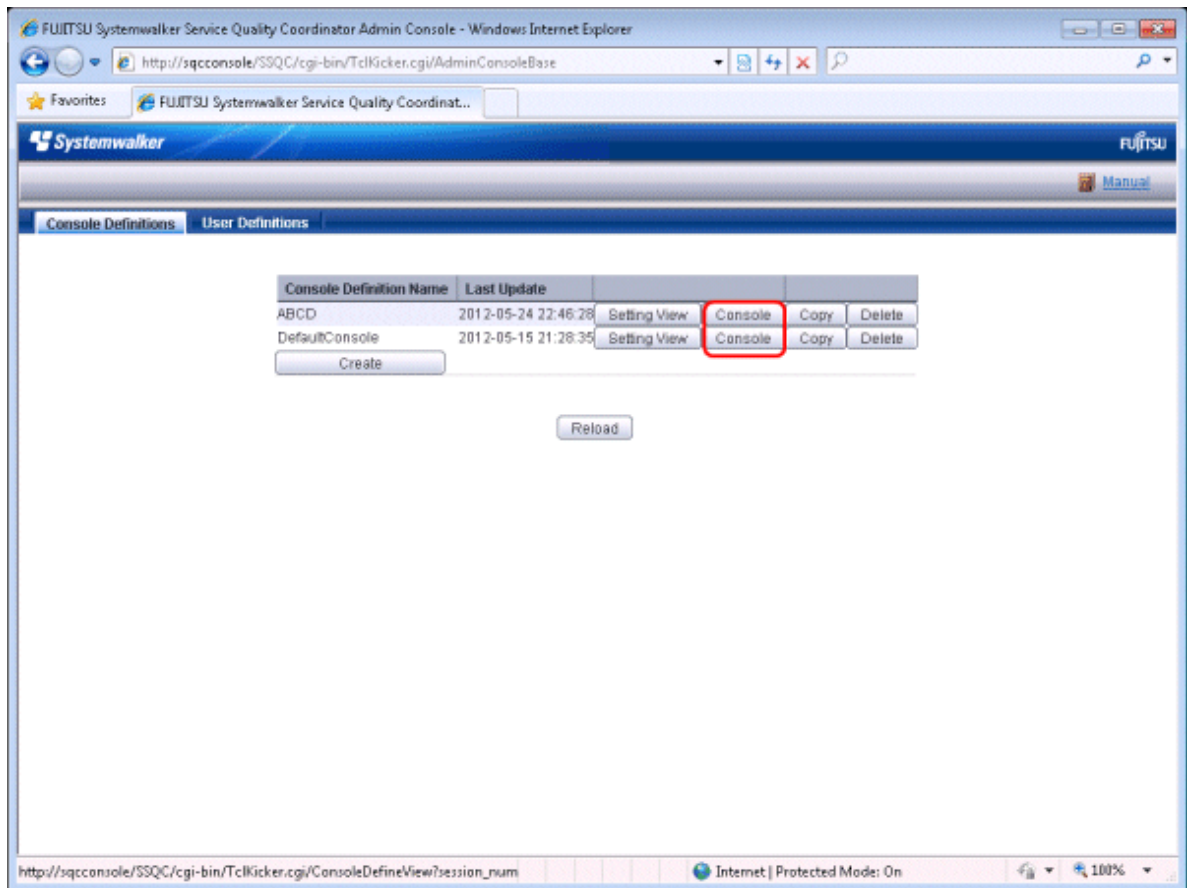
Or

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

The "XXX" part of the second URL is a user name that has been registered in "1.3 User Definitions Window".

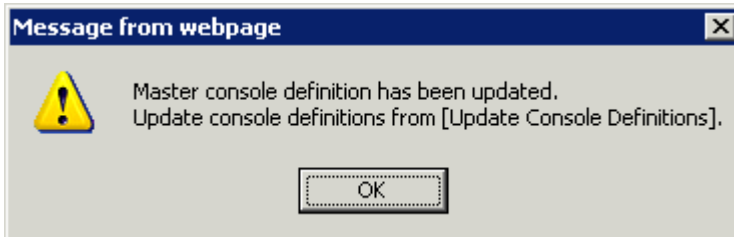
To enter user names, first make basic authentication settings for each user by referring to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide*.

To start the Console from the Admin Console, click on the **Console** button on the **Console Definitions** tab of the **Admin Console** window.



Note

- 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.
- When the Console is started, the message below might be displayed.



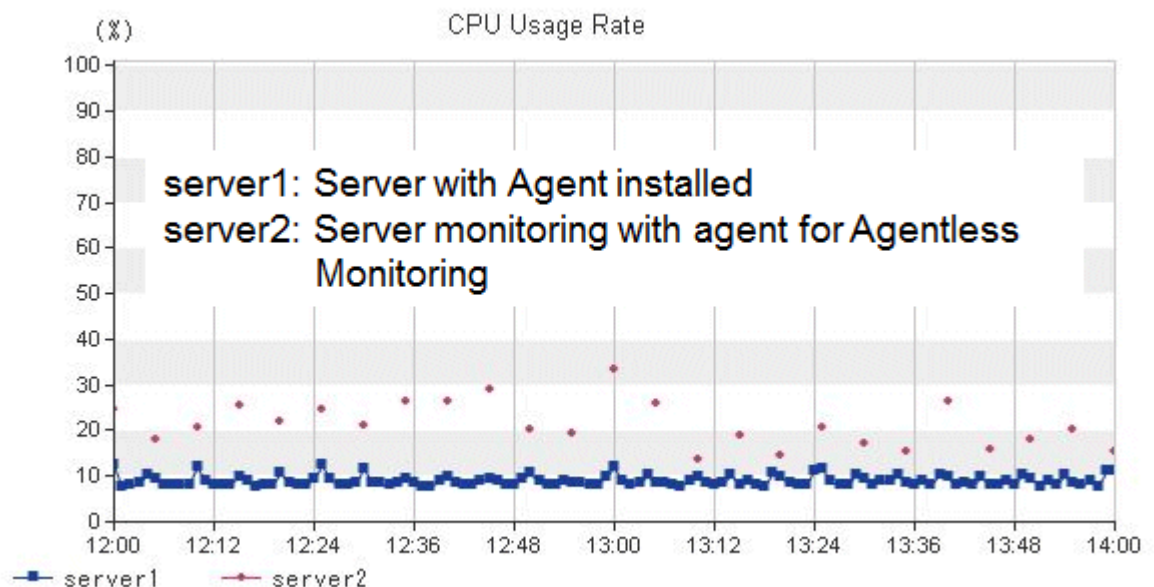
In this case, click **OK** and then click **Update Console Definition** on the displayed Console. The update might take a few moments, depending on the number of registered Agents.

About the graphs

The graphs displayed in the console have the following peculiarities.

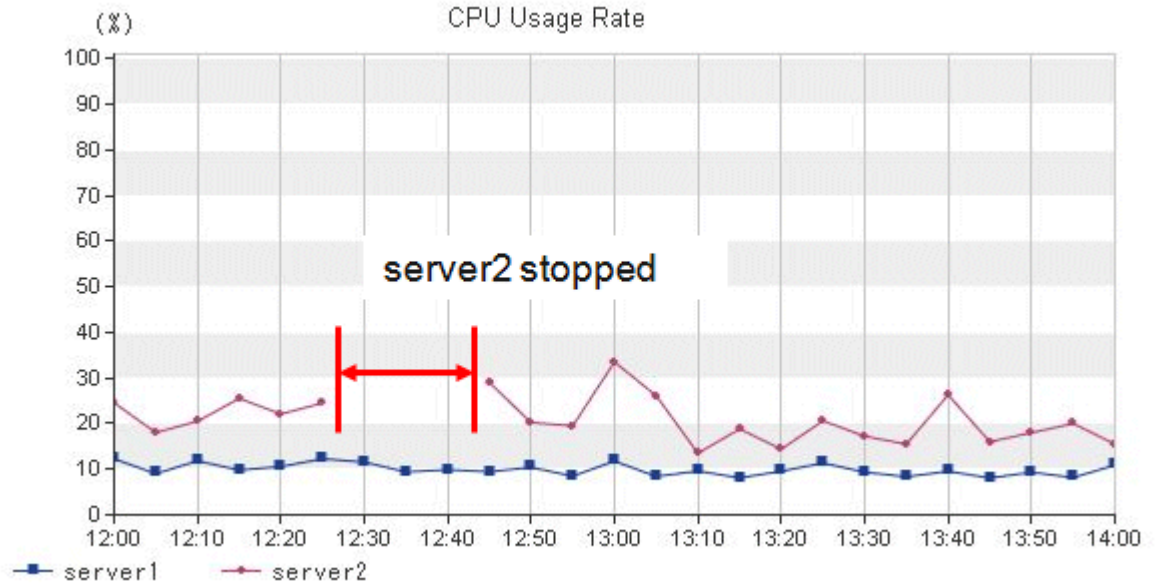
- When you display in line graphs information collected at different intervals from different agents (for example information from a server with an Agent installed and information from a server being monitored by an agent for Agentless Monitoring), the display may be affected. Create system groups of Agents that have the same collection intervals.

Example



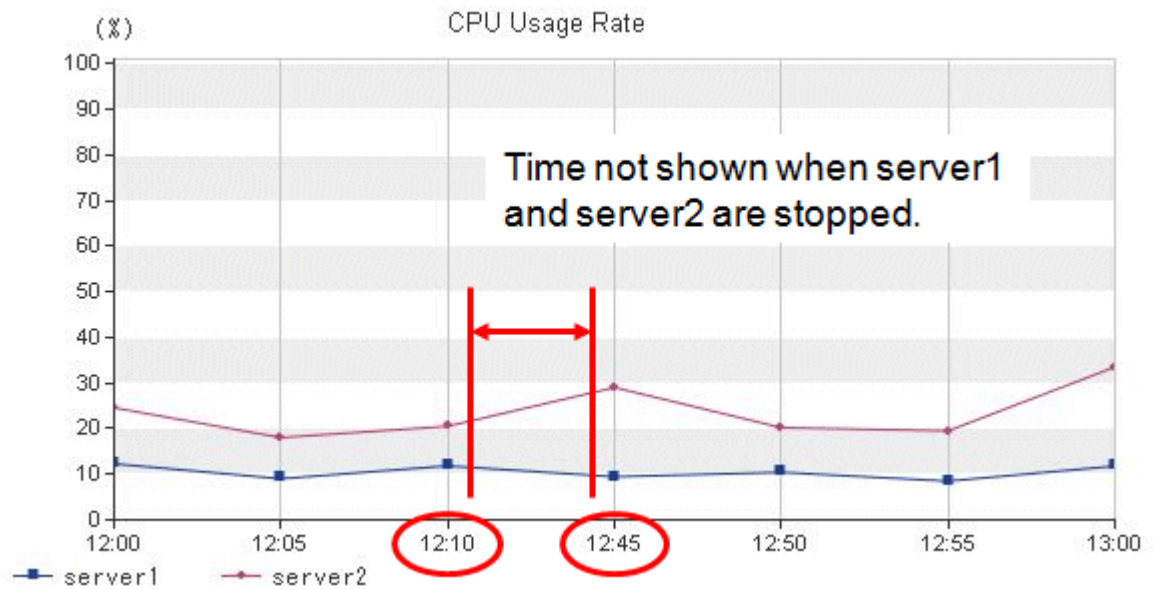
- In the summary view, when multiple Agents are displayed in a line graph and some of the Agents have been stopped, the times when they are stopped are not displayed.

Example



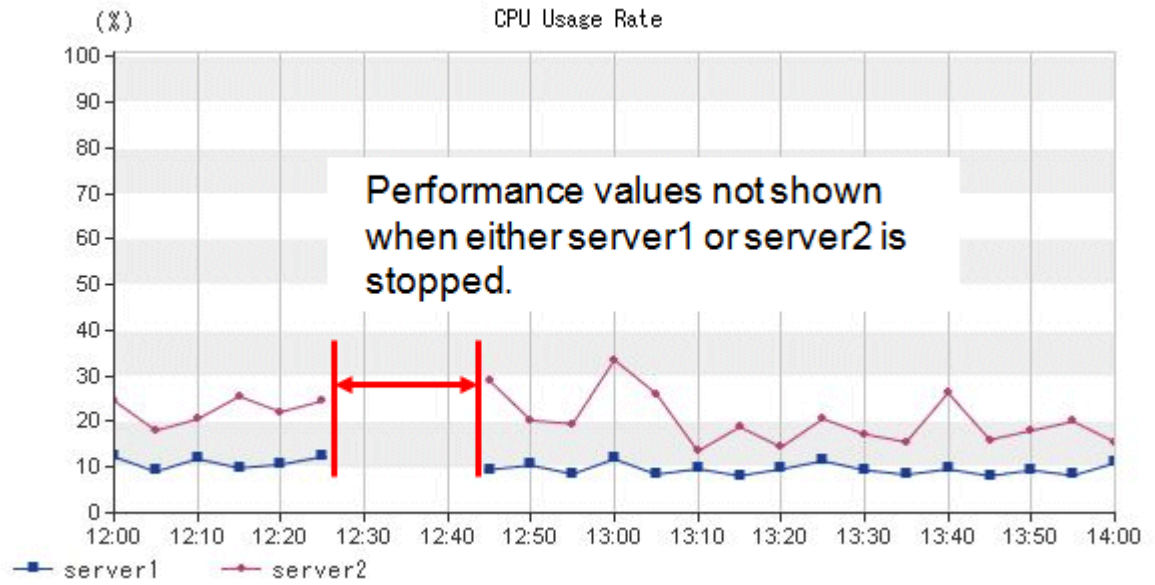
- In the summary view, when all monitored Agents have stopped and information is not being collected, the times when performance information is not being collected are not displayed in the line charts and area charts.

Example



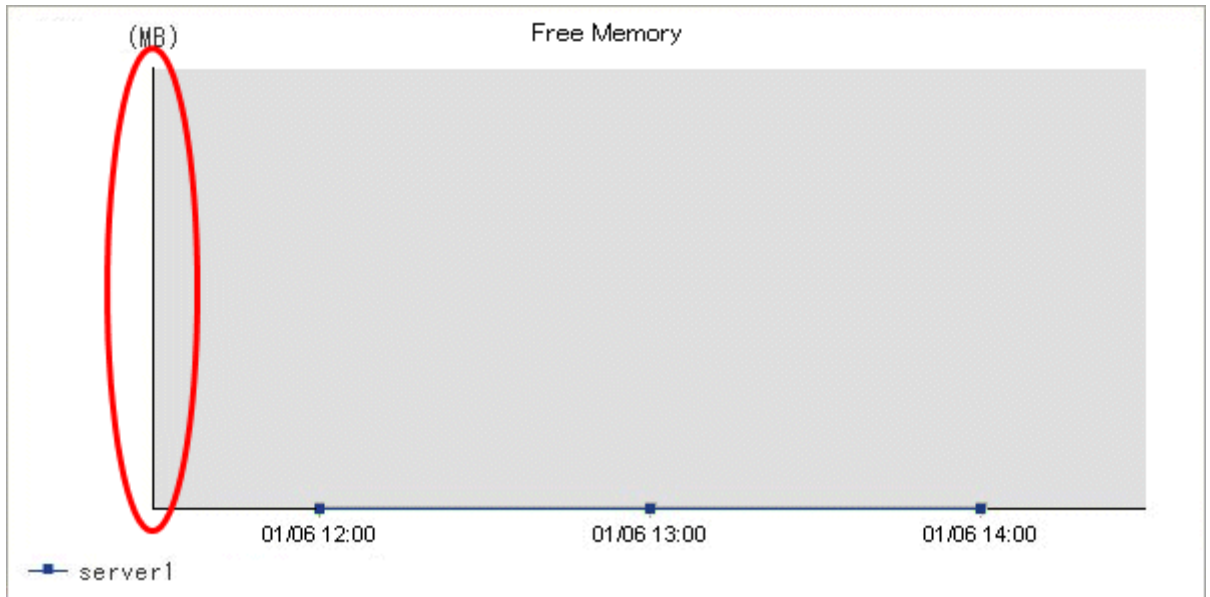
- In the analysis/planning window and Scheduled Reports window, when Agents have stopped, the performance values at times when they are stopped are not displayed in the line charts and area charts.

 Example



- In graphs other than those showing percentages in the full system inspection analysis/report and categorized diagnostic analysis/report, and in graphs in the detailed analysis/report, values may not be shown in the vertical axis of the graph. Look at the values in the tables to confirm. The above condition occurs when the performance values in the specified period are constantly "0".

 Example

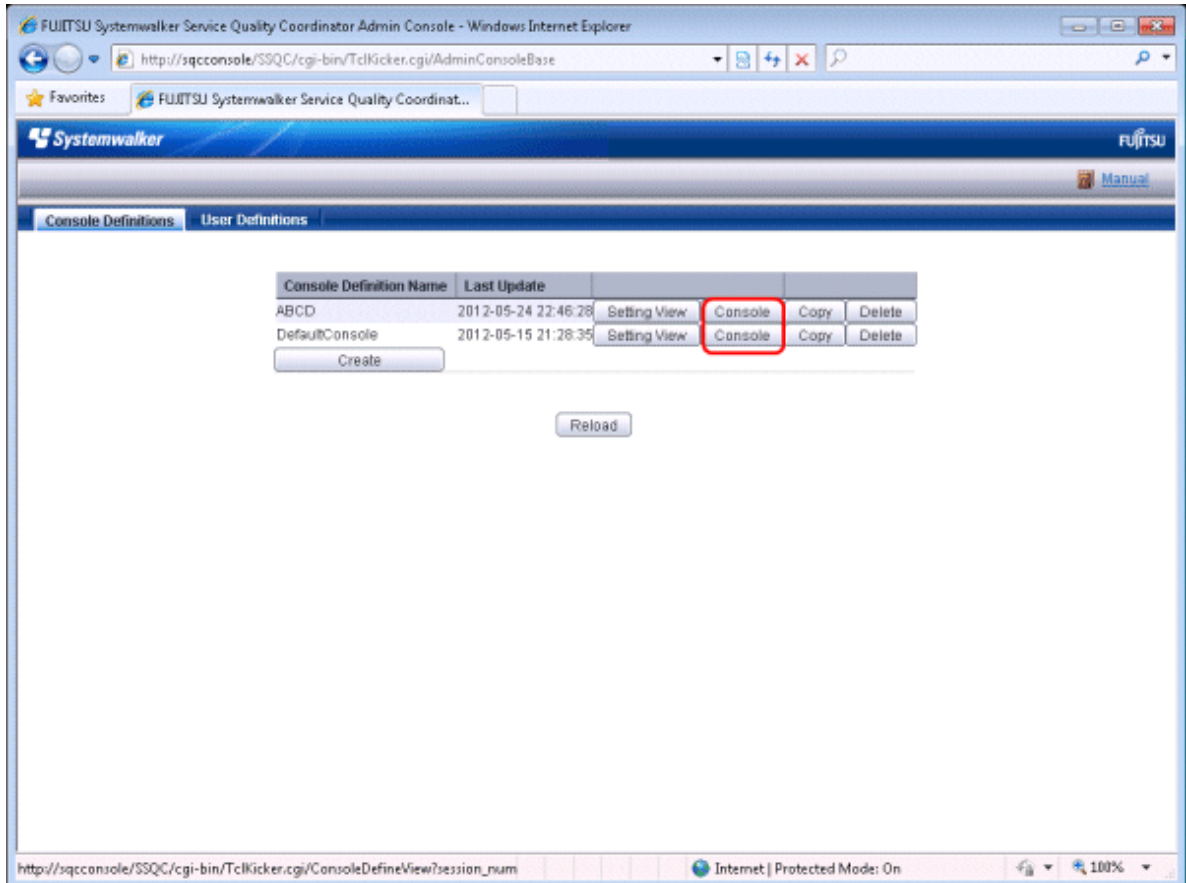


Chapter 3 Monitoring Window

The monitoring window is made up of a summary display, which allows the user to quickly grasp the operation status of the entire system, and the Drilled-Down display, which displays details when a problem occurs.

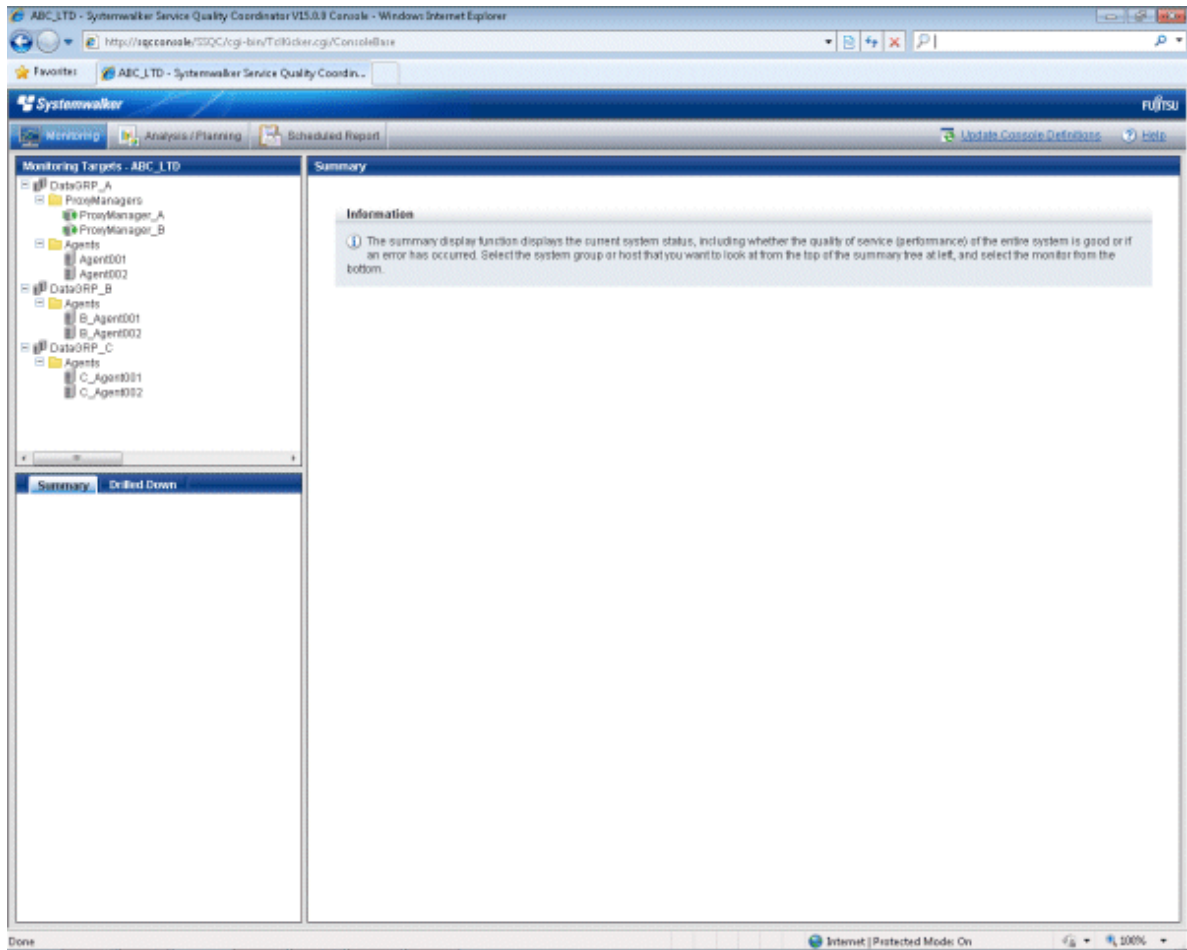
Starting

Start the **Console** by clicking the **Console** button on the **Console Definitions** tab of the **Admin Console** window.



The console window can also be started by specifying its URL.

Click on the **Monitoring** menu in global navigation in the Console to start.

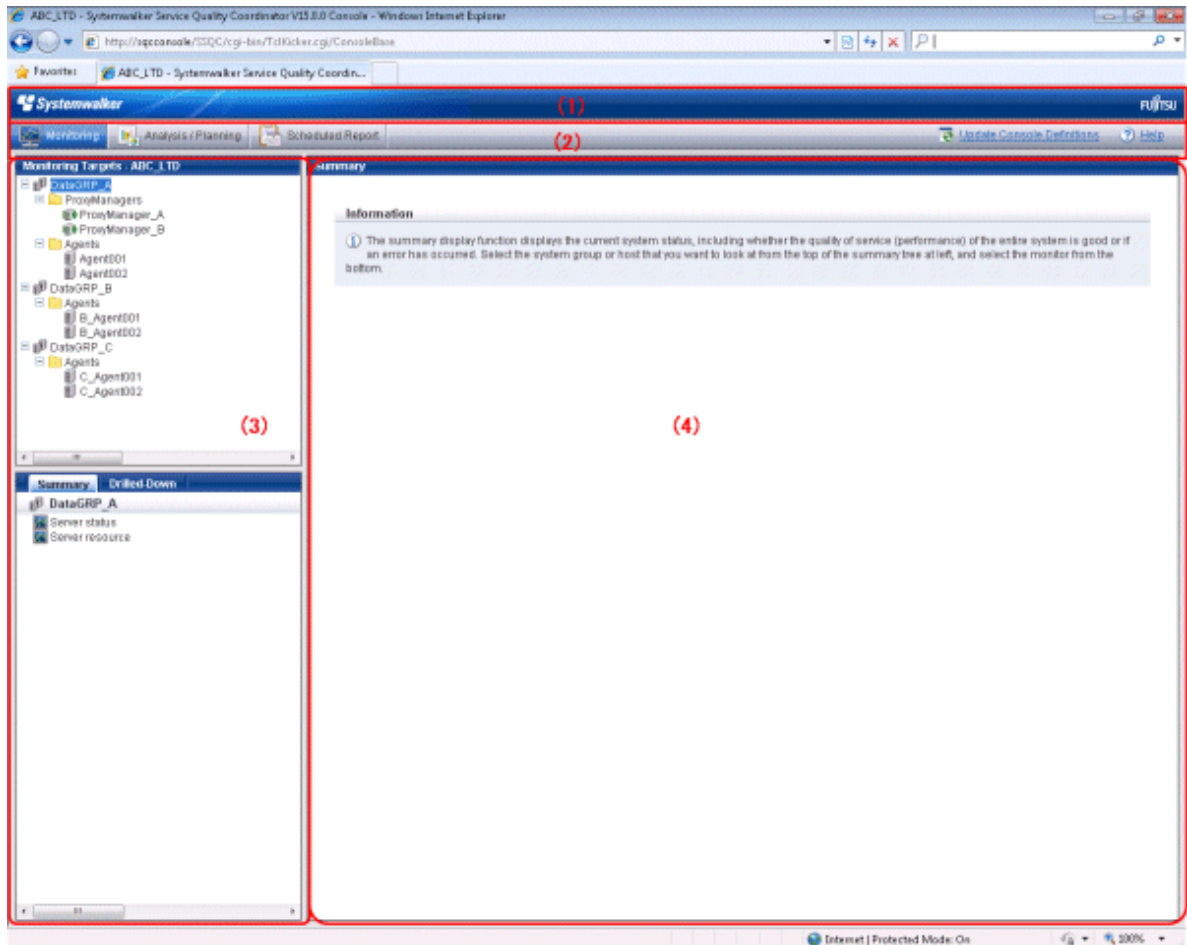


Note

- Do not perform operations in the monitoring window using the context menu that appears when the right mouse button is clicked.

Window configuration

Once started, the following Monitoring window will appear.



Basic configuration

The Console is organized as shown in the following table.

Item No.	Component	Description
(1)	Global Header	The Systemwalker and Fujitsu logos are displayed.
(2)	Global navigation	Global Navigation provides the following menus: <ul style="list-style-type: none"> - Monitoring Opens the Monitoring window. Allows checks on the current status and isolates faults when they occur. - Analysis/Planning Opens the Analysis/Planning window. Allows checks on the current status and isolates faults when they occur. A mid/long-term analysis and the planning of the service quality to prevent the trouble beforehand are done. - Scheduled Report Opens the Scheduled Report window. Displays reports about service levels for the customer or for capacity planning. - Update Console Definition Reloads the console definitions. - Help Opens the <i>User's Guide (Console Edition)</i>.

Item No.	Component	Description
(3)	Tree display area	<p>The Summary view and the Drilled-Down display are displayed in tree structure.</p> <p>It is possible to switch between the two display functions by clicking the relevant tabs.</p> <p>By default, the Summary view will be displayed when the Console is first opened.</p>
(4)	Content display area	When a node in the tree is selected, the corresponding content of the Summary or Drilled-Down display will appear in this area.

The **Console** provides two display functions: **Summary** view and **Drilled-Down** display.

These functions are explained in the following two sections.

3.1 Summary View

The **Summary** view displays representative information to enable the user to understand the current status of the entire system as a monitor.


The **Summary** view is explained below




3.1.1 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, PM: Proxy Manager, Agt: Agent)



SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
Yes	No	No	Server Status	Agent status display  Point Information of CPU, Memory, and Disk is displayed as "-" when the status of Agent under VMware vCenter is "Running".
			AgentStatusMonitor	
Yes	Yes	No	Service operation	Summary of service operational information - Operational status of the HTTP/DNS/SMTP/PORT services (color-coded display)
			ServiceAvailMonitor	
Yes	Yes	No	End user response	Summary of end user response information - End user response time
			UserResponseMonitor	
Yes	No	Yes	Server resource	Summary of server performance information - CPU usage rate - Free memory rate
			ServerMonitor	


SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				- Disk I/O count
Yes	No	Yes	VMware(host) VMware(Physical)Monitor	VMware ESX/VMware ESXi physical performance information summary - CPU usage rate - Available memory - Disk I/O count  Point This graph makes it easy to see how much the physical CPU, disk, and memory are being used and how much is available.
No	No	Yes	VMware(Virtual machine stack) VMware(Virtual)StackMonitor	VMware ESX/VMware ESXi virtual performance information stack graph - CPU usage rate - Memory usage - Disk I/O count  Point CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%. This graph makes it easy to see which guest OS is using the CPU, disk, and memory. It is possible to see information about the physical CPU, memory, and disk by displaying the CPU usage rate, available memory, and disk I/O count of "VMware(Physical)StackMonitor".
No	No	Yes	VMware(cluster) VMware(Cluster)Monitor	VMware vCenter cluster performance information stack graph - CPU usage - Memory usage  Point This graph makes it easy to see which cluster is using the CPU and memory. It is possible to see information about the physical CPU, memory, and disk for the hosts in a cluster by displaying the CPU usage rate,

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				available memory, and disk I/O count of "VMware(Physical)Monitor".
No	No	Yes	VMware(resource pool)	VMware vCenter resource pool performance information stack graph - CPU usage - Memory usage  Point This graph makes it easy to see which cluster is using the CPU and memory. It is possible to see information about the CPU, memory, and disk for the virtual machines in a resource pool by displaying the CPU usage rate, available memory, and disk I/O count of "VMware(Virtual)StackMonitor".
			VMware(ResourcePool)Monitor	
Yes	No	Yes	Hyper-V(host)	Hyper-V physical performance information summary - CPU usage rate  Point This graph makes it easy to see how much the physical CPU is being used and how much is available. It is also possible to see information about the physical memory and disk by the available memory and disk I/O count of "ServerMonitor".
			HyperV(Physical)Monitor	
No	No	Yes	Hyper-V(Virtual machine stack)	Hyper-V virtual performance information stack graph - CPU usage rate - Memory usage  Point CPU usage rate is calculated with each virtual CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%. This graph makes it easy to see which guest OS is using the CPU.
			HyperV(Virtual)StackMonitor	

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				<p>It is possible to see information about the physical CPU, memory, and disk by displaying the CPU usage rate of "HyperV(Physical)Monitor" and the available memory and disk I/O count of "ServerMonitor".</p> <p>.....</p> <p> Note</p> <p>.....</p> <p>The Memory usage is displayed from Windows Server 2008 R2 Service Pack1 and later.</p> <p>.....</p>
No	No	Yes	<p>KVM(Virtual machine stack)</p> <hr/> <p>KVM(Virtual)StackMonitor</p>	<p>Linux virtualization function (KVM) virtual performance information stack graph</p> <ul style="list-style-type: none"> - CPU usage rate - Memory usage - Disk I/O count <p> Point</p> <p>.....</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%.</p> <p>This graph makes it easy to see which guest OS is using the CPU, disk, and memory.</p> <p>It is possible to see information about the physical CPU, memory, and disk by displaying the CPU usage rate, available memory, and disk I/O count of "ServerMonitor".</p> <p>.....</p>
No	No	Yes	<p>Xen(Virtual machine stack)</p> <hr/> <p>Xen(Virtual)StackMonitor</p>	<p>Linux virtualization function (Xen) virtual performance information stack graph</p> <ul style="list-style-type: none"> - CPU usage rate - Memory usage - Disk I/O count <p> Point</p> <p>.....</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%.</p>

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				<p>This graph makes it easy to see which guest OS is using the CPU, disk, and memory.</p> <p>It is possible to see information about the physical CPU, memory, and disk by displaying the CPU usage rate, available memory, and disk I/O count of "ServerMonitor".</p> <p>.....</p>
No	No	Yes	Solaris Zone(Virtual machine stack) SolarisZone(Virtual)StackMonitor	<p>Solaris Zone Virtualization function virtual performance information stack graph</p> <ul style="list-style-type: none"> - CPU usage rate - Memory usage <p> Point</p> <p>.....</p> <p>This graph makes it easy to see which Zone is using the CPU, disk, and memory.</p> <p>It is possible to see information about the Global Zone CPU, memory, and disk by displaying the CPU usage rate, available memory, and disk I/O count of "ServerMonitor".</p> <p>.....</p>
Yes	No	Yes	Solaris Zone(Solaris 10) ZoneMonitor(Solaris10)	<p>Summary of Solaris Zone(Solaris 10) performance information</p> <ul style="list-style-type: none"> - CPU usage rate - Memory usage rate <p> Point</p> <p>.....</p> <p>If Solaris zones are bound to processor sets, the CPU usage will be 100% for each processor set.</p> <p>.....</p>
Yes	No	No	Solaris Zone(Solaris 10) (Virtual machine stack) ZoneStackMonitor(Solaris10)	<p>Stack graph for Solaris Zone(Solaris 10) performance information</p> <ul style="list-style-type: none"> - Stack graph for CPU usage rates - Stack graph for memory usage rates <p> Point</p> <p>.....</p> <p>If Solaris zones are bound to processor sets, the CPU usage will be 100% for each processor set.</p> <p>To display a stack graph for CPU usage rates, it is necessary to create a system group for each processor set.</p> <p>.....</p>

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
Yes	No	Yes	Web transaction	Summary of Web transaction volume information - Request count - Traffic volume
			WebTrnMonitor	
Yes	No	Yes	Network	Summary of Systemwalker Resource Coordinator (Network) performance information - Transmission line problems (including adjoining lines)
			TcpNetworkMonitor	
Yes	No	Yes	Storage	Summary of Systemwalker Resource Coordinator (Storage) performance information - Maximum read response time - Maximum write response time - Maximum disk usage rate
			StorageMonitor	
No	No	Yes	VMPool	Summary of VM pool - CPU usage rate - Memory usage rate
			ROR(VMPool)Monitor	
No	No	Yes	StoragePool	Summary of storage pool - StoragePool usage rate  Note In the storage pool where the Thin Provisioning function is effective, the number of L-Server that can be disposed is displayed as all 0 regardless of the kind of the L-Platform template.
			ROR(StoragePool)Monitor	
No	No	Yes	NetworkPool	Summary of network pool NetworkPool usage rate
			ROR(NetworkPool)Monitor	
No	No	Yes	ServerPool	Summary of server pool - ServerPool usage rate  Note When a physical server is not registered in the server pool of ServerView Resource Orchestrator, it is not displayed.
			ROR(ServerPool)Monitor	
No	No	Yes	AddressPool	Summary of address pool - AddressPool usage rate
			ROR(AddressPool)Monitor	

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				 Note When a physical server is not registered in the server pool of ServerView Resource Orchestrator, it is not displayed.
Yes	No	Yes	Interstage(EJB) Interstage(EJB)Monitor	Summary of Interstage Application Server (EJB) performance information <ul style="list-style-type: none"> - Maximum processing time for EJB applications - Pending request count
Yes	No	Yes	Interstage(TD) Interstage(TD)Monitor	Summary of Interstage Application Server (TD) performance information <ul style="list-style-type: none"> - Maximum request processing time for objects - Pending request count
Yes	No	Yes	Interstage(CORBA) Interstage(CORBA)Monitor	Summary of Interstage Application Server (CORBA) performance information <ul style="list-style-type: none"> - Maximum request processing time for implementation repository IDs - Pending request count
Yes	No	Yes	Interstage(IJServer) Interstage(IJServer)Monitor	Summary of Interstage Application Server (IJServer) performance information <ul style="list-style-type: none"> - Maximum current heap usage rate for JavaVM
Yes	No	Yes	Interstage(JServerCluster) Interstage(IJServerCluster)Monitor	Summary of Interstage Application Server Java VM performance information <ul style="list-style-type: none"> - Mean value of amount of use of heap of Java VM (present) - Mean value of quantity consumed (present) in Perm area of Java VM - Garbage collection
Yes	No	Yes	Interstage(IBAS async) TxnAsyncMonitor	Summary of Interstage Business Application Server performance information <ul style="list-style-type: none"> - The number of transactions that have been executed - The average and maximum execution times for multiple instances of the same transaction - The average and maximum execution times for all transactions that have been executed
Yes	No	Yes	Interstage(IBAS sync)	Summary of Interstage Application Framework Suite performance information

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
			TxnSyncMonitor	<ul style="list-style-type: none"> - The number of transactions that have been executed - The average and maximum execution times for multiple instances of the same transaction - The average and maximum execution times for all transactions that have been executed
Yes	No	Yes	Interstage(IBAS OssJava TxnOssJavaMonitor)	<p>Summary of Interstage Business Application Server Open Java Framework performance information</p> <ul style="list-style-type: none"> - The number of transactions that have been executed - The average and maximum execution times for multiple instances of the same transaction - The average and maximum execution times for all transactions that have been executed
Yes	No	Yes	Interstage(ISI Sequence Summary) ISI SequenceMonitor(Summary)	<p>Summary of Interstage Service Integrator performance information</p> <ul style="list-style-type: none"> - Sequence processing number (unit of group)
Yes	No	Yes	Interstage(ISI Sequence Detail) ISI SequenceMonitor(Detail)	<p>Summary of Interstage Service Integrator performance information</p> <ul style="list-style-type: none"> - Sequence processing number (unit of sequence)
Yes	No	Yes	Interstage(ISI Queue Summary) ISI QueueMonitor(Summary)	<p>Summary of Interstage Service Integrator performance information</p> <ul style="list-style-type: none"> - Number of queue stays (unit of group)
Yes	No	Yes	Interstage(ISI Queue Detail) ISI QueueMonitor(Detail)	<p>Summary of Interstage Service Integrator performance information</p> <ul style="list-style-type: none"> - Number of queue stays (unit of sequence)
Yes	No	Yes	WebLogicServer WebLogicServerMonitor	<p>Summary of Oracle WebLogic Server Java VM performance information</p> <ul style="list-style-type: none"> - Mean value of amount of use of heap of Java VM (present) - Garbage collection
Yes	No	Yes	Operation Manager OperationMgrMonitor	<p>Summary of Systemwalker Operation Manager performance information</p> <ul style="list-style-type: none"> - Change in job concurrency

SG	PM	Agt	Node name at the bottom part of Summary tree	Outline
			Monitor name	
				<ul style="list-style-type: none"> - Change in the number of pending jobs - Change in the number of completed jobs - Change in the number of error jobs
Yes	No	Yes	MS-.NET	MS-.NET performance information summary <ul style="list-style-type: none"> - The number of requests waiting to be processed - The number of requests
			MS-.NET_Monitor	
Yes	No	Yes	SAP	SAP performance information summary <ul style="list-style-type: none"> - Dialog response time - Number of enqueue requests and queue length - Background usage rate - Number of RFC calls waiting to be executed
			SAP Monitor	
Yes	No	Yes	Symfoware	Summary of Symfoware Server performance information <ul style="list-style-type: none"> - Buffer hit rate - The number of times that the buffer has been used up - SQL count
			SymfowareMonitor	
Yes	No	Yes	Oracle	Summary of Oracle Database Server performance information <ul style="list-style-type: none"> - Buffer hit rate - Exclusive control wait count
			OracleMonitor	
Yes	No	Yes	MS-SQL	MS-SQL performance information summary <ul style="list-style-type: none"> - Buffer cache hit rate - The number of deadlocks - The number of transactions
			MS-SQL_Monitor	
Yes	No	Yes	User data	Information about user data
			UserDataMonitor	

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

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






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

Refer to "Manager" in the *Technical Guide* and "Data Formats" in the *Reference Guide* for details on the information displayed in the Summary view.

3.1.2 Description of the Summary Tree

The summary tree is shown in two parts, upper and lower.

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

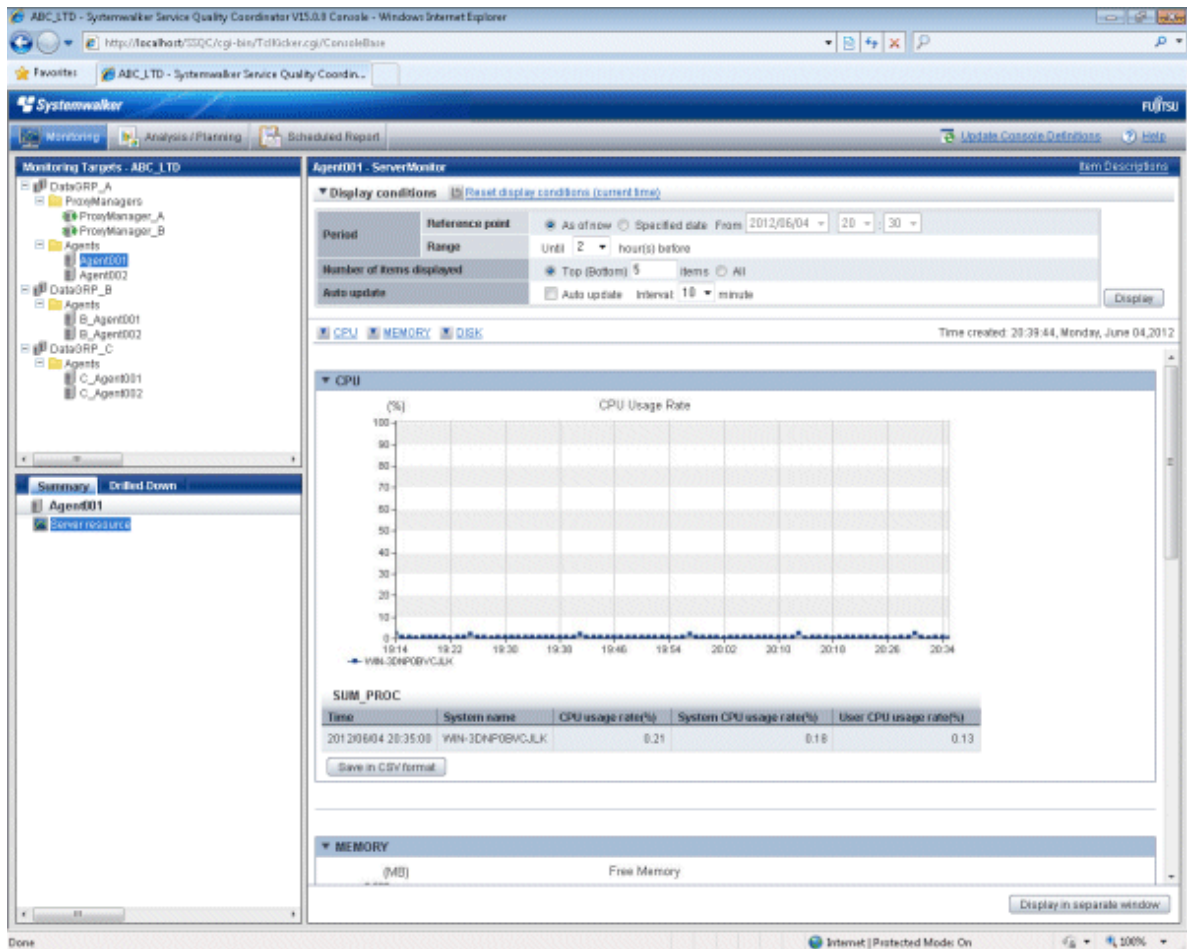
Icon	Meaning
	Indicates a system group.
	Indicates a folder used to store collected information.
	Indicates individual Proxy Manager hosts.
	Indicates individual Agent hosts.
	Indicates each monitor

3.1.2.1 Reloading the Summary tree

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

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

3.1.3 Basic operation



When the node indicating the monitor to be displayed is selected in the Summary tree on the left, the monitored content will be displayed on the right.

"Loading..." appears in the content display area while the content is being made.


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

3.1.3.1 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	<p>Select the reference point for displaying the Monitor.</p> <p>The following reference points can be selected:</p> <p>As of now, Specified date</p> <p>If As of now is selected, the Monitor will be displayed with the current time as the reference point.</p> <p>If the Specified date is selected, any time up to three days before the current time can be selected as the reference point.</p>
Range	<p>Select the display range as the number of hours leading up to the present time or another specified time.</p>

Option	Description
	<p>The following display periods can be selected:</p> <p>1, 2, 4, 8, 12, 18 and 24 hours</p> <p>The default period is 2 hours.</p>
<p>Number of items displayed</p>	<p>For the number of display items, either "All" or an arbitrary number of items can be specified.</p> <p> Point</p> <p>.....</p> <p>When the number of display items is set, for performance information where high performance values can cause problems (e.g., with CPU usage), high numbers are shown, and vice versa.</p> <p>The number of data items to display in the report is about up to 10. The graph might collapse by explanatory notes in case of 10 or more.</p> <p>.....</p>
<p>Auto Update/Interval</p>	<p>To perform updates automatically, select the interval and check the check box.</p> <p>The following update intervals can be selected:</p> <p>1, 3, 5 and 10 minutes</p> <p>The default value is 10 minutes.</p> <p>The count of the update time starts when the check box is checked. Moreover, the count starts again at that time when the update time is changed when the auto update is done.</p> <p>Note that if the current content of the Monitoring 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.</p> <p>Please remove the check on the check box when you stop the auto update.</p>

To remove the need to specify the same option many times, once an option ([Reference point], [Range] and [Number of items displayed]) is specified, it is inherited by other monitors.

 **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, the different options can be specified by starting Internet Explorer separately from the **Start** menu.

.....

 **Note**

.....

The summary data for Agents that is held in the PDB is the summary data that has been received from the Agent for (up to) the latest retention period. The summary window in the **Admin Console** displays the summary data held in the PDB, so if an Agent is stopped, there may be differences in the display period, as compared to other Agents that are running.

.....

 **Note**

.....

The following problems sometimes occur when users try to display the desired contents (graphs or tables).

- The operation may terminate with error code 1572864.
- "Chart is unavailable" is displayed instead of the graph image.
- The graph image may be left out (only graphs are not displayed).

- The following error message may be displayed:

```
"The specified CGI application misbehaved by not returning a complete set of HTTP headers. The headers it did return are: Unable to register TclNotifier window class"

"ohd_update error."

"Ohd file create error."
```

These problems may be due to insufficient space in the desktop heap for the operation management client. Increase the size of the desktop heap by referring to "[6.1 Content Display Errors](#)".

3.1.3.2 Opening targets in the Drilled-Down display

When a problem is discovered with the monitor, open the respective Drilled-Down display by clicking on the **Drilled-Down** tab with the monitor displayed, and then selecting the detailed view icon in the Drilled-Down display tree.

3.1.3.3 Display in another window and print

By clicking on the **Display in separate window** button in the lower right of the summary window, the monitor content in the current view is opened in a separate window.

This makes it possible to display another monitor in the console for comparison.

When the window is displayed separately, that window can then be printed by clicking the **Print** button.

3.1.4 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.

Point

- 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.
-

Save in CSV Format

The following buttons is available at the bottom of the Monitor contents tables:

- Save in CSV format

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

3.2 Drilled-Down Display

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

This section explains the Drilled-Down Display.

3.2.1 Drilled-Down Display Types

The Drilled-Down display supports the items listed in the following table.

Item	Outline
ResponseCondition	Detailed end user response information
ServiceCondition	Detailed service operation information
WebTrn	Detailed Web transaction volume information
Windows	Detailed Windows server performance information
Solaris	Detailed Solaris server performance information
Linux	Detailed Linux server performance information
Interstage	Detailed Interstage Application Server performance information
Interstage(TxnAnalysis)JavaEE	Interstage transaction breakdown analysis (Java EE environment)
Interstage(TxnAnalysis)	Interstage transaction breakdown analysis (J2EE environment)
TxnAnalysis(Sync)	Interstage Application Framework Suite transaction breakdown analysis Interstage Business Application Server transaction breakdown analysis
TxnAnalysis(Async)	Interstage Business Application Server transaction breakdown analysis
TxnAnalysis(OssJava)	Interstage Business Application Server Open Java Framework transaction breakdown analysis
ISI	Detailed Interstage Service Integrator performance information
WebLogicServer	Detailed Oracle WebLogic Server performance information
Symfoware	Detailed Symfoware Server performance information
Oracle	Detailed Oracle Database Server performance information
OperationMGR	Detailed Systemwalker Operation Manager performance information
TcpNetwork	Detailed Systemwalker Resource Coordinator (Network) performance information
StorageResource	Detailed Systemwalker Resource Coordinator (Storage)/ ETERNUS SF Storage Cruiser performance information
Resource Orchestrator	Detailed ServerView Resource Orchestrator performance information
UserData	Information about user data
MS-SQL	Detailed Microsoft SQL Server performance information

Item	Outline
MS-.NET	Detailed Microsoft .NET performance information
SAP	Detailed SAP NetWeaver performance information
ECO	Eco information
VMware	Detailed VMware ESX/VMware ESXi performance information
Hyper-V	Detailed Hyper-V performance information
KVM	Detailed Linux virtualization function (KVM) performance information
Xen	Detailed Linux virtualization function (Xen) performance information
Zone	Detailed Solaris Zone performance information

Refer to "Manager" in the *Technical Guide* and "Data Formats" in the *Reference Guide* for details about the information displayed in detail.










 **Point**

"Data Formats" can also be access by clicking on the "Item descriptions" link at the top right of the detailed view.

3.2.2 Description of the Drilled-Down Tree

The Drilled-Down tree is shown in two parts, upper and lower.

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

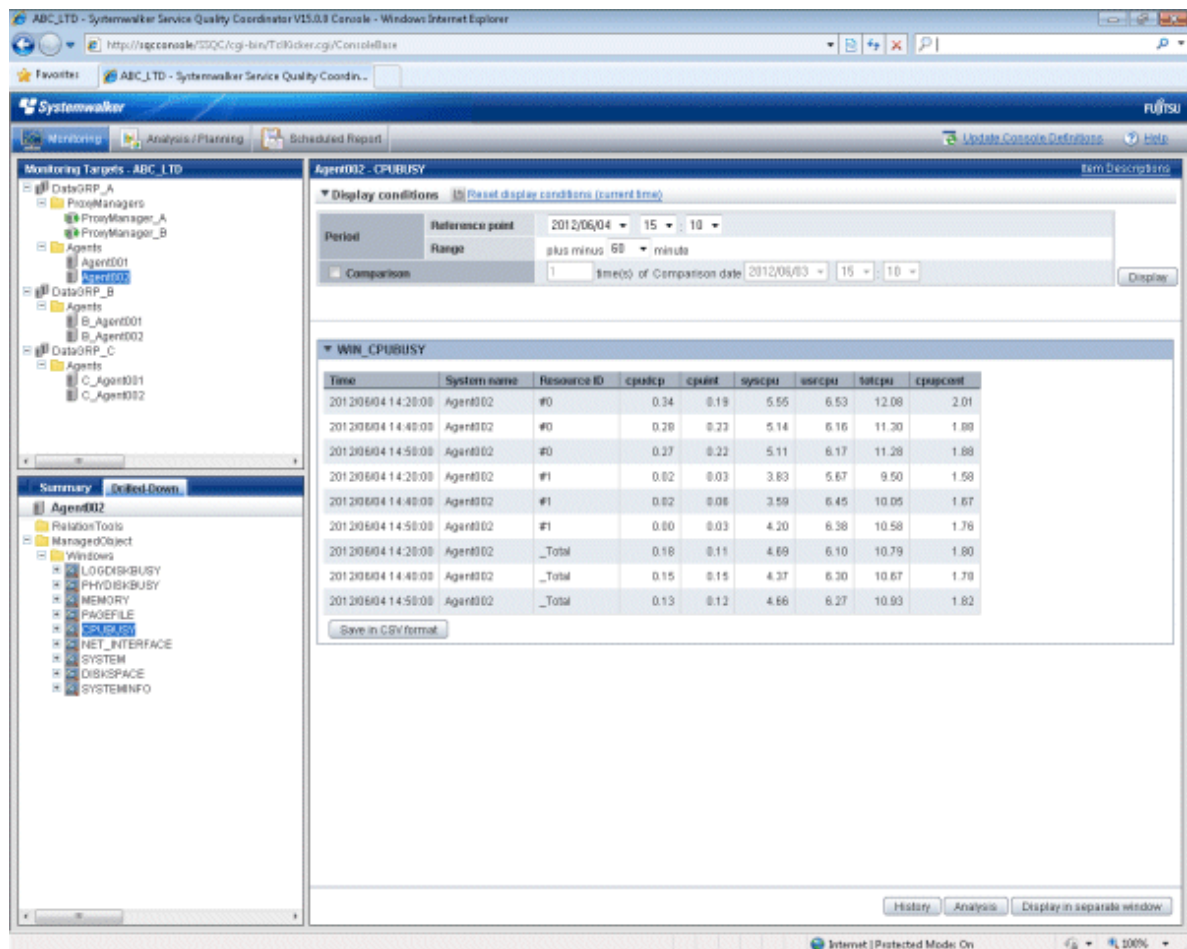
Icon	Meaning
	Indicates a system group.
	Indicates a folder used to store collected information.
	Indicates individual Proxy Manager hosts.
	Indicates individual Agent hosts.
	Indicates each Drilled-Down display item.
	Indicates an instance defined by a middleware product, etc.
	Indicates a related tool.
	Indicates a node for which information is being set. Settings are made in the same way as for the Setting View . Refer to " 1.2 Setting View ".
	Note Settings for the Drilled-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 .

3.2.2.1 Reloading the Drilled-Down tree

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

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

3.2.3 Basic operation




To display detailed content, select an item from the display targets in the Drilled-Down tree on the left, specify the options at the top of the right window and then click the **Display** button.

While the content is being generated, the message "Loading..." appears in the content display area.

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

option

The following table lists the options that can be specified.

Option	Description
Reference point	<p>Select the time that will be used as the starting point for the Drilled-Down display.</p> <p>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.</p>
Range	<p>This option is used to select how many minutes either side of the starting point will be used as the Drilled-Down display's range.</p> <p>The following display ranges can be selected:</p> <p>180, 120, 60, 30, 10 and 0 minutes</p> <p>The default is 60 minutes.</p> <p>If "0" (minutes) is selected, the time specified in the Date option will be indicated by a pinpoint.</p>
Comparison date /Multiple	<p>Comparison</p> <p>Put a check here if the Drilled-Down display is to be compared. The data from a specified period is compared to the data from the date selected as the Comparison date.</p> <p>Any time up to one week before the current time can be selected for Comparison date.</p> <p>The default is one day before the day when the window is opened.</p> <p>Specify a real number between 0.001 and 1000 for the multiplying factor. The default is 1.</p> <p>When a factor greater than 1 is specified, the information is emphasized if the data from the specified period is greater than that from the comparison date when multiplied by the factor.</p> <p>When a factor less than 1 is specified (between 0.999 and 0.001), the information is emphasized if the data from the specified period is less than that from the comparison date when multiplied by the factor.</p> <p> Note</p> <p>.....</p> <p>As for the following Drilled-Down display items, this function is off the subject.</p> <p>ResponseCondition</p> <p>TxnAnalysis(Sync)</p> <p>TxnAnalysis(Async)</p> <p>TxnAnalysis(OssJava)</p> <p>Workload</p> <p>.....</p>

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

3.2.3.1 Display in another window and print

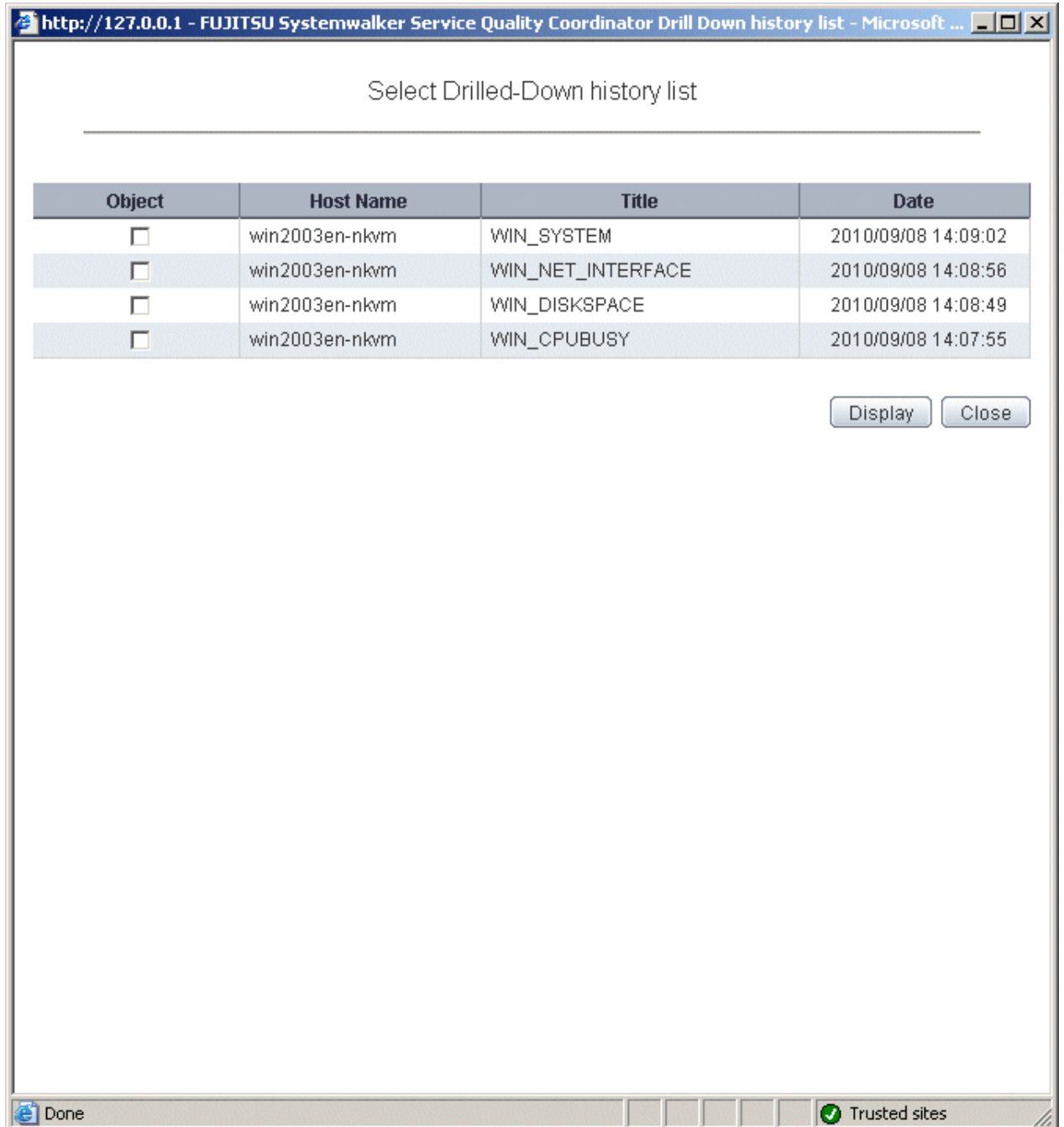
By clicking on the **Display in separate window** button in the lower right of the Drilled-Down display window, the Drilled-Down display content in the current view is opened in a separate window.

This makes it possible to display other items in the console for comparison.

When the window is displayed separately, that window can then be printed by clicking the **Print** button.

3.2.3.2 History

When the **History** button at the bottom right of the Drilled-Down display is clicked, the **Drilled-Down history list** window is displayed showing the details from the past two hours.

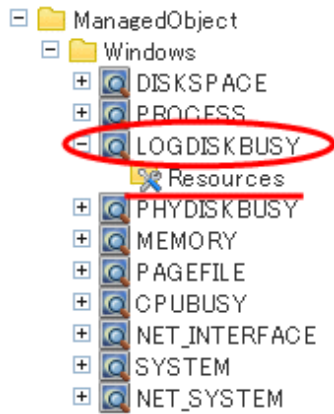


By selecting any of the check boxes shown in the list and clicking the **Show** button, the selected Drilled-Down display content can be displayed in a single window.

This enables multiple items to be listed together and compared.

3.2.3.3 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. By defining resources for this type of node, the user can display the content of specific resources in the Drilled-Down display.

This is an example of the Drilled-Down display content displayed when the WIN_CPUBUSY node is selected.

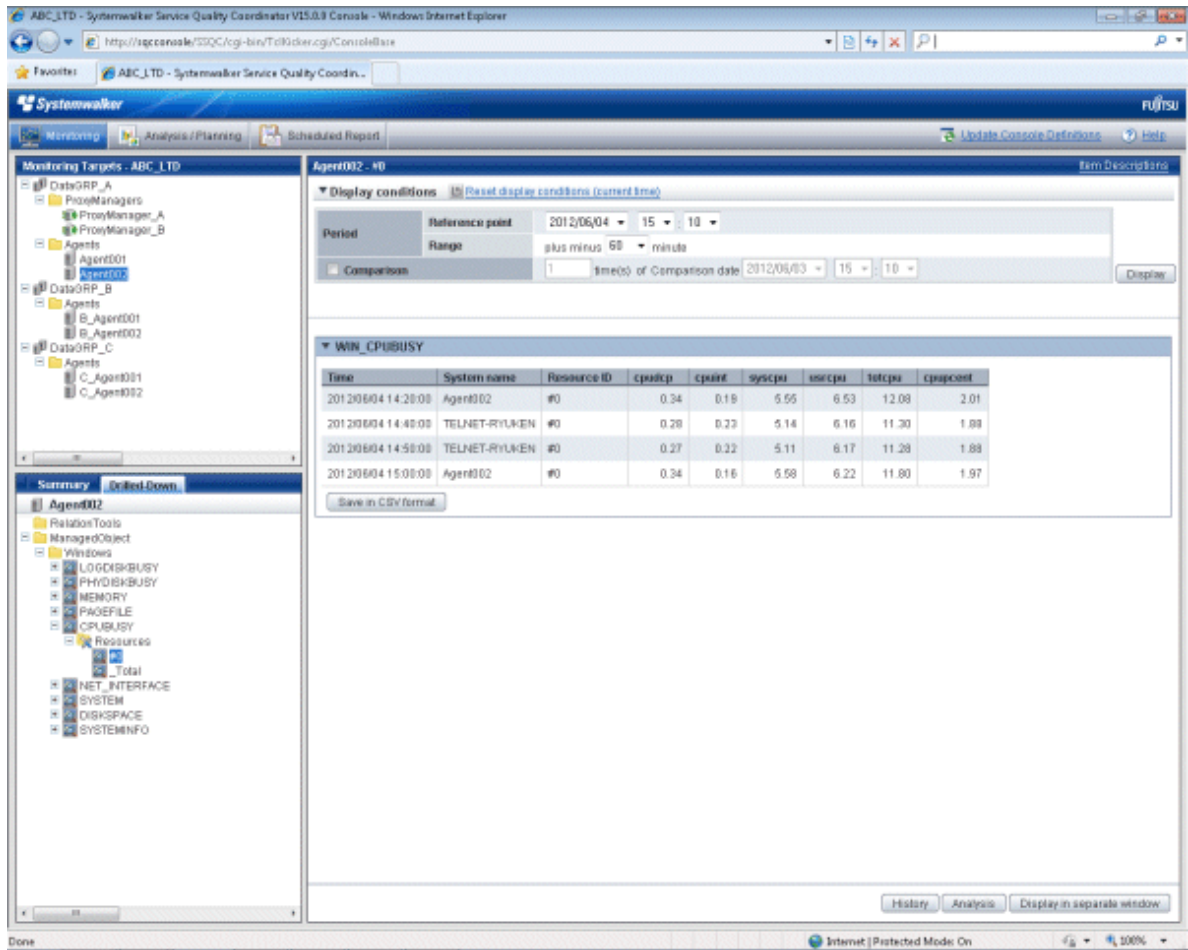
Agent002 - CPUBUSY

Display conditions: Reference point: 2012/06/04 15:10, Range: plus minus 60 minute, Comparison: 1 time(s) of Comparison date 2012/06/03 15:10

Time	System name	Resource ID	cpuidcp	cpuint	syscpu	usercpu	totcpu	cpupcent
20120604 14:20:00	Agent002	#0	0.34	0.19	5.55	6.53	12.08	2.01
20120604 14:40:00	Agent002	#0	0.28	0.23	5.14	6.16	11.30	1.88
20120604 14:50:00	Agent002	#0	0.27	0.23	5.11	6.17	11.28	1.88
20120604 14:20:00	Agent002	#1	0.82	0.03	3.83	5.67	9.50	1.58
20120604 14:40:00	Agent002	#1	0.82	0.08	3.59	6.45	10.05	1.67
20120604 14:50:00	Agent002	#1	0.80	0.03	4.20	6.38	10.58	1.76
20120604 14:20:00	Agent002	__Total	0.18	0.11	4.69	6.10	10.79	1.80
20120604 14:40:00	Agent002	__Total	0.15	0.15	4.37	6.30	10.67	1.70
20120604 14:50:00	Agent002	__Total	0.13	0.12	4.66	6.27	10.93	1.82

Buttons: Save in CSV format, History, Analysis, Display in separate window

Registering "Resource #0" as a resource node enables content to be displayed by targeting only "#0".



Refer to "1.2.2.5 Resources" for details on how to define resources.

3.2.3.4 Invoking related tools

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

Refer to "1.2.2.4 RelationTools" for details on how to define related tools.

3.2.4 How to perform operations relating to content

This section explains the operations that can be performed on displayed Drilled-Down display content.

3.2.4.1 Common operations

Table sorting

When the header section of any column in a table displayed in the Drilled-Down display 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.

Save in CSV Format

The following buttons are located underneath the Drilled-Down display content:

- **Save in CSV format**

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

Point

If Server Instance under Interstage (TxnAnalysis) Java EE, Work Units under Interstage (TxnAnalysis), and data in TxnID units are downloaded and displayed in Excel, they will not be displayed correctly because the default display format of the collection time cell (sdattim) is "mm:ss.0". The display can be corrected by setting the display format of the cell to "yyyy/mm/dd hh:mm:ss.000" in the user definition.

Analysis/Planning

This link calls a Detailed Analysis/Planning window for displaying a graph of the data currently displayed.

3.2.4.2 WebSites tree

For end use response information, specific content can be displayed by setting the URLs of fully downloaded Web pages (i.e., no errors occur when the Web page is displayed, or the display is not canceled) as specific resources in Resources (URL) under WebSites or in nodes under WebSites (URL, DNS, TCP).

If an URL whose page is not fully downloaded is specified as a resource, the corresponding data will not be available and content will not be displayed.

Refer to "[1.2.2.7 Resources \(URL\)](#)" for details on setting specific resources in the Drilled-Down display.

Point

By selecting a specific resource node under WebSites and clicking **Completion number of cases** among the items in the content table that is displayed, a new window will be opened and details about those completed items will be displayed as a data list.

And, by clicking **Elapsed Time** in the table items, an internal sequence information showing the Web page data being downloaded will be displayed.

3.2.4.3 Interstage(TxnAnalysis)JavaEE/Interstage(TxnAnalysis) tree

For transaction breakdown analysis information collected from Interstage Application Server, selecting a Server Instance or a Work Unit node under the **Interstage(TxnAnalysis)** tree displays the breakdown analysis information for all translations for the Web applications (servlets and JSPs) and EJB applications executed in that Server Instance or Work Unit.

It is also possible to display breakdown analysis information focusing on a single transaction by specifying a specific transaction ID in **TxnIDs** under the Server Instance or the Work Unit node.

Refer to "1.2.2.9 TxnIDs" for details on how to set specific transaction IDs.

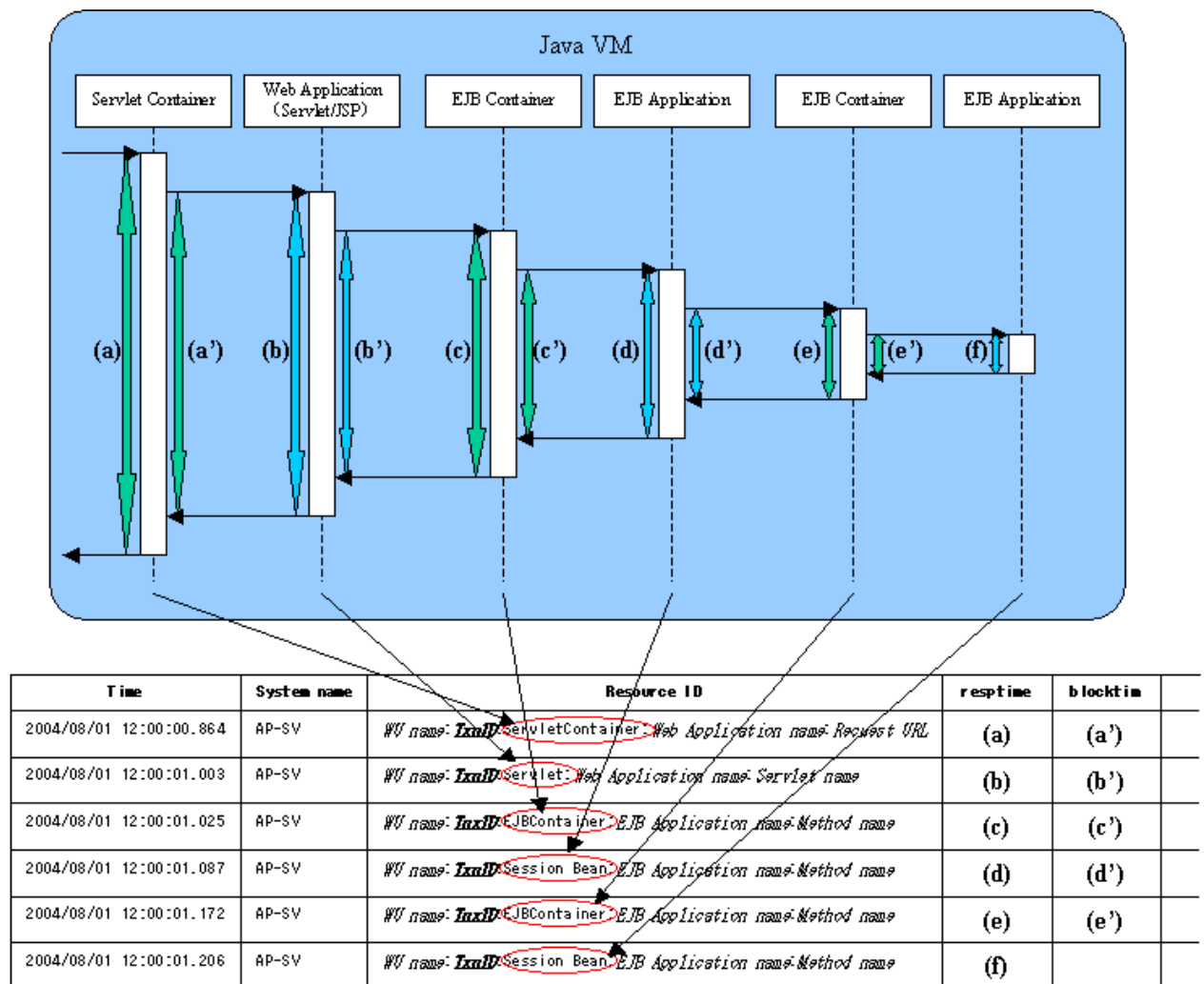
Viewing transaction breakdown analysis content

This content displays the time between the start and termination of a component as the response time, and the time between one component invoking another component and control returning to the first component as the block time. These times are displayed for each Java EE application running on each IJServer cluster or J2EE application component running on each IJServer.



No block time is displayed for components that do not invoke other components.

The following screen shot shows the correspondence between the component sequence diagram and content.



When a Server Instance or a Work Unit node is selected, information about multiple transactions is displayed. Components that relate to single transactions can be identified by the ID indicated by *TxnID* in the resource ID.

When the node of a specific transaction ID that has been set is selected, only the information relating to the specific transaction ID will be displayed.

The resource ID format used in transaction breakdown analysis is explained below.

Resource ID format

The resource ID format for each component is shown below.

Java EE environment

- Servlet container

Server Instance name:Transaction ID:ServletContainer:Web application name:Requested URL

- Web application (Servlet)

Server Instance name:Transaction ID:Servlet:Web application name:Servlet name

- Web application (JSP)

Server Instance name:Transaction ID:JSP:Web application name:Servlet name

- EJB container

Server Instance name:Transaction ID:EJB container:EJB application name:method name

- EJB application (SessionBean)

Server Instance name:transaction ID:SessionBean:EJB application name:method name

- EJB application (EntityBean)

Server Instance name:transaction ID:EntityBean:EJB application name:method name

J2EE environment

- Servlet container

Work Unit name:transaction ID:ServletContainer:Web application name:Requested URL

- Web application (Servlet)

Work Unit name:transaction ID:Servlet:Web application name:Servlet name

- Web application (JSP)

Work Unit name:transaction ID:JSP:Web application name:Servlet name

- EJB container

Work Unit name:transaction ID:EJBContainer:EJB application name:method name

- EJB application (SessionBean)

Work Unit name:transaction ID:SessionBean:EJB application name:method name

- EJB application (EntityBean)

Work Unit name:transaction ID:EntityBean:EJB application name:method name



When collecting time of multiple performance information for transaction breakdown analysis are exactly the same, display order of the performance information may be different from real calling order of components.

3.2.4.4 TxnAnalysis(Sync)/TxnAnalysis(Async)/TxnAnalysis(OssJava)tree

Transaction breakdown information that has been collected from Interstage Business Application Server, Interstage Application Framework Suite, or Interstage Business Application Server Open Java Framework can be displayed by selecting the TxnTime nodes under the main TxnAnalysis tree. There are two types of content: the analysis results over the multiple servers that execute transactions for each system group, and the breakdown analysis information for the transactions on each server.

Transaction breakdown analysis information can also be displayed for specific individual transactions by setting specific transaction IDs in the TxnIDs node under the TxnTime node.

Refer to "[1.2.2.10 TxnIDs for TxnAnalysis\(Sync\), TxnAnalysis\(Async\), and TxnAnalysis\(OssJava\)](#)" for details on how to set up specific transaction IDs.

Viewing transaction breakdown analysis content

This content shows information for two types of transactions: synchronous transactions and asynchronous transactions. Analysis results are displayed for each type of transaction, as shown below, including both analysis results for transactions on each separate server and analysis results for each system group over the multiple servers that execute the transactions. Analysis results are displayed for only the transactions whose processing has completed on all of the servers executing the transaction.

- Synchronous transactions (Interstage Application Framework Suite and Interstage Business Application Server)
 - The starting time, finishing time and execution time for each individual transaction on each server
 - The effective transaction time and the total communication time for the transaction
 - A list of correspondences between Systemwalker Service Quality Coordinator transaction IDs and Interstage context IDs
- Asynchronous transactions or Open Java Framework (Interstage Business Application Server)
 - The starting time, finishing time and execution time for each individual transaction on each server, as well as the number of activities
 - The effective transaction time
 - The starting times, finishing times and effective times for the activities in transactions
 - A list of correspondences between Systemwalker Service Quality Coordinator transaction IDs and Interstage context IDs



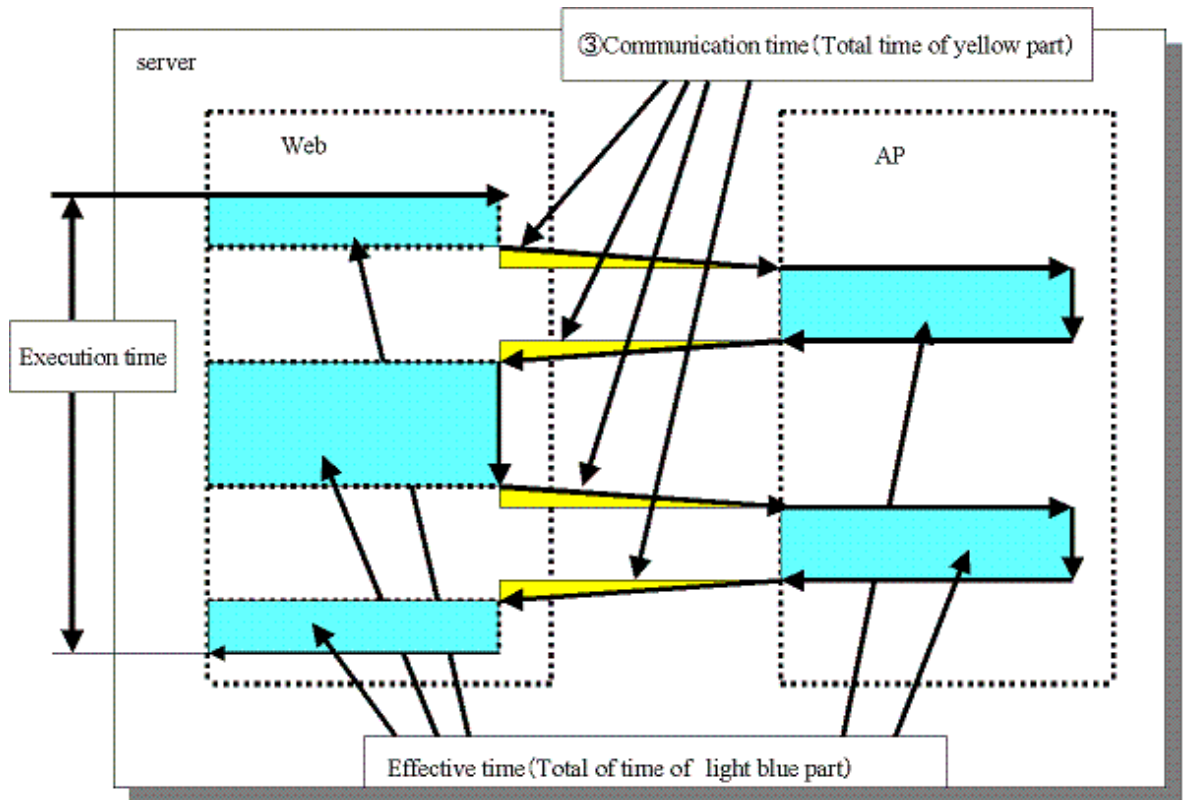
Refer to "[1.2.2.10 TxnIDs for TxnAnalysis\(Sync\), TxnAnalysis\(Async\), and TxnAnalysis\(OssJava\)](#)" for information about "The effective transaction time and the total communication time for the transaction ", "The starting times, finishing times and effective times for the activities in transactions" and " A list of correspondences between Systemwalker Service Quality Coordinator transaction IDs and Interstage context IDs".

Term	Meaning
Transaction	Business applications that are executed on Interstage are collectively referred to as "transactions". This function performs analysis processing for the state of servers while transaction control is retained by Interstage.
Synchronous transaction	"Synchronous transactions" are transactions whose processing on Interstage is executed sequentially from start to finish. If processing requests are issued to other servers, the transaction waits for the results to be returned. Synchronous transactions can be executed using both Interstage Application Framework Suite and Interstage Business Application Server.
Asynchronous transaction	Unlike synchronous transactions, "asynchronous transactions" return immediately, without waiting for processing requests that have been issued to other servers to return. Requested processes are placed in Interstage queues and are executed in order. Asynchronous transactions can be executed using Interstage Business Application Server only.
Context ID	"Context ID" refers to the context ID section in the standard log.
Correlation ID	Refers to Correlation ID part within standard log.
Transaction execution time	For synchronous transactions, "transaction execution time" refers to the total time taken from the time when a transaction is called to the time when it returns, Accordingly, if a transaction passes through multiple servers, the time taken to pass through these servers is also counted as the execution time for the server that made the original call. For asynchronous transactions, "transaction execution time" refers to the total time taken from the time when a transaction is called to the time when all activities complete. (Part (3) in the following diagrams)
Effective transaction time	"Effective transaction time" refers to the time that a transaction spends actually running on a server. Accordingly, for synchronous transactions, if a processing request is issued to another server, neither communication time nor the time that a transaction spends executing on the other server are not counted as effective time. (Part (2) in the following diagrams)
Communication time	"Communication time" is the time that a transaction spends making processing requests and receiving processing results. (Part (3) in the following diagrams)

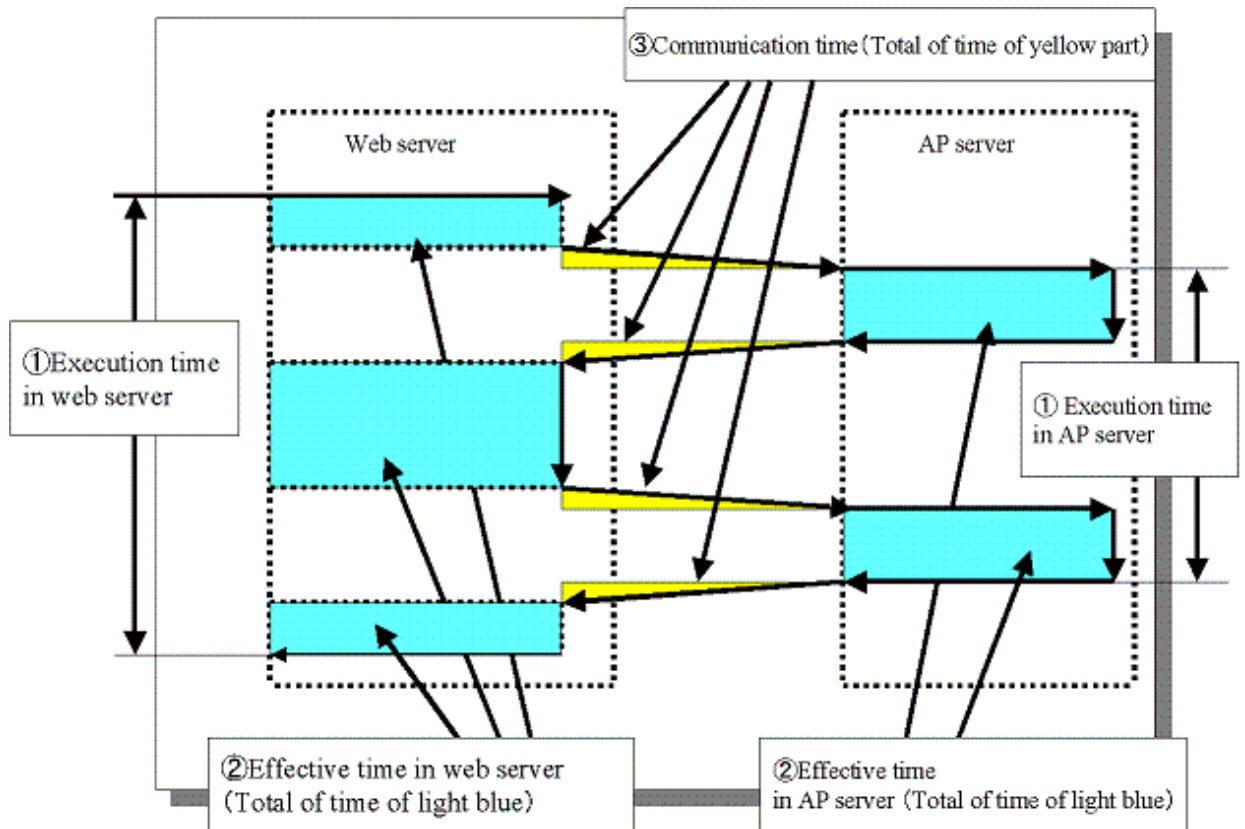
 **Note**

"Context ID" is a term that is used with synchronous transactions. For asynchronous transactions, the term "correlation ID" is used.

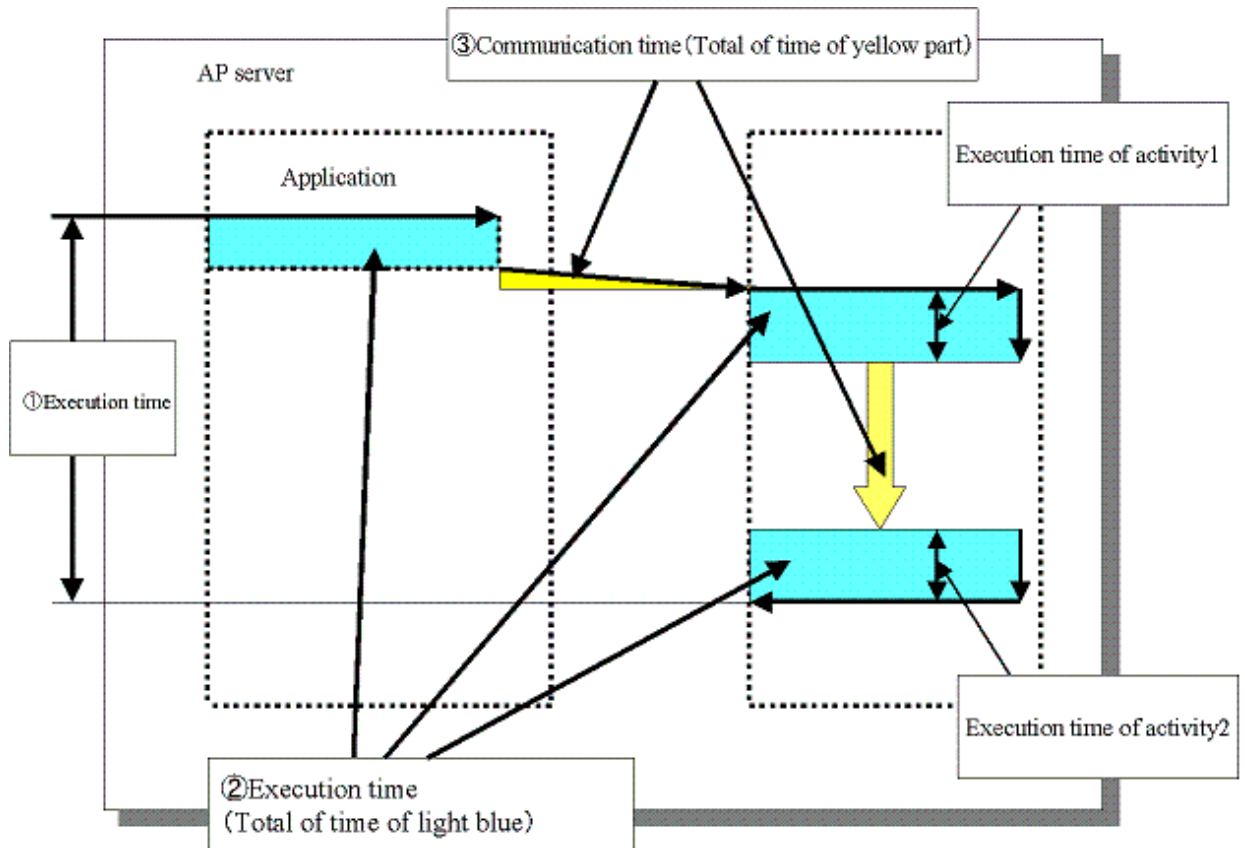
- Representation of execution time, effective time and communication time for a synchronous transaction (where the transaction is executed within a single server)



- Representation of execution time, effective time and communication time for a synchronous transaction (where the transaction is executed over multiple servers)



- Representation of execution time and effective time for an asynchronous transaction or Open Java Framework



With the open Java framework, the processes performed by each of the subsystems (Struts, Spring, iBATIS) are treated as activities. The breakdown for each activity is displayed below:

Activity	Description	Applicable Log Output Occasion (message ID)
Model	M in the MVC model. Performs processes related to data and procedures.	Action-Class(8501) Spring-Controller(8542) Controller-Class(8543) Spring-Remote-App(8547)
View	V in the MVC model. Performs processes related to display and output	Struts-View(8502) Spring-View(8544)
Controller	C in the MVC model. Responds to user input, and performs distribution to Model and View.	ActionServlet(8500) Spring-MVC(8541)
Validator	Checks values entered by the user.	Struts-Validator(8503) Spring-Validator(8545)
DB Access	Input-output of data to and from databases.	iBATIS(8581)
Remote (communication time)	Time required for network communication for Spring remote processing.	Spring-Remote(8546)

Analyze the transactions from each performance log and the execution time, effective time, and communication time for each activity, and collect transaction performance information.

 **Information**

The definitions for execution time, effective time, and communication time are as follows:

- Execution time: Time taken from invocation of a transaction until completion of all activities.
- Effective time: Time during which activities are actually running on the server.
- Communication time: Time taken for the communication to request processing and receive results in a transaction

3.3 Invoking Functions Directly

This section explains how to invoke the **Summary** view and **Drilled-Down** displays directly.

3.3.1 Invoking the Summary View

To invoke the summary view directly, add the following parameters.


```
http://Host name for operation management client/SSQC/XXX.html?
mode=monitor[&type=TARGET_TYPE&name=TARGET_NAME[&monitor=MONITOR_NAME]]
```


The "XXX" part of the URL is a user name that has been registered with the **Admin Console**.

To enter user names, first make basic authentication settings for each user by referring to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide*.

Parameter

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

Parameter	Meaning
mode	Specifies the function to be invoked. When invoking the Summary 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" "ProxyManager" "Agent"  Point "Name" cannot specify some characters (such as #, ?, +, \ and \$) in an URL directly. Use URL encoding to specify any of these characters.

Parameter	Meaning
	 Note If "SystemGroup", "ProxyManager" 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 in the lower part of the Summary tree of the Console from which the view was invoked. "The node selected is not exist."
monitor	Specifies the monitor name. The monitor names that can be specified are explained in "3.1.1 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
Summary view	Yes	No		No
Monitor target	Yes	Yes		No
Monitor content	Yes	Yes		Yes

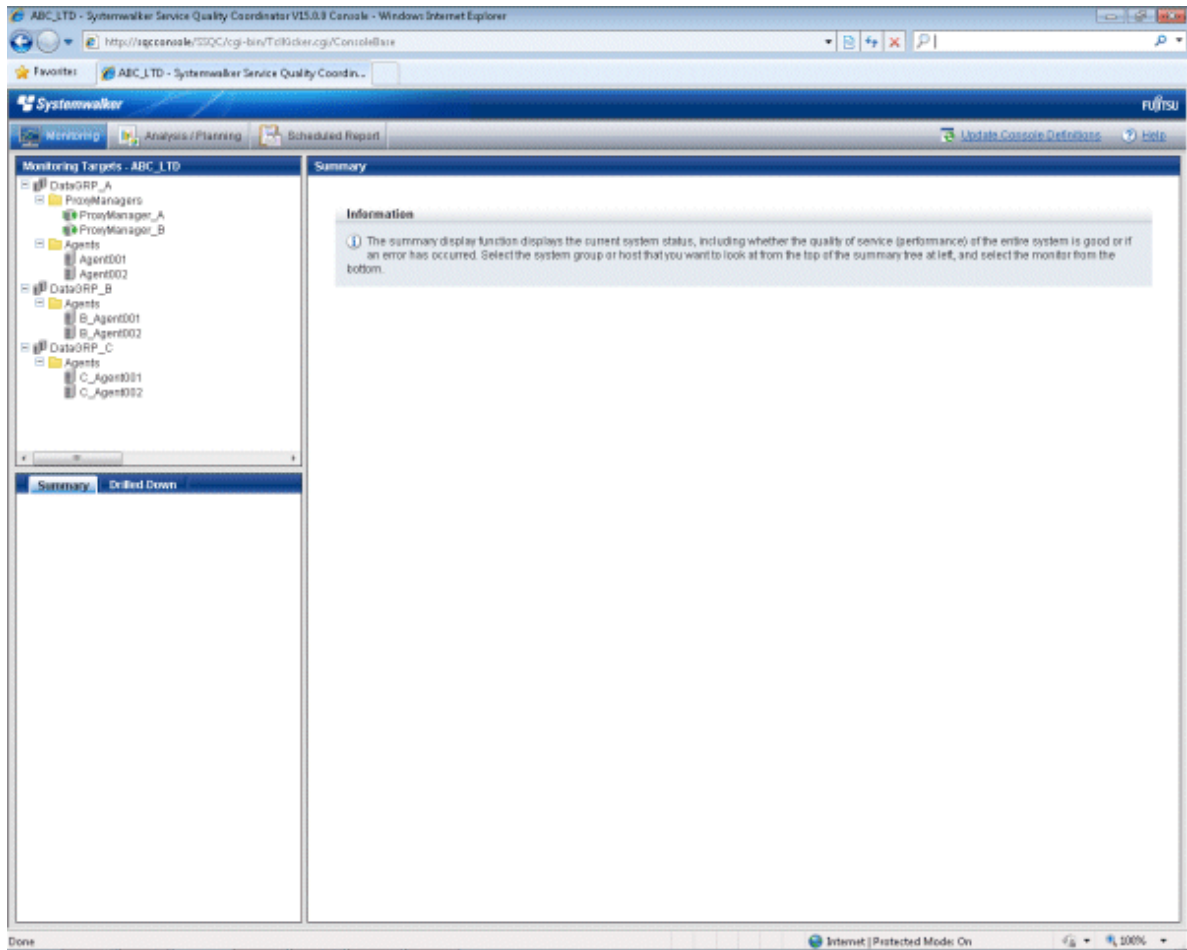
Example of Summary view invocation

If only the "mode" parameter is specified, the Console will start up with the summary display function selected.

[Sample URL entry for invocation]

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

[Sample startup window]



Example of monitor target invocation

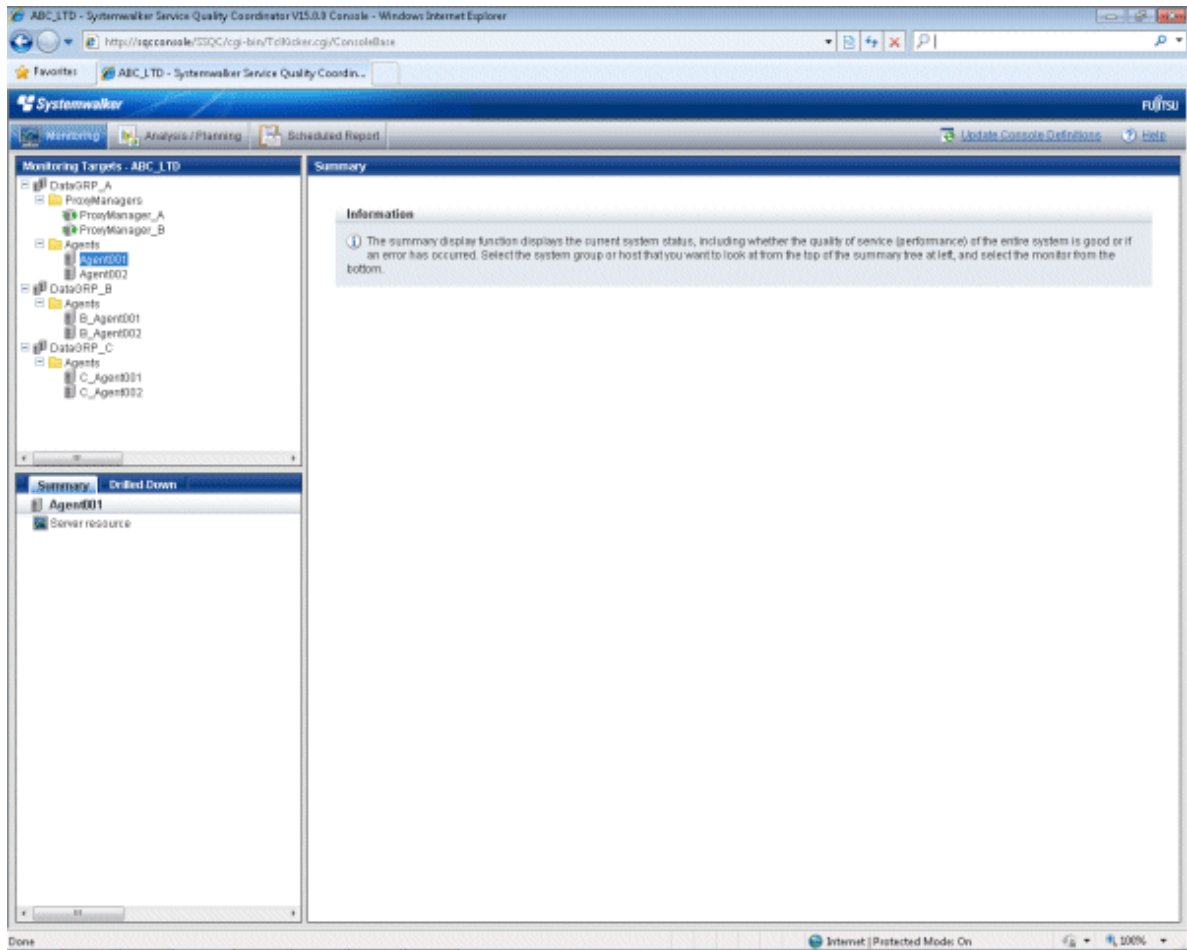
When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Summary tree.

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

[Sample URL entry for invocation]

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

[Sample URL entry for invocation]



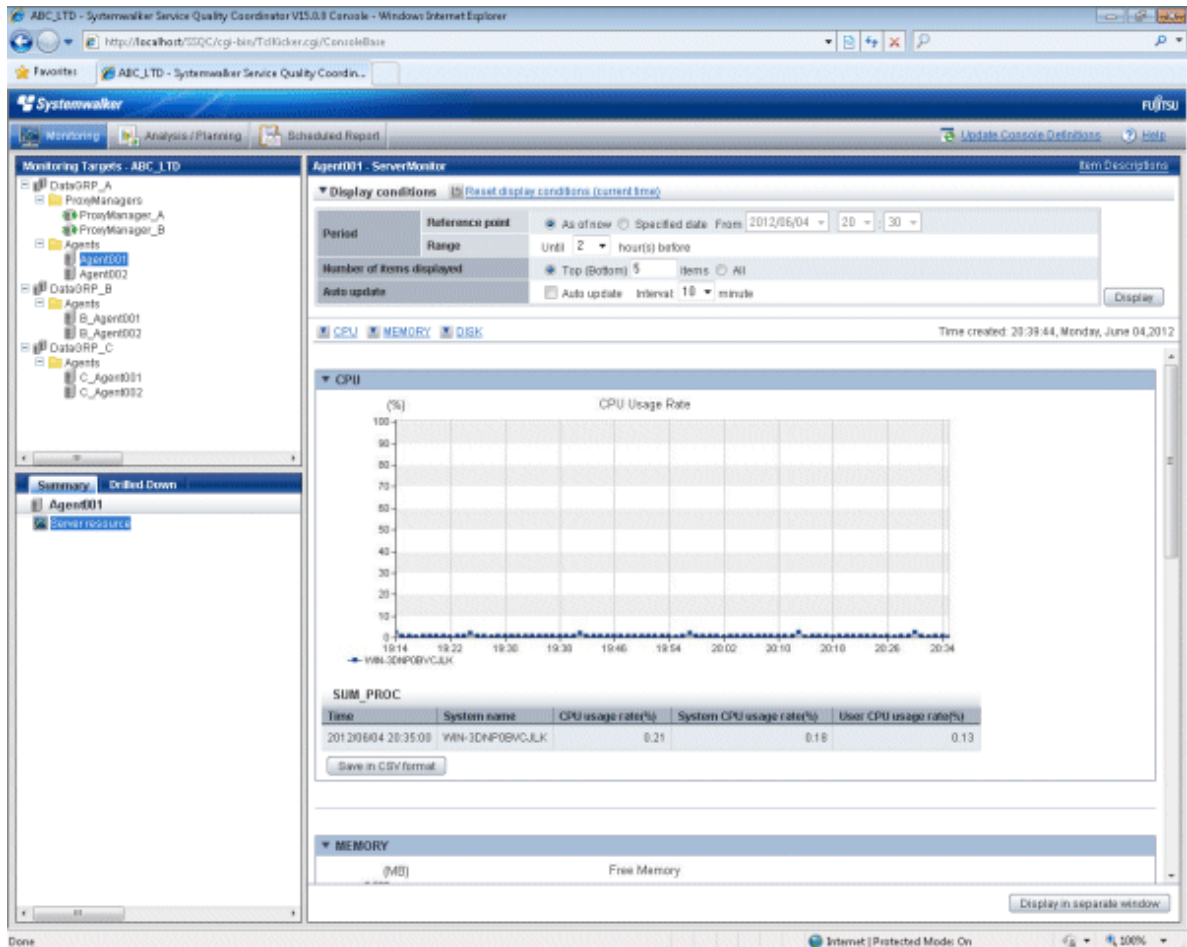
Example of monitored content invocation

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=Agent_C&monitor=ServerMonitor
```

[Sample startup window]



3.3.2 Invoking the Drilled-Down Display

To invoke the **Drilled-Down** display directly, add the following parameters.

```
http://Host name for operation management client/SSQC/XXX.html?
mode=drilldown[&type=TARGET_TYPE&name=TARGET_NAME]
```



The "XXX" part of the URL is a user name that has been registered with the **Admin Console**.

To enter user names, first make basic authentication settings for each user by referring to "How to Set Up Basic Authentication for Operation Management Clients" in the *Installation Guide*.

Parameter

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

Parameter name	Meaning
mode	Specifies the function to be invoked. When invoking the Drilled-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"

Parameter name	Meaning
	<p>"ProxyManager"</p> <p>"Agent"</p> <p> Point</p> <p>.....</p> <p>"name" cannot specify some characters (such as #, ?, +, \ and \$) in an URL directly. Use URL encoding to specify any of these characters.</p> <p>.....</p> <p> Note</p> <p>.....</p> <p>If "SystemGroup", "ProxyManager" 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 in the lower part of the Summary tree of the Console from which the view was invoked:</p> <p>"The node selected is not exist."</p> <p>.....</p>

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
Drilled-Down display	Yes	No	
Drilled-Down display status target	Yes	Yes	

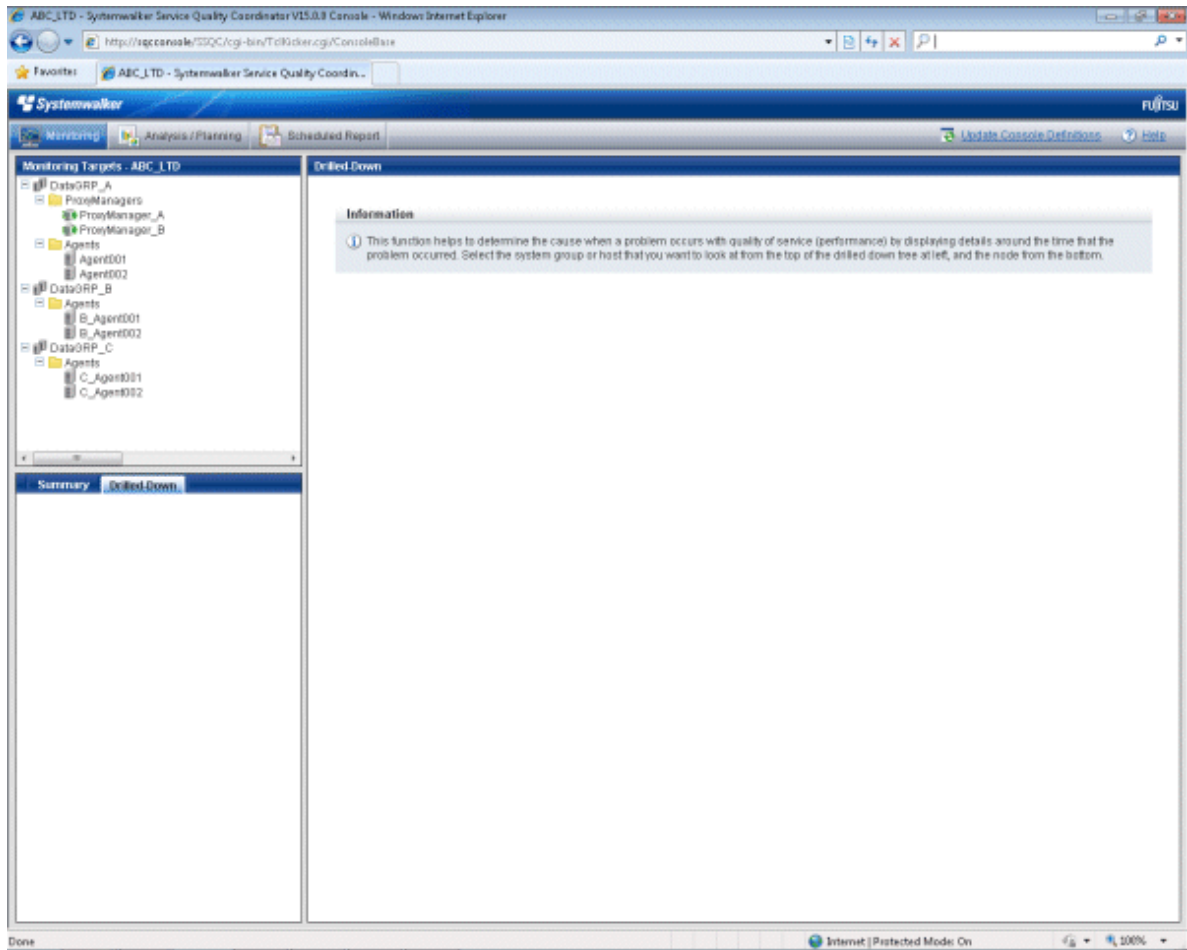
Example of Drilled-Down display invocation

If only the "mode" parameter is specified, the Console will start up with the Drilled-Down display function selected.

[Sample URL entry for invocation]

<code>http://client_host/SSQC/User1.html?mode=drilldown</code>

[Sample startup window]



Example of Drilled-Down display target invocation

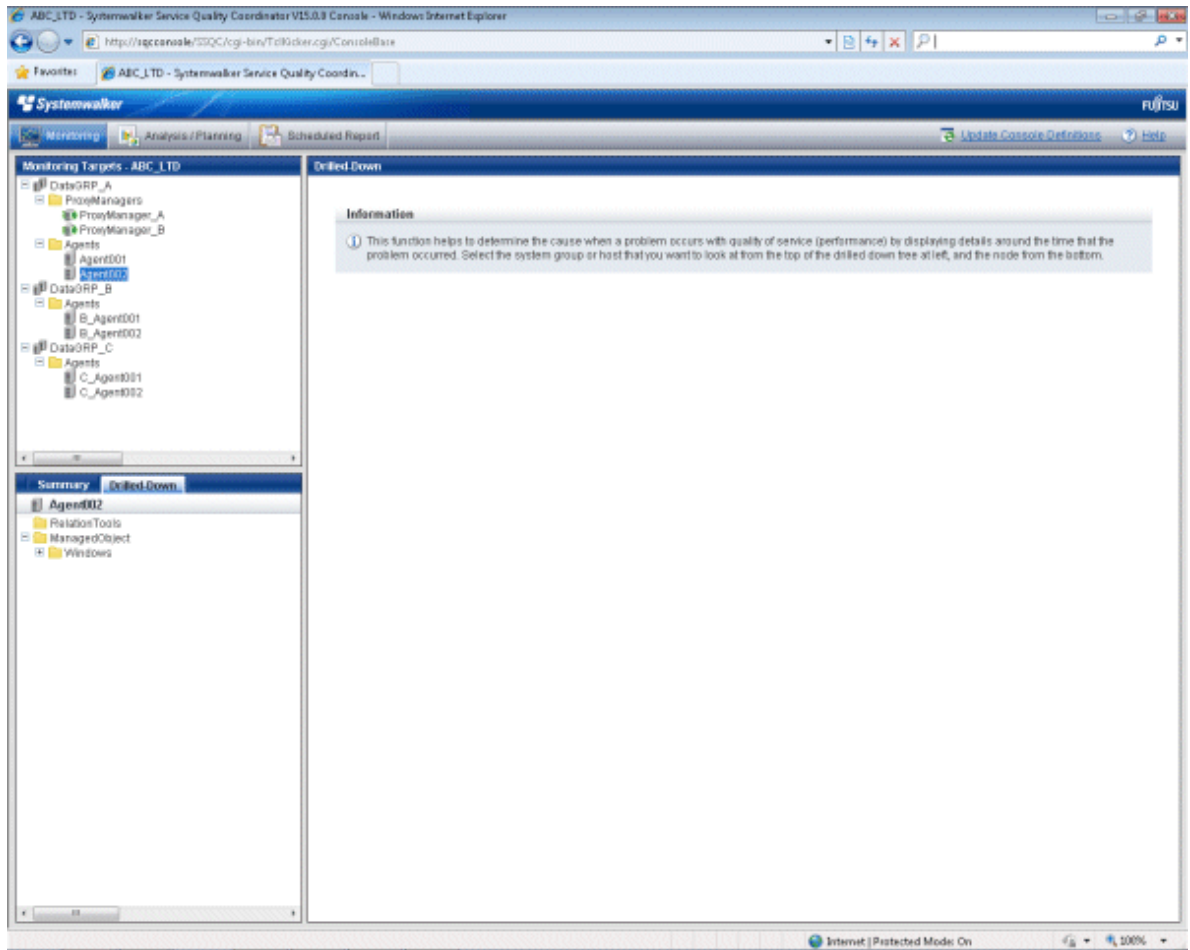
When the "mode" and "type/name" parameters are specified, the Console will start with the targets selected in the Drilled-Down tree.

After the Console has started, Drilled-Down display 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=Agent_C
```

[Sample startup window]



Chapter 4 Analysis/Planning Window

The service level management function can display the performance information collected by this product in a variety of report formats to suit the granularity of the information and the purpose of the report. The **Analysis/Planning** and **Scheduled Report Registration** windows have different scenarios categorized according to operational purposes. It is possible to meet your aims for analysis and planning by checking each report displayed in the categories in turn.

The **Analysis/Planning** window displays reports as needed for analysis and planning of service quality over the medium to long term to avoid problems in the future.

Point

Past analysis/planning results and registered conditions for analysis are saved for each console definition. Refer to "5.5 Storing Reports (Administrator Tasks)" for details.

4.1 Types of Categories

This table describes categories used for different operational aims.

Usage	Scenarios	Categories	Description
My Category	-	-	Create your own categories and register reports for your own use. Refer to "4.3.1.1.1 My Category Management" for details. If reports from version 13.5.0 or earlier are migrated, they are displayed under My Category , as a "Transition report" category. Refer to "Tasks to perform on the Operation Management Client" in the <i>Installation Guide</i> for information on migration.
Planning	Virtual aggregate	P2V (Physical to Virtual)	Track resource usage and simulate P2V.
	Effective resources use	VMware virtual machine relocation	Track resource usage on VMware virtual hosts and simulate relocating virtual machines.
		VMware resource allocation optimization	Track resource usage on VMware virtual machines.
		VMware tuning guidance	Use the tuning guidance to see if there are any problems with the status or usage status of resources on VMware virtual hosts or virtual machines.
	Demand forecast	VMware Resource pool	This enables the demand for VMware resource pool resources to be anticipated.
ServerView Resource Orchestrator Resource pool		This enables the demand for ServerView Resource Orchestrator resource pool resources to be anticipated.	

Usage	Scenarios	Categories	Description
	Increment simulation	Response simulation	Simulate the response times when servers are added based on past performance using forecast numbers of requests.
	Generic report	Generic report	Use the reports for future predictions when planning.
Performance Analysis	Virtualization software	VMware	The performance of VMware clusters, resource pools, virtual hosts, and virtual machines can be analyzed.
		Hyper-V	The performance of Hyper-V virtual hosts and virtual machines can be analyzed.
		Linux Virtualization function (KVM)	The performance of Linux virtualization function (KVM) virtual hosts and virtual machines can be analyzed.
		Linux Virtualization function (Xen)	The performance of the Linux virtualization function (Xen) can be analyzed.
		Solaris Zone	The performance of Solaris Zone can be analyzed.
		Solaris Zone(Solaris 10)	The performance of Solaris Zone (Solaris 10) can be analyzed.
	Network	Systemwalker Centric Manager (Network)	The performance of Systemwalker Centric Manager (Network) can be analyzed.
		Systemwalker Network Manager	The performance of Systemwalker Network Manager can be analyzed.
		TcpNetwork	The performance of Systemwalker Resource Coordinator (Network Resource Manager) can be analyzed.
	Storage	ETERNUS SF Storage Cruiser(SAN Storage)	The performance of ETERNUS SF Storage Cruiser (SAN Storage) can be analyzed.
		ETERNUS SF Storage Cruiser(NAS)	The performance of ETERNUS SF Storage Cruiser (NAS) can be analyzed.
	OS	Windows	The performance of Windows can be analyzed.
		UNIX	The performance of UNIX can be analyzed.
		OS common	The performance of all operating systems can be analyzed.
	Web	Web transaction	The performance of Web transactions can be analyzed.

Usage	Scenarios	Categories	Description	
	Application	Interstage Application Server (IIServer Cluster)	The performance of Interstage Application Server (IIServer Cluster) can be analyzed.	
		Interstage Application Server (Work Unit)	The performance of Interstage Application Server (Work Unit) can be analyzed.	
		Oracle WebLogic Server	The performance of Oracle WebLogic Server can be analyzed.	
		Microsoft .NET	The performance of Microsoft .NET can be analyzed.	
		SAP Netweaver	The performance of SAP Netweaver can be analyzed.	
		Primesoft Server	The performance of Primesoft Server can be analyzed.	
		Workload	The performance of Workload Organizer can be analyzed.	
	Database	Symfoware Server	The performance of Symfoware Servers can be analyzed.	
		Oracle Database	The performance of Oracle Databases can be analyzed.	
		Microsoft SQL Server	The performance of Microsoft SQL Servers can be analyzed.	
	Job	Systemwalker Operation Manager	The performance of Systemwalker Operation Manager can be analyzed.	
	Service bus	Interstage Service Integrator	The performance of Interstage Service Integrator can be analyzed.	
	Service	Service operational information	Service operational information can be analyzed.	
		End user response	End user response can be analyzed.	
	Generic report	Generic report	Use the report for time series displays and past comparisons for performance analysis.	
	History	-	History	Display reports that have already been created.



The "Solaris Zone(Solaris 10)", "TcpNetwork", and "Workload" categories are not displayed by default.

Use the following procedure to display them:

Procedure

1. Backup the Scenario_Template.xml file found in the following location:

```
<Installation directory for the operation management client>\www\html\admin\SLC
\Scenario_Template.xml
```

2. Rename the following file and replace Scenario_Template.xml.

Before:

```
<Installation directory for the operation management client>\www\html\admin\SLC
\Scenario_Template_for_OldEdition.xml
```

After:

```
<Installation directory for the operation management client>\www\html\admin\SLC
\Scenario_Template.xml
```

3. Display the console, click the **Analysis/Planning** tab, and check that the following categories are displayed:

- Solaris Zone(Solaris 10)
- TcpNetwork
- Workload



The following table shows how reports have changed from V13.5 and earlier to reflect improvements made so that the Windows and UNIX operating systems can use the same reports. Information registered for analysis and scheduled reports in V13.5 or earlier is not carried over to V15.0.0 and later. Reregister this information.

V13.5 or earlier	V15.0.0 and later
Category: Full System Inspection Analysis/ Report Reports: Distribution of rsc. usage cond. (Windows)	Usage: Planning Scenario: Virtual aggregate Category: P2V (Physical to Virtual) Reports: Server Distribution by rsc. usage cond. (Summary)
Category: Full System Inspection Analysis/ Report Reports: Distribution of rsc. usage cond. (UNIX)	
Category: Full System Inspection Analysis/ Report Reports: List of rsc. usage cond. (Windows)	Usage: Planning Scenario: Virtual aggregate Category: P2V (Physical to Virtual) Reports: List of rsc. usage cond. (Detail)
Category: Full System Inspection Analysis/ Report Reports: List of rsc. usage cond. (Windows)	
Category: Categorized Diagnostic Analysis/ Report Reports: Resource piling (Windows)	Usage: Planning Scenario: Virtual aggregate Category: P2V (Physical to Virtual) Reports: P2V simulation
Category: Categorized Diagnostic Analysis/ Report Reports: Resource piling (UNIX)	
Category: Categorized Diagnostic Analysis/ Report Reports: Estimated response time (Requests)	Usage: Planning Scenario: Increment simulation Category: Response simulation

V13.5 or earlier	V15.0.0 and later
	Reports: Response simulation (Request count)
Category: Categorized Diagnostic Analysis/ Report Reports: Estimated response time (Servers)	Usage: Planning Scenario: Increment simulation Category: Response simulation Reports: Response simulation (Adding servers)

4.2 Types of Reports

This section describes the types of reports that are included in the categories described in "4.1 Types of Categories".

The symbols on the first line of the "Analysis target and condition settings" column mean the following:

- G: System group
- H: Host


4.2.1 Planning


This section describes the reports used in planning by category.

The results of forecasts and simulations shown in the reports are calculated according to Fujitsu's own methods, based on past performance. These are offered as guides for the computer environment you are working with, but are not guaranteed to work in actual environments. Be aware that actual conditions may yield different results.

4.2.1.1 Virtual Aggregate

4.2.1.1.1 P2V (Physical to virtual)

Reports	Analysis target and condition settings	Display item	Description
Server Distribution by rsc. usage cond. (Summary)	G Specify System Group	<ul style="list-style-type: none"> - Server Distribution - By CPU Usage Rate - Server Distribution - By Memory Usage Rate - Server Distribution - By Disk I/O Count - Server Distribution - By Disk Throughput - Server Distribution - By Count for data sent/received over network - Server Distribution - By Network Throughput - Hardware Resources information 	<p>Check the status of resources to see whether the physical server's resources are being used effectively across the entire system.</p> <p>If a resource was changed, for example because of memory being added within a specified period, only the post-change information for this server will be displayed.</p> <ul style="list-style-type: none"> - When considering virtual aggregation <p>The benefits of aggregation are mostly achieved when there are many servers that have low usage. Note that resource usage is high when you choose to virtually aggregate servers that have high usage.</p> <p> Point</p> <ul style="list-style-type: none"> - The CPU performance (MHz) displayed is the performance value of one CPU core. - The loaded memory displayed is the memory capacity that is available for actual use.

Reports	Analysis target and condition settings	Display item	Description
List of rsc. usage cond. (Detail)	G Specify System Group	<ul style="list-style-type: none"> - CPU (usage rate/usage) - Memory (usage rate/usage) - Disk (I/O count/throughput) - Network (Count for data sent/received over network/throughput) - Hardware Resources information 	<p>Check the usage status of physical resources and the capacity of hardware resources (CPU and memory) across the entire system.</p> <ul style="list-style-type: none"> - If a resource was changed, for example because of memory being added within a specified period, only the period after the change will be displayed for that server. - If this was saved in Excel(R) format, the information for all resources is displayed in a list on the [ALL] sheet. <p> Point</p> <hr style="border-top: 1px dotted blue;"/> <ul style="list-style-type: none"> - The CPU performance (MHz) displayed is the performance value of one CPU core. - The loaded memory displayed is the memory capacity that is available for actual use. <hr style="border-top: 1px dotted blue;"/>
P2V simulation	- Specifications for displays that include P2V simulations	<ul style="list-style-type: none"> - CPU Usage - Memory Usage - Disk I/O Count - Disk Throughput - Count for data sent/received over network - Network Throughput 	<p>The resource usage status can be simulated for a case where the selected servers are aggregated on one virtual environment.</p> <p>If a value becomes too great throughout a period of time or there is a bias depending on the time of day or day of the week, consider the combinations of the servers to be aggregated.</p> <p>If a tolerated threshold value was set, this checks that the value is not greatly exceeded.</p> <p>Not available with scheduled reports.</p>

 **Note**

The above report types are not displayed for servers being monitored by Agents from Systemwalker Service Quality Coordinator V13.5.0 or earlier or by an Agent for agentless monitoring.

4.2.1.2 Effective Use of Resources

4.2.1.2.1 VMware virtual machine relocation

 **Note**

- For VMware ESX (ssh connection), there are items that cannot be collected, so reports from this category cannot be used.
- When performing VMware Virtual machine relocation simulations, register only one virtual host on the vCenter within a single system group.

Reports	Analysis target and condition settings	Display item	Description
VMware rsc. usage cond. (List of host)	G Specify System Group	<ul style="list-style-type: none"> - CPU (usage rate/usage) - Memory (usage rate/usage) - Disk (I/O count/throughput) - Network (Count for data sent/received over network/throughput) - Hardware Resources information 	<p>Track resource use on the VMware virtual hosts registered in the system group.</p> <p>Virtual hosts with available resources will be detected as virtual hosts that might be aggregated.</p> <p>The overall CPU frequency (MHz) displayed is the total of all CPU cores fitted.</p>
VMware rsc. usage cond. (Virtual machine stack)	H Specify System Group and Host	<ul style="list-style-type: none"> - CPU Usage - Memory Usage - Disk I/O Count - Disk Throughput - Count for data sent/received over network - Network Throughput 	<p>Check the virtual machines located in the virtual host and their resource usage on the cumulative graph for the virtual hosts considered as migration sources in "VMware rsc. usage cond. (List of host)".</p> <p>Check the resource usage in each virtual machine in the migration source, and use this information to work out which virtual machine should go to which destination candidate host.</p>
VMware virtual machine relocation simulation	- Specifications for displays that include simulations of VMware Virtual machine relocation	<ul style="list-style-type: none"> - CPU Usage - Memory Usage - Disk I/O Count - Disk Throughput - Count for data sent/received over network - Network Throughput 	<p>Simulate the resource usage if virtual machines considered as migration candidates are relocated to virtual hosts considered as migration targets. Check results on graphs by time period, by day of the week, and by time series.</p> <p>Not available with scheduled reports.</p>

4.2.1.2.2 VMware resource allocation optimization



For VMware ESX (ssh connection), there are items that cannot be collected, so reports from this category cannot be used.

Reports	Analysis target and condition settings	Display item	Description
VMware rsc. usage cond. (List of virtual machine)	H Specify System Group and Host	<ul style="list-style-type: none"> - CPU (usage rate/usage) - Memory (usage rate/usage) 	<p>The resource usage status of the virtual machines on the selected virtual host are displayed in a list.</p> <p>Sort by CPU usage rate and memory usage rates to detect virtual machines with available resources and reduce the allocation of resources to virtual machines with low usage rates.</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that values over 100% may be displayed.</p>

4.2.1.2.3 VMware tuning guidance



For VMware ESX (ssh connection) and VMware ESX 3.5, there are items that cannot be collected, so reports from this category cannot be used.

Reports	Analysis target and condition settings	Display item	Description
VMware CPU tuning guidance	H Specify System Group and Host	- Tuning guidance	Check if there is a problem with the CPU usage status of the host or virtual machine. Refer to the tuning guidance when displayed.
		- Virtual Host, CPU Usage Rate	<ul style="list-style-type: none"> - If the CPU usage rate of the host is constantly above 90% and the CPU wait rate on the virtual machine is constantly above 20% CPU waits are occurring due to overloading of the CPU. Consider increasing physical CPUs. - If the CPU usage rate of the host is constantly above 90% and the CPU wait rate on one of the virtual machines is constantly above 90% There is a bias in usage. Review the allocation of virtual CPUs in the virtual machines. - If the CPU usage rates on machines other than the host (0) are constantly above 90% and the CPU wait rate on the virtual machine is constantly above 20% CPUs are being overloaded, but CPU waits are not occurring. If batch processes are slow, consider switching to CPUs with higher CPU performance. <p>Warning level: CPU usage rate of virtual host >= 90%</p>


Reports	Analysis target and condition settings	Display item	Description
		<ul style="list-style-type: none"> - Virtual Machine, CPU Usage Rate - Virtual Machine, Average CPU Usage Rate - Virtual Machine, CPU Wait Rate 	<ul style="list-style-type: none"> - CPU usage rate is calculated with each physical CPU having a value of 100%. This means that values over 100% may be displayed. - If there is no problem with the CPU usage rate of the host, but the CPU usage rate (per CPU) of the virtual machines is constantly above 90% Review the allocation of virtual CPUs in the virtual machines, (for example, by allocating virtual CPUs that are not being used on other virtual machines). Also, check that there are no problems with specific applications running on the virtual machines. If there are no problems, move the virtual machine to a different host, or migrate to a different virtual machine. - If there is no problem with the CPU usage rate of the virtual machine, but the CPU wait rate is constantly above 20% There may have been an over-allocation of virtual CPUs. Review the overcommit rate. <p>Warning level: Virtual machine Average CPU usage rate (per CPU) >= 90% Virtual machine CPU wait rate >= 20%</p>
VMware Memory (Host) tuning guidance	H Specify System Group and Host	- Tuning guidance	Check if there is a problem with the memory usage status of the virtual host. Refer to the tuning guidance when displayed.
		- Virtual Host, Swap Occurrence Status	<ul style="list-style-type: none"> - When swap is occurring There is insufficient memory. Consider expanding memory. Warning level: Swap occurrence status > 0 MB
		- Virtual Host, Memory Usage Status	<ul style="list-style-type: none"> - When swapping volume is greater than 0 Swapping may have occurred previously. Check whether memory insufficiency has occurred at times other than when creating and starting the virtual machine. Warning level: Swapping volume > 0 MB/sec - When the Memory compression volume is greater than 0 This may be due to insufficient physical memory. Consider expanding memory if there are problems with performance. Warning level:

Reports	Analysis target and condition settings	Display item	Description
			<p>Memory compression volume > 0 MB/sec</p> <p>- When balloon occurrence is greater than 0</p> <p>This may be due to insufficient physical memory. Consider expanding memory if there are problems with performance.</p> <p>Warning level:</p> <p>Balloon occurrence > 0 MB/sec</p>
		- Virtual Host, Memory Usage	<p>- When the available memory is less than 6% of the total</p> <p>Indications of future memory insufficiency such as ballooning, memory compression, and swapping, may have already occurred. Consider expanding memory to prevent memory insufficiency occurring.</p> <p>Warning level:</p> <p>Free memory rate < 6%</p>
VMware memory (Virtual machine) tuning guidance	H Specify System Group and Host	- Tuning guidance	Check if there is a problem with the memory usage status of the virtual machine. Refer to the tuning guidance when displayed.
		- Virtual Machine, Swap Occurrence Status(Reads/Writes)	<p>- When swap occurrence status (reads) or (writes) is greater than 0</p> <p>Swap is occurring and there is insufficient memory. Consider expanding the memory.</p> <p>Warning level:</p> <p>Swap occurrence status (reads) > 0 MB Swap occurrence status (writes) > 0 MB</p>
		- Virtual Machine, Swap Wait Rate	<p>- When swap wait rate is greater than 0</p> <p>CPU waits are occurring on the virtual machine and there is insufficient memory. Review the allocation of memory on the virtual machines.</p> <p>Warning level:</p> <p>Swap wait rate > 0%</p>
		- Virtual Machine, Swap Amount	<p>- When swap usage volume is greater than 0</p> <p>Swapping may have occurred previously. Check whether memory insufficiency has occurred at times other than when creating and starting the virtual machine.</p> <p>Warning level:</p> <p>Swap usage volume > 0 MB/sec</p>
		- Virtual Machine, Memory Compression Amount	<p>- When the memory compression status is greater than 0</p>

Reports	Analysis target and condition settings	Display item	Description
			<p>This may be due to insufficient physical memory. Consider expanding the memory if there are problems with performance.</p> <p>Warning level: Memory compression status > 0 MB/sec</p>
		- Virtual Machine, Memory Extension Amount	<p>- When the memory extension status is greater than 0</p> <p>This may be due to insufficient physical memory. Consider expanding the memory if there are problems with performance.</p> <p>Warning level: Memory extension status > 0 MB/sec</p>
		- Virtual Machine, Balloon Occurrence Amount	<p>- When the balloon usage volume is greater than 0</p> <p>This may be due to insufficient physical memory. Consider expanding the memory if there are problems with performance.</p> <p>Warning level: Balloon usage volume > 0 MB/sec</p>
VMware Physical Disk	H Specify System Group and Host	<ul style="list-style-type: none"> - Virtual Host, Physical Disk Throughput(Reads/Writes) - Virtual Host, Physical Disk I/O Count 	<p>Track disk throughput and the I/O count on the virtual host.</p> <ul style="list-style-type: none"> - When the CM (Controller Module) exceeds the maximum performance of each disk device <p>Consider changing the deployment of RAID groups with high loads to distribute the load.</p> <ul style="list-style-type: none"> - When there are RAID groups that exceed the maximum performance of the disk devices <p>Consider adding RAID groups to distribute the load. If RAID5 is being used, consider changing to RAID0+1 or RAID1.</p>
		- Virtual Host, Physical Disk Driver Access Performance(Reads/Writes)	<p>Check the disk driver access performance of the virtual host.</p> <ul style="list-style-type: none"> - When disk access performance is constantly 4ms or more <ol style="list-style-type: none"> a. When multiple machines are fitted in one datastore, reduce the number of virtual machines fitted in each single datastore (to distribute the load). b. Review the RAID configuration of the RAID group specified in the datastore. (Increase disks and review RAID level). c. Check the makeup of the virtual disks within the same RAID group (datastore).

Reports	Analysis target and condition settings	Display item	Description
			<p>Warning level:</p> <p>Disk access performance (kernel) (reads) ≥ 4 ms *constantly</p> <p>Disk access performance (kernel) (writes) ≥ 4 ms *constantly</p>
		- Virtual Host, Physical Disk Kernel Access Performance(Reads/Writes)	<p>Check the disk kernel access performance of the virtual host.</p> <p>- When disk access performance is constantly 20ms or more</p> <p>a. When multiple machines are fitted in one datastore, reduce the number of virtual machines fitted in each single datastore (to distribute the load).</p> <p>b. Review the RAID configuration of the RAID group specified in the datastore. (Increase disks and review RAID level).</p> <p>c. Check the makeup of the virtual disks within the same RAID group (datastore).</p> <p>Warning level:</p> <p>Disk access performance (driver) (reads) ≥ 20 ms *constantly</p> <p>Disk access performance (driver) (writes) ≥ 20 ms *constantly</p>
VMware Virtual Disk	H Specify System Group and Host	- Virtual Disk Throughput - Virtual Disk I/O Count	<p>Track disk throughput and the I/O count on the virtual machine.</p> <p>- When the CM (Controller Module) exceeds the maximum performance of each disk device</p> <p>Consider changing the deployment of RAID groups with high loads to distribute the load.</p> <p>- When there are RAID groups that exceed the maximum performance of the disk devices</p> <p>Consider adding RAID groups to distribute the load. If RAID5 is being used, consider changing to RAID0+1 or RAID1.</p>
		- Virtual Disk, Access Performance(Reads/Writes)	Check the disk access performance of the virtual machine.
VMware Physical NIC	H Specify System Group and Host	- Physical NIC, Network Usage Rate(Transmission/Reception)	<p>Track the network usage rate of the physical NIC.</p> <p>- When the network usage rate (transmission) is exceeding a threshold</p> <p>a. The load on a physical NIC is high. Try reviewing the makeup of the physical network and dividing segments. (Refer to the VMware Virtual NIC and see which virtual</p>

Reports	Analysis target and condition settings	Display item	Description
			<p>machines are tying up the bandwidth of the physical NIC).</p> <ul style="list-style-type: none"> - When the network usage rate (reception) is exceeding a threshold <ul style="list-style-type: none"> a. The load on a physical NIC is high. Try reviewing the makeup of the physical network and dividing segments. (Refer to the VMware Virtual NIC and see which virtual machines are tying up the bandwidth of the physical NIC). b. Add physical NICs to the vSwitch connected to the physical NIC where load is high. (Teaming). <p>Warning level: Network usage rate \geq threshold *constantly Circuit type: Threshold When a dedicated circuit is being used: 80% When a switching hub is being used: 60% When a repeater hub is being used: 30%</p>
		<ul style="list-style-type: none"> - Physical NIC, Packet Drop Rate(Transmission/Reception) 	<p>Track the packet drop ratio of the physical NIC.</p> <ul style="list-style-type: none"> - When packet drop rate (reception) is greater than 0 Check the CPU usage rate of the virtual machine and add virtual CPUs if the CPU usage rate is high. Also review the configuration of the virtual machine's network. - When packet drop rate (transmission) is greater than 0 Check the network usage rate of the physical NIC, and move virtual machines connected to physical NIC with high values to vSwitches connected to different physical NICs. Alternatively, add physical NICs to the vSwitch connected to the physical NIC where packet drop is occurring (Teaming). <p>Warning level: Packet drop rate (transmission) $> 0\%$ Packet drop rate (reception) $> 0\%$</p>
VMware Virtual NIC	H Specify System Group and Host	<ul style="list-style-type: none"> - Virtual NIC, Network Usage (Transmission/Reception) 	<p>Check the network usage of virtual NICs.</p>
		<ul style="list-style-type: none"> - Virtual NIC, Packet Drop Rate (Transmission/Reception) 	<p>Check the packet drop ratio of the virtual NIC.</p>

Reports	Analysis target and condition settings	Display item	Description
			 Note <hr style="border-top: 1px dotted orange;"/> <p>The following are not displayed for VMware ESX 3.5, VMware ESX 4.0, or VMware ESX/ESXi 4.1:</p> <ul style="list-style-type: none"> - Virtual NIC packet drop rate (transmission) - Virtual NIC packet drop rate (reception) <hr style="border-top: 1px dotted orange;"/>

4.2.1.3 Demand Forecast

4.2.1.3.1 VMware resource pool

Reports	Analysis target and condition settings	Display item	Description
Resource pool (CPU) (demand forecast)	H Specify System Group, Host, and Resource ID	- Resource Pool(CPU)(demand forecast)	Perform regression analysis based on past CPU usage rates in the resource pool managed by VMware to anticipate the resources that will be used.
Resource pool (Memory) (demand forecast)	H Specify System Group, Host, and Resource ID	- Resource Pool(Memory) (demand forecast)	Perform regression analysis based on past memory usage rates in the resource pool managed by VMware to anticipate the resources that will be used.

4.2.1.3.2 ServerView Resource Orchestrator resource pool


Reports	Analysis target and condition settings	Display item	Description
VM pool (CPU) (demand forecast)	H Specify System Group, Host, and Resource ID	- VM pool (CPU) (demand forecast)	Perform regression analysis based on past CPU usage rates in the VM pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.



Reports	Analysis target and condition settings	Display item	Description
VM pool (Memory) (demand forecast)	H Specify System Group, Host, and Resource ID	- VM pool (Memory) (demand forecast)	Perform regression analysis based on past memory usage rates in the VM pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.
Storage pool (demand forecast)	H Specify System Group, Host, and Resource ID	- Storage pool (demand forecast)	Perform regression analysis based on past usage rates in the storage pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.
Network pool (demand forecast)	H Specify System Group, Host, and Resource ID	- Network pool (demand forecast)	Perform regression analysis based on past usage rates in the network pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.
Server pool (demand forecast)	H Specify System Group, Host, and Resource ID	- Server pool (demand forecast)	Perform regression analysis based on past usage rates in the server pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.
Address pool (demand forecast)	H Specify System Group, Host, and Resource ID	- Address pool (demand forecast)	Perform regression analysis based on past usage rates in the address pool managed by ServerView Resource Orchestrator to anticipate the resources that will be used.

4.2.1.4 Increment Simulation

4.2.1.4.1 Response simulation

Reports	Analysis target and condition settings	Display item	Description
Request count (future prediction)	H Specifications for displays that include	- Request count (future prediction)	Perform regression analysis based on past performance information for Web transactions to anticipate future request volume.

Reports	Analysis target and condition settings	Display item	Description
	request count future predictions		Track the potential future increases in requests compared to the current number of requests.
Response simulation (Request count)	- Specifications for displays that include response simulations (requests or adding servers)	- Response Time(Request Increase)	<p>The correlation coefficient between Web transaction performance information and the performance information of the operating systems of the servers making up the system is analyzed based on past performance, and a simulation can be performed of the trend in daily response times when the number of responses increases (expressed as a multiple of the current number of requests). Determine whether improvements are required in response time.</p> <p>Not available with scheduled reports.</p> <p> Point</p> <p>.....</p> <p>Response simulation is a simulation of response times, achieved by analyzing the relationship between the number of service requests in the past and the performance information (OS) of the various servers. The precision of the simulation can be increased by excluding time periods when batch processes are performed (after hours, for example) that have no bearing on actual request processes.</p> <p>Confirm the precision of the simulation by looking at the '(High)', '(Medium)', and '(Low)' reliability displayed after the response time in the table.</p> <p>'(High)' indicates that the simulation was performed with little interference and the precision of the simulation is therefore high.</p> <p>'N/A' is displayed in the table if the simulation could not be performed because no performance information was found or no correlation was achieved between the number of requests and the performance information of the OS.</p> <p>The reliability can be improved by increasing the period in Analysis Conditions, and taking actions to decrease interference by excluding periods when batch work is performed, such as after hours.</p> <p>Refer to "Operating the Analysis/Planning Window" for information on how to configure analysis conditions.</p> <p>.....</p>
Response simulation (Adding servers)	- Specifications for displays that include response simulations (requests or adding servers)	- Request Times(Adding servers)	<p>The correlation coefficient between Web transaction performance information and the performance information of the operating systems of the servers making up the system is analyzed based on past performance, and a simulation can be performed of the trend in response times when a server is added.</p> <p>Determine where to add servers (in the Web layer, application layer, or database layer) and how many to add to improve response times.</p>

Reports	Analysis target and condition settings	Display item	Description
			<p>Not available with scheduled reports.</p> <p> Point</p> <p>.....</p> <p>Response simulation performs the simulation by analyzing the correlation coefficient between the number of requests and the performance information of the OS, so the precision of the simulated response times improves when there is sufficient correlation.</p> <p>The reliability of the above correlation coefficient is indicated by the three levels displayed in the table; '(High)', '(Medium)', and '(Low)'.</p> <p>'(High)' indicates that the response time has been simulated to a relatively high degree of precision due to sufficient correlations being achieved.</p> <p>'(Medium)' and '(Low)' indicate that the precision of the response time has been reduced due to insufficient correlations being achieved.</p> <p>If there is insufficient performance information for calculation, there may be interference from processes not directly related to requests, such as after-hours batch processing.</p> <p>If this is the case, reliability may be improved by changing the Analysis Conditions settings as shown below:</p> <ul style="list-style-type: none"> - Make the analysis period longer. - Set the times other than service time as times when services are not running, such as nights or days off. <p>Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.</p> <p>.....</p> <p> Note</p> <p>.....</p> <p>If there is no performance information or there are many processes running that are not directly related to the number of requests, a correlation may not be established between the number of requests and the performance information of the OS, making it impossible to generate an analysis, in which case 'N/A' is displayed instead of a value.</p> <p>If this is the case, analysis may be made possible by changing the Analysis Conditions settings as shown below:</p> <ul style="list-style-type: none"> - Make the analysis period longer. - Set the times other than service time as times when services are not running, such as nights or days off.

Reports	Analysis target and condition settings	Display item	Description
			Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.

4.2.1.5 Generic Report

4.2.1.5.1 Generic report



Reports	Analysis target and condition settings	Display item	Description
Future forecast display	H Specifications for displays that include future predictions	-	Displays specified field values as regression line graphs.



4.2.2 Performance Analysis

This section describes the reports used for performance analysis by category.


4.2.2.1 Virtualization Software

4.2.2.1.1 VMware

Reports	Analysis target and condition settings	Display item	Description
VMware (Cluster)	H Specify System Group and Host	- CPU Usage - Memory Usage	The CPU usage and memory usage for the cluster is displayed. This graph makes it easy to see which cluster is using the CPU or memory.  Point It is possible to track CPU and memory usage by cluster. It is also possible to track CPU, memory, and disk by displaying "VMware (Virtual host)".
VMware (Resource pool)	H Specify System Group and Host	- CPU Usage - Memory Usage	The CPU usage and memory usage for the resource pool is displayed. This graph makes it easy to see which resource pool is using the CPU or memory.  Point It is possible to track CPU and memory usage by resource pool.


Reports	Analysis target and condition settings	Display item	Description
			<p>It is also possible to track CPU, memory, and disk by displaying "VMware (Virtual host)".</p> <p>When virtual resources are running low and physical resources are available, the manager can see which resource pools are using the resources in this report and reallocate resources if necessary.</p> <p>.....</p>
VMware (Host)	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate - Free Memory Amount - Disk I/O Count 	Check the usage status of the physical CPU, memory, and disks.
VMware (Virtual machine)	H Specify System Group and Host	- CPU Usage Rate	<p>CPU usages by guest operating systems are stacked for display. This graph makes it easy to see which guests are using the CPU.</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%.</p>
		- Memory Usage	Memory usages by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the memory.
		- Disk I/O Count	Disk I/O by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the disk.
		<p> Point</p> <p>.....</p> <p>Monitoring guest operating systems with Agents enables the system manager to see what is happening with virtual CPUs, memories, and disks.</p> <p>It is also possible to track physical CPU, memory, and disk by displaying "VMware (Virtual host)".</p> <p>When virtual resources are running low and physical resources are available, the manager can see in this report which guests are using the resources and reallocate resources if necessary.</p> <p>.....</p> <p> Note</p> <p>.....</p> <p>With VMware ESX (ssh connection), the name of the Service console or kernel driver may be included as part of the virtual machine name.</p> <p>.....</p>	

4.2.2.1.2 Hyper-V


Reports	Analysis target and condition settings	Display item	Description
Windows server	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate 	Track and compare trends and peaks in the usage status of CPU, disk, and memory.
HyperV (Host)	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate 	<p>Track how much the physical CPU is being used and how much is available.</p> <p>It is possible to see information on the physical memory and disk by displaying the free memory and physical disk busy rate for "Windows Server".</p>
HyperV (Virtual machine)	H Specify System Group and Host	<ul style="list-style-type: none"> - CPU Usage Rate 	<p>CPU usages by guest operating systems are stacked for display. This graph makes it easy to see which guests are using the CPU.</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%.</p>
		<ul style="list-style-type: none"> - Memory Usage 	Memory usages by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the memory.
		<p> Point</p> <p>.....</p> <p>Monitoring guest operating systems with Agents enables the system manager to see what is happening with virtual CPUs and memories.</p> <p>It is also possible to track physical CPU by displaying "HyperV (Virtual host)", and track the physical memory by displaying "Windows Server".</p> <p>When virtual resources are running low and physical resources are available, the manager can see in this report which guests are using the resources and reallocate resources if necessary.</p> <p>.....</p>	

4.2.2.1.3 Linux virtualization function (KVM)

Reports	Analysis target and condition settings	Display item	Description
UNIX server	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate 	Track and compare trends and peaks in the use of the CPU, disk, and memory for the servers registered in the system group.
KVM (Virtual machine)	H Specify System Group and Host	<ul style="list-style-type: none"> - CPU Usage Rate 	<p>CPU usages by guest operating systems are stacked for display. This graph makes it easy to see which guests are using the CPU.</p> <p>CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage</p>


Reports	Analysis target and condition settings	Display item	Description
			rate of the CPUs of guest operating systems will be shown exceeding 100%.
		- Memory Usage	Memory usages by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the memory.
		- Disk I/O Amount	Disk I/O by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the disk.
		 Point Monitoring guest operating systems with Agents enables the system manager to see what is happening with virtual CPUs, memories, and disks. It is also possible to track the physical CPU, memory, and disk by displaying "UNIX Server". When virtual resources are running low and physical resources are available, the manager can see in this report which guests are using the resources and reallocate resources if necessary.	

4.2.2.1.4 Linux virtualization function (Xen)

Reports	Analysis target and condition settings	Display item	Description
UNIX server	G Specify System Group	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Track and compare trends and peaks in the use of the CPU, disk, and memory for the servers registered in the system group.
Xen (Virtual machine)	H Specify System Group and Host	- CPU Usage Rate	CPU usages by guest operating systems are stacked for display. This graph makes it easy to see which guests are using the CPU. CPU usage rate is calculated with each physical CPU having a value of 100%. This means that the cumulative CPU usage rate of the CPUs of guest operating systems will be shown exceeding 100%.
		- Memory Usage	Memory usages by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the memory.
		- Disk I/O Amount	Disk I/O by guest operating systems are stacked for display. This graph makes it easy to see which guest is using the disk.
		 Point Monitoring guest operating systems with Agents enables the system manager to see what is happening with virtual CPUs, memories, and disks.	


Reports	Analysis target and condition settings	Display item	Description
			<p>It is also possible to track the physical CPU, memory, and disk by displaying "UNIX Server".</p> <p>When virtual resources are running low and physical resources are available, the manager can see in this report which guests are using the resources and reallocate resources if necessary.</p> <p>.....</p>



4.2.2.1.5 Solaris Zone

Reports	Analysis target and condition settings	Display item	Description
UNIX server	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate 	Track and compare trends and peaks in the use of the CPU, disk, and memory for the servers registered in the system group.
Solaris Zone (Virtual machine)	H Specify System Group and Host	- CPU Usage Rate	CPU usage rates by zones are stacked for display. This graph makes it easy to see which zone is using the CPU.
		- Memory Usage	Memory usage by zones are stacked for display. This graph makes it easy to see which zone is using the memory.
		 Point <p>.....</p> <p>It is possible to track CPU and memory usage by zone.</p> <p>It is also possible to track the Global Zone CPU, memory, and disk by displaying "UNIX Server".</p> <p>When zone resources are running low and physical resources are available, the manager can see in this report which zones are using the resources and reallocate resources if necessary.</p> <p>.....</p>	

4.2.2.1.6 Solaris Zone (Solaris 10)

This category is not displayed by default. Refer to the point in "4.1 Types of Categories" if displayed.

Reports	Analysis target and condition settings	Display item	Description
Solaris Zone(Solaris 10)	G Specify System Group	<ul style="list-style-type: none"> - CPU Usage Rate - Memory Usage 	<p>Check the status of Solaris Zone resources for the servers registered in the system group.</p> <p> Point <p>.....</p> <p>If Solaris zones are bound to processor sets, the CPU usage rate will be 100% for each processor set.</p> <p>.....</p> </p>

Reports	Analysis target and condition settings	Display item	Description
Solaris Zone(Solaris 10) CPU	H Specify System Group and Host	- CPU Usage Rate	Track trends and peaks for CPU usage rates in Solaris zones.  Point If Solaris zones are bound to processor sets, the CPU usage rate will be 100% for each processor set.
		- CPU Usage Time	Track trends and peaks for CPU usage times in Solaris zones.
Solaris Zone(Solaris 10) memory	H Specify System Group and Host	- Memory Usage Rate	Track trends and peaks for memory usage rates in Solaris zones.
		- Virtual Memory Size	Track trends and peaks for virtual memory size in Solaris zones.
		- Real Memory Size	Track trends and peaks for real memory size in Solaris zones.
Solaris Zone(Solaris 10) CPU (Contour)	H Specify System Group and Host	- CPU Usage Rate	The rise and fall of CPU usage rates is represented by contour lines. Visually track and compare trends and peaks in CPU usage rates. This analysis is based on long-term data usage of approximately one month.  Point If Solaris zones are bound to processor sets, the CPU usage rate will be 100% for each processor set.
Solaris Zone(Solaris 10) memory (Contour)	H Specify System Group and Host	- Memory Usage Rate	The rise and fall of memory usage rates is represented by contour lines. Visually track and compare trends and peaks in memory usage rate. This analysis is based on long-term data usage of approximately one month.

4.2.2.2 Network

4.2.2.2.1 Systemwalker Centric Manager (Network)

Reports	Analysis target and condition settings	Display item	Description
Centric Manager traffic	H Specify System Group and Host	- Line utilization rate	Track and compare trends and peaks in the line utilization rate.
		- Number of octets	Track and compare trends and peaks in the number of octets.
Centric Manager packet	H Specify System	- Number of packets	Track and compare trends and peaks in the number of packets.

Reports	Analysis target and condition settings	Display item	Description
	Group and Host	- Discard packet rate	It can be used to identify interfaces that have a large number of packets that cannot be sent for reasons other than data errors (insufficient buffer size, etc).
		- Error packet rate	It can be used to identify interfaces that have a large number of packets that cannot be sent because of data errors.

4.2.2.2.2 Systemwalker Network Manager

Reports	Analysis target and condition settings	Display item	Description
Network Manager network traffic	H Specify System Group, Host, and Resource ID	- Input network utilization rates - Output network utilization rates	These items display the average and maximum network traffic values, and the time when the maximum traffic occurred. Use the displayed report to locate and correct problems.
Network Manager CPU load	H Specify System Group, Host, and Resource ID	- CPU Usage rate	This item displays the average and maximum CPU usage rates, and the time when the maximum CPU usage occurred. Use the displayed report to locate and correct problems.
Network Manager collision	H Specify System Group, Host, and Resource ID	- Collisions	This item displays the average and maximum numbers of collisions, and the time when the maximum number of collisions occurred. Use the displayed report to locate and correct problems.
Network Manager CRC error	H Specify System Group, Host, and Resource ID	- CRC Errors	This item displays the average and maximum numbers of CRC errors, and the time when the maximum number of CRC errors occurred. Use the displayed report to locate and correct problems.
Network Manager drop packet	H Specify System Group, Host, and Resource ID	- Input drop packets - Output drop packets	These items display the average and maximum numbers of dropped packets, and the time when the maximum number of dropped packets occurred. Use the displayed report to locate and correct problems.

Reports	Analysis target and condition settings	Display item	Description
Network Manager transfer packet	H Specify System Group, Host, and Resource ID	- Input packets - Output packets	These items display the average and maximum numbers of sent and received packets, and the time when the maximum number of sent and received packets occurred. Use the displayed report to locate and correct problems.
Network Manager discard packet	H Specify System Group, Host, and Resource ID	- Input packets discard - Output packets discard	These items display the average and maximum numbers of discarded packets, and the time when the maximum number of discarded packets occurred. Use the displayed report to locate and correct problems.
Network Manager error packet	H Specify System Group, Host, and Resource ID	- Input error packets - Output error packets	These items display the average and maximum numbers of error packets, and the time when the maximum number of error packets occurred. Use the displayed report to locate and correct problems.
Network Manager IP operating rates	H Specify System Group, Host, and Resource ID	- IP Operating rates	This item displays the average IP operating rate, the downtime length and the downtime frequency. Use the displayed report to locate and correct problems.
Network Manager RTT	H Specify System Group, Host, and Resource ID	- RTT - Ping	These items display the average and maximum RTT values, and the average and maximum ping loss rates. Use the displayed report to locate and correct problems.

4.2.2.2.3 TcpNetwork

This category is not displayed by default. Refer to the point in "[4.1 Types of Categories](#)" if displayed.

Reports	Analysis target and condition settings	Display item	Description
TcpNetwork	H Specify System	- Number of TCP packets transferred	If application processing performance is slow even though there are no problems with server resources (CPU, memory, disk), network performance may be causing a bottleneck.

Reports	Analysis target and condition settings	Display item	Description
	Group, Host, and Resource ID	- Size of TCP packets transferred	Take the appropriate action with reference to the graph.
		- Resend rate, duplicated reception rate, packet loss rate	Take the appropriate action with reference to the graph.
		- Network problem situation	Take the appropriate action with reference to the graph.

4.2.2.3 Storage

4.2.2.3.1 ETERNUS SF Storage Cruiser (SAN Storage)

Reports	Analysis target and condition settings	Display item	Description
Storage CM CPU usage rate	H Specify System Group, Host, and Resource ID	- CM CPU Usage Rate	Track and compare trends and peaks in the CM (Controller Module) CPU usage rate. When the CPU usage rate of one or more CMs is 85% or greater, and the CPU usage rates of the remaining CMs are 75% or greater, there is the possibility that all CMs are under a high load.
Storage CM (ROE) CPU usage rate	H Specify System Group, Host, and Resource ID	- CM(ROE) CPU Usage Rate	Track and compare trends and peaks in the CM (Controller Module) ROE usage rate. When the ROE usage rate is high, it is likely that there have been a massive number of accesses to encrypted volumes or to RAID6. When the ROE usage rate is low, and the CM CPU usage rate is high, it is likely that there have been a massive number of accesses to unencrypted volumes or to RAIDGroups other than those at the RAID6 level.
Storage disk busy	H Specify System Group, Host, and Resource ID	- Disk Busy	Track and compare trends and peaks in the disk usage rate. When the disk usage rate is 80% or greater, high-load applications may be concentrated in the same RAID group. Alternatively, the RAID configuration of the relevant RAID group may not be suitable.
Storage throughput	H Specify System Group, Host, and Resource ID	- Throughput	Track and compare trends and peaks in the throughput.

Reports	Analysis target and condition settings	Display item	Description
Storage IOPS	H Specify System Group, Host, and Resource ID	- IOPS	Track and compare trends and peaks in the IOPS.
Storage response time	H Specify System Group, Host, and Resource ID	- Response time	Track and compare trends and peaks in response times.
Storage cache hit rate	H Specify System Group, Host, and Resource ID	- Cache Hits	Track and compare trends and peaks in the cache hit rate.

4.2.2.3.2 ETERNUS SF Storage Cruiser (NAS)

Reports	Analysis target and condition settings	Display item	Description
NAS CPU usage rate	H Specify System Group, Host, and Resource ID	- NAS CPU usage rate	Track and compare trends and peaks in CPU usage rates.
NAS NFS OPS	H Specify System Group, Host, and Resource ID	- NAS NFS OPS	Track and compare trends and peaks in NFS handling performance.
NAS CIFS OPS	H Specify System Group, Host, and Resource ID	- NAS CIFS OPS	Track and compare trends and peaks in CIFS processing performance.

Reports	Analysis target and condition settings	Display item	Description
	Resource ID		
NAS HTTP OPS	H Specify System Group, Host, and Resource ID	- NAS HTTP OPS	Track and compare trends and peaks in HTTP processing performance.
NAS network traffic	H Specify System Group, Host, and Resource ID	- Amount of network input data - Amount of network output data	Track and compare trends and peaks in network traffic.
NAS Amount of DISK R/W data	H Specify System Group, Host, and Resource ID	- Amount of reading data from disk - Amount of writing data to disk	Track and compare trends and peaks in disk read and write data amounts.
NAS Amount of tape R/W data	H Specify System Group, Host, and Resource ID	- Amount of reading data from tape - Amount of writing data to tape	Track and compare trends and peaks in tape read and write data amounts.

4.2.2.4 OS

4.2.2.4.1 Windows


Reports	Analysis target and condition settings	Display item	Description
Windows server	G Specify System Group	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Check the status of resource usage for the servers registered in the system group.
Windows CPU	H Specify System	- CPU Usage Rate(User, System)	Track and compare trends and peaks in CPU usage rates.

Reports	Analysis target and condition settings	Display item	Description
	Group and Host		<p>If the CPU usage rate consistently exceeds 80%, a CPU bottleneck may be degrading performance, or such a problem may be about to occur.</p> <p>It is necessary to consider taking actions such as increasing or upgrading the CPUs, adjusting the application execution schedule, or relocating some applications to a different server.</p> <p>Warning level: CPU usage rate > 80%</p>
		- CPU Queue Length	<p>If the number of CPU queue requests is consistently high, increasing the number of CPUs may be more effective than upgrading the CPU.</p> <p>Conversely, if the CPU usage rate is high when there are no queue requests, it indicates that the CPU performance is not enough to handle single processes, so a processor upgrade is recommended.</p> <p>Warning level: CPU queue length > 2</p>
Windows physical disks	H Specify System Group and Host	- Disk Busy	<p>Track and compare trends and peaks in load for each disk.</p> <p>If the physical disk busy rate continuously exceeds 60%, the disk load is causing a bottleneck and performance problems are either occurring now or may occur in the future.</p> <p>Warning level: Physical disk busy >= 60%</p>
		- Disk Usage Rate	<p>Track and compare trends and peaks of I/O requests for each disk.</p> <p>If the number of physical disk queue requests is two or more, the disk load is causing a bottleneck and performance problems are either occurring now or may occur in the future. It is necessary to take actions such as distributing the disk load or adding disks.</p> <p>Warning level: Number of physical disk queue requests >= 2</p>
Windows disk space	H Specify System Group and Host	- Free Memory	Track and compare trends and peaks usage of each disk.
Windows memory	H Specify System Group and Host	- Page ins/Page outs	<p>Track and compare trends and peaks in free memory amount.</p> <p>If the amount of available memory space approaches 4 MB intermittently, insufficient memory is causing a bottleneck, and performance problems are either occurring now or may occur in the future.</p> <p>Warning level:</p>



Reports	Analysis target and condition settings	Display item	Description
			Available memory capacity < 4 MB
		- Disk Usage Rate	Refer to the graph when responding to paging.
Windows process	H Specify System Group and Host	- CPU Time	This graph makes it possible to identify processes that consume too much CPU time.
		- Working set Size	A cumulative graph showing the size of the working set used by different processes. In the case of a computer that has a high rate of physical memory usage rate, this analysis makes it possible to identify which processes consume a large amount of physical memory.
		- Pagefile Size	A cumulative graph of the pagefile required for different processes. In the case of a computer that has a high rate of virtual memory usage, this analysis makes it possible to identify which processes consume a large amount of virtual memory.
Windows CPU (Contour)	H Specify System Group and Host	- CPU Usage Rate	The rise and fall of the CPU usage rate is represented by contour lines. Visually track and compare trends and peaks in CPU usage rates. This analysis is based on long-term data usage of approximately one month.
Windows physical disk (Contour)	H Specify System Group and Host	- Physical Disk Busy	The rise and fall of the physical disk busy rate is represented by contour lines. Visually track and compare trends and peaks in the physical disk busy rate. This analysis is based on long-term data usage of approximately one month.
Windows memory (Contour)	H Specify System Group and Host	- Free Memory	The rise and fall of available memory capacity is represented by contour lines. Visually track and compare trends and peaks available memory capacity. This analysis is based on long-term data usage of approximately one month.

4.2.2.4.2 UNIX

Reports	Analysis target and condition settings	Display item	Description
UNIX server	G Specify System Group	- CPU Usage Rate - Free Memory - Physical Disk Busy - Disk Usage Rate	Check the status of resource usage for the servers registered in the system group.
UNIX CPU	H Specify System	- CPU Usage Rate(User, System)	Track and compare trends and peaks in CPU usage rates. If the CPU usage rate consistently exceeds 80%, a CPU bottleneck may be degrading performance, or such a problem may be about to occur.

Reports	Analysis target and condition settings	Display item	Description
	Group and Host		<p>It is necessary to consider taking actions such as increasing or upgrading the CPUs, adjusting the application execution schedule, or relocating some applications to a different server.</p> <p>Warning level: CPU usage rate > 80%</p> <hr/> <p>- CPU Queue Length</p> <p>If CPU queue length > 10 or if CPU execution wait time rate > 90% or more, and (the number of queue requests) divided by (the number of processors) > 2, response may be being degraded because multiple processes are waiting for CPU allocation.</p> <p>If it is not possible to perform interactive job tuning or to restrict the number of concurrent processes, the user should consider increasing the number of CPUs.</p> <p>If CPU execution wait time rate > 90% and the number of queue requests < 1, a single program may be monopolizing the CPU.</p> <p>If there are no problems with the interactive job response, etc, there is no need to perform tuning. If there is a problem, lower the priority of the program that is monopolizing the CPU. Note that if there are any other resources that are experiencing a bottleneck, increasing the number of CPUs is unlikely to improve the situation.</p> <p>Warning level: CPU execution wait time rate > 90 and Requests count < 1</p> <p> Note</p> <hr style="border-top: 1px dotted orange;"/> <p>This information is displayed when a Solaris server is analyzed and reported.</p> <hr style="border-top: 1px dotted orange;"/>
UNIX physical disk	H Specify System Group and Host	- Average Disk Busy	<p>Track and compare trends and peaks in load for each disk.</p> <p>Disk access wait times start to become noticeable when the physical disk busy rate exceeds 60%. When this rate reaches 80%, wait times, including the average access times, may start to become two to three times longer than normal.</p> <p>When the trend is towards 80% or higher, there is more than likely a bottleneck being caused by disk load.</p> <p>Bottlenecks caused by disk load can be diagnosed from the following items. You will need to consider taking actions to reduce the load, such as increasing the number of disks, or moving files to disk devices that have a lower load rate (i.e., review the disposition of data):</p> <p>Disk busy</p>

Reports	Analysis target and condition settings	Display item	Description
			<p>Service times in disk access</p> <p>Disk Queue</p> <p>Warning level:</p> <p>Disk Busy rate $\geq 60\%$ and</p> <p>Service Time $\geq 30(\text{ms})$ and</p> <p>Number of disk queue requests ≥ 2</p>
		- Service Times	<p>Service time is defined as the average time required to completely process a single I/O request.</p> <p>This time also includes the time spent waiting for the completion of processing of requests in the I/O queue.</p> <p>Warning level:</p> <p>Service Time $\geq 30(\text{ms})$</p>
		- Physical Disk Waiting Request Number	<p>Track and compare trends and peaks of I/O requests for each disk.</p> <p>When the service time in disk access is equal to or greater than 30 ms, and there are a large number of requests waiting, it is likely that there is a concentration of access requests to the disk. Review the disposition of data.</p> <p>When the service time in disk access is equal to or greater than 30 ms, and there are not a large number of requests waiting, it is likely that there are disk devices with high loads connected within the same controller.</p> <p>Warning level:</p> <p>Service Time $\geq 30(\text{ms})$</p> <p>and</p> <p>Number of disk queue requests < 2</p>
UNIX disk space	H Specify System Group and Host	- Disk Usage Rate	Track and compare trends and peaks usage of each disk.
UNIX memory	H Specify System Group and Host	- Free Memory	<p>Track and compare trends and peaks in available memory capacity.</p> <p>If the amount of available memory space approaches the lotsfree kernel parameter (units: KB) intermittently, insufficient memory is causing a bottleneck, and performance problems are either occurring now or may occur in the future.</p> <p>Warning level:</p> <p>Available memory capacity $< \text{lotsfree}$</p>
		- Swap ins/Swap outs	When swap-in is occurring:

Reports	Analysis target and condition settings	Display item	Description
			<p>There is no problem because the memory insufficiency is temporary and swapped out processes are just being swapped in.</p> <p>When swap-out is occurring:</p> <p>There is no problem because the memory insufficiency is temporary and only unnecessary processes are swapped out.</p> <p>These phenomena occur due to a large amount of processes being generated temporarily.</p> <p>When both are occurring:</p> <p>Currently swapping should not normally occur with UNIX. There may be a severe memory insufficiency which requires an increase in memory.</p> <p> Note</p> <p>.....</p> <p>This information is displayed when a Solaris server is analyzed and reported.</p> <p>.....</p>
UNIX process	H Specify System Group and Host	- CPU Time	This graph makes it possible to identify processes that consume too much CPU time.
		- Memory Usage Rate	<p>A cumulative graph showing the memory usage rate of different processes.</p> <p>Determine which process is the cause of memory insufficiencies that occur.</p> <p> Note</p> <p>.....</p> <p>The graph showing the top ten processes using memory is not displayed in Linux.</p> <p>.....</p>
UNIX CPU (Contour)	H Specify System Group and Host	- CPU Usage Rate	<p>The rise and fall of the CPU usage rate is represented by contour lines. Visually track and compare trends and peaks in CPU usage rates.</p> <p>This analysis is based on long-term data usage of approximately one month.</p>
UNIX physical disk (Contour)	H Specify System Group and Host	- Physical Disk Busy (Contour)	<p>The rise and fall of the physical disk busy rate is represented by contour lines. Visually track and compare trends and peaks in the physical disk busy rate.</p> <p>This analysis is based on long-term data usage of approximately one month.</p>
UNIX memory (Contour)	H Specify System Group and Host	- Free Memory	<p>The rise and fall of available memory capacity is represented by contour lines. Visually track and compare trends and peaks in memory usage.</p> <p>This analysis is based on long-term data usage of approximately one month.</p>

4.2.2.4.3 Common to all operating systems

Reports	Analysis target and condition settings	Display item	Description
Disk space	G Specify System Group	- Disk Usage Rate - Disk Availability	Check the status of disk usage for the servers registered in the system group.

4.2.2.5 Web

4.2.2.5.1 Web transaction

Reports	Analysis target and condition settings	Display item	Description
Web transaction	G Specify System Group	- Request count - Traffic - Error count	Track and compare trends and peaks in the number of requests for each service and the time used for the requests. If the number of requests in each service, or the time required by requests exceeds the expected value, the user can consider taking actions such as adding another Web server.
Web transaction request	H Specify System Group, Host, and Resource ID	- Web transaction request(Request Count,Time Taken)	Track and compare trends and peaks in traffic volume for each service. If the volume of traffic exceeds the expected value, the user can consider taking actions such as adding another Web server.
Web transaction hitserver	H Specify System Group, Host, and Resource ID	- Hit Server Count	Track the occurrence of server hits in each service.
Web transaction hitclient	H Specify System Group, Host, and Resource ID	- Hit Client Count	Track the occurrence of client hits in each service.
Web transaction hitremote	H Specify System Group, Host, and Resource ID	- Hit Remote Count	Track the occurrence of remote hits in each service.

Reports	Analysis target and condition settings	Display item	Description
Web transaction traffic	H Specify System Group, Host, and Resource ID	- Traffic	Track and compare trends and peaks in traffic volume for each service. If the volume of traffic exceeds the expected value, the user can consider taking actions such as adding another Web server.
Web transaction error	H Specify System Group, Host, and Resource ID	- Error count	Track the occurrence of errors in each service.

4.2.2.6 Application

4.2.2.6.1 Interstage Application Server (IJSERVER Cluster)

Reports	Analysis target and condition settings	Display item	Description
Interstage IJSERVER Cluster	G Specify System Group	- Current Heap Size - Current Perm - Garbage Collection	Check the JavaVM heap and Perm area usage amount, and garbage collection occurrences for the servers registered in the system group.
Interstage IJSERVER Cluster JVM	H Specify System Group, Host, and Resource ID	- Heap Size(avg/max/min)	Displays Java VM heap information. Track and compare trends and peaks in the heap information.
		- Perm Size(avg/max/min)	Displays Java VM Perm area information. Track and compare trends and peaks in Perm area information.
		- Garbage collections	Displays Java VM Garbage collection information. Track the occurrence of Garbage collections.
Interstage IJSERVER Cluster JTA	H Specify System Group, Host, and Resource ID	- Transaction(avg/max/min)	Displays information about transactions used by applications. Track and compare trends and peaks in transaction counts.
Interstage IJSERVER Cluster JDBC	H Specify System Group, Host, and	- Connection Pool(avg/max/min)	Information about JDBC connections that are pooled by Interstage. Track and compare trends and peaks in connection counts.

Reports	Analysis target and condition settings	Display item	Description
	Resource ID	- Connection Acquisition Wait Status(avg/max/min)	<p>When an attempt is made to obtain a connection from the pool but the maximum number of connections has already been reached, the system will wait for the connection timeout period until a connection is returned. This information relates to waiting for the connection to be returned.</p> <p>Track and compare trends and peaks in the frequency of connection waiting and the number of threads that are waiting for a connection.</p>
Interstage IJServer Cluster Thread Pool	H Specify System Group, Host, and Resource ID	- Work items in queue	<p>The number of work items in the queue.</p> <p>Track the number of work items in a queue.</p>
		- Total busy threads	<p>This is the total number of busy threads in a thread pool.</p> <p>Track the total number of busy threads in a thread pool.</p>
		- Average completion time of work items	<p>This is statistical information about the average completion time of work items.</p> <p>Track the average completion time of work items.</p>
		- Total usable threads	<p>This is the total number of usable threads in a thread pool.</p> <p>Track the total number of usable threads in a thread pool.</p>

4.2.2.6.2 Interstage Application Server (Work Unit)

Reports	Analysis target and condition settings	Display item	Description
Interstage(EJB)	G Specify System Group	- EJB Application Processing Time	Check the processing times for EJB applications of the servers registered in the system group.
Interstage(TD)	G Specify System Group	- Object Processing Time	Check the processing times for transaction applications of the servers registered in the system group.
Interstage(CORBA)	G Specify System Group	- Implementation Repository ID Processing Time	Check the processing times for CORBA applications of the servers registered in the system group.
Interstage(IJServer)	G Specify System Group	- Current Heap Size - Current Perm	Check the size used by the heap and Perm area of the JavaVM of the servers registered in the system group.
Interstage EJB application	H Specify System Group,	- EJB Application Processing Time(avg/max/min)	The maximum, minimum and average processing times for EJB applications.

Reports	Analysis target and condition settings	Display item	Description
	Host, and Resource ID		<ul style="list-style-type: none"> - When the maximum processing time for an entire period (one day) is long and the average processing time is close to the maximum processing time. The following causes are possible: <ul style="list-style-type: none"> - There is a performance-related problem with the server application. - The load on the system is high. Review the server applications and the system, giving particular attention to the above factors. - When the maximum, minimum and average processing times within a specific period are long. The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status. - When the maximum processing time is long but the average processing time is short and close to the minimum processing time. The following causes are possible: <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. Review the system and server applications, giving particular attention to the above factors.
		- Wait Time(avg/max/min)	<p>The maximum, minimum and average times from when a client receives a request until a method commences processing.</p> <ul style="list-style-type: none"> - When the maximum, minimum and average wait times during a specific period are long. The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status. - When the maximum wait time is long but the average wait time is short and close to the minimum wait time. The following causes are possible: <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. Review the system and server applications, giving particular attention to the above factors. - When the maximum wait time and the average wait time are long throughout a performance monitoring period. The performance of a server application is not sufficient to handle the number of requests from a client. Take

Reports	Analysis target and condition settings	Display item	Description
			actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.
		- Requests / Wait Queues	<p>The cumulative number of processes that have been handled by the object since performance monitoring began, and the maximum number of requests that had to await processing by the object.</p> <ul style="list-style-type: none"> - When there are many processes and process wait requests within a specific period. <p>The number of requests to a server application within a specific period has increased. When the performance of a server application is not sufficient to handle the number of requests from a client, take actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance of other server applications as well to confirm the load status.</p> <ul style="list-style-type: none"> - When the number of process wait requests is large but the average wait time is short. <p>Use the isinfobj command to regularly check the queue status, and also check the load status during the collection interval.</p>
		- VM memory used	<p>Maximum and average values of the amount of VM memory used.</p> <p>If a large amount of VM memory is being used, there may be a memory leak. Review the server applications with a view to identifying objects that can be deleted.</p>
		- Sessions	<p>The number of current EJB objects.</p> <p>If the number of EJB objects has become larger than the number of connected (deployed) clients, this means that EJB objects may not have been removed when each session was disconnected, for every EJB object created when the session was established. If this is the case, make sure that each EJB object is removed when the session is disconnected.</p>
Interstage CORBA application	H Specify System Group, Host, and Resource ID	- Processing Time(avg/max/min)	<p>The maximum, minimum and average processing times for CORBA applications.</p> <ul style="list-style-type: none"> - When the maximum processing time for an entire period (one day) is long and the average processing time is close to the maximum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - There is a performance-related problem with the server application. - The load on the system is high. <ul style="list-style-type: none"> - When the maximum, minimum and average processing times within a specific period are long.

Reports	Analysis target and condition settings	Display item	Description
			<p>The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status.</p> <ul style="list-style-type: none"> - When the maximum processing time is long but the average processing time is short and close to the minimum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. <p>Review the system and server applications, giving particular attention to the above factors.</p>
		<ul style="list-style-type: none"> - Wait Time(avg/max/min) 	<p>The maximum, minimum and average times from when a client receives a request until an operation commences processing.</p> <ul style="list-style-type: none"> - When the maximum, minimum and average wait times during a specific period are long. <p>The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status.</p> <ul style="list-style-type: none"> - When the maximum wait time is long but the average wait time is short and close to the minimum wait time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. <p>Review the system and server applications, giving particular attention to the above factors.</p> <ul style="list-style-type: none"> - When the maximum wait time and the average wait time are long throughout a performance monitoring period. <p>The performance of a server application is not sufficient to handle the number of requests from a client. Take actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.</p>
		<ul style="list-style-type: none"> - Requests / Wait Queues 	<p>The cumulative number of processes that have been handled by the object since performance monitoring began, and the maximum number of requests that had to await processing by the object.</p> <ul style="list-style-type: none"> - When there are many processes and process wait requests within a specific period. <p>The number of requests to a server application within a specific period has increased. When the performance of a server application is not sufficient to handle the number</p>

Reports	Analysis target and condition settings	Display item	Description
			<p>of requests from a client, take actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance of other server applications as well to confirm the load status.</p> <ul style="list-style-type: none"> - When the number of process wait requests is large but the average wait time is short. <p>Use the isinfobj command to regularly check the queue status, and also check the load status during the collection interval.</p>
Interstage transaction application	H Specify System Group, Host, and Resource ID	<ul style="list-style-type: none"> - Object Processing Time(avg/max/min) 	<p>The maximum, minimum, and average processing times for transaction applications.</p> <ul style="list-style-type: none"> - When the maximum processing time for an entire period (one day) is long and the average processing time is close to the maximum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - There is a performance-related problem with the server application. - The load on the system is high. - When the maximum, minimum and average processing times within a specific period are long. <p>The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status.</p> - When the maximum processing time is long but the average processing time is short and close to the minimum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. <p>Review the system and server applications, giving particular attention to the above factors.</p>
		<ul style="list-style-type: none"> - Wait Time(avg/max/min) 	<p>The maximum, minimum and average times from when a client receives a request until an object commences processing.</p> <ul style="list-style-type: none"> - When the maximum, minimum and average wait times during a specific period are long. <p>The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status.</p> - When the maximum wait time is long but the average wait time is short and close to the minimum wait time. <p>The following causes are possible:</p>

Reports	Analysis target and condition settings	Display item	Description
			<ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. <p>Review the system and server applications, giving particular attention to the above factors.</p> <ul style="list-style-type: none"> - When the maximum wait time and the average wait time are long throughout a performance monitoring period. <p>The performance of a server application is not sufficient to handle the number of requests from a client. Take actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition.</p>
		- Requests/Wait queues	<p>The cumulative number of processes that have been handled by the object since performance monitoring began, and the maximum number of requests that had to await processing by the object.</p> <ul style="list-style-type: none"> - When there are many processes and process wait requests within a specific period. <p>The number of requests to a server application within a specific period has increased. When the performance of a server application is not sufficient to handle the number of requests from a client, take actions to raise the performance of server applications, such as increasing the number of concurrent processes in the Work Unit definition. Measure the performance of other server applications as well to confirm the load status.</p>
Interstage IJServer JVM	H Specify System Group, Host, and Resource ID	- Heap Size(avg/max/min)	Track and compare trends and peaks in Java VM heap information.
		- Perm Size(avg/max/min)	Track and compare trends and peaks in Java VM Perm area information.
		- Garbage collections(avg/max/min)	Track and compare trends and peaks in the number of occurrences of Garbage collection in Java VM.
Interstage IJServer JTA	H Specify System Group, Host, and Resource ID	- Transaction(avg/max/min)	<p>Displays information about transactions used by applications.</p> <p>Track and compare trends and peaks in transaction counts.</p>
Interstage IJServer JDBC	H Specify System Group, Host, and Resource ID	- Connection Pool(avg/max/min)	<p>Information about JDBC connections that are pooled by Interstage.</p> <p>Track and compare trends and peaks in connection counts.</p>
		- Connection Acquisition Wait Status(avg/max/min)	When an attempt is made to obtain a connection from the pool but the maximum number of connections has already been reached, the system will wait for the connection timeout

Reports	Analysis target and condition settings	Display item	Description
			<p>period until a connection is returned. This information relates to waiting for the connection to be returned.</p> <p>Track and compare trends and peaks in the frequency of connection waiting and the number of threads that are waiting for a connection.</p>
		- Establishment of Physical Connection (avg/max/min)	<p>Information about established connections and discarded connections.</p> <p>Track and compare trends and peaks in the number of established connections.</p>
		- Acquisition of Connection from Application (avg/max/min)	<p>Information about connections used by applications.</p> <p>Track and compare trends and peaks in the number of established connections, etc.</p>
Interstate IJServer SERVLET CONTAINER	H Specify System Group, Host, and Resource ID	- Number sum total of Threads (avg/max/min)	<p>Information about the total number of threads.</p> <p>Track and compare trends and peaks in thread counts.</p>
		- Number of Threads currently in progress (avg/max/min)	<p>Information about the number of threads currently being processed.</p> <p>Track the number of threads currently being processed.</p>
Interstate IJServer SERVLET WEBMODULE	H Specify System Group, Host, and Resource ID	- The effective number of Sessions (avg/max/min)	Check the number of valid sessions.
Interstage IJServer EVENT SERVICE	H Specify System Group, Host, and Resource ID	- Number of Connected consumers (avg/max/min)	Check the number of connected consumers.
		- Number of Connected suppliers (avg/max/min)	Check the number of connected suppliers.
		- Number of Accumulated event data items (avg/max/min)	Check the number of accumulated event data items.

4.2.2.6.3 Oracle WebLogic Server

Reports	Analysis target and condition settings	Display item	Description
WebLogic Server	G	<ul style="list-style-type: none"> - Current heap size - Garbage collection 	Check the JavaVM heap information for the servers registered in the system group and number of occurrences of Garbage collections.

Reports	Analysis target and condition settings	Display item	Description
	Specify System Group		

4.2.2.6.4 Microsoft .NET

Reports	Analysis target and condition settings	Display item	Description
MS-.NET	G Specify System Group	- Requests Count - Wait Queues	Check the number of requests and the request queue status for the servers registered in the system group.
MS-.NET ASP.NET	H Specify System Group, Host, and Resource ID	- Waiting Demands for Processing Count	<p>Track the number of MS-.NET requests waiting to be processed.</p> <ul style="list-style-type: none"> - When the maximum processing time for an entire period (one day) is long and the average processing time is close to the maximum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - There is a performance-related problem with the server application. - The load on the system is high. <p>Review the server applications and the system, giving particular attention to the above factors.</p> <ul style="list-style-type: none"> - When the maximum, minimum and average processing times within a specific period are long. <p>The load on the system may be high during a specific time period. Measure the performance of other server applications as well to confirm the load status.</p> <ul style="list-style-type: none"> - When the maximum processing time is long but the average processing time is short and close to the minimum processing time. <p>The following causes are possible:</p> <ul style="list-style-type: none"> - The system load became high temporarily. - There is a performance-related problem with a server application under specific conditions. <p>Review the system and server applications, giving particular attention to the above factors.</p>
		- Application Reboot Count	<p>Track the number of MS-.NET application reboots.</p> <p>Take the appropriate action with reference to the graph.</p>
		- Worker Process Reboot Count	<p>Track the MS-.NET worker process reboot count.</p> <p>Take the appropriate action with reference to the graph.</p>

Reports	Analysis target and condition settings	Display item	Description
MS-.NET Applications	H Specify System Group, Host, and Resource ID	- Transaction Count	Track the number of MS-.NET transactions. Take the appropriate action with reference to the graph.
		- Number of Execution Requests	Track the number of MS-.NET execution requests. Take the appropriate action with reference to the graph.
		- Session Count	Track the number of active MS-.NET sessions. Take the appropriate action with reference to the graph.
		- Error Count	Track the total number of MS-.NET errors. Take the appropriate action with reference to the graph.
MS-.NET Remote procedure	H Specify System Group, Host, and Resource ID	- Total Number of Remote Procedure Calls	Track the total number of remote procedure calls for MS-.NET. Take the appropriate action with reference to the graph.

4.2.2.6.5 SAP NetWeaver

Reports	Analysis target and condition settings	Display item	Description
SAP	G Specify System Group	- Dialog Response Time - Enqueue Enqueue Requests/Queue Length - Background Utilization - Execution Waiting RFC Total Calls	Check the Dialog response time, number of Enqueue requests and queue length, background usage rate, and number of RFC calls waiting for execution on SAP on the servers registered in the system group.
SAP Enqueue(Request)	H Specify System Group, Host, and Resource ID	- Enqueue Requests	Track and compare trends and peaks in the number of enqueue requests.
		- Enqueue Requests Errors	Track and compare trends and peaks in the number of enqueue request errors.
		- Dequeue Requests	Track and compare trends and peaks in the number of dequeue requests.
		- Dequeue Requests Errors	Track and compare trends and peaks in the number of dequeue request errors.
		- Exclusion lock wait time	Track and compare trends and peaks in the time that parallel processes spend waiting to access lock tables.
		- Server time	Track and compare trends and peaks in the time spent in the enqueue server.

Reports	Analysis target and condition settings	Display item	Description
		- Runtime of data collector	Track and compare trends and peaks in the time that the data collector (the RSCOLL00 program) spends executing.
SAP Enqueue(QueLength)	H Specify System Group, Host, and Resource ID	- Queue Length	Enqueue server monitoring object: Track and compare trends and peaks in queue length.
		- Utilization (Lock owner)	Track and compare trends and peaks in the usage rates for lock owners within lock tables.
		- Utilization (Lock arguments)	Track and compare trends and peaks in the usage rates for lock arguments within lock tables.
		- Utilization (Elementary Locks)	Track and compare trends and peaks in the usage rates for elementary locks within lock tables.
		- Errors	Track and compare trends and peaks in the number of errors that occur with enqueue work processes.
SAP Dialog	H Specify System Group, Host, and Resource ID	- Response Time	Track and compare trends and peaks in the response times for the Dialog Service.
		- Front End Wait Time	Track and compare trends and peaks in front-end standby times.
		- Dispatcher Wait Time	Track and compare trends and peaks in the dispatcher standby times for each dialog step.
		- Load /Generation Time	Track and compare trends and peaks in the load/generation times for GUI objects.
		- Roll Time	Track and compare trends and peaks in roll times.
		- DB Request Time	Track and compare trends and peaks in the processing times for logical database requests.
		- Load Factor	Track and compare trends and peaks in the rate of load that Dialog processes place on the application server.
		- Dispatcher wait time	Track and compare trends and peaks in the number of Dialog steps.
SAP Spool	H Specify System Group, Host, and Resource ID	- Load Factor	Track and compare trends and peaks in the load rate for spool work processes.
		- Errors	Track and compare trends and peaks in the number of errors that occur with spool work processes.
SAP Background	H Specify System Group, Host, and Resource ID	- Load Factor	Track and compare trends and peaks in the load rate for background work processes.
		- Errors	Track and compare trends and peaks in the number of errors that occur with background work processes.
SAP Update	H Specify System Group,	- Response Time	SAP Update task V1: Track and compare trends and peaks in the response times for each Dialog Step.
		- Dispatcher wait time	SAP Update task V1: Track and compare trends and peaks in the dispatcher standby times in dispatcher queues.

Reports	Analysis target and condition settings	Display item	Description
	Host, and Resource ID	- Load factor (V1)	SAP Update task V1: Track and compare trends and peaks in the load for update task work processes.
		- Errors (V1)	Track and compare trends and peaks in the number of errors that have occurred for Update 1 work processes.
		- Load factor (V2)	SAP Update task V2: Track and compare trends and peaks in the load for update 2 task work processes.
		- Errors (V2)	Track and compare trends and peaks in the number of errors that have occurred for Update 2 work processes.
SAP Roll Paging	H Specify System Group, Host, and Resource ID	- Paging area utilization	Track and compare trends and peaks in the paging area usage rate.
		- Roll area utilization	Track and compare trends and peaks in the roll area usage rate.
SAP Memory	H Specify System Group, Host, and Resource ID	- Extended Memory Utilization	Track and compare trends and peaks in the extended memory usage rate.
		- Heap Memory Utilization	Track and compare trends and peaks in the heap memory usage rate.
		- Management Slots Utilization	Track and compare trends and peaks in the usage rate for EM management slots.
		- Work Processes	Track and compare trends and peaks in the number of work processes in PRIV mode.
SAP Buffers	H Specify System Group, Host, and Resource ID	- Buffer Utilization	Track and compare trends and peaks in the buffer usage rate.

4.2.2.6.6 Workload

This category is not displayed by default. Refer to the point in "4.1 Types of Categories" if displayed.

Reports	Analysis target and condition settings	Display item	Description
Workload	H Specify System Group, Host, and Resource ID	- Allocated CPU - Used CPU	Track and compare the amount of allocated CPU resources and the amount of used CPU resources for resource modules. Take the appropriate action with reference to the graph.

4.2.2.7 Database

4.2.2.7.1 Symfoware server

Reports	Analysis target and condition settings	Display item	Description
Symfoware	G Specify System Group	<ul style="list-style-type: none"> - Buffer hit ratio - Buffer Dry up - SQL executions - Deadlocks 	Check the buffer cache hit rate, number of deadlocks, and number of SQL executions in Symfoware on the servers registered in the system group.
Symfoware shared buffer	H Specify System Group, Host, and Resource ID	- Buffer Hit Ratio	<p>The rate at which the shared buffer was hit (%).</p> <p>Fine-tune the shared buffer.</p> <p>Note that when application programs that mainly access a wide area of the table are executed without the addition of indexes, the on-buffer hit rate will become 0% or something similar, but this does not indicate a problem.</p>
		- Buffer Dry Up	<p>The number of times that no unused buffers were available.</p> <p>Fine-tune the shared buffer.</p>
Symfoware log area	H Specify System Group, Host, and Resource ID	- Recovery Log Over Count	<p>The number of times that the recovery log overflowed and a checkpoint occurred.</p> <p>Check the size of the recovery log, and increase it as necessary.</p>
		- Transaction Entry Dry Up Count	<p>Indicates if the transaction entries have been used up.</p> <p>Increase the number of transaction entries.</p>
		- BI Log Dry Up Count	<p>Indicates if the BI log area has been used up.</p> <p>Increase the size of the BI log area.</p>
Symfoware disk I/O	H Specify System Group, Host, and Resource ID	- DB Space I/O	<p>The number of I/O operations for each database space.</p> <p>Take the appropriate action with reference to the graph.</p>
Symfoware database space usage rate	H Specify System Group, Host, and Resource ID	- Database Space Usage Rate	Track and compare usage trends and peaks for each database space.

4.2.2.7.2 Oracle database

Reports	Analysis target and condition settings	Display item	Description
Oracle	G Specify System Group	- Buffer cache hit ratio - Deadlocks	Check the buffer cache hit rate and number of deadlocks on the Oracle servers registered in the system group.
Oracle SGA	H Specify System Group, Host, and Resource ID	- Buffer Cache Hit Ratio	The role of buffer caches is to reduce the number of accesses to the disk (data files). Increase the value of the initialization parameter "DB_BLOCK_BUFFERS" or "DB_CACHE_SIZE" that specifies the size of the buffer cache. * "DB_CACHE_SIZE" is a new initialization parameter that was added in Oracle9i. * Pay attention to the remaining physical memory capacity.
		- REDO log buffer cache	The REDO log buffer cache stores the information that is written to the online REDO log. If processing to write to the REDO log buffer cache enters a wait state, increase the value of the initialization parameter "LOG_BUFFERS". If I/O processing performed from the REDO log buffer cache to a disk enters a wait state, move the REDO log file to a dedicated disk or a high-speed RAID device. If the REDO log file is located on the file system, consider using direct I/O or moving to a raw device.
		- Library Cache Hit Ratio	The library cache stores the SQL statements that have been parsed and can be executed. Increase the value of the initialization parameter "SHARED_POOL_SIZE". Pay attention to the remaining physical memory capacity.
		- Data Dictionary Cache Hit Ratio	The dictionary cache stores data dictionary information such as the status of file space for database segments (indexes, sequence, tables, etc) and object permissions. Increase the value of the initialization parameter "SHARED_POOL_SIZE". Pay attention to the remaining physical memory capacity.
Oracle PGA	H Specify System Group, Host, and Resource ID	- Memory sort hit rate	Sorts should be performed in memory whenever possible. Sorting in memory is far quicker than using the disk. Increase the value of the initialization parameter "SORT_AREA_SIZE" or "PGA_AGGREGATE_TARGET". * "PGA_AGGREGATE_TARGET" is a new initialization parameter that was added in Oracle9i.

Reports	Analysis target and condition settings	Display item	Description
			<p>* Pay attention to the remaining memory capacity.</p> <p>* Because changes to the above initialization parameter can change the execution plans for optimizing all SQL statements, be wary of changing the value, unless the memory sort hit rate has become a major problem.</p>
Oracle disk I/O	H Specify System Group, Host, and Resource ID	- Amount of free table space area	<p>Displays the minimum value for the available tablespace capacity.</p> <p>Expand or add data files.</p>
		- Volume of database I/O	<p>Displays the volume of database I/O.</p> <p>Take the appropriate action with reference to the graph.</p>
Oracle resource conflict	H Specify System Group, Host, and Resource ID	- Ratio of zero rollback segment wait time	<p>Ideally, rollback segment header waiting should be kept to zero or a very small amount.</p> <p>When rollback segments are being used, there are an insufficient number of rollback segments and some need to be added.</p> <p>* If the UNDO table space is being used in Oracle9i or later, tuning will take place automatically.</p>
Oracle table space usage rate	H Specify System Group, Host, and Resource ID	- Oracle tablespace	Track and compare trends and peaks in usage for each tablespace.

4.2.2.7.3 Microsoft SQL Server

Reports	Analysis target and condition settings	Display item	Description
MS-SQL	G Specify System Group	<ul style="list-style-type: none"> - Buffer cache hit ratio - Deadlocks Count - Transaction Count 	Check the buffer cache hit rate and number of deadlocks on SQL Servers on the servers registered in the system group.
MS-SQL ACCESS METHOD	H Specify System Group, Host, and Resource ID	<ul style="list-style-type: none"> - Full Scan Count - Index Count 	<p>Track and compare MS-SQL access methods.</p> <p>Take the appropriate action with reference to the graph.</p>
MS-SQL Server BUFFER	H	- Buffer Cache Hit Count	<p>Track the number of MS-SQL buffer cache hits.</p> <p>Take the appropriate action with reference to the graph.</p>

Reports	Analysis target and condition settings	Display item	Description
	Specify System Group, Host, and Resource ID	- Access Count	Track the number of MS-SQL accesses. Take the appropriate action with reference to the graph.
MS-SQL Server CMGR	H Specify System Group, Host, and Resource ID	- Cache hit rate	Track MS-SQL cache hit rates. Take the appropriate action with reference to the graph.
		- Hits Count	Track the number of MS-SQL hits. Take the appropriate action with reference to the graph.
MS-SQL Server DATABASES	H Specify System Group, Host, and Resource ID	- Transaction Count	Track the number of MS-SQL transactions. Take the appropriate action with reference to the graph.
		- Active Transaction Count	Track the number of MS-SQL active transactions. Take the appropriate action with reference to the graph.
		- Log Area Ratio	Track the MS-SQL log area ratio. Take the appropriate action with reference to the graph.
MS-SQL Server GENERALSTATISTICS	H Specify System Group, Host, and Resource ID	- Number of Connected Users	Track the number of connected users for MS-SQL. Take the appropriate action with reference to the graph.
MS-SQL Server LOCKS	H Specify System Group, Host, and Resource ID	- Deadlocks Count	Track the number of MS-SQL deadlocks. Take the appropriate action with reference to the graph.
		- Number of standby waiting lock requests	Track the number of MS-SQL standby waiting lock requests. Take the appropriate action with reference to the graph.
MS-SQL Server MEMORY	H Specify System Group, Host, and Resource ID	- Total Amount of Memory	Track the memory capacity for MS-SQL. Take the appropriate action with reference to the graph.
MS-SQL Server STATISTICS	H Specify System Group, Host, and Resource ID	- Number of SQLS Batch Requests	Track the number of requests for MS-SQL batches. Take the appropriate action with reference to the graph.

Reports	Analysis target and condition settings	Display item	Description
	Resource ID		

4.2.2.8 Job

4.2.2.8.1 Systemwalker Operation Manager

Reports	Analysis target and condition settings	Display item	Description
Operation Manager	G Specify System Group	<ul style="list-style-type: none"> - Job multiplicity - Number of execution waiting jobs - Number of jobs that have exceeded the predicted time - Number of jobs that end - Number of Error Jobs 	Check the multiplicity and jobs waiting for execution on the Systemwalker Operation Manager in the servers registered in the system group.
Operation Manager subsystem	H Specify System Group, Host, and Resource ID	- Job multiplicity of each Subsystem (Job multiplicity, Network/Distributed execution job multiplicity)	Track and compare trends and peaks in job multiplicity of each subsystem (Job multiplicity, Network/Distributed execution job multiplicity). If the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, review job schedules and reduce the level of concurrency.
		- Job net multiplicity of each Subsystem	Check deviations and peaks in the job net concurrency of different subsystems.
		- Number of execution waiting jobs of each Subsystem	Track and compare trends and peaks in the number of pending jobs in different subsystems. If the number of pending jobs is large, review the job execution schedule.
		- Execution waiting time of each Subsystem	Track and compare trends and peaks in the job execution wait times of different subsystems. If the execution wait time is long and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of each Subsystem	Track and compare trends and peaks in the number of jobs with execution time overruns in different subsystems. If the number of jobs with execution time overruns is large and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
		- Number of completed jobs by subsystem	Track and compare trends and peaks in the number of completed jobs in different subsystems. The number of completed jobs by subsystem also includes the following number of error jobs by subsystem.

Reports	Analysis target and condition settings	Display item	Description
		- Number of error jobs by subsystem	Track the number of error jobs in different subsystems.
Operation Manager queue	H Specify System Group, Host, and Resource ID	- Job multiplicity of each Queue (Job multiplicity, Network/Distributed execution job multiplicity)	Track and compare trends and peaks in job multiplicity of each Queue (Job multiplicity, Network/Distributed execution job multiplicity). If the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, review job schedules and reduce the level of concurrency.
		- Job net multiplicity of each Queue	Track and compare trends and peaks in the job net multiplicity of different queues.
		- Number of execution waiting jobs of each Queue	Track and compare trends and peaks in the number of pending jobs in different queues. If the number of pending jobs is large, review the job execution schedule.
		- Execution waiting time of each Queue	Track and compare trends and peaks in the job execution wait times of different queues. If the execution wait time is long and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of each Queue	Track and compare trends and peaks in the number of jobs with execution time overruns in different queues. If the number of jobs with execution time overruns is large and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
Operation Manager project	H Specify System Group, Host, and Resource ID	- Job multiplicity of each Project	Track and compare trends and peaks in the job multiplicity of different projects. If the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, review job schedules and reduce the level of concurrency.
		- Job net multiplicity of each Project	Track and compare trends and peaks in the job net multiplicity of different projects.
		- Number of execution waiting jobs of each Project	Track and compare trends and peaks in the number of pending jobs in different projects. If the number of pending jobs is large, review the job execution schedule.
		- Execution waiting time of each Project	Track and compare trends and peaks in the job execution wait times of different projects. If the execution wait time is long and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
		- Number of jobs that have exceeded the predicted time of each Project	Track and compare trends and peaks in the number of jobs with execution time overruns in different projects. If the number of jobs with execution time overruns is large and the CPU usage rate, available memory capacity, disk usage rate, or some other item exceeds a warning level, take actions to reduce the level of job concurrency.
		- Number of completed jobs by project	Track and compare trends and peaks in the number of completed jobs in different projects.

Reports	Analysis target and condition settings	Display item	Description
			The number of completed jobs by project also includes the following number of error jobs by project.
		- Number of error jobs by project	Track the number of completed error jobs in different projects.

4.2.2.9 Service Bus

4.2.2.9.1 Interstage Service Integrator

Reports	Analysis target and condition settings	Display item	Description
ISI Sequence	G Specify System Group	- Number of transactions	Check the ISI sequence information of the servers registered in the system group.
ISI Queue	G Specify System Group	- Number of retention	Check the ISI queue information of the servers registered in the system group.
ISI Sequence	H Specify System Group, Host, and Resource ID	- Number of transactions	Track and compare trends and peaks in the number of process in each sequence.
ISI Queue	H Specify System Group, Host, and Resource ID	- Number of retention	Track and compare trends and peaks in the number of remaining items in each queue.

4.2.2.10 Service

4.2.2.10.1 Service operational information

Reports	Analysis target and condition settings	Display item	Description
HTTP service	G Specifications for	- HTTP Operating rate	Check the status of the HTTP service to be monitored that is registered in the system group.

Reports	Analysis target and condition settings	Display item	Description
	displays that include service operational information		
SMTP service	G Specifications for displays that include service operational information	- SMTP Operating rate	Check the status of the SMTP service to be monitored that is registered in the system group.
DNS service	G Specifications for displays that include service operational information	- DNS Operating rate	Check the status of the DNS service to be monitored that is registered in the system group.
PORT service	G Specifications for displays that include service operational information	- PORT Operating rate	Check the status of the PORT to be monitored that is registered in the system group.

4.2.2.10.2 End user response

Reports	Analysis target and condition settings	Display item	Description
End user response	G	- End user response	Check the status of the response times of the URLs that are registered in the system group.

Reports	Analysis target and condition settings	Display item	Description
	Specify System Group		

4.2.2.11 Generic report

4.2.2.11.1 Generic report

Reports	Analysis target and condition settings	Display item	Description
Time-series	H Specify detailed items	-	Displays specified field values as chronological graphs and tables.
Summary data time series display	H Specify detailed items	-	Display the summary data as a time-series graph or table.
Correlation display	H Specifications for displays that include correlations/compositions	-	Displays two specified field values as correlation graphs and regression line graphs.
Contour display	H Specifications for displays that include contours	-	Displays specified fields as contour graphs. This analysis is based on long-term data usage of approximately one month.
Comparison display of the past	H Specifications for displays that include past	-	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


Reports	Analysis target and condition settings	Display item	Description
	comparisons		
Transition comparison display according to day	H Specifications for displays that include daily transition comparisons	-	Displays a graph that compares data trends for the specified date and time period.
Composite display	H Specifications for displays that include correlations/compositions	-	Displays a graph that allows two different items (such as response time and CPU usage rate) to be compared side-by-side.


4.2.3 History

This section explains the history display.

4.2.3.1 History

4.2.3.1.1 History

Reports	Analysis target and condition settings	Display item	Description
-	-	-	<p>Displays reports created previously.</p> <p>Up to 50 reports are saved in the history.</p> <p>If this number is exceeded, reports will be automatically deleted in chronological order, starting from the oldest.</p> <p> Point</p> <p>.....</p> <p>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 another folder.</p> <p>.....</p>

Reports	Analysis target and condition settings	Display item	Description
			 Note <hr style="border-top: 1px dotted orange;"/> Reports created in versions V13.5 or earlier have Registered Name displayed in the Report name column. <hr style="border-top: 1px dotted orange;"/>

4.3 Operating the Analysis/Planning Window

This section describes how to operate the **Analysis/Planning** window.

Note

The following kinds of problems may occur if you try to display content (graphs or tables):

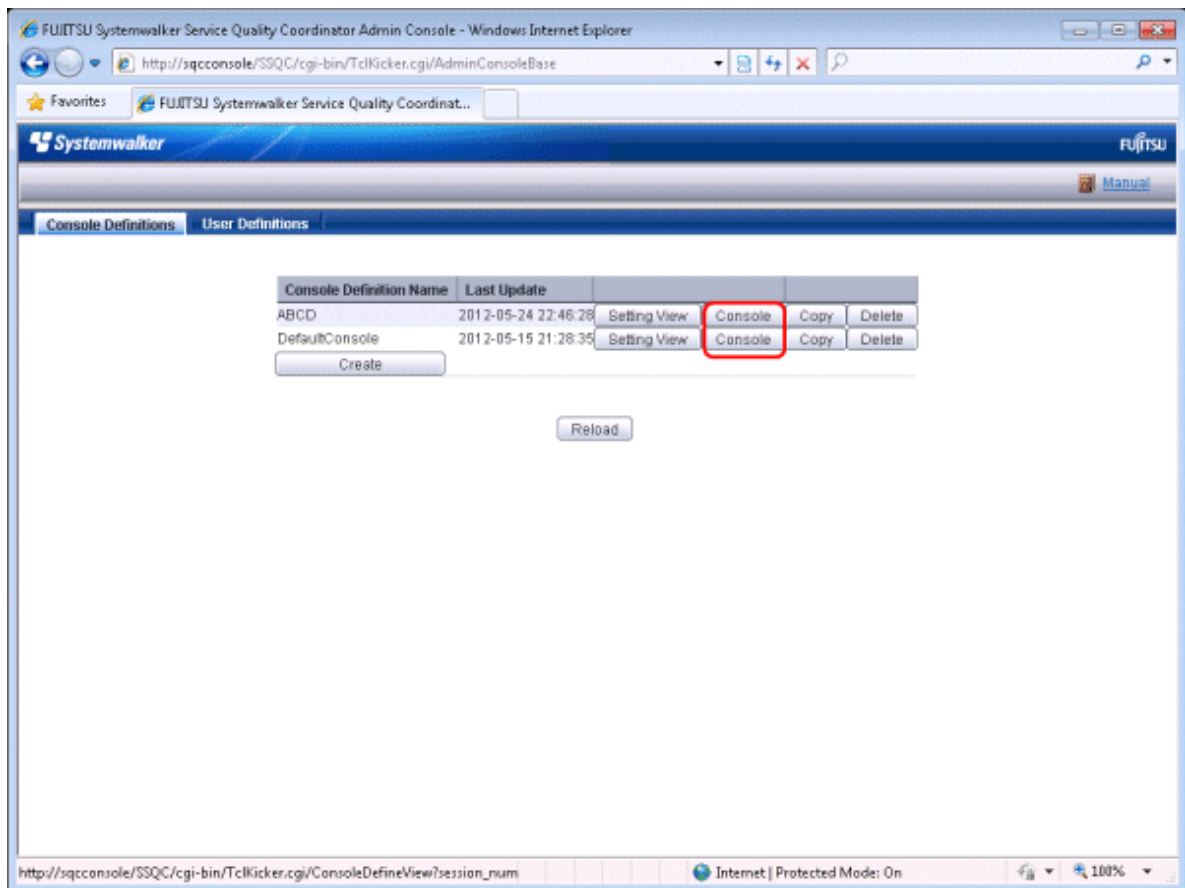
- The operation terminates with error code 1572864.
- "Chart is unavailable" is displayed instead of the graphics for the graph.
- The graph image may be left out (only graphs are not displayed).
- The following error message may be displayed:

"The specified CGI application misbehaved by not returning a complete set of HTTP headers. The headers it did return are: Unable to register TclNotifier window class"
 "ohd_update error."
 "Ohd file create error."

These problems may be due to insufficient space in the desktop heap for the operation management client. Refer to "[6.1 Content Display Errors](#)" to increase the size of the desktop heap.

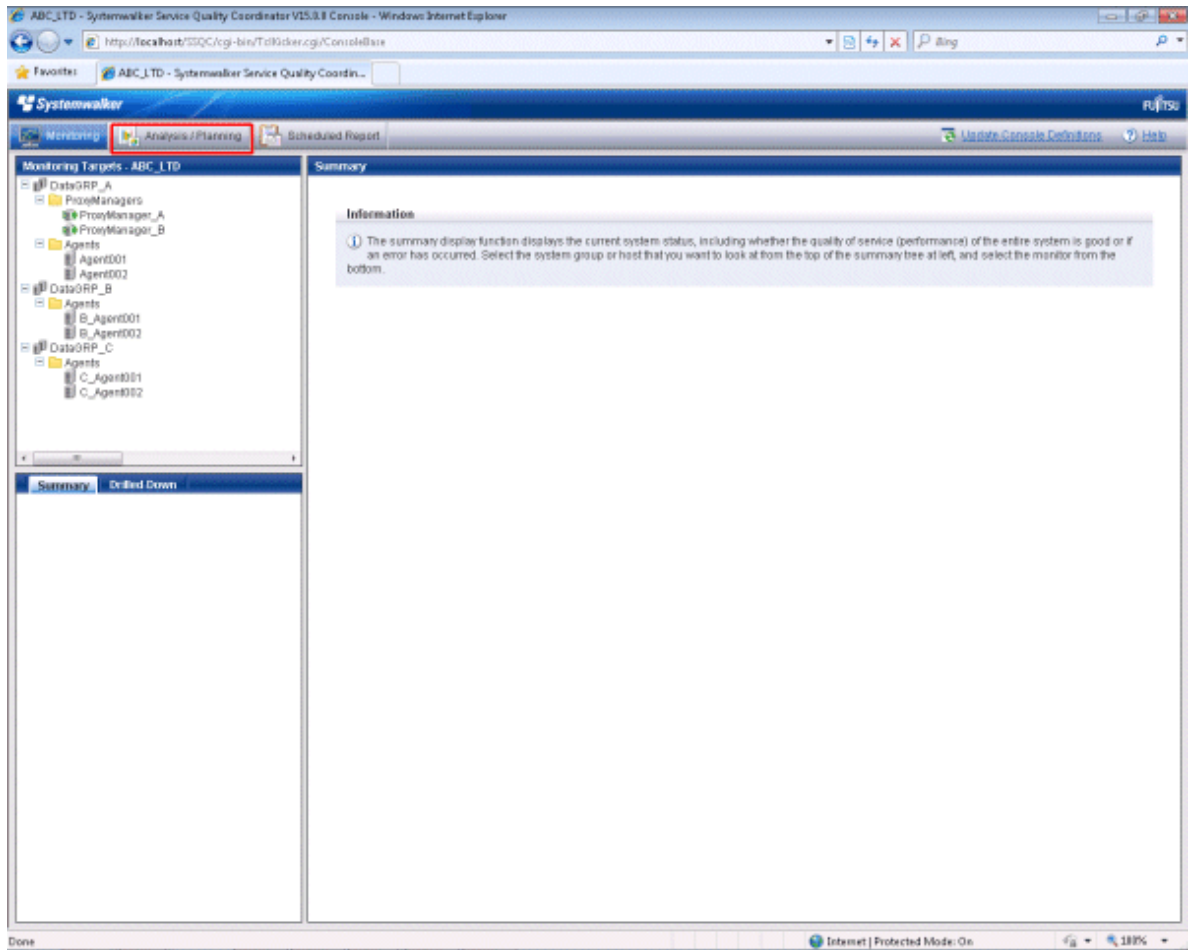
Starting

Start the console by clicking the **Console** button on the **Console Definitions** tab of the **Admin Console** window.



Or start the console directly by specifying the URL.

Click on **Analysis/Planning** on the global navigation bar in the console to start.

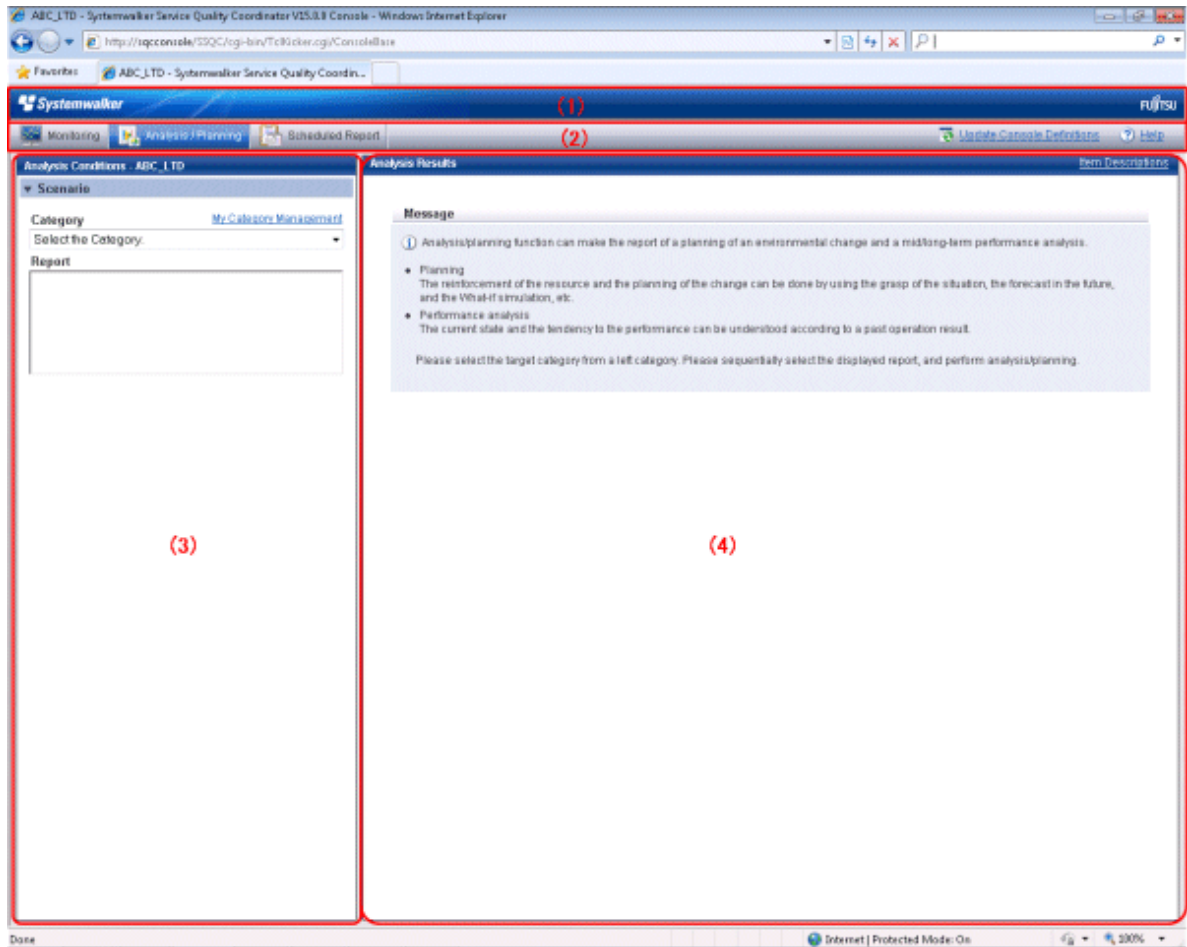


Note

- Do not perform operations in the **Analysis/Planning** window using the pop-up context menu that appears when the right mouse button is clicked.

Window configuration

When started, the following **Analysis/Planning** window is displayed.



The **Analysis/Planning** window is made up of the following:

No.	Component	Description
(1)	Global header	The Systemwalker and Fujitsu logos are displayed.
(2)	Global navigation bar	The menus are as follows: <ul style="list-style-type: none"> - Monitoring Opens the Monitoring window. Allows checks on the current status and isolates faults when they occur. - Analysis/Planning Opens the Analysis/Planning window. Analyze and plan service quality over the medium to long term to avoid future problems. - Scheduled Report Opens the Scheduled Report window. Displays reports about service levels for the customer or for capacity planning. - Update Console Definitions Reloads the console definitions. - Help Opens <i>the User's Guide (Console Edition)</i>.
(3)	Analysis Conditions area	Set and register categories, reports, and the analysis conditions for the various reports. Operations in the Analysis Conditions area are described in the sections that follow.

No.	Component	Description
(4)	Contents display area	The contents of the reports are displayed.

Basic operations

The following operations are possible in the **Analysis/Planning** window.

Operation	Description
Use scenarios to create reports	<p>Analysis and planning that meets your aims is possible by checking each report displayed in the categories in turn.</p> <p>You can use the templates provided with the product and the "My Category" you register for each console.</p> <p>The analysis conditions can be saved when using a My Category.</p>
Refer to the history of created reports	<p>Displays a history of created reports.</p> <p>Up to 50 reports are saved in the history.</p> <p>If this number is exceeded, reports will be automatically deleted in chronological order.</p>
Edit My Category	<p>The following operations are possible with the My Category items you register for each console:</p> <ul style="list-style-type: none"> - My Category Management <ul style="list-style-type: none"> - Add category Categories can be added by copying existing categories or by creating an empty category and copying reports registered in other categories to it. - Modify category name - Delete category - Report Management <ul style="list-style-type: none"> - Add reports - Modify report name - Delete report - Save analysis/planning conditions Conditions can be saved in the currently selected report, or they can be saved using a different name.



See

Refer to "[Basic specifications in the Analysis Conditions area](#)" for details on how to manipulate analysis conditions.

Components in the Analysis Conditions area

Basic specifications in the Analysis Conditions area

No.	Component	Description
(1)	Category	Select a category that matches the purpose of the operation.
(2)	Report	Select a report that matches the purpose of the operation.
(3)	Target Settings	Specify items relating to the report target.
(4)	View Settings	Specify report data intervals, number of display items, and file output. The way to specify the number of display items depends on the type of report. CPU usage rates are used to troubleshoot high CPU usage rates by processes, so the highest are extracted. Available memory capacity is used to avoid system stoppages due to extremely low memory availability, so is extracted from the lowest up. The number of items that can be displayed legibly in the graph is about 10. The graph may be disrupted by the legend if there are more than 10. The graph size can be set in Advanced Settings for some report types.
(5)	Period	Specify the analysis period.
(6)	Display button	Click to display the analysis results in the report content area.

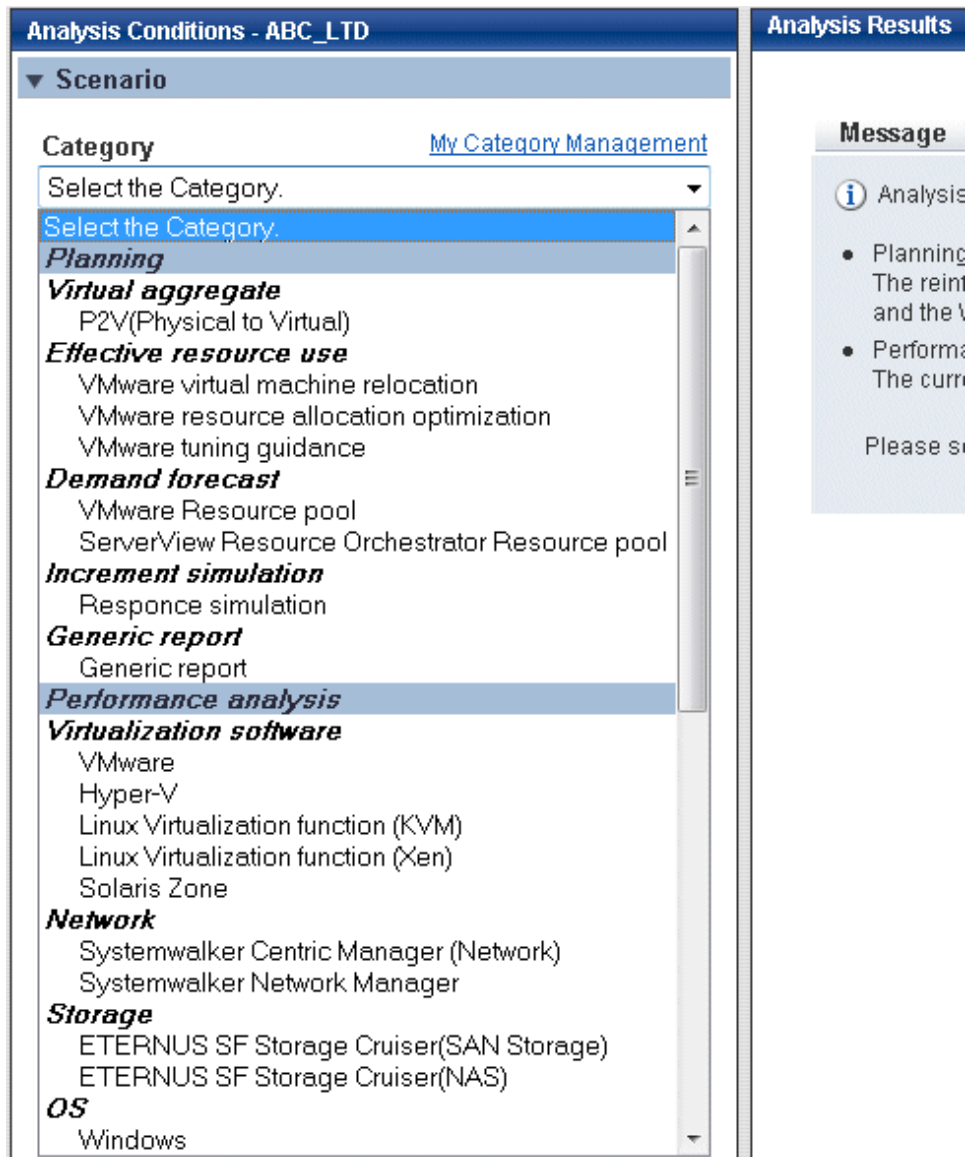
4.3.1 Scenario

Scenarios are prepared in the **Analysis/Planning** window to suit different operational purposes. Perform analysis and planning to suit your aims by checking each report displayed in turn.

4.3.1.1 Category

The reports provided by Systemwalker Service Quality Coordinator are categorized according to operational aims. There are also cases where reports are further divided into separate categories.

First select the category then select the required report in that category.



The screenshot shows the 'Analysis Conditions - ABC_LTD' window. The 'Scenario' section is expanded, showing a 'Category' dropdown menu with 'Select the Category.' selected. Below the dropdown is a list of categories and reports:

- Planning**
 - Virtual aggregate**
 - P2V(Physical to Virtual)
 - Effective resource use**
 - VMware virtual machine relocation
 - VMware resource allocation optimization
 - VMware tuning guidance
 - Demand forecast**
 - VMware Resource pool
 - ServerView Resource Orchestrator Resource pool
 - Increment simulation**
 - Response simulation
 - Generic report**
 - Generic report
- Performance analysis** (highlighted)
 - Virtualization software**
 - VMware
 - Hyper-V
 - Linux Virtualization function (KVM)
 - Linux Virtualization function (Xen)
 - Solaris Zone
 - Network**
 - Systemwalker Centric Manager (Network)
 - Systemwalker Network Manager
 - Storage**
 - ETERNUS SF Storage Cruiser(SAN Storage)
 - ETERNUS SF Storage Cruiser(NAS)
 - OS**
 - Windows

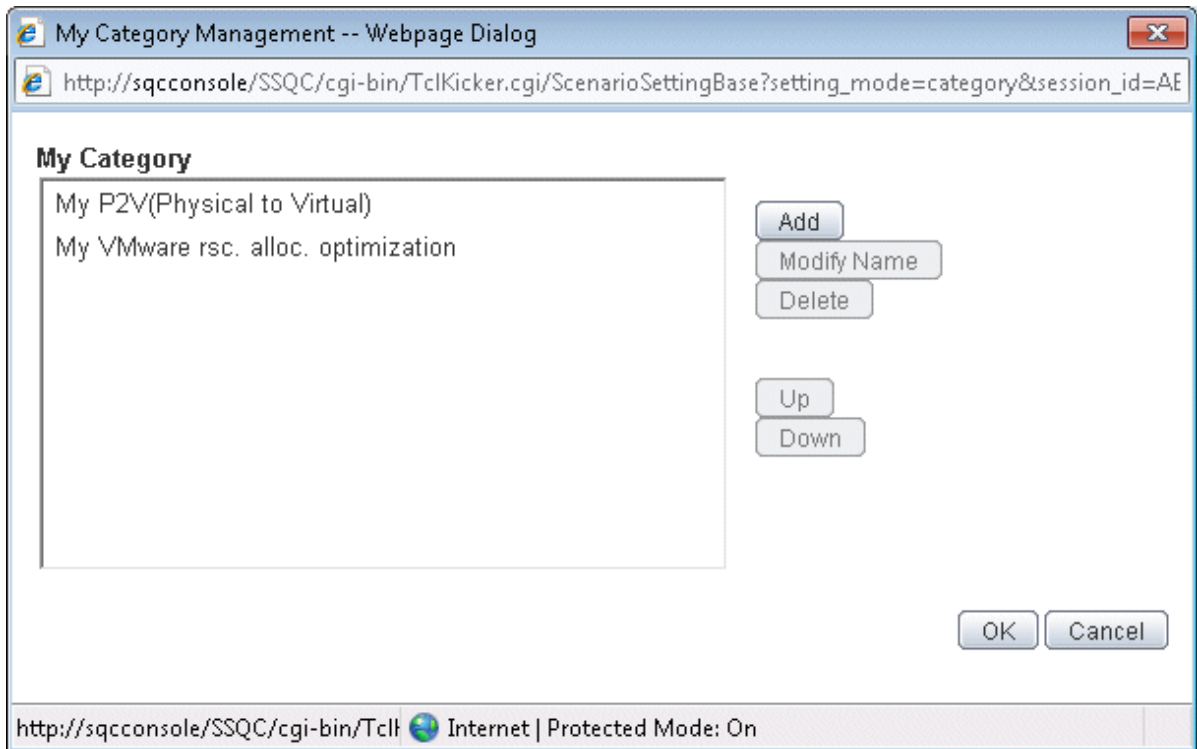
The 'Analysis Results' panel on the right shows a 'Message' section with an information icon and the text: 'Analysis', 'Planning', 'The reint', 'and the', 'Performa', 'The curr', and 'Please s'.

Click **My Category Management** to show the **My Category Management** window, where categories can be added, modified, or deleted.

4.3.1.1.1 My Category Management

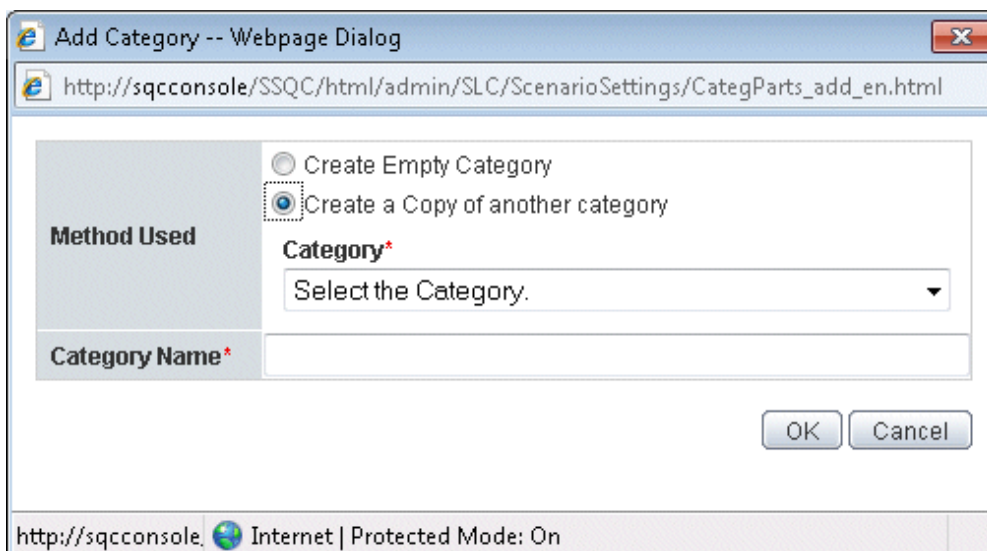
The My Category Management window

Categories can be added, modified, or deleted in the **My Category Management** window.



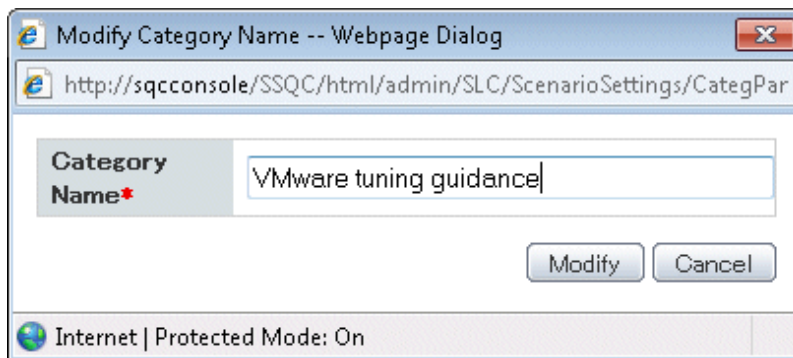
Item	Description
My Category	Categories that have been registered are listed.
Add button	The Add Category window is displayed where new categories can be added.
Modify Name button	Displays the Modify Category Name window where the name of the category can be modified.
Delete button	Delete the category selected in My Category . Click OK in the confirmation dialog box to go ahead and delete the category.
Up button	Move the category selected in My Category up or down.
Down button	

The Add Category window



Item		Description
Method Used	Create Empty Category	Creates an empty category. Register reports in it later.
	Create a Copy of another category	Creates a copy of another category. The Category list becomes available to select from when you select this option. The reports in the copied category can be changed later.
	Category	Use to select a category when creating a copy of another category.
Category Name		<p>Specify a display name for identifying the scenario.</p> <p>Enter a new name for the category, irrespective of the method used.</p> <p>The name must be unique within the console definition.</p> <p>The following characters can be used for search category names:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , = % # +) <p>Platform-dependent characters are not allowed.</p> <p>The registered report name can be no longer than 36 characters.</p>

The Modify Category Name window

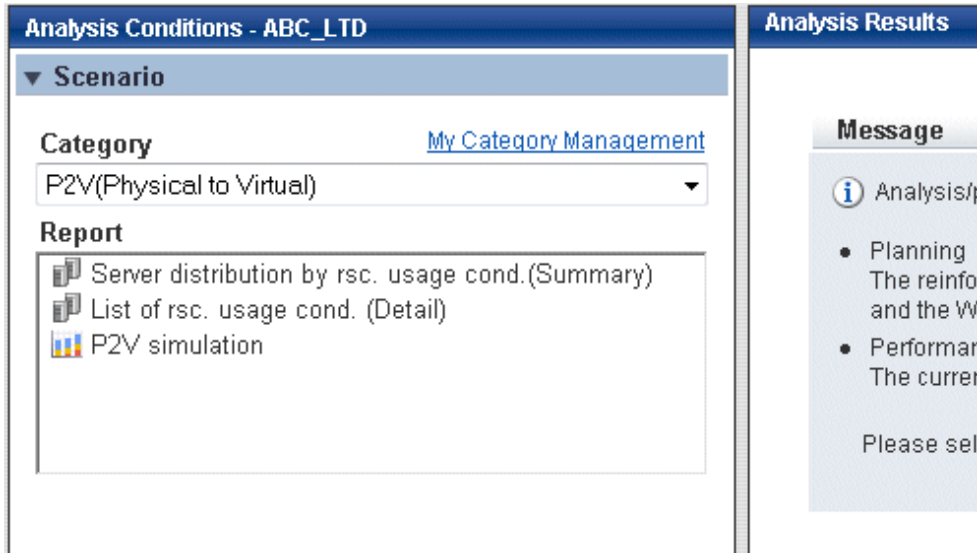


Item	Description
Category Name	<p>Specify a display name for identifying the scenario.</p> <p>The name must be unique within the console definition.</p> <p>The following characters can be used for search category names:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , = % # +) <p>Platform-dependent characters are not allowed.</p> <p>The registered report name can be no longer than 36 characters.</p>

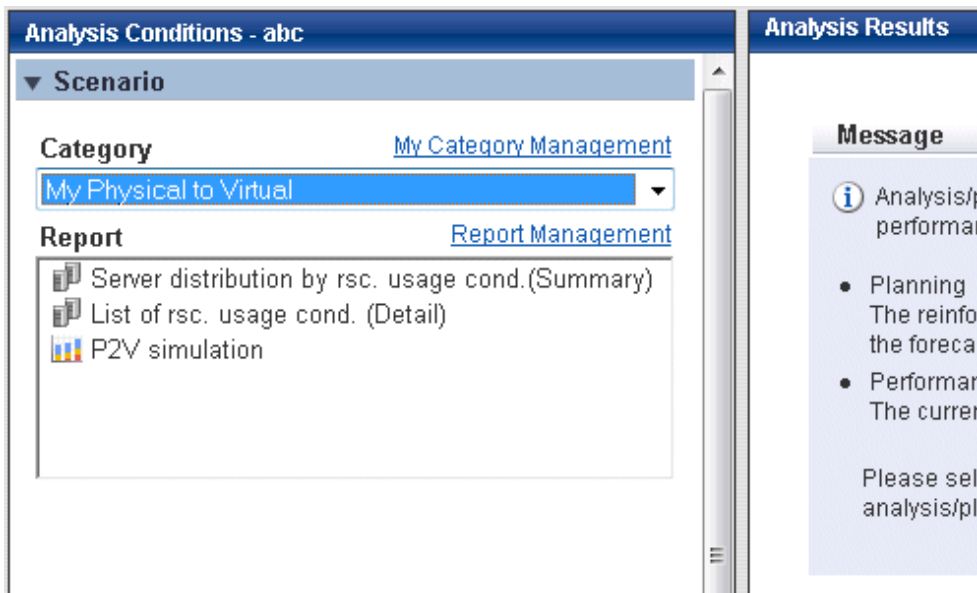
4.3.1.2 Report

Select a report that matches your purpose.

The items in **Conditions** depend on the report selected.



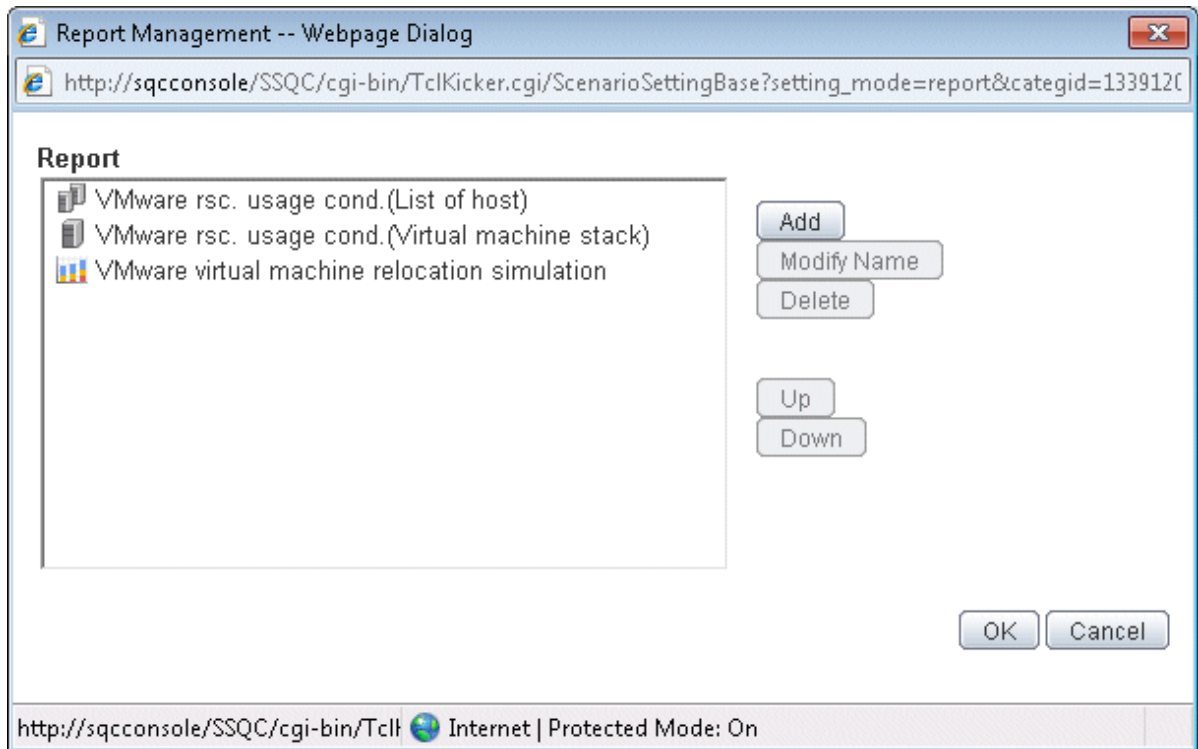
Report Management is displayed when you select a My Category. Click **Report Management** to show the **Report Management** window, where reports can be added, modified, or deleted.



4.3.1.2.1 Report Management

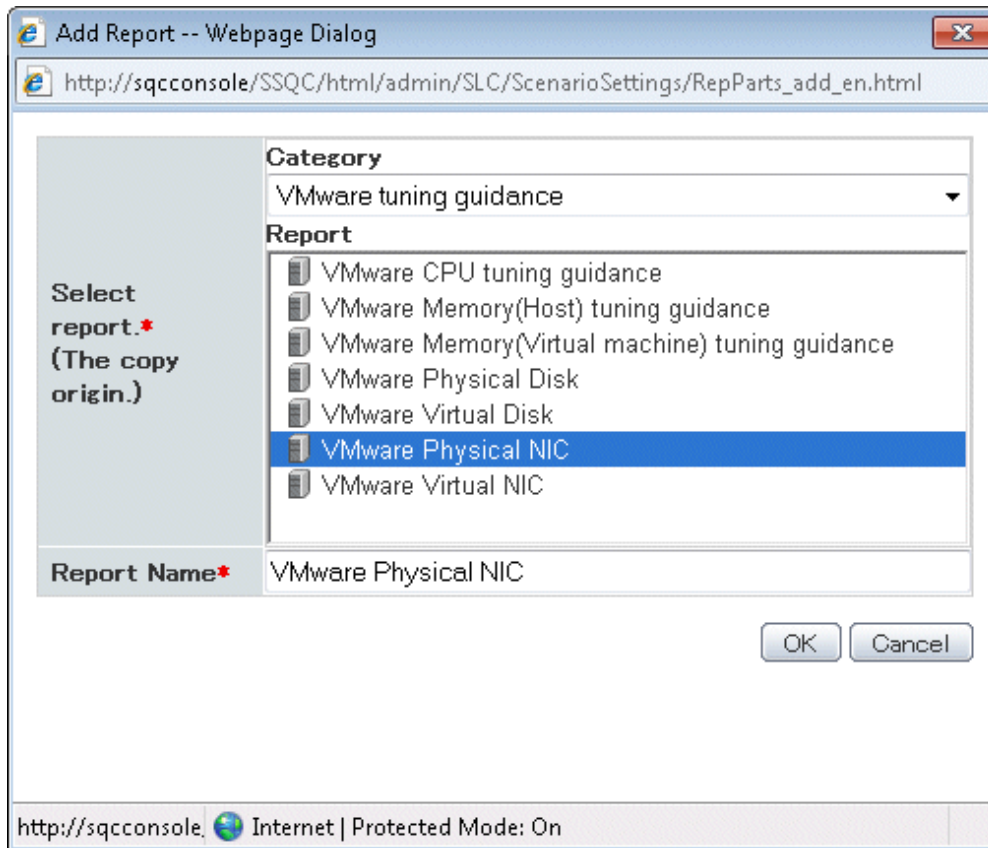
The Report Management window

Reports can be added, modified, or deleted in the **Report Management** window.



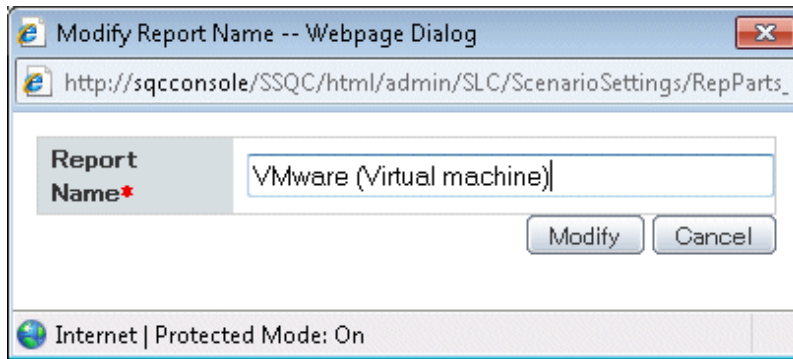
Item	Description
Report	Reports that have been registered are listed.
Add button	The Add Report window is displayed where new reports can be added.
Modify Name button	Displays the Modify Report Name window where the name of the report can be modified.
Delete button	Delete the report selected in Report . Click OK in the confirmation dialog box to go ahead and delete the report.
Up button	Move the report selected in Report up or down.
Down button	

Add Report window



Item		Description
Select report. (The copy origin.)	Category	Select the category that includes the report that you want to copy.
	Report	The reports included in the selected category are listed, so select the report you want to copy.
Report Name		<p>The name of the report is displayed.</p> <p>Specify a display name for identifying the report and condition settings.</p> <p>The name must be unique within the category.</p> <p>The following characters can be used for report names:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , = % # +) <p>Platform-dependent characters are not allowed.</p> <p>The registered report name can be no longer than 50 characters.</p>

The Modify Report Name window



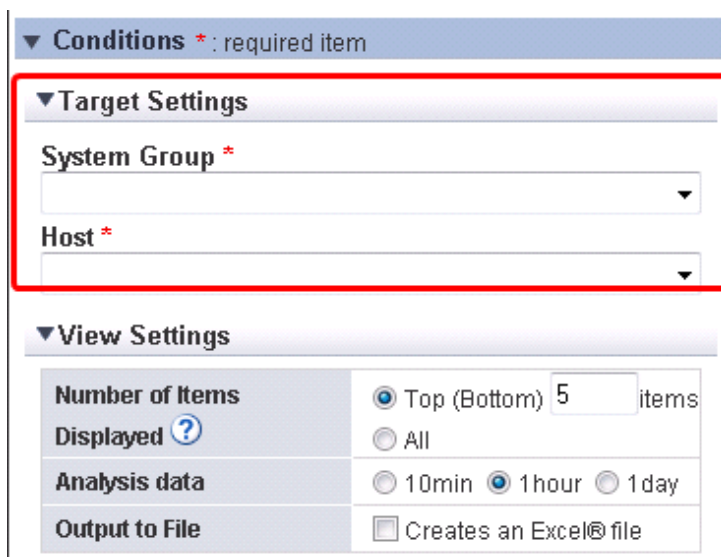
Item	Description
Report Name	<p>Specify a display name for identifying the report and condition settings.</p> <p>The name must be unique within the category.</p> <p>The following characters can be used for report names:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , = % # +) <p>Platform-dependent characters are not allowed</p> <p>The registered report name can be no longer than 50 characters.</p>

4.3.2 Conditions

4.3.2.1 Target Settings

When a report is specified, the following target setting items are displayed. Items displayed depend on the report specified.

The following is an example of the window where you can specify the system group and host.



The items that are specified are explained below for the different types.

Specify System Group

Item	Description
System Group	Select the system group to be analyzed from the list.


Specify System Group and Host

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered with the selected system group.

Specify System Group, Host, and Resource ID


Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group.
Resource ID	The content specified for Resource ID depends on the type. Refer to the "4.3.2.1.1 Resource ID specification" for more information. Note that only alphanumeric characters and symbols (except for \,<>"\$'[]=&%) can be used. Length is limited to 128 characters.

Specifications for displays that include future predictions

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the record ID and field name of the analysis target.
Field name	For the record ID, only the options corresponding to the selected host are displayed.
Display by difference	For the field name, only the options corresponding to the selected record ID are displayed. If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. All resource IDs are analyzed if this is omitted.  Point Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example:

Item	Description
	If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".


Specify detailed items

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the record ID and field name of the analysis target.
Field name	For the record ID, only the options corresponding to the selected host are displayed.
Display by difference	For the field name, only the options corresponding to the selected record ID are displayed. If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. All resource IDs are analyzed if this is omitted.  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".


In the summary data time-series display, when Agents that have different collection intervals are in the same system group, the graph display will be affected if ALL_SERVER is selected. If the **Display by difference** checkbox is selected, some servers will not be displayed. Create system groups of Agents that have the same collection intervals.

Specifications for displays that include correlations/compositions


Item	Description
System Group	Select the system group to be analyzed from the list.
Data 1 specification	Host 1 Select a host containing one part of the data to be displayed from the list.
Data 2 specification	Host 2 The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
	Record ID 1 Specify the record ID and field name of one of the pair to be displayed.
	Record ID 2 For the record ID, only the options corresponding to the selected host are displayed.
	Field name 1

Item		Description
	Field name 2	For the field name, only the options corresponding to the selected record ID are displayed.
	Display by difference	If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
	Resource ID 1 Resource ID 2	Specify one of the resource IDs to be displayed. All resource IDs are analyzed if this is omitted.  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".


Specifications for displays that include contours

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the record ID and field name of the analysis target.
Field name	For the field name, only the options corresponding to the selected record ID are displayed.
Display by difference	If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. All resource IDs are analyzed if this is omitted.  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".

Specifications for displays that include past comparisons

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the record ID and field name of the analysis target.
Field name	For the field name, only the options corresponding to the selected record ID are displayed.
Display by difference	If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. All resource IDs are analyzed if this is omitted.  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".
Base day	Specify the base day used for comparison in the analysis.

Specifications for displays that include daily transition comparisons

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Record ID	Specify the record ID and field name of the analysis target.
Field name	For the field name, only the options corresponding to the selected record ID are displayed.
Display by difference	If the Display by difference checkbox is selected, information for cumulative values can be displayed incrementally. Refer to "Drilled-Down/Report Information" in the <i>Reference Guide</i> for information on the record IDs and field names that can be specified.
Resource ID	Specify the resource ID to be targeted for analysis. All resource IDs are analyzed if this is omitted.  Point Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string. Example:

Item	Description
	If the two resource IDs "AAA123" and "AAA456" exist, both can be targeted by specifying "AAA".

Specifications for displays that include P2V simulations

Item	Description
System Group	Select the system group to be used in the P2V simulation from the list.
Aggregation candidate	Click the Add button to display the Add Candidate window. Select the host for the aggregation candidate and click OK . Multiple aggregation candidates can be selected. The selected hosts are displayed in a list. A maximum of 50 aggregation candidates can be specified. To remove a host that has been selected as a consolidation candidate, click Delete next to that host.
Aggregation target's information	Direct input of installed resource/Aggregate to a host in operation If the aggregation target host has already been registered in the system group, select Specify the aggregation target's Host . The number of CPUs and amount of memory in the specified host are shown as black lines in the displayed graph. Select Direct input of installed resource if not registered.
	CPU Core Number Memory When Direct input of installed resource is selected, enter numbers to specify the CPU (in GHz), the Core Number and Memory (in GB) of the aggregation target: - Specify a number between 0.001 and 1000 for CPU (clock count). - Specify an integer between 1 and 1000 for Core Number . - Specify a number between 0.001 and 1000000 for Memory . The number of CPUs and amount of memory in the specified host are shown as black lines in the displayed graph as hardware capacity.
	Host If you selected Aggregate to a host in operation , select the aggregation target host from the list. The same hosts cannot be selected as aggregation candidates.

Note

- When a system is monitored with an Agent from V13.5.0 or earlier, these systems are not displayed in the list as aggregation candidates or aggregation target hosts.
- When a virtual machine is to be an aggregation candidate, monitor the server performance (OS) of the virtual machine using either an installed agent or an Agent for agentless monitoring.

Specifications for displays that include simulations of VMware Virtual machine relocation

Item		Description
System Group		Select the system group to be used in the virtual machine relocation simulation from the list.
Relocation candidate	Host Virtual machine	Click the Add button to display the Add Candidate window. Select the migration source host from the Host list. Select the virtual machine that is the candidate for reallocation from the Virtual machine list and click OK . More than one virtual machine can be selected. When virtual machine aggregation candidates are added from multiple virtual hosts, repeat the above procedure.
	Relocation candidate	The relocation candidate(s) selected above is displayed. The display format is "host name: virtual machine name". A maximum of 50 relocation candidates can be specified. You can select up to five hosts that have virtual machines that are possible relocation candidates. To remove a host that has been selected as a consolidation candidate, click Delete next to that host.
Aggregation target's information	Direct input of installed resource/Aggregate to a host in operation	If the aggregation target host has already been registered in the system group, select Specify the aggregation target's Host . The number of CPUs and amount of memory in the specified host are shown as black lines in the displayed graph. Select Direct input of installed resource if not registered.
	Host	If you selected Aggregate to a host in operation , select the aggregation target host from the menu. The same hosts cannot be selected as aggregation candidates.
	CPU Core Number Memory	When Direct input of installed resource is selected, enter numbers to specify the CPU (in GHz), the Core Number and Memory (in GB) of the aggregation target: - Specify a number between 0.001 and 1000 for CPU (clock count). - Specify an integer between 1 and 1000 for Core Number . - Specify a number between 0.001 and 1000000 for Memory . The number of CPUs and amount of memory in the specified host are shown as black lines in the displayed graph as hardware capacity.


Note


- Only VMware can be the target of virtual machine relocation simulation.
- When a system is monitored with an Agent from V13.5.0 or earlier, these systems are not displayed in the relocation candidate or aggregation target's information lists.
- Virtual hosts that have been stopped for five hours or more are not displayed in the list of relocation candidate virtual machines.
- Select the virtual machine from the host name before migration if this procedure is performed immediately after migration. The list of virtual machines is updated every hour.

Specifications for displays that include request count future predictions

Item	Description
System Group	Select the system group to be analyzed from the list.
Host	Select the host to be analyzed from the list. The list displays the hosts that have been registered in the selected system group. When ALL_SERVER is selected, all hosts in the system group are analyzed.
Service name	Specify the name (resource ID) of the service set to manage Web transaction volume. If omitted, all services will be extracted. Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.

Specifications for displays that include response simulations (requests or adding servers)

Item	Description
System Group	Select the system group to be analyzed from the list.
Server Groups (layer 1)	Divide hosts registered to the system group into web servers (layer 1), applications servers (layer 2), and database servers (layer 3).
Server Groups (layer 2)	Click the Add button to display the Add Server window. Select the host from the Add Host list and click OK .
Server Groups (layer 3)	Specify a host where there is an Agent managing Web transaction volume in the server group (layer 1). Server group (layer 2) and server group (layer 3) do not have to be specified. A maximum of 50 hosts can be added across the three layers.  Point The performance information that is used by the application server and the database server is CPU information. It is not intended to set up performance management for linkage middleware such as Interstage Application Server or Symfoware Server.
Service name	Specify the name (resource ID) of the service set to manage Web transaction volume. If omitted, all services will be extracted. Resource IDs can be retrieved by right-truncating the resource ID according to a specified search string.
Request coefficient	Specify the expected request volume (as a rate of the current volume). Use "Request count (future prediction)" to predict the rate of increase, and specify that value. The current request count is used if you specify 1. Range: 0.1 to 9999.9
Adding servers	This is displayed for Response simulation (Adding servers). Specify the number of servers to be added to each server group. Range: 0 to 99
Times other than service time	Specify periods when the service is not running (night, days off, scheduled maintenance times, etc), or periods when the number of requests is extremely low.


Item	Description
	<p>The precision of the simulation is improved by excluding those periods when processes that have no direct bearing on requests are being performed.</p> <p>Select the days of the week, hours, and minutes to specify the periods to designate as "times other than service time".</p> <p>A maximum of ten conditions can be specified.</p> <p> Point</p> <p>.....</p> <p>When "Daily" is specified for a period, the values for response (request increase) and response (add server) in the table will be replaced with a hyphen.</p> <p>.....</p>



Specifications for displays that include service operational information




Item	Description
System Group	Select the system group to be analyzed from the list.

4.3.2.1.1 Resource ID specification

The following table lists the content to be specified for resource IDs for each report type:

Report type	Resource ID
Web transaction Request	<p>The following specified content depends on the category:</p> <p>Specify the service name for the reports on the left.</p> <p>When using generic reports, connect the service names and URLs with colons (:).</p> <p>Example: imagine:/SSQC/console.html</p> <p>If only the service name is specified, all the data for that service name will be targeted for reporting.</p> <p> Note</p> <p>.....</p> <p>For the URL, specify the one specified in Inclusion in the transaction log definition file (tlawatch.ini). Refer to "Transaction Log Definitions" in the <i>User's Guide</i> for information on the transaction log definition file (tlawatch.ini).</p> <p>.....</p>
Web transaction hitserver	
Web transaction hitclient	
Web transaction hitremote	
Web transaction Traffic	
Web transaction Error	
Interstage EJB application	<p>Specify the name of an EJB application.</p> <p>To monitor the performance of an EJB container, specify the name of the EJB container.</p>
Interstage CORBA application	Specify the implementation repository ID.
Interstage transaction application	Specify the object name.
Interstage IJServer JVM	Specify the object name.
Interstage IJServer JTA	
Interstage IJServer JDBC	

Report type	Resource ID
Interstage IJServer SERVLET WebModule	
Interstage IJServer EVENT SERVICE	
Symfoware shared buffer	Specify the RDB system name.
Symfoware log area	 Alphanumeric characters are recommended.
Symfoware disk I/O	
Oracle SGA	Specify the instance name.
Oracle PGA	 Alphanumeric characters are recommended.
Oracle disk I/O	
Oracle resource conflict	
Operation Manager Subsystem	Specify the subsystem name. Example: subsystem00
Operation Manager Queue	Specify the subsystem name and the queue name connected by a colon (:). Example: subsystem00:queue1
Operation Manager Project	Specify the subsystem name and the project name connected by a colon (:). Example: subsystem00:project5
Network Manager network traffic	Specify the node name and the host name connected by a colon (:). Example: node1:interface1
Network Manager CPU load	Specify the node name.
Network Manager collision	Specify the node name and the host name connected by a colon (:). Example: node1:interface1
Network Manager CRC error	
Network Manager drop packet	
Network Manager transfer packet	
Network Manager discard packet	
Network Manager error packet	
Network Manager IP operating rates	Specify the node name.
Network Manager RTT	Specify the node name.
TcpNetwork	Specify the interface name.
Storage CM CPU usage rate	Specify the Storage ID and the CM ID connected by a colon (:). Example: 00GR730#####GR73E02U####IA000003#####:0x30000

Report type	Resource ID
	 Point This string is displayed in the resource ID column by selecting "CM" under "Storage" with the Drilled-down display view.
Storage Disk busy	Specify the Storage ID and the Disk ID connected by a colon (:). Example: 00GR730#####GR73E02U####IA000003#####:0x0  Point This string is displayed in the "Resource ID" column by selecting "Disk" under "Storage" with the Drilled-down display view.
Storage throughput Storage IOPS	Specify the Storage ID and the RAIDGroup ID connected by a colon (:). Example: 00GR730#####GR73E02U####IA000003#####:0x0  Point This string is displayed in the "Resource ID" column by selecting "RAIDGroup" under "Storage" with the Drilled-down display view.
Workload	Specify resource module names separated by a colon (:). Example 1: When specifying one resource module: module1: Example 2: When specifying multiple resource modules: module1:module2: If no name is specified, all modules will be targeted.

4.3.2.2 Display Settings

When a report is specified, the following display settings are displayed. Items displayed depend on the type of report specified.

The following is an example of the window where you can specify the number of items displayed, the analysis data, and the file output.

▼ **Conditions** *: required item

▼ **Target Settings**

System Group *

▼

Host *

▼

▼ **View Settings**

Number of Items Displayed ?

Top (Bottom) 5 items


All




Analysis data

10min 1 hour 1 day

Output to File

Creates an Excel® file

Item	Description
Number of Items Displayed	<p>Select the number of data items that will be displayed for analysis.</p> <p>The number of data items can be selected as follows:</p> <ul style="list-style-type: none"> - Top (Bottom) An integer between 1 and 1000 can be entered. Only the entered number of data items will be displayed. The number of items that can be displayed in the graph legibly is about 10. The graph may be disrupted by the legend if there are more than 10. - All All data is displayed.
Analysis data	<p>Select the data interval to be used for analysis.</p> <p>The following data intervals can be selected:</p> <ul style="list-style-type: none"> - 10 min Data retention period: 7 days (default) This period is suitable for analysis of approximately one day. - 1 hour Data retention period: 6 weeks (default) This period is suitable for analysis of approximately one week. - 1 day Data retention period: 13 months (default) This period is suitable for analysis of one month or more. <p>This is not available with some report types.</p> <p> Note</p> <p>.....</p> <p>If a period prior to the data retention period is specified, no data will be displayed.</p> <p>.....</p>
Output to File	<p>Content is output in Excel(R) format.</p> <p>When the Creates an Excel(R) file checkbox is selected, the Save as Excel(R) button becomes active at the bottom of the analysis and report content area. Click this button to download the displayed content in Excel format.</p>

Item	Description
	<p> Note</p> <p>.....</p> <p>Disable clipboard redirection if the operation is to be performed using a remote desktop connection.</p> <p>.....</p> <p> Note</p> <p>.....</p> <p>A file is downloaded with an xlsx or xlsxm extension when Save as Excel(R) is used. Enable macros when opening files with the xlsxm extension.</p> <p>.....</p> <p> Information</p> <p>.....</p> <p>If an XML file is downloaded with Save as Excel(R), change the following in Internet Explorer:</p> <p>Go to Internet Options, Security, select the appropriate zone and click Custom level, then in the Miscellaneous section click Open files based on content, not file extension to disable it.</p> <p>.....</p>
Operation time	Specify the time period to be displayed. Specify the starting time (hour/minute) and the finishing time (hour/minute) for operations.
Threshold value (Optional): CPU Memory	<p>Specify the CPU and memory usage rates that will be tolerated on the aggregation target server. (Optional)</p> <p>If this is specified, it is shown as a red line in the graph.</p> <p>[CPU]: Enter a number between 10 and 100. (Units: %)</p> <p>[Memory]: Enter a whole number between 10 and 100. (Units: %)</p>
Analysis mode	<p>Specify the way the simulation is to be performed:</p> <ul style="list-style-type: none"> - Hourly <p>The maximum value (average value) for hourly resource usage is calculated for each aggregation candidate server and displayed as a stack.</p> <p>Check that there is no problem with the resources by hour after aggregation.</p> - Weekly <p>The maximum value (average value) for daily resource usage is calculated for each aggregation candidate server and displayed as a stack.</p> <p>Check that there is no problem with the resources by day of the week after aggregation.</p> - time-line <p>The resource usage for each aggregation candidate server is displayed as a stack.</p>

4.3.2.2.1 Detail settings

A **Detail Settings** area is displayed for some report types. Items displayed depend on the type of report that has been specified.

The **Detail Settings** area is shown collapsed when a report is selected. Click the title bar of the **Detail Settings** area to specify detailed settings.

Figure 4.1 Detail Settings area collapsed (example)

▼ **Conditions *** : required item

▼ **Target Settings**

System Group *

Relocation candidate *

Aggregation target's information

Direct input of installed resource
 Aggregate to a host in operation

CPU * GHz, Core Number *

Memory * GB

▼ **View Settings**

Threshold	CPU: <input type="text"/> %, Memory: <input type="text"/> %
Analysis mode	<input checked="" type="radio"/> Hourly <input type="radio"/> Weekly <input type="radio"/> time-line
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

▶ **Detail Settings**

Figure 4.2 Detail Settings area expanded (example)

▼ Conditions *: required item

▼ Target Settings

System Group *

Relocation candidate *

Aggregation target's information
 Direct input of installed resource
 Aggregate to a host in operation
 CPU * GHz, Core Number *
 Memory * GB

▼ View Settings

Threshold	CPU: <input type="text"/> %, Memory: <input type="text"/> %
Analysis mode	<input checked="" type="radio"/> Hourly <input type="radio"/> Weekly <input type="radio"/> time-line
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

▼ Detail Settings

Aggregation method	<input checked="" type="radio"/> Analyze by the maximum value. <input type="radio"/> Analyze by the mean value.
Output object	<input type="checkbox"/> Analyze according to the disk reading and writing. <input type="checkbox"/> Analyze according to the network sending and receiving.

Generic report

Item	Description
Title	<p>Specify the title to be used for the graph and table.</p> <p>For an example of what is displayed when this is specified, refer to the illustration below (Example of a graph when Detail Settings have been specified).</p> <p>The following characters can be used for titles:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , . = %) <p>Platform-dependent characters are not allowed.</p> <p>The registered report name can be no longer than 24 characters.</p> <p>If a title is not specified, the field name is used for the title of the graph and the record ID is used for the title of the table.</p>

Item	Description
Unit	<p>Specify the unit used on the Y axis.</p> <p>For an example of what is displayed when this is specified, refer to the illustration below (Example of a graph when Detail Settings have been specified).</p> <p>The following characters can be used for units:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for \$ " ' [] < > / ? ; : * \ & , . =) <p>Platform-dependent characters are not allowed</p> <p>The registered report name can be no longer than 8 characters.</p> <p>Units are not displayed if this is omitted.</p>
Graph size	<p>Specify the size of the graph in pixels.</p> <p>Specify an integer between 200 and 1500.</p> <p>The default width is 700 pixels and height is 300 pixels. (For the contour display width is 750 pixels and height is 500 pixels).</p> <p>Specify a value that is equal to or greater than the default value.</p>
Graph range (Y axis)	<ul style="list-style-type: none"> - Specify Minimum and Maximum to specify the range of the Y axis. When this is specified, the "minimum" and "maximum" shown in the illustration below this table ("Example of a graph when Detail Settings have been specified") use the specified values. (The numeric value applied as the maximum may not always appear.) Specify a number between -1000000000000 and 10000000000000. The range of the data is used if this is omitted. - Specify the interval between scale marks in Width of scale. When this is specified, the "Width of scale" shown in the illustration below this table ("Example of a graph when Detail Settings have been specified") uses the specified value. Specify a number between 0 and 10000000000000. The width of the scale is determined automatically if this is omitted.
Threshold	<p>Specify the threshold.</p> <p>For an example of what is displayed when this is specified, refer to the illustration below (Example of a graph when Detail Settings have been specified).</p> <p>Specify a number between -1000000000000 and 10000000000000.</p> <p>This may not be displayed within the graph due to the range of the Y axis, even if you do specify it.</p>

Figure 4.3 Example of a graph when Detail Settings have been specified



Miscellaneous

Item		Description
Output object	Analyze according to the disk reading and writing	Select to display a distribution graph and table showing reads and writes.
	Analyze according to the network sending and receiving	Select to display a distribution graph and table showing sends and receives.
Graph settings	CPU usage rate	Select to configure graphs. The default maximum for the markings is 100% and the number of markings is 10. Scale Max: Enter an integer between 10 and 100. (Units: %) Scale Number: Enter a whole number between 2 and 10.
	Memory usage rate	Select to configure graphs. The default maximum for the markings is 100% and the number of markings is 10. Scale Max: Enter an integer between 10 and 100. (Units: %) Scale Number: Enter a whole number between 2 and 10.
	Disk I/O Count	Select to configure graphs. This setting is used to draw graphs for reading and writing (combined), and to draw separate graphs for reading and writing.

Item		Description
		<p>The default number of markings is 10.</p> <p>Scale Max: Enter an integer between 10 and 1000000000. (Units: times per second)</p> <p>Scale Number: Enter a whole number between 2 and 10.</p>
	Disk Throughput	<p>Select to configure graphs. This setting is used to draw graphs for transfers, and to draw separate graphs for sending and receiving.</p> <p>The default number of markings is 10.</p> <p>Scale Max: Enter an integer between 10 and 1000000000. (Units: MB/sec)</p> <p>Scale Number: Enter a whole number between 2 and 10.</p>
	Count for data sent/received over network	<p>Select to configure graphs. This setting is used to draw graphs for reading and writing (combined), and to draw separate graphs for reading and writing.</p> <p>The default number of markings is 10.</p> <p>Scale Max: Enter an integer between 10 and 1000000000. (Units: times per second)</p> <p>Scale Number: Enter a whole number between 2 and 10.</p>
	Network throughput	<p>Select to configure graphs. This setting is used to draw graphs for transfers, and to draw separate graphs for sending and receiving.</p> <p>The default number of markings is 10.</p> <p>Scale Max: Enter an integer between 10 and 1000000000. (Units: MB/sec)</p> <p>Scale Number: Enter a whole number between 2 and 10.</p>
Aggregation method	Use maximum	Select whether to analyze using the maximum or the average.
	Use average	
Threshold		<p>Specify the threshold with a percentage.</p> <p>Threshold: Enter an integer between 1 and 100. (Units: %)</p>
Server group name (layer 1)		Specify the display name for the server group.
Server group name (layer 2)		<p>The following characters can be used for display names:</p> <ul style="list-style-type: none"> - Alphanumerics - Symbols (except for "\$"[]<>/?;*\\&,.=) <p>Platform-dependent characters are not allowed</p> <p>The name can be no longer than 36 characters.</p>
Server group name (layer 3)		

4.3.2.3 Saving Condition Settings

With My Category, you can save the conditions set in the **Conditions** area by clicking **Save**.

▼ **Conditions** * : required item Save

▼ **Target Settings**

System Group *

▼

Host *

▼

▼ **View Settings**

Number of Items Displayed ?	<input checked="" type="radio"/> Top (Bottom) <input type="text" value="5"/> items <input type="radio"/> All
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

Either save by overwriting the selected report, or save using another name.

Save Condition Settings -- Webpage Dialog

http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ScenarioSettingBase?setting_mode=condition&categ

Report Name VMware Physical NIC

OK Cancel

http://sqcconsole/SSQC/cgi- Internet | Protected Mode: On

Item	Description
Report Name	<p>The name of the report selected in the Scenario area is displayed.</p> <p>The selected report is overwritten if you do not change the report name.</p> <p>When you change the report name, the report is added to the category selected in the Scenario area.</p> <p>The following characters can be used for report names:</p> <ul style="list-style-type: none"> - Alphanumerics.

Item	Description
	<ul style="list-style-type: none"> - Symbols (except for \$ " ' [] < > / ? ; : * \ & , = % # +) Platform-dependent characters are not allowed The registered report name can be no longer than 50 characters.

4.3.3 Period

A **Period** area is displayed for some report types. Items displayed depend on the type of report specified.

The following is an example:

▼ Period

Start date 2012 ▾ 06 ▾ 04 ▾ 00 ▾ : 00 ▾

End date 2012 ▾ 06 ▾ 04 ▾ 23 ▾ : 50 ▾

Display

Period/analysis period

Item	Description
Start date	Specify the period of the analysis.
End date	Select the minute, hour, day, month and year using a list to specify the date and time that analysis will start and stop.

Predicted day

Item	Description
Date	Prediction is performed up to the specified date. Select the day, month, and year from the lists.

4.3.4 Display Button

This section explains the **Display** button.

▼ Period

Start date 2012 ▾ 06 ▾ 04 ▾ 00 ▾ : 00 ▾

End date 2012 ▾ 06 ▾ 04 ▾ 23 ▾ : 50 ▾

Display

Button	Description
Display	Creates a report using the specified conditions. Reports are displayed in the contents display area at the right of the analysis window. History can also be displayed.

"Loading..." appears in the contents display area while the content is being produced.

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

4.3.5 Contents Display Area

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

Table sorting

When the header section of any column in a table displayed in the 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 sorting only works 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 input as user data.

Save in CSV Format/Save in Excel(R) format/Display in separate window/Print

The following buttons are in the lower part of the report content:

- **Save in CSV Format**
This enables the displayed range of data to be downloaded in CSV format.
- **Save in Excel(R) format**
This is displayed in the **Analysis/Planning** window when the **Creates an Excel(R) file** checkbox is selected and when scheduled reports are created. This link enables the displayed content to be downloaded in Excel(R) format.
- **Display in separate window**
Display the content in a separate window.
- **Print**
Print the displayed content.

4.4 Using the Analysis/Planning Window

4.4.1 Using Scenarios to Create Reports

This section describes how to create reports using scenarios.

1. Select the category.

Analysis Conditions - ABC_LTD	Analysis Results
<p>▼ Scenario</p> <p>Category My Category Management</p> <p>Select the Category. ▼</p> <p>Select the Category. ▲</p> <p>Planning</p> <p>Virtual aggregate P2V(Physical to Virtual)</p> <p>Effective resource use VMware virtual machine relocation VMware resource allocation optimization VMware tuning guidance</p> <p>Demand forecast VMware Resource pool ServerView Resource Orchestrator Resource pool</p> <p>Increment simulation Responce simulation</p> <p>Generic report Generic report</p> <p>Performance analysis</p> <p>Virtualization software VMware Hyper-V Linux Virtualization function (KVM) Linux Virtualization function (Xen) Solaris Zone</p> <p>Network Systemwalker Centric Manager (Network) Systemwalker Network Manager</p> <p>Storage ETERNUS SF Storage Cruiser(SAN Storage) ETERNUS SF Storage Cruiser(NAS)</p> <p>OS Windows</p>	<p>Message</p> <p>i Analysis</p> <ul style="list-style-type: none">• Planning The reint and the \• Performa The curr <p>Please si</p>

2. The reports registered in the selected category are displayed, so select the report you want.

Analysis Conditions - ABC_LTD	Analysis Results
<p data-bbox="327 297 478 331">▼ Scenario</p> <p data-bbox="343 365 1029 398">Category My Category Management</p> <p data-bbox="343 405 1029 443">P2V(Physical to Virtual) ▼</p> <p data-bbox="343 454 438 488">Report</p> <ul data-bbox="351 499 1029 604" style="list-style-type: none">Server distribution by rsc. usage cond.(Summary)List of rsc. usage cond. (Detail)P2V simulation	<p data-bbox="1157 353 1276 387">Message</p> <p data-bbox="1157 409 1302 448"> Analysis/t</p> <ul data-bbox="1157 477 1302 633" style="list-style-type: none">• Planning The reinfo and the W• Performar The curre <p data-bbox="1181 667 1302 701">Please sel</p>

3. Specify the appropriate settings in the **Conditions** and **Period** items.

▼ **Conditions** *: required item

▼ **Target Settings**

System Group *

DataGRP_A

Aggregation candidate*

Agent002

Add

Delete

Aggregation target's information

Direct input of installed resource

Aggregate to a host in operation

Host *

Agent001

▼ **View Settings**

Threshold	CPU: <input type="text"/> %, Memory: <input type="text"/> %
Analysis mode	<input checked="" type="radio"/> Hourly <input type="radio"/> Weekly <input type="radio"/> time-line
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

▶ **Detail Settings**

▼ **Period**

Start date 2012 ▾ 06 ▾ 06 ▾ 00 ▾ : 00 ▾

End date 2012 ▾ 06 ▾ 06 ▾ 23 ▾ : 50 ▾

Display

4. Click the **Display** button at the bottom of the Analysis Conditions area.

▼ **Conditions** * : required item

▼ **Target Settings**

System Group *

DataGRP_A

Aggregation candidate*

Agent002

Add

Delete

Aggregation target's information

Direct input of installed resource

Aggregate to a host in operation

Host *

Agent001

▼ **View Settings**

Threshold	CPU: 80 %, Memory: %
Analysis mode	<input type="radio"/> Hourly <input checked="" type="radio"/> Weekly <input type="radio"/> time-line
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1day
Output to File	<input type="checkbox"/> Creates an Excel® file

▶ **Detail Settings**

▼ **Period**

Start date 2012 06 06 00 : 00

End date 2012 06 06 23 : 50

Display

4.4.2 Referring to the History of Created Reports

This section describes how to refer to reference reports created in the past.

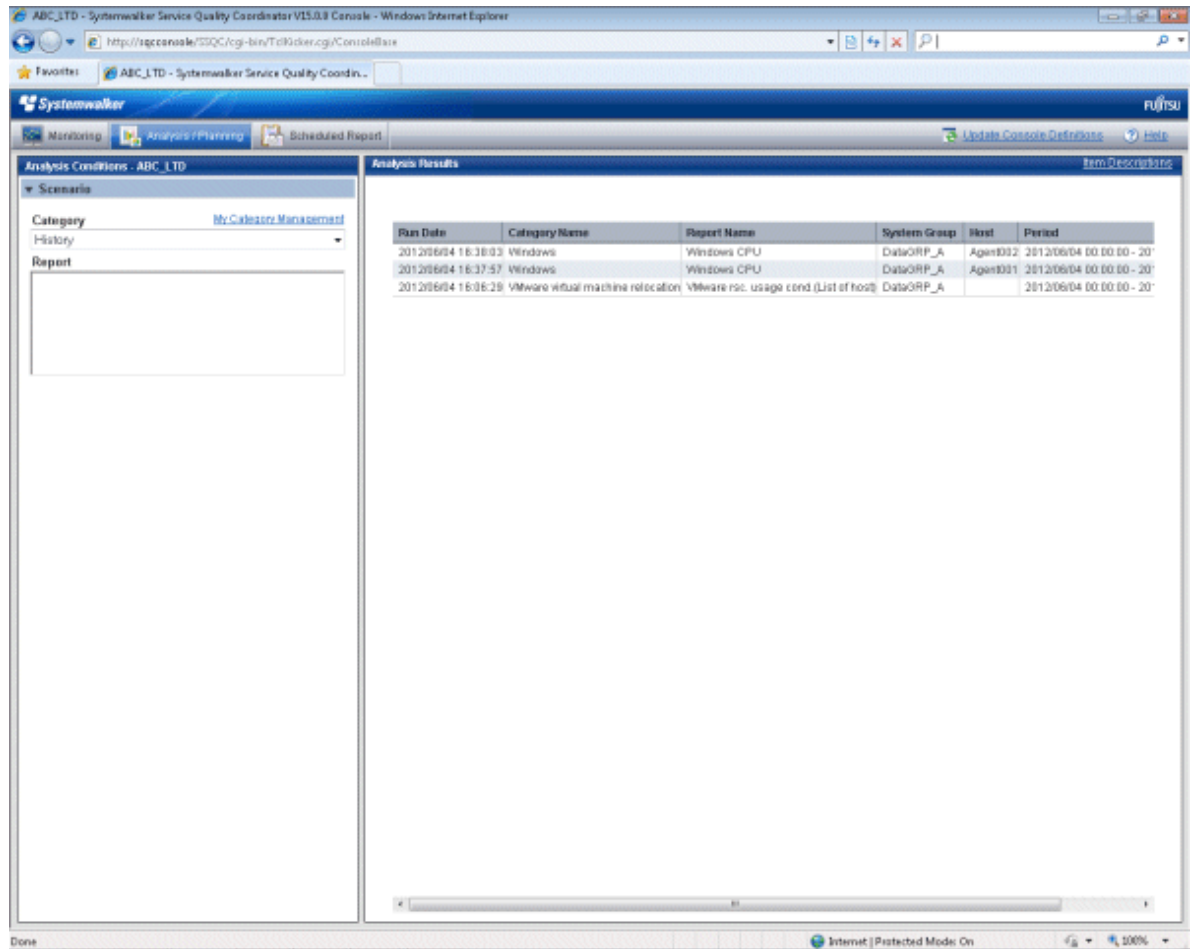
1. Select **History** for the category.

The screenshot displays a software interface with two main panels. The left panel, titled 'Analysis Conditions - ABC_LTD', features a 'Scenario' dropdown menu set to 'History'. Below this is a 'Category' dropdown menu, also set to 'History', with a link for 'My Category Management'. A scrollable list of categories is shown, including 'ETERNUS SF Storage Cruiser(SAN Storage)', 'ETERNUS SF Storage Cruiser(NAS)', 'OS' (with sub-items: Windows, UNIX, OS common), 'Web' (with sub-item: Web transaction), 'Application' (with sub-items: Interstage Application Server(IJServer Cluster), Interstage Application Server(Work Unit), Oracle WebLogic Server, Microsoft .NET, SAP NetWeaver, Primesoft Server), 'Database' (with sub-items: Symfoware Server, Oracle Database, Microsoft SQL Server), 'Job' (with sub-item: Systemwalker Operation Manager), 'Service bus' (with sub-item: Interstage Service Integrator), 'Service' (with sub-items: Service operational information, End user response), 'Generic report' (with sub-item: Generic report), and 'History' (with sub-item: History). The right panel, titled 'Analysis Results', contains a 'Run Date' section with three entries: 2012/06/04 16, 2012/06/04 16, and 2012/06/04 16.

2. When the lines in the displayed list are selected, relevant reports that were created previously are displayed in a separate window.

Up to 50 reports are saved in the history.

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



Point

.....
If it is necessary to keep a report, select a line, then in the browser window that opens use the **File** menu to save the report to any folder.
.....

4.4.3 Registering a New Scenario and Saving Report Conditions

This section describes how to register a new scenario and save report conditions.

1. Click **My Category Management** next to **Category**.

Analysis Conditions - ABC_LTD

▼ **Scenario**

Category [My Category Management](#)

Select the Category. ▼

Report

Analysis Results

Message

- Planning The reinfo and the W
- Performa The curre

Please se

2. Click the **Add** button in the **My Category Management** that is displayed.

My Category Management -- Webpage Dialog

http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ScenarioSettingBase?setting_mode=category&session_id=AE

My Category

- My P2V(Physical to Virtual)
- My VMware rsc. alloc. optimization

Add

Modify Name

Delete

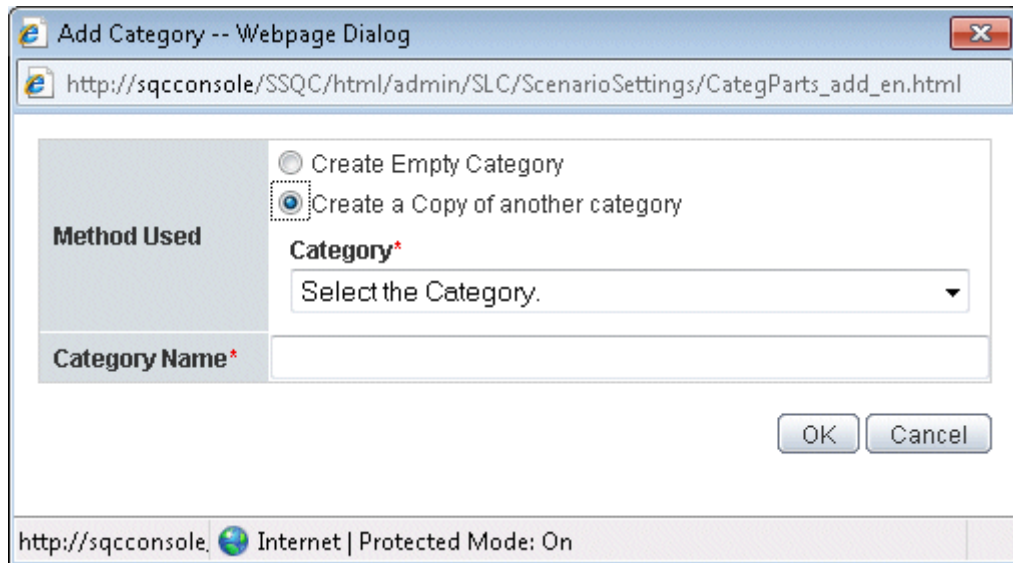
Up

Down

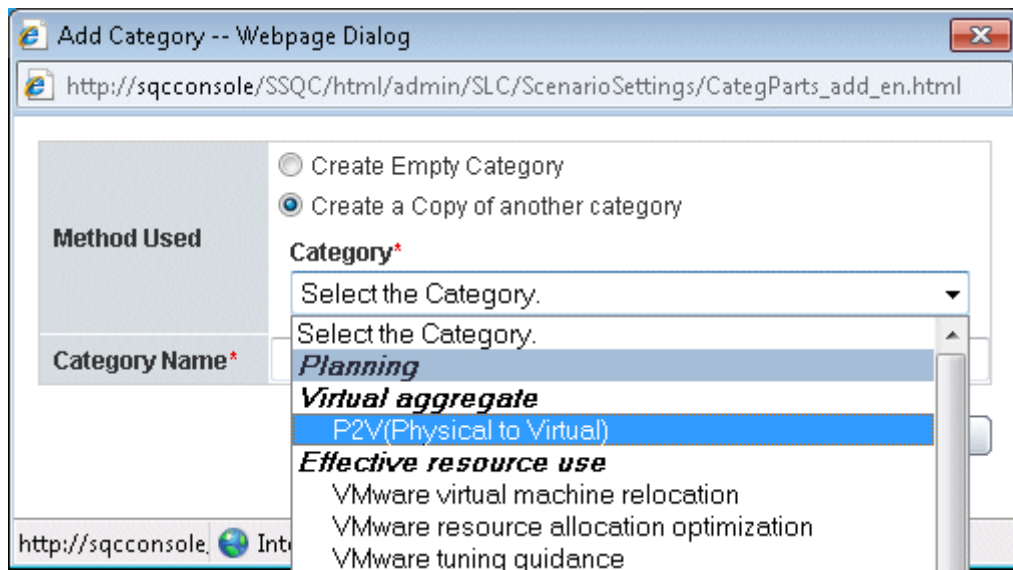
OK Cancel

http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ScenarioSettingBase?setting_mode=category&session_id=AE Internet | Protected Mode: On

3. In the **Add Category** window that is displayed, click either **Create Empty Category** or **Create a Copy of another category**.



4. If you select **Create a Copy of another category**, select a category that has already been registered in the console.



5. Enter the new category name in the **Category Name** field and click **OK**.

The screenshot shows a web browser dialog titled "Add Category -- Webpage Dialog". The address bar shows the URL: http://sqcconsole/SSQC/html/admin/SLC/ScenarioSettings/CategParts_add_en.html. The dialog contains the following elements:

- Method Used:** Two radio buttons are present. The first is "Create Empty Category" (unselected). The second is "Create a Copy of another category" (selected).
- Category*:** A dropdown menu showing "VMware virtual machine relocation".
- Category Name*:** A text input field containing "My VMware virtual machine relocation".
- Buttons:** "OK" and "Cancel" buttons are located at the bottom right of the dialog.

The status bar at the bottom of the browser window shows "http://sqcconsole. Internet | Protected Mode: On".

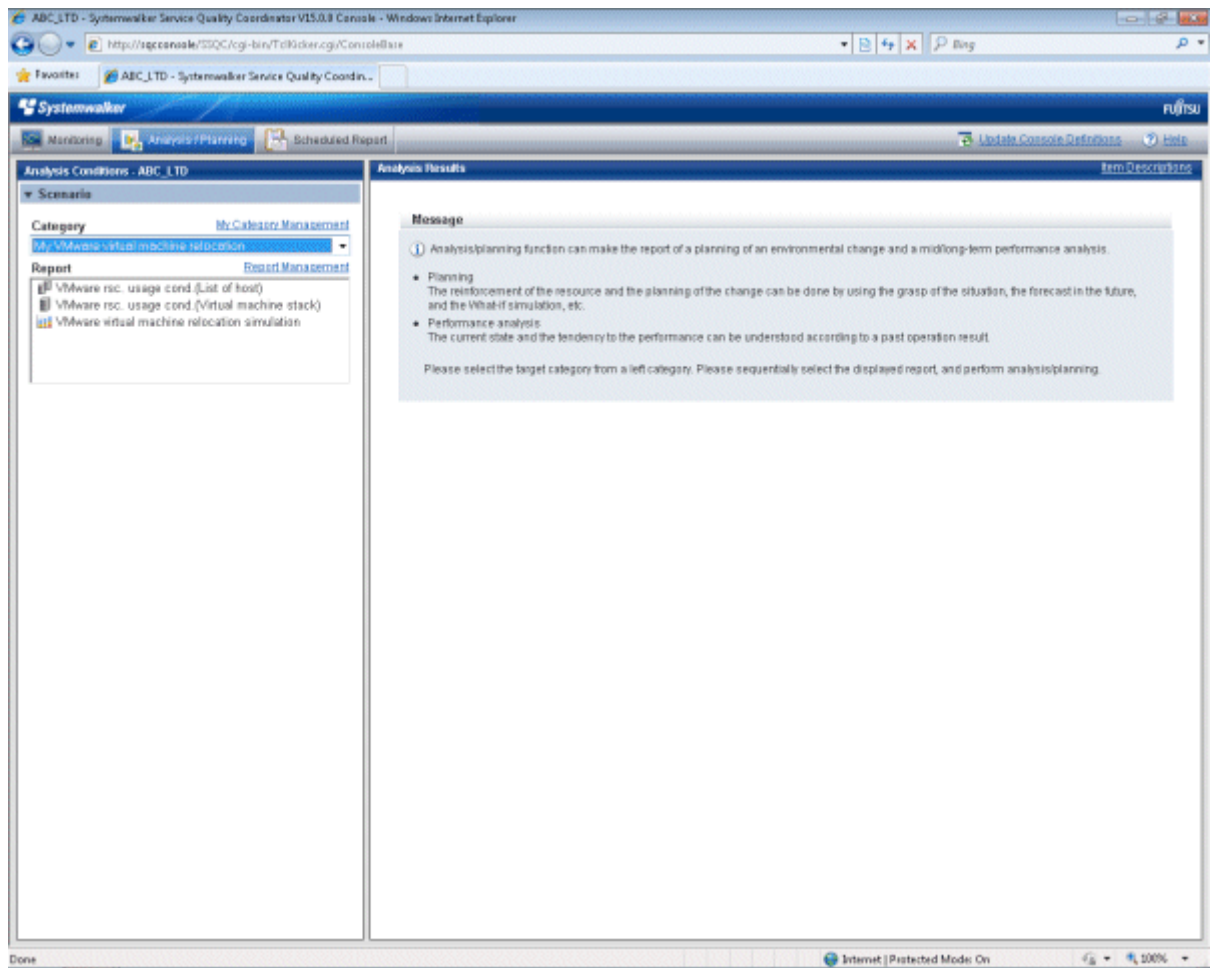
6. Click **OK** in the **My Category Management** window.

The screenshot shows a web browser dialog titled "My Category Management -- Webpage Dialog". The address bar shows the URL: http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi/ScenarioSettingBase?setting_mode=category&session_id=AE. The dialog contains the following elements:

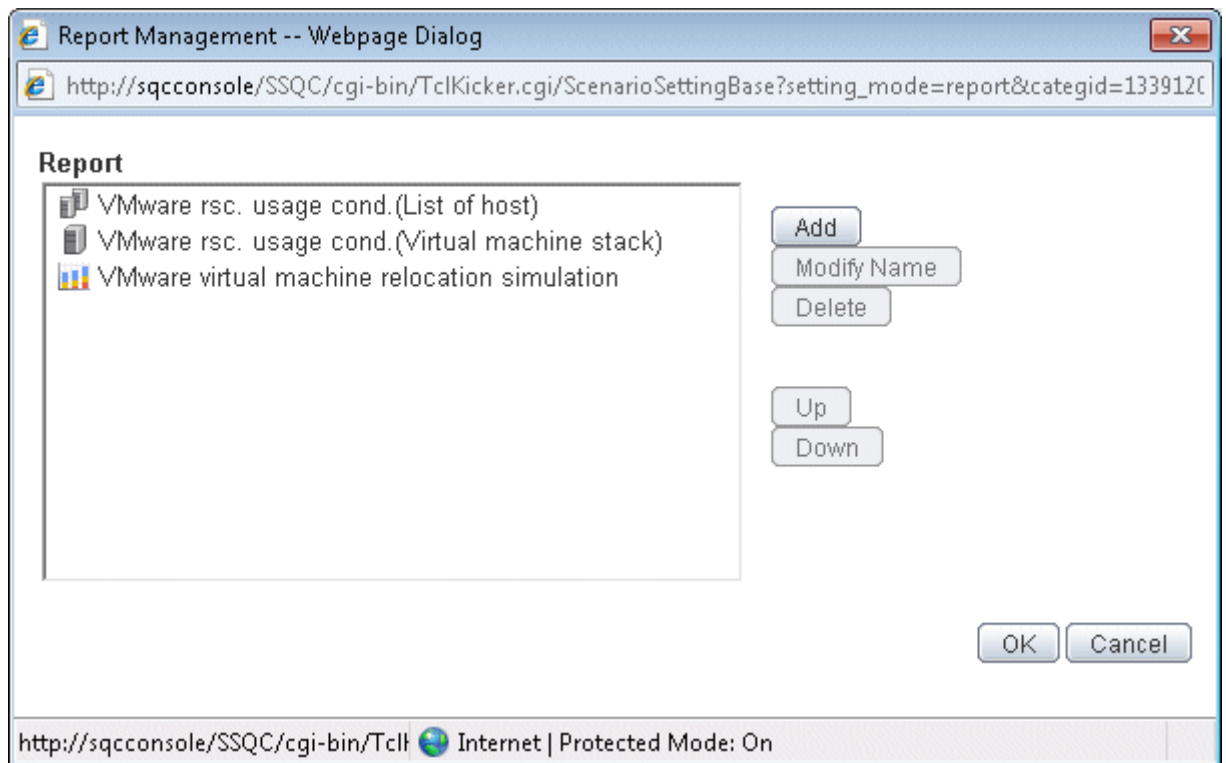
- My Category:** A list box containing three items: "My P2V(Physical to Virtual)", "My VMware rsc. alloc. optimization", and "My VMware virtual machine relocation".
- Action Buttons:** A vertical stack of buttons on the right side: "Add", "Modify Name", "Delete", "Up", and "Down".
- Buttons:** "OK" and "Cancel" buttons are located at the bottom right of the dialog.

The status bar at the bottom of the browser window shows "http://sqcconsole/SSQC/cgi-bin/TclKicker.cgi Internet | Protected Mode: On".

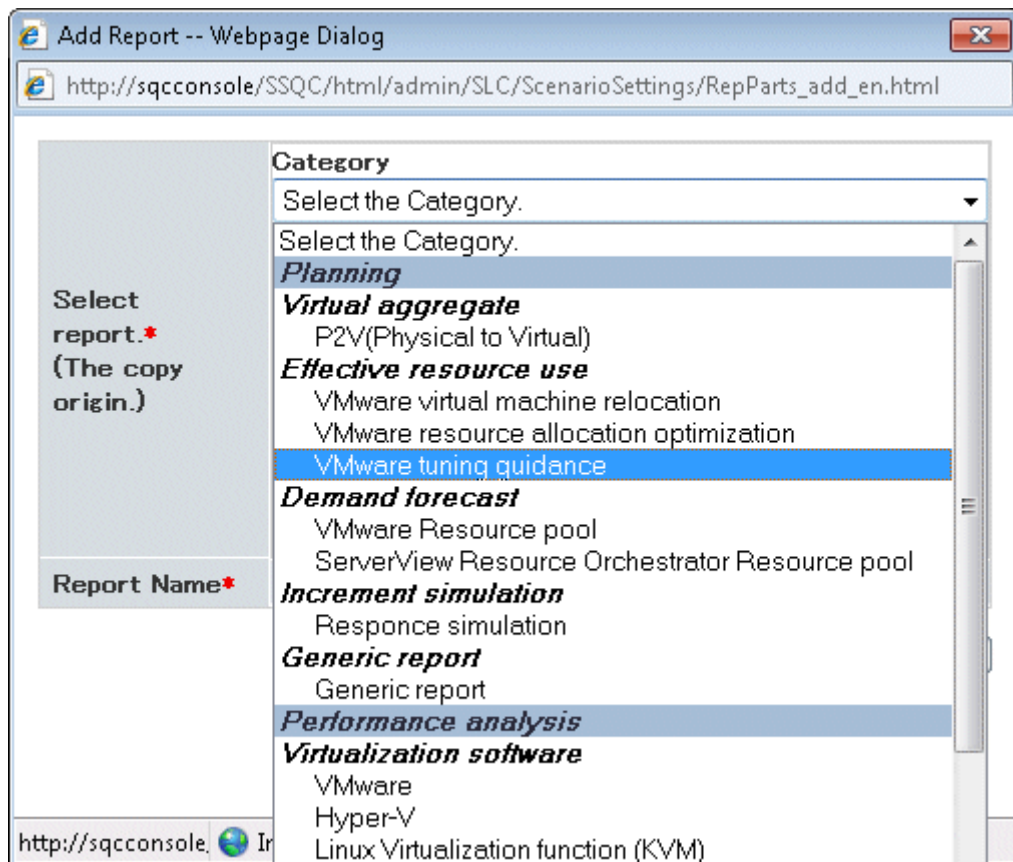
7. If the report is not registered in a newly registered category, click **Report Management** next to **Report**.



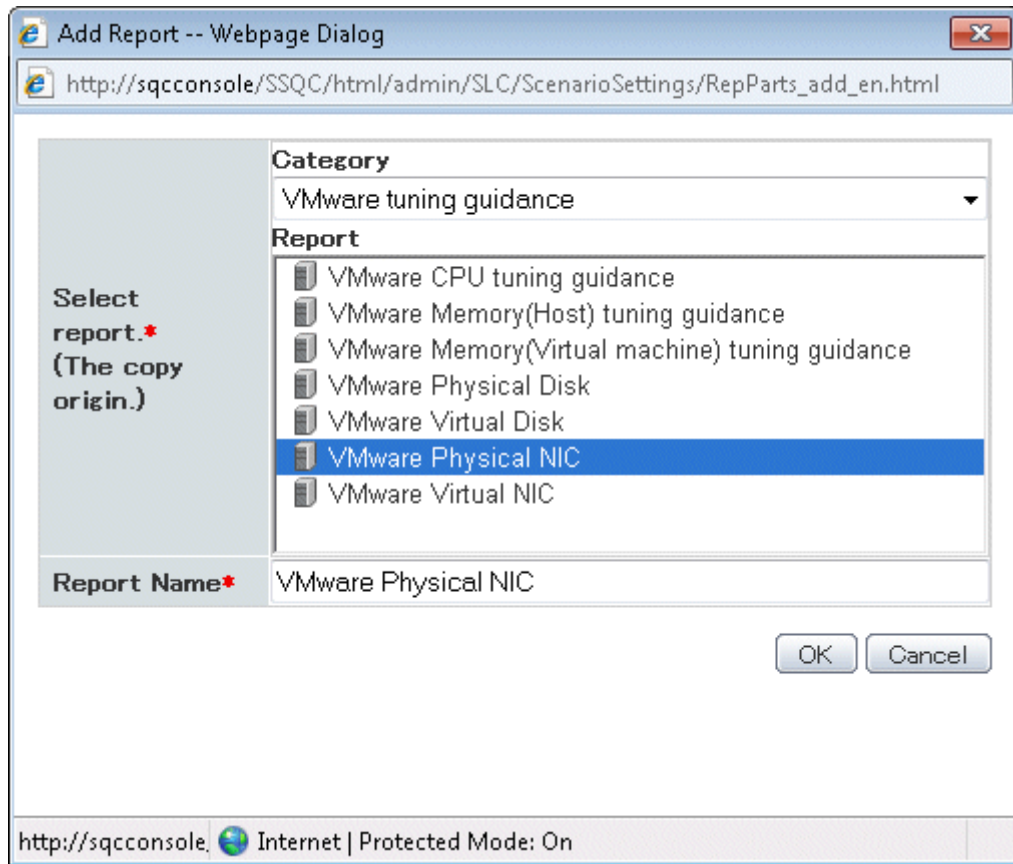
- Click the **Add** button in the **Report Management** window that is displayed.



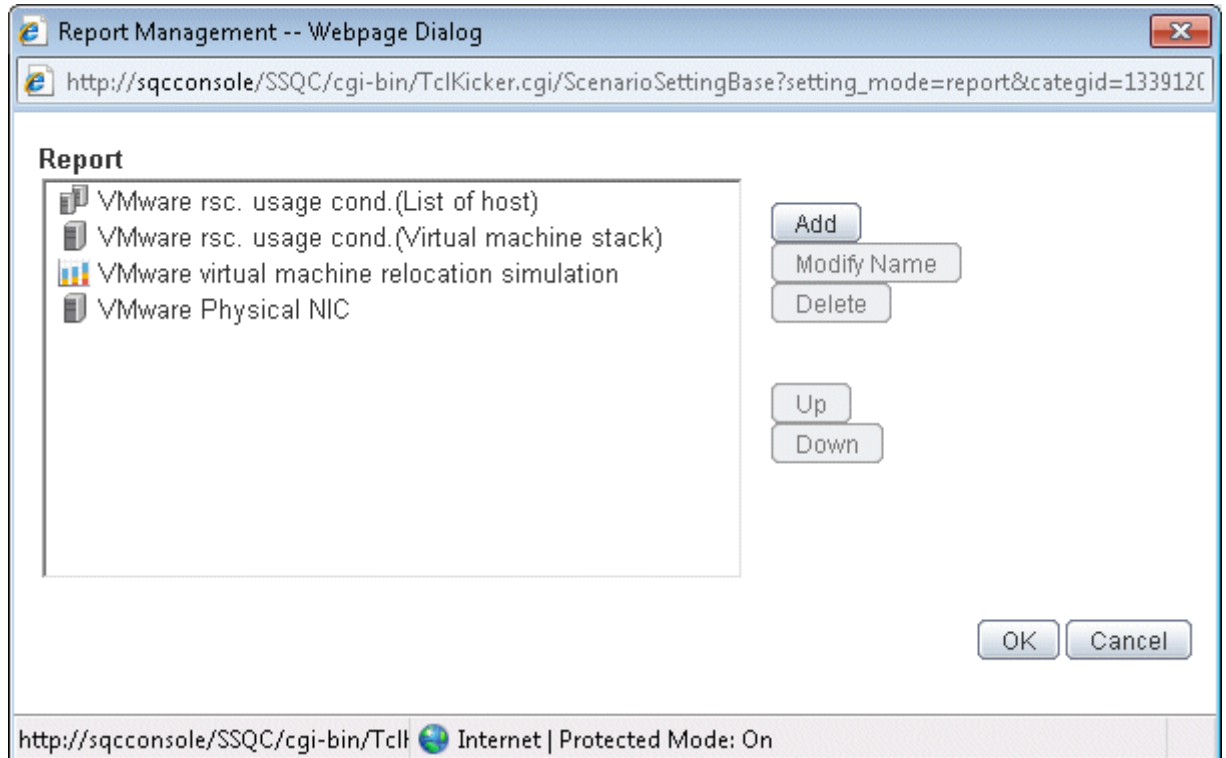
- In the **Add Report** window that is displayed, select the category that includes the report that you want to copy.




10. The reports included in the selected category are listed, so select the report you want to copy. More than one report can be selected. Click **OK** after selecting.



11. Click **OK** in the **Report Management** window.



12. Enter the appropriate **Conditions** and **Period**.

▼ **Conditions** * : required item  Save

▼ **Target Settings**

System Group *
DataGRP_A ▼

Host *
Agent002 ▼

▼ **View Settings**

Number of Items Displayed ?	<input checked="" type="radio"/> Top (Bottom) 5 items <input type="radio"/> All
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

▼ **Period**

Start date 2012 ▼ 06 ▼ 04 ▼ 00 ▼ : 00 ▼

End date 2012 ▼ 06 ▼ 04 ▼ 23 ▼ : 50 ▼

13. Click the **Display** button at the bottom of the analysis conditions area.

▼ **Conditions *** : required item Save

▼ **Target Settings**

System Group *
DataGRP_A

Host *
Agent002

▼ **View Settings**

Number of Items Displayed ?	<input checked="" type="radio"/> Top (Bottom) 5 items
	<input type="radio"/> All
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

▼ **Period**

Start date 2012 06 04 00 : 00

End date 2012 06 04 23 : 50

Display

14. When saving conditions, first check that there is no problem with the displayed report, then click **Save** next to **Conditions**.

▼ **Conditions *** : required item Save

▼ **Target Settings**

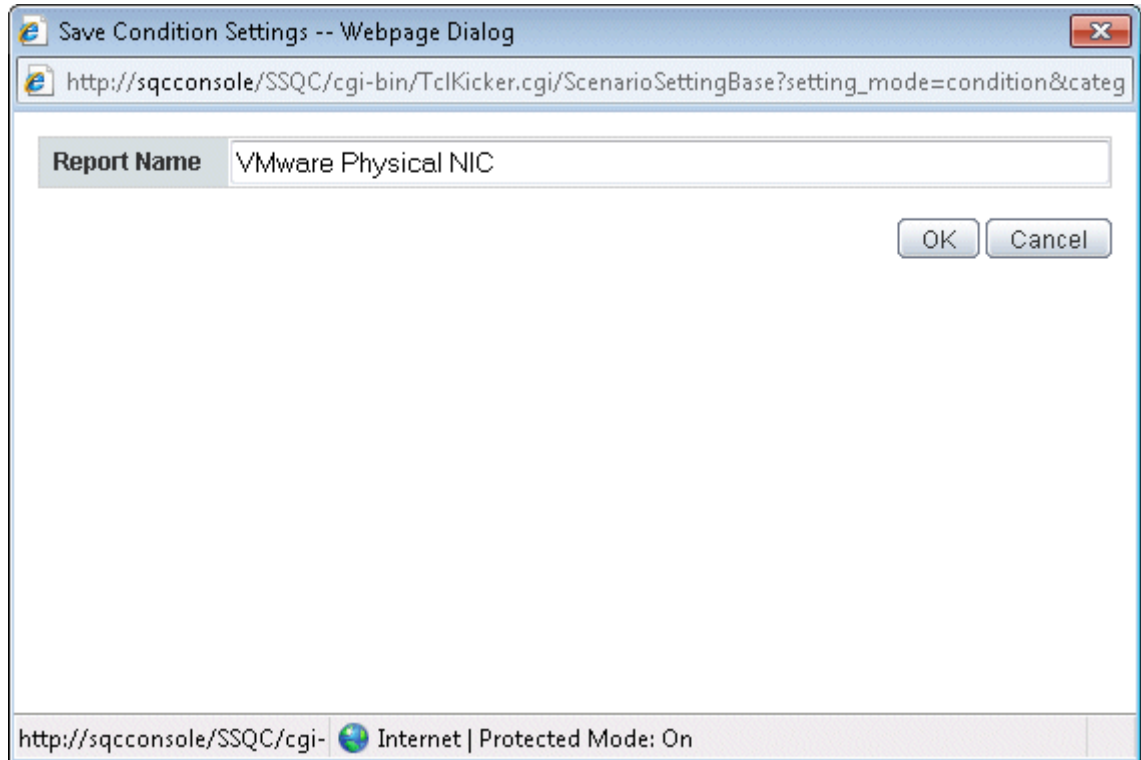
System Group *
DataGRP_A

Host *
Agent002

▼ **View Settings**

Number of Items Displayed ?	<input checked="" type="radio"/> Top (Bottom) 5 items
	<input type="radio"/> All
Analysis data	<input type="radio"/> 10min <input checked="" type="radio"/> 1 hour <input type="radio"/> 1 day
Output to File	<input type="checkbox"/> Creates an Excel® file

15. Enter a name for the report in the **Save Condition Settings** window that is displayed, then click the **Save** button. If you have changed the report name, a report with the specified conditions is added to the selected category. If you have not changed either the category or the report name, the selected report is overwritten.

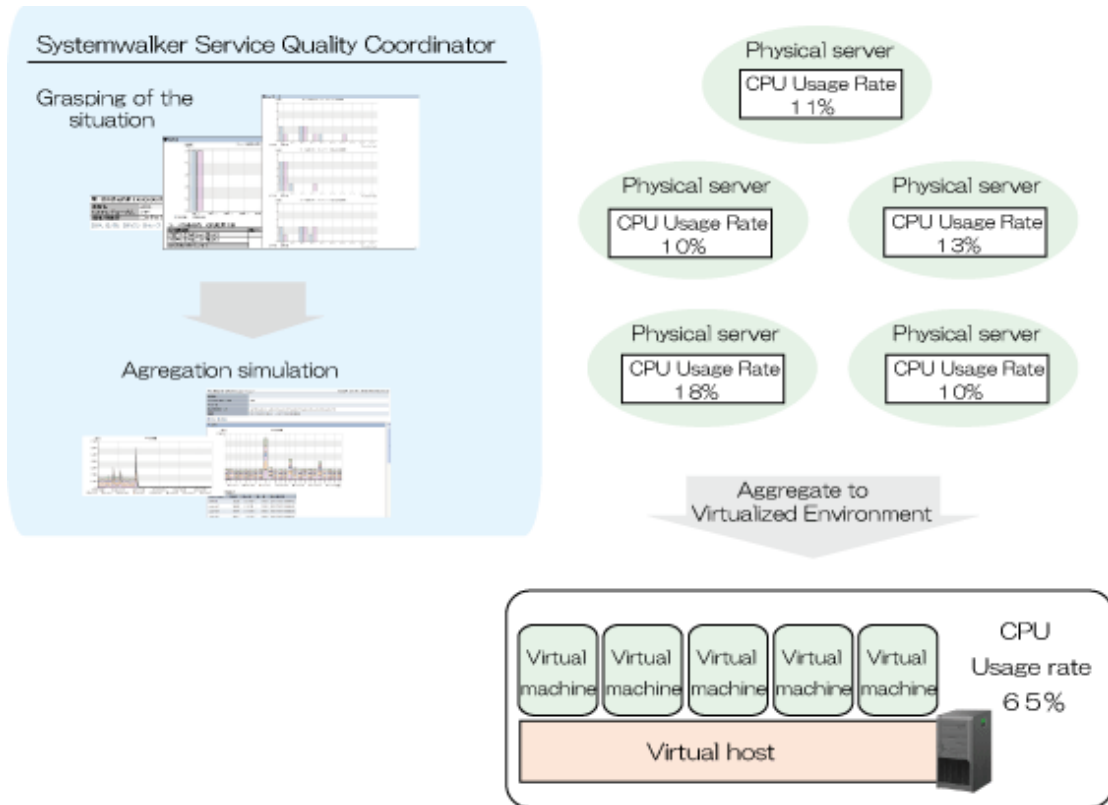


4.5 Operations Using Scenarios

4.5.1 Simulation of Aggregating Physical Servers to a Virtual Environment: [P2V (Physical to Virtual)]

When aggregating physical servers to a virtual environment, you can use Systemwalker Service Quality Coordinator to perform precise simulations based on past operating performance.

You can use the simulation to check beforehand that there will be no problems, and ensure that the aggregation occurs in the optimum virtual environment.



This section describes the procedure for simulation using a "P2V (Physical to Virtual)" category scenario.

Point

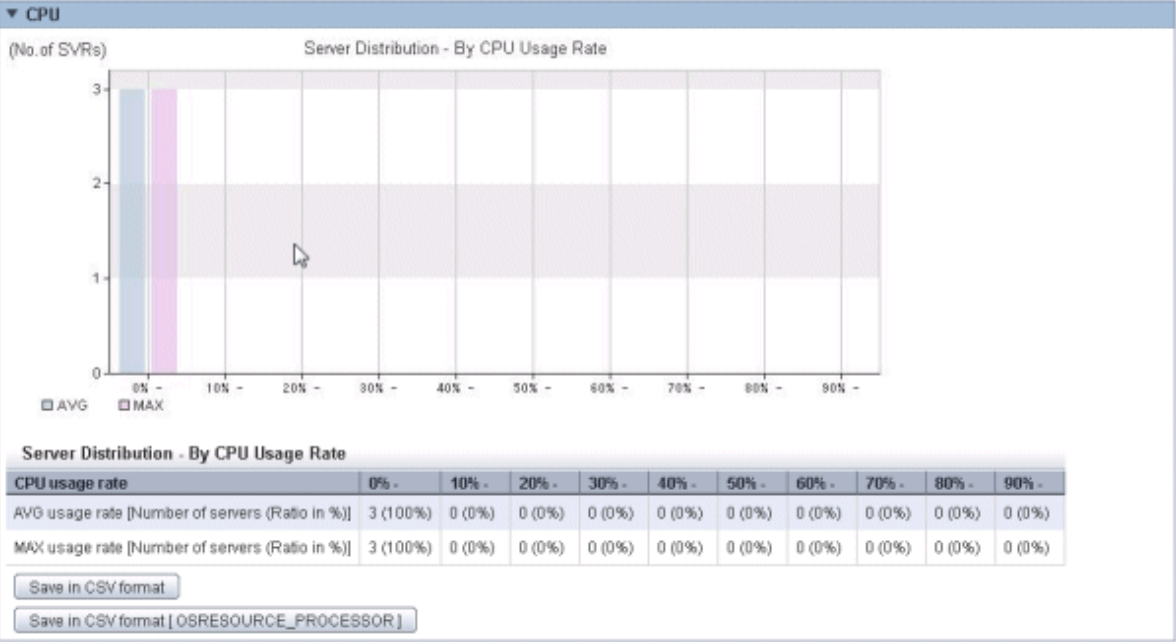
Use the following procedure to test virtual aggregation with hosts within the same system group.

Understanding the current status

1. In the **Analysis/Planning** window, select the "Server distribution by rsc. usage cond. (Summary)" report of the "P2V (Physical to Virtual)" category, specify the analysis conditions and display the report.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.

▼ P2V(Physical to Virtual)		Time created: 09:43:21, Tuesday, June 05, 2012
Report Name	Server distribution by rsc. usage cond. (Summary)	
System Group Name	DefaultGroup	
Host Name		
Period/Report time slot	Tuesday, June 5, 2012 / 00:00 - 23:50	







This report allows you to obtain an overview of the resource usage status of all servers that may be considered as virtual aggregation targets. Aggregation is effective when servers that are not making the most of their resources are aggregated.

- In the **Analysis/Planning** window, select the "List of rsc. usage cond. (Detail)" report of the P2V (Physical to Virtual) category, specify the analysis conditions and display the report.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.

P2V(Physical to Virtual) Time created: 10:19:07, Tuesday, June 05, 2012

Report Name	List of rsc. usage cond. (Detail)
System Group Name	DefaultGroup
Host Name	
Period/Report time slot	Tuesday, June 5, 2012 / 00:00 - 23:50

▼ CPU

CPU usage rate

No.	Category	System name	AVG	MAX	MIN	CPU number	CPU performance(MHz)	Date and time of Maximum value
1	CPU usage rate(%)	HV03-w23r2ex	4.22	4.28	4.16	2	2,932.00	2012/06/05 02:00:00
2	CPU usage rate(%)	HyperV	0.52	0.80	0.50	8	2,934.00	2012/06/05 03:00:00
3	CPU usage rate(%)	WIN-3DNP0BVCJLK	0.49	0.93	0.39	1	3,333.00	2012/06/05 03:00:00

CPU usage

No.	Category	System name	AVG	MAX	MIN	CPU number	CPU performance(MHz)	Date and time of Maximum value
1	CPU usage(MHz)	HV03-w23r2ex	247.40	250.98	244.12	2	2,932.00	2012/06/05 02:00:00
2	CPU usage(MHz)	HyperV	122.64	139.89	118.06	8	2,934.00	2012/06/05 03:00:00
3	CPU usage(MHz)	WIN-3DNP0BVCJLK	16.49	31.10	13.07	1	3,333.00	2012/06/05 03:00:00

Save in CSV format [OSRESOURCE_PROCESSOR]

Save in CSV format [OSRESOURCE_SYSTEMINFO]

▼ Memory

Memory usage rate

No.	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and time of Maximum value
1	Memory usage rate(%)	HV03-w23r2ex	59.06	59.16	59.01	4,095.00	2012/06/05 08:00:00
2	Memory usage rate(%)	WIN-3DNP0BVCJLK	23.61	23.89	23.36	4,095.00	2012/06/05 03:00:00
3	Memory usage rate(%)	HyperV	13.00	13.01	12.99	73,726.00	2012/06/05 01:00:00

Memory usage

No.	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and time of Maximum value
1	Memory usage(MB)	HyperV	9,582.82	9,591.80	9,577.31	73,726.00	2012/06/05 01:00:00
2	Memory usage(MB)	HV03-w23r2ex	2,418.46	2,422.78	2,416.56	4,095.00	2012/06/05 08:00:00
3	Memory usage(MB)	WIN-3DNP0BVCJLK	967.01	978.34	956.43	4,095.00	2012/06/05 03:00:00

Save in CSV format [OSRESOURCE_MEMORY]

Save in CSV format [OSRESOURCE_SYSTEMINFO]

▼ Disk

Disk I/O count

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	I/O(count/sec)	HyperV	4.63	6.17	4.36	2012/06/05 02:00:00
2	I/O(count/sec)	HV03-w23r2ex	2.55	2.58	2.50	2012/06/05 07:00:00
3	I/O(count/sec)	WIN-3DNP0BVCJLK	1.88	2.40	1.71	2012/06/05 03:00:00

Disk throughput

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	Throughput(MB/sec)	HyperV	0.09	0.25	0.05	2012/06/05 03:00:00
2	Throughput(MB/sec)	HV03-w23r2ex	0.02	0.02	0.02	2012/06/05 09:00:00
3	Throughput(MB/sec)	WIN-3DNP0BVCJLK	0.02	0.04	0.01	2012/06/05 03:00:00

Save in CSV format [OSRESOURCE_PHYDISK]

▼ Network

Count for data sent/received over network

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	Sends/Receives(count/sec)	HyperV	700.88	719.34	695.58	2012/06/05 05:00:00
2	Sends/Receives(count/sec)	HV03-w23r2ex	100.36	102.78	95.09	2012/06/05 06:00:00
3	Sends/Receives(count/sec)	WIN-3DNP0BVCJLK	2.87	3.37	2.70	2012/06/05 09:00:00

Network throughput

No.	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	Throughput(MB/sec)	HyperV	0.12	0.12	0.12	2012/06/05 05:00:00
2	Throughput(MB/sec)	HV03-w23r2ex	0.01	0.01	0.01	2012/06/05 06:00:00
3	Throughput(MB/sec)	WIN-3DNP0BVCJLK	0.00	0.00	0.00	2012/06/05 09:00:00

Save in CSV format [OSRESOURCE_NET_INTERFACE]

In the "List of rsc. usage cond. (Detail)" report, a list of resources allocated to each host and resource usage is displayed. For example, sort by CPU usage rate and memory usage rates to check which hosts have available resources. Consider hosts with low usage rates as aggregation candidates.

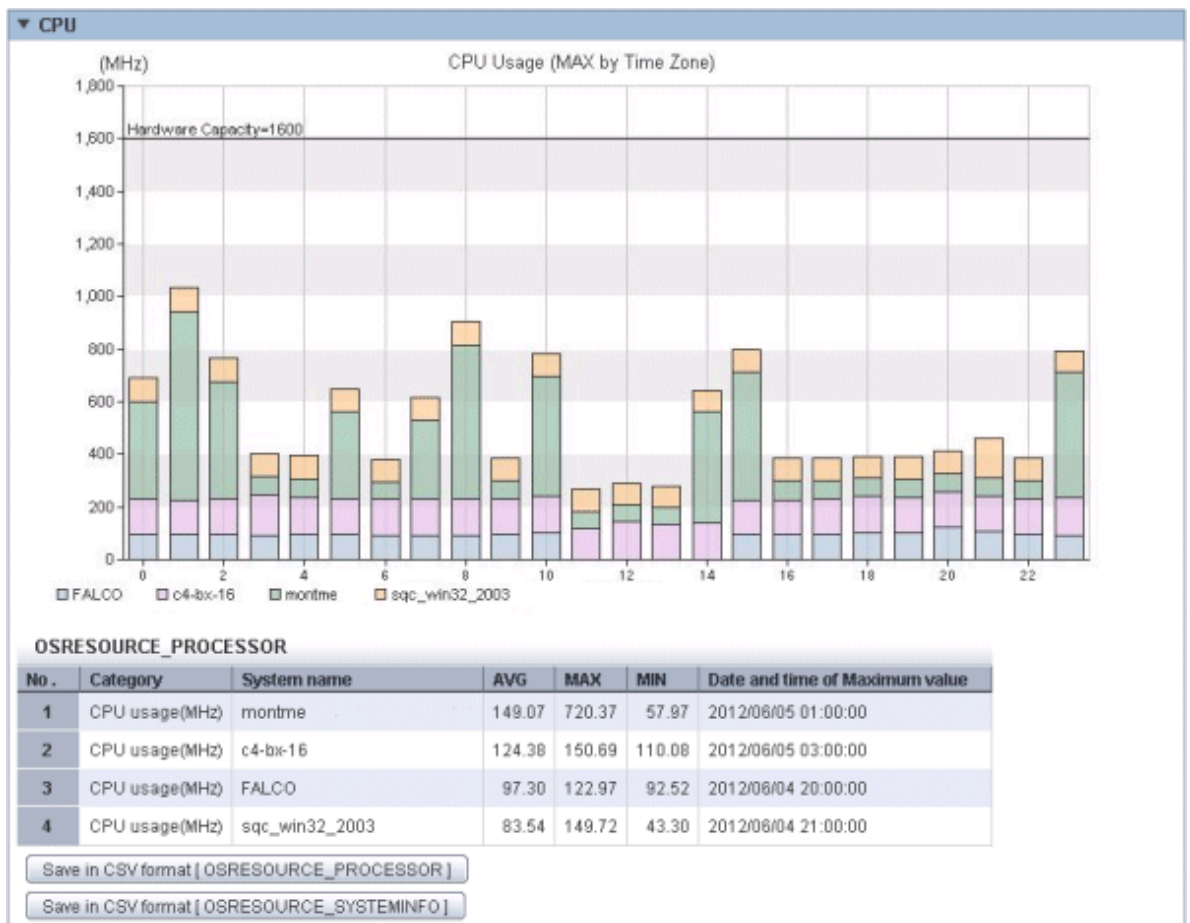
Also check the hosts that are being considered as aggregation candidates to see whether the disk and network throughput is large or not.

Aggregation simulation

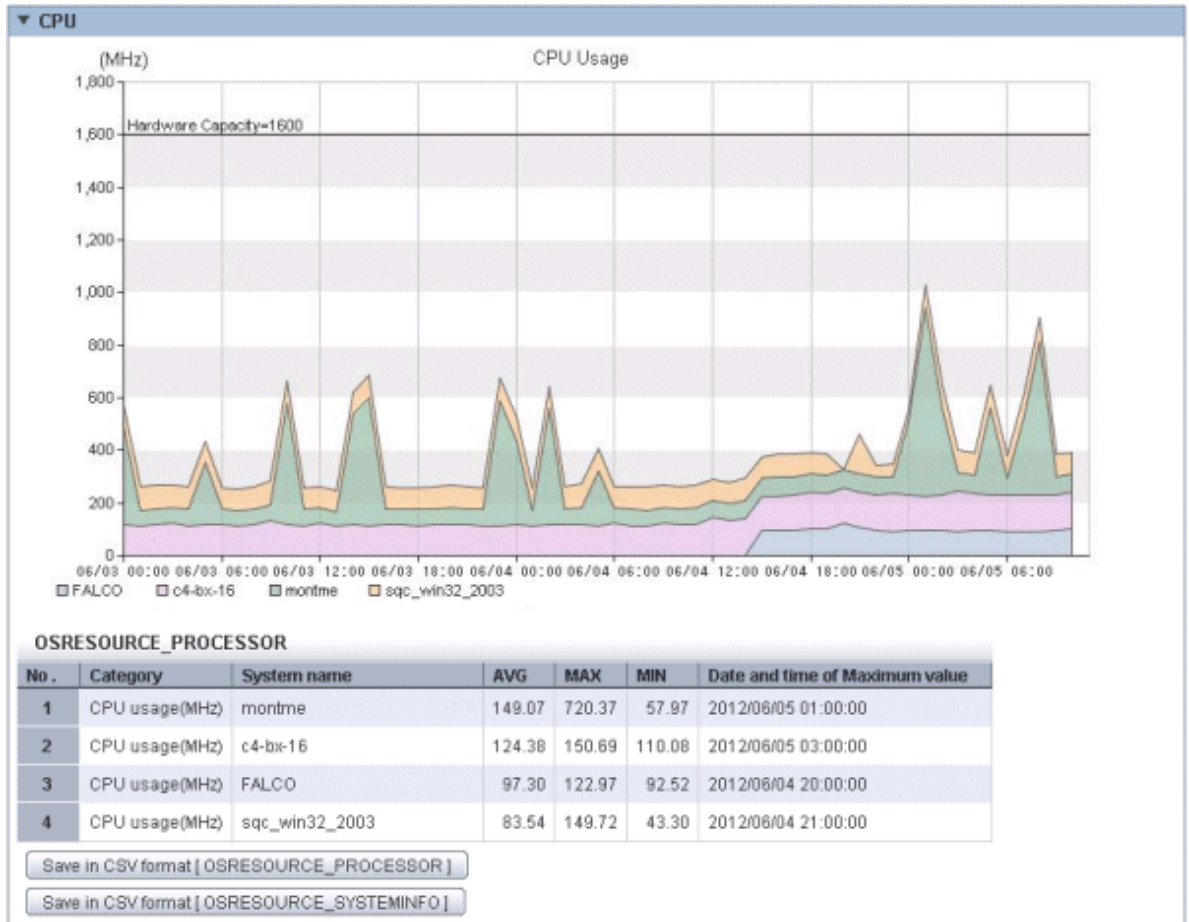
1. In the **Analysis/Planning** window, select the "P2V simulation" report of the "P2V (Physical to Virtual)" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.

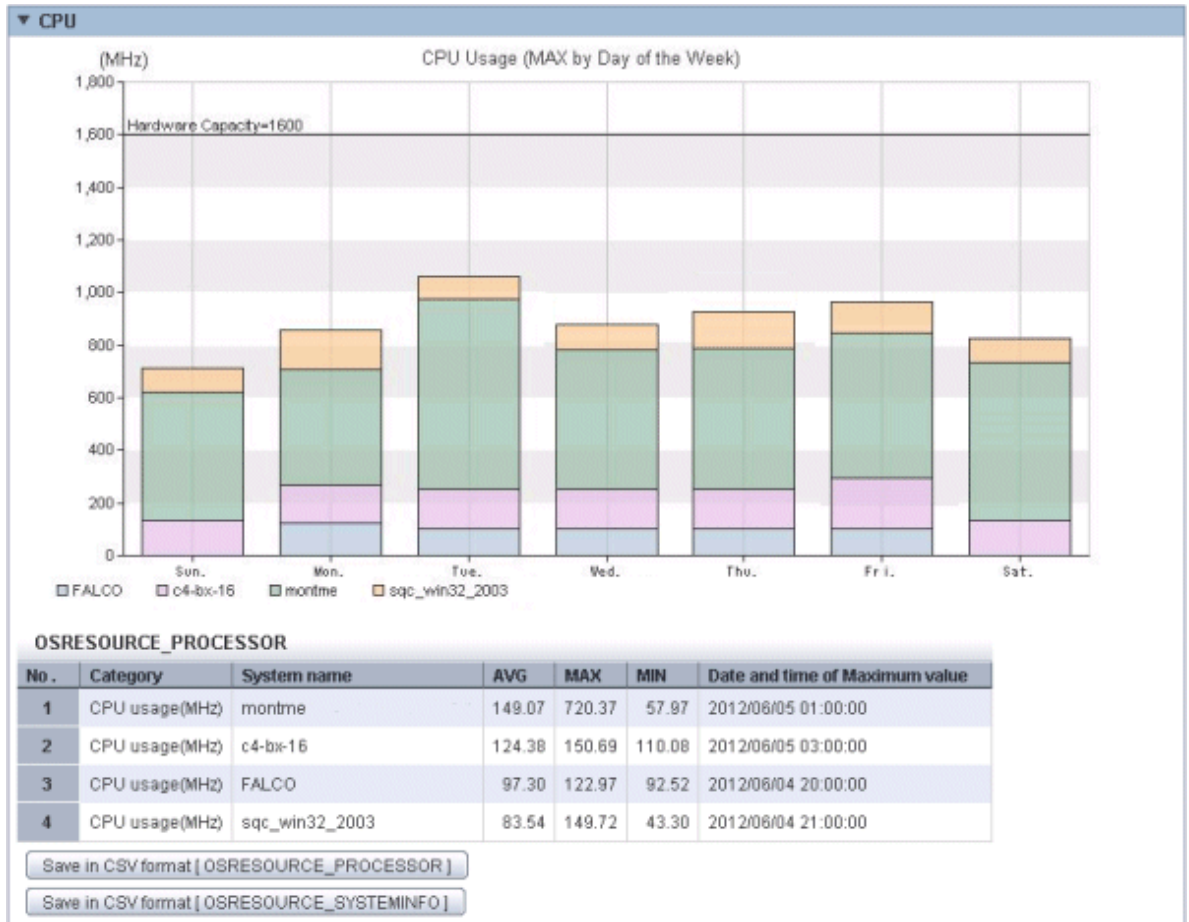
- **Simulation method: By Time Zone**



- Simulation method: Time Series



- Simulation method: By Day



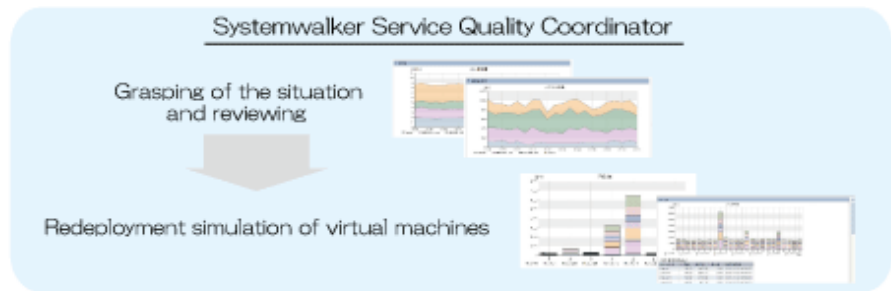
Information about hosts to be aggregated is displayed in a stack graph and table.

For each resource, if a value is too large throughout a period of time or there is a bias for certain time periods or days of the week, consider the combinations of hosts to be aggregated.

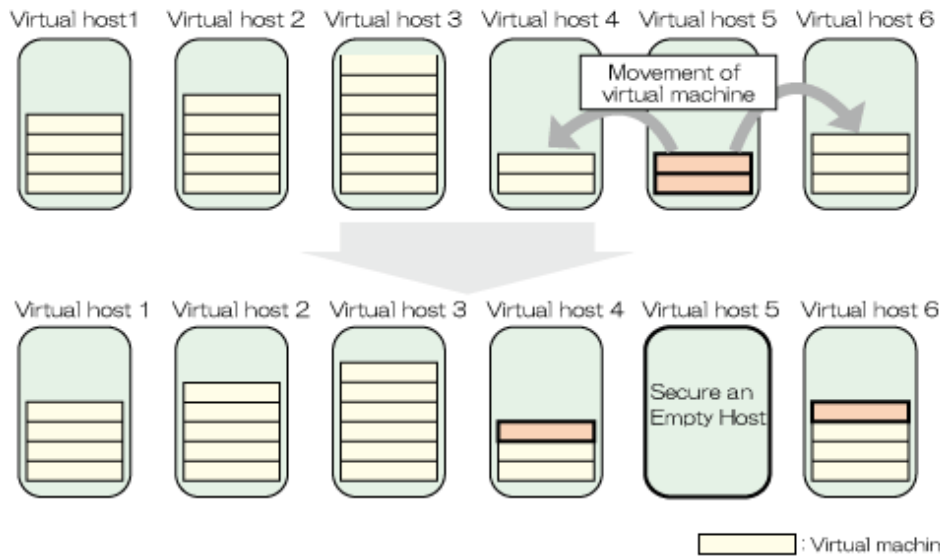
If a threshold value was set, check whether that value is greatly exceeded.

4.5.2 Simulating the Relocation of Virtual Machines: [VMware Virtual Machine Relocation]

Use Systemwalker Service Quality Coordinator to simulate the resource usage status that would occur when a virtual machine is moved from another host to an overcommitted host. By moving virtual machines based on the simulation, hosts can be secured.



Redeployment of virtual machine



This section describes the procedure for simulation using a "VMware virtual machine relocation" category scenario.

Point

Use the following procedure to test relocation with virtual hosts within the same system group.

Understanding the current status

1. In the **Analysis/Planning** window, select the "VMware resource usage status (virtual host list)" report of the "VMware virtual machine relocation" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.

▼ CPU								
CPU usage rate								
No .	Category	System name	AVG	MAX	MIN	Core number	Total CPU performance(MHz)	Date
1	CPU usage rate(%)	VMware-5	2.17	2.70	1.94	12.00	40,001.41	2012/06/04 12:00:00
2	CPU usage rate(%)	VMware-3.5	1.77	1.82	1.75	8.00	25,270.00	2012/06/04 04:00:00
3	CPU usage rate(%)	VMware-4.1-root01	0.56	0.59	0.43	8.00	23,467.50	2012/06/04 04:00:00
CPU usage								
No .	Category	System name	AVG	MAX	MIN	Core number	Total CPU performance(MHz)	Date
1	CPU usage(MHz)	VMware-5	1,742.32	2,168.75	1,556.92	12.00	40,001.41	2012/06/04 12:00:00
2	CPU usage(MHz)	VMware-3.5	449.07	461.17	442.58	8.00	25,270.00	2012/06/04 04:00:00
3	CPU usage(MHz)	VMware-4.1-root01	264.86	278.25	203.42	8.00	23,467.50	2012/06/04 04:00:00
Save in CSV format [VMW_PCPU]								
Save in CSV format [VMW_PCPU2]								

▼ Memory								
Memory usage rate								
No .	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and time of Maximum value	
1	Memory usage rate(%)	VMware-3.5	7.10	7.60	6.38	8,191.38	2012/06/04 12:00:00	
2	Memory usage rate(%)	VMware-5	1.72	2.28	1.48	196,598.16	2012/06/04 16:00:00	
3	Memory usage rate(%)	VMware-4.1-root01	0.08	0.09	0.08	73,726.00	2012/06/04 07:00:00	
Memory usage								
No .	Category	System name	AVG	MAX	MIN	Hardware memory capacity(MB)	Date and time of Maximum value	
1	Memory usage(MB)	VMware-5	3,374.36	4,481.42	2,903.04	196,598.16	2012/06/04 16:00:00	
2	Memory usage(MB)	VMware-3.5	581.53	622.91	522.92	8,191.38	2012/06/04 04:00:00	
3	Memory usage(MB)	VMware-4.1-root01	62.39	64.94	60.13	73,726.00	2012/06/04 04:00:00	
Save in CSV format [VMW_PMEM]								

▼ Disk							
Disk I/O count							
No .	Category	System name	AVG	MAX	MIN	Date and time of Maximum value	
1	I/O(count/sec)	VMware-5	75.08	198.38	52.87	2012/06/04 17:00:00	
2	I/O(count/sec)	VMware-3.5	21.39	22.09	21.05	2012/06/04 04:00:00	
3	I/O(count/sec)	VMware-4.1-root01	7.58	9.96	6.95	2012/06/04 04:00:00	
Disk throughput							
No .	Category	System name	AVG	MAX	MIN	Date and time of Maximum value	
1	Throughput(MB/sec)	VMware-5	1.66	3.74	1.05	2012/06/04 17:00:00	
2	Throughput(MB/sec)	VMware-3.5	0.22	0.23	0.22	2012/06/04 04:00:00	
3	Throughput(MB/sec)	VMware-4.1-root01	0.17	0.19	0.16	2012/06/04 04:00:00	
Save in CSV format [VMW_PDISK]							

▼ Network						
Count for data sent/received over network						
No .	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	Sends/Receives(count/sec)	VMware-5	2,665.83	3,881.84	2,365.72	2012/06/04 09:00:00
2	Sends/Receives(count/sec)	VMware-4.1-root01	1,829.98	3,186.44	1,679.46	2012/06/04 09:00:00
3	Sends/Receives(count/sec)	VMware-3.5	36.37	40.55	34.70	2012/06/04 12:00:00

Network throughput						
No .	Category	System name	AVG	MAX	MIN	Date and time of Maximum value
1	Throughput(Mbits/sec)	VMware-5	5.76	13.85	3.65	2012/06/04 09:00:00
2	Throughput(Mbits/sec)	VMware-4.1-root01	3.76	12.92	2.75	2012/06/04 09:00:00
3	Throughput(Mbits/sec)	VMware-3.5	0.11	0.13	0.10	2012/06/04 15:00:00

Save in CSV format [VMW_NET]

▼ Hardware resources information					
Hardware resources information					
No .	System name	Core number	Total CPU performance(MHz)	Hardware memory capacity(MB)	Information ac
1	VMware-3.5	8.00	25,270.00	8,191.38	2012/06/04 00:
2	VMware-4.1-root01	8.00	23,467.50	73,726.00	2012/06/04 00:
3	VMware-5	12.00	40,001.41	196,598.16	2012/06/04 00:

Save in CSV format [VMW_PCPU2]

Save in CSV format [VMW_PMEM]

A list of resources allocated to each virtual host and resource usage is displayed.

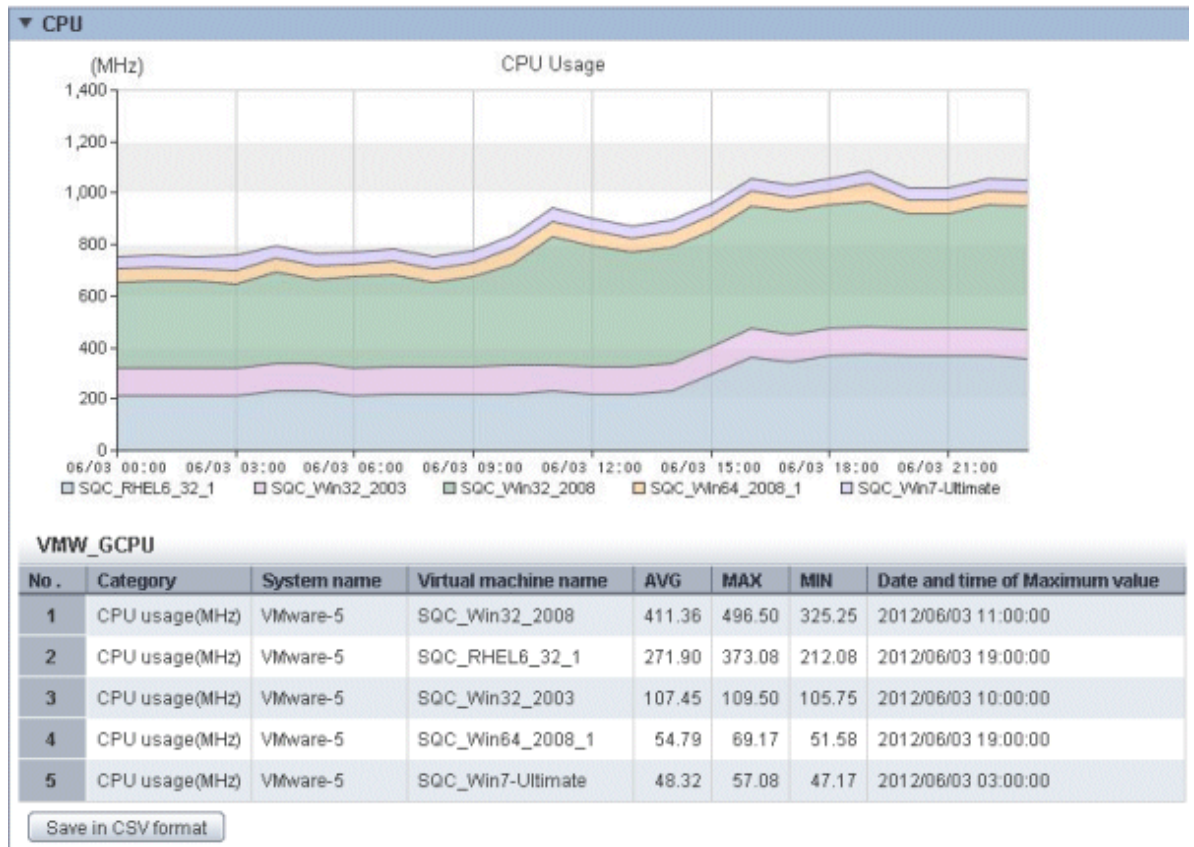
For example, sort by CPU usage rate and memory usage rates to check which hosts have available resources. Consider making the host with the lowest amount of resource usage the migration source, and the host with the next lowest rate as the migration target.

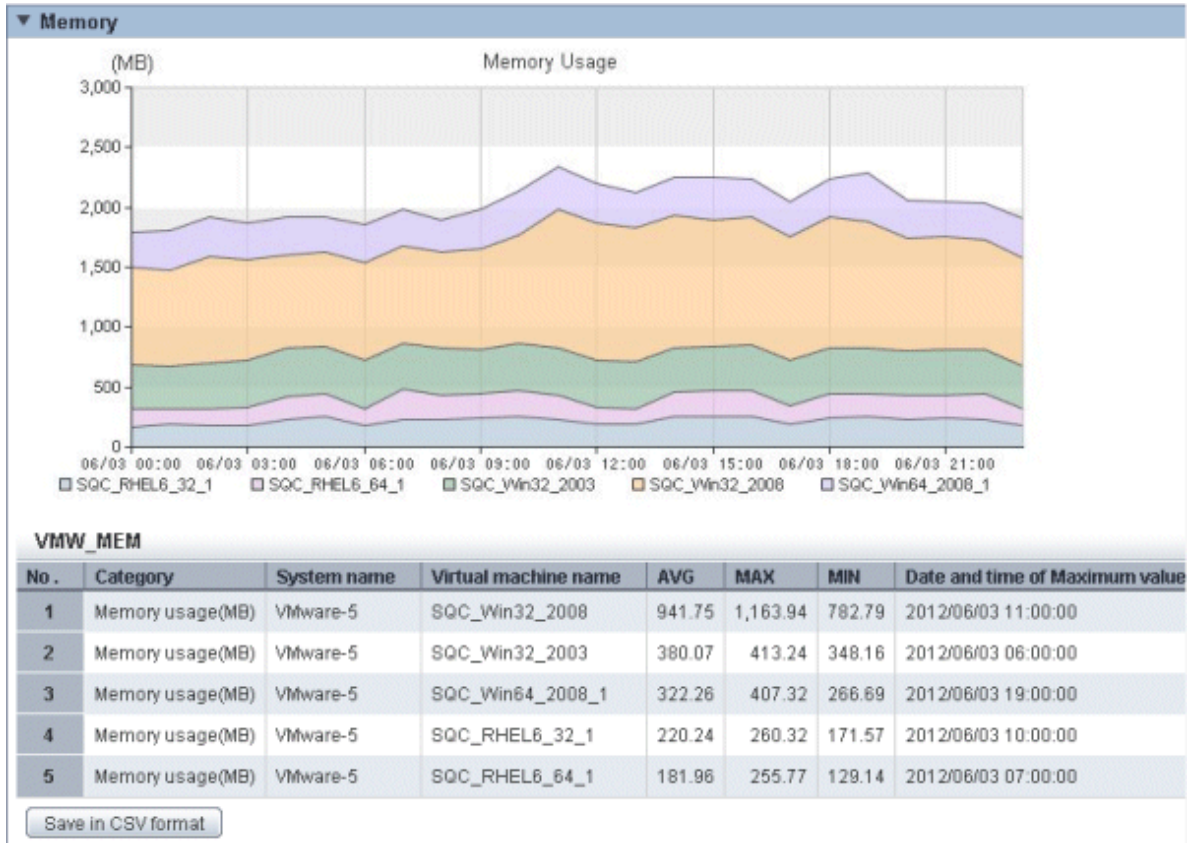
Also check the hosts that are being considered as migration source and destination to see whether the disk and network throughput is large or not.

Considering relocation

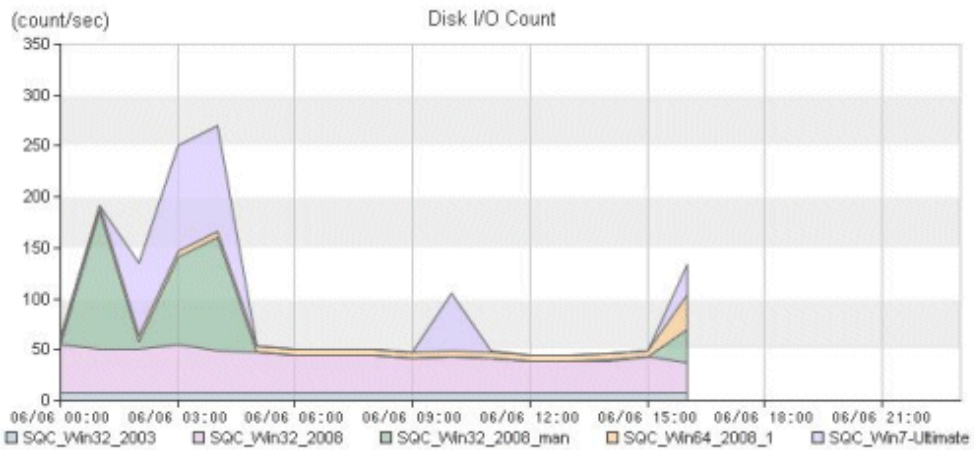
1. In the **Analysis/Planning** window, select the VMware rsc. usage cond. (Virtual machine stack) report of the "VMware virtual machine relocation" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.



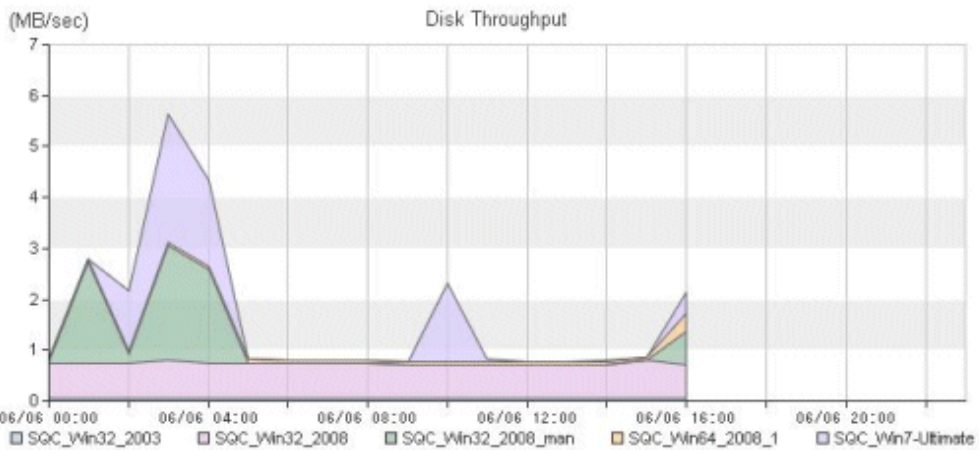


▼ Disk



VMW_DISK

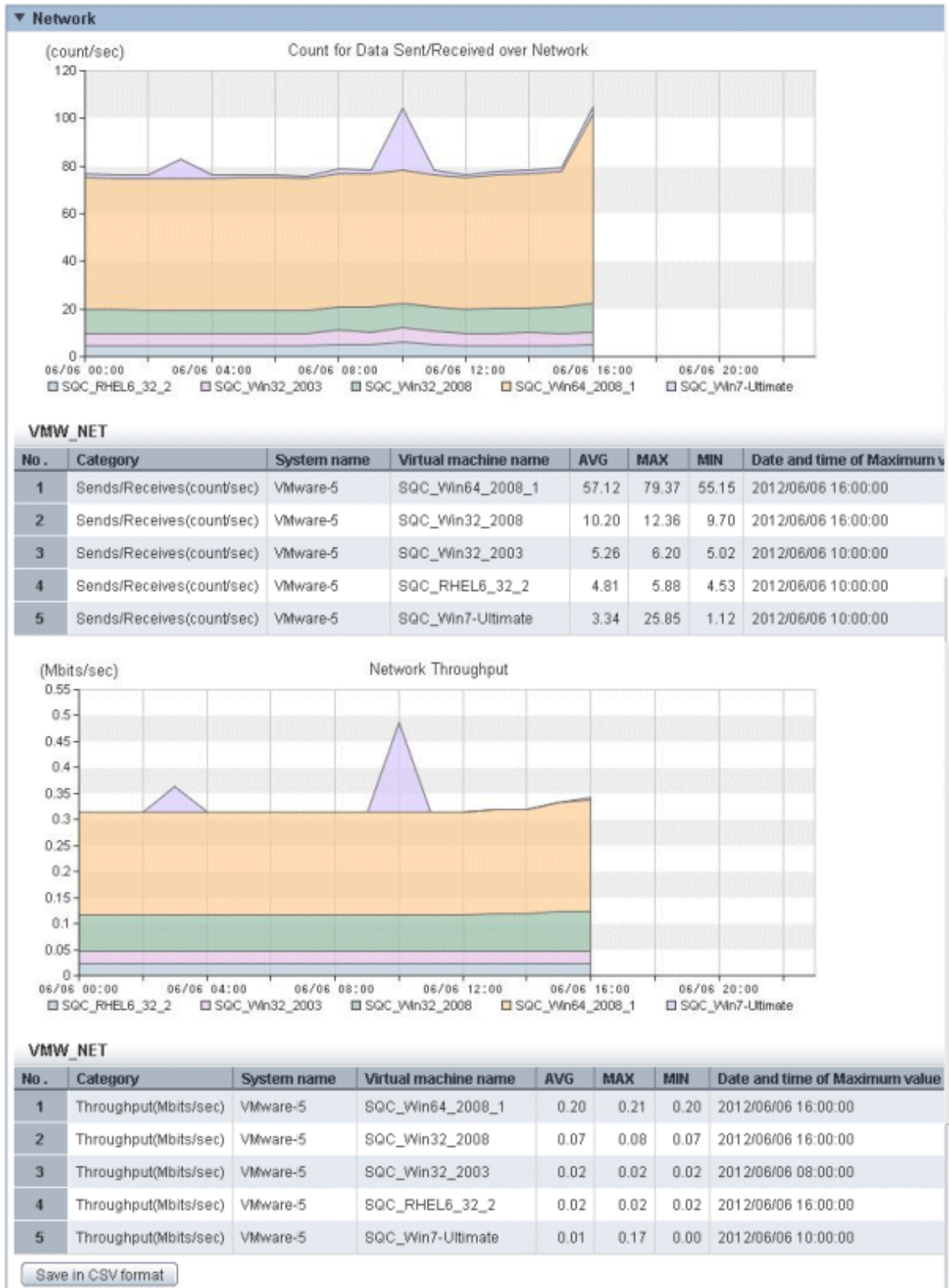
No .	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	I/O(count/sec)	VMware-5	SQC_Win32_2008	37.66	48.68	29.63	2012/06/06 03:00:00
2	I/O(count/sec)	VMware-5	SQC_Win32_2008_man	21.91	133.98	0.08	2012/06/06 01:00:00
3	I/O(count/sec)	VMware-5	SQC_Win7-Ultimate	21.78	104.65	0.08	2012/06/06 04:00:00
4	I/O(count/sec)	VMware-5	SQC_Win64_2008_1	7.83	34.61	5.78	2012/06/06 16:00:00
5	I/O(count/sec)	VMware-5	SQC_Win32_2003	7.00	7.23	6.72	2012/06/06 01:00:00



VMW_DISK

No .	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum value
1	Throughput(MB/sec)	VMware-5	SQC_Win32_2008	0.69	0.76	0.67	2012/06/06 03:00:00
2	Throughput(MB/sec)	VMware-5	SQC_Win7-Ultimate	0.44	2.50	0.00	2012/06/06 03:00:00
3	Throughput(MB/sec)	VMware-5	SQC_Win32_2008_man	0.40	2.25	0.00	2012/06/06 03:00:00
4	Throughput(MB/sec)	VMware-5	SQC_Win64_2008_1	0.08	0.36	0.06	2012/06/06 16:00:00
5	Throughput(MB/sec)	VMware-5	SQC_Win32_2003	0.05	0.05	0.05	2012/06/06 16:00:00

Save in CSV format



The resource usage information for the virtual machines on the virtual host is displayed in a stack graph.

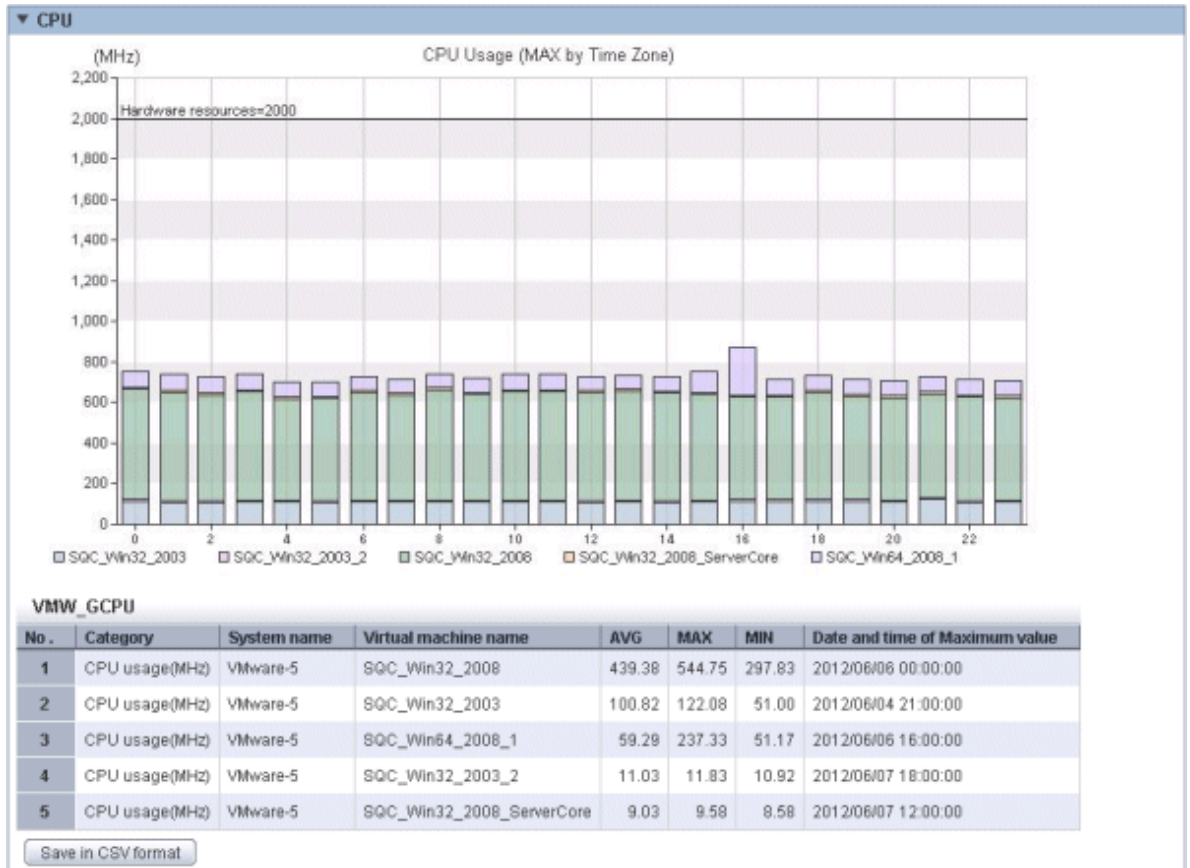
Check the resource usage in each virtual machine, and use this information to work out which virtual machine should go to which destination candidate host.

Relocation simulation

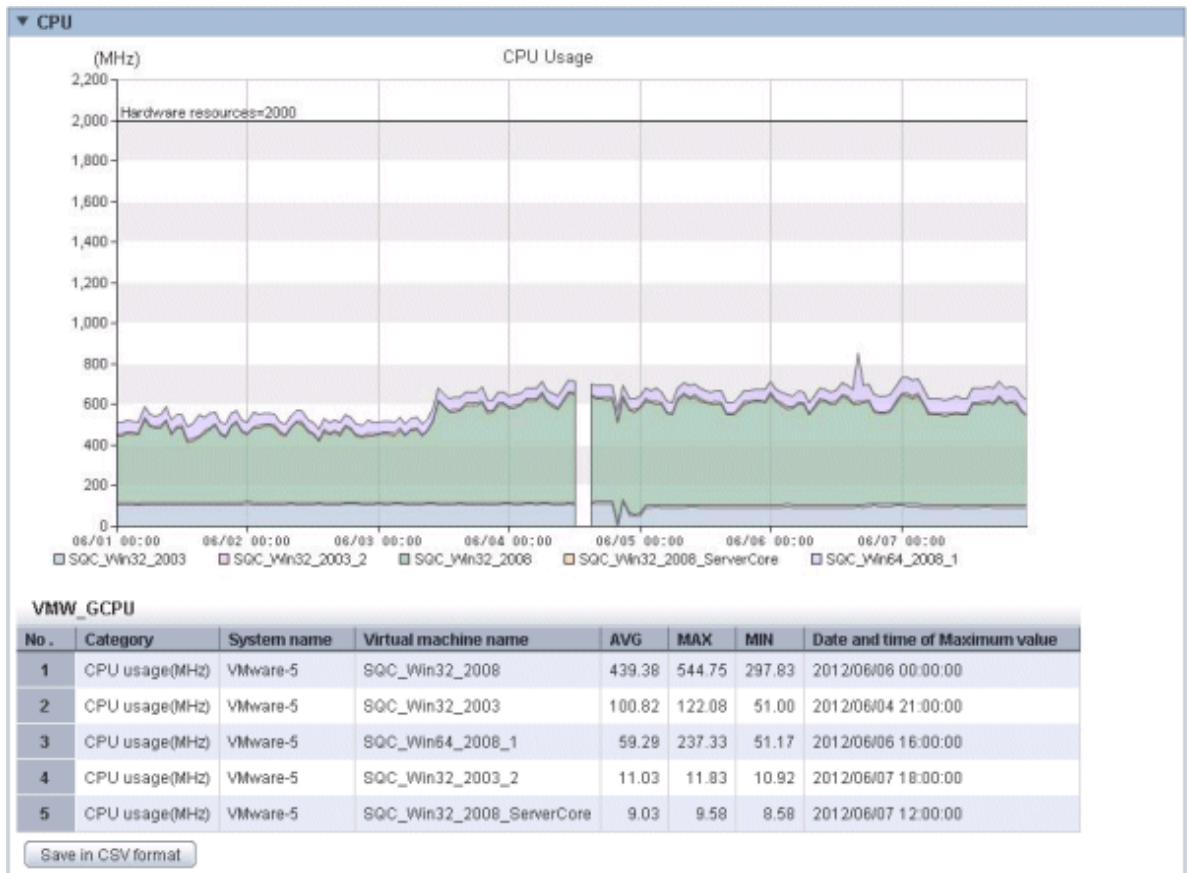
1. In the **Analysis/Planning** window, select the "VMware Virtual machine relocation simulation" report of the "VMware virtual machine relocation" category, specify the analysis conditions and run the simulation.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.

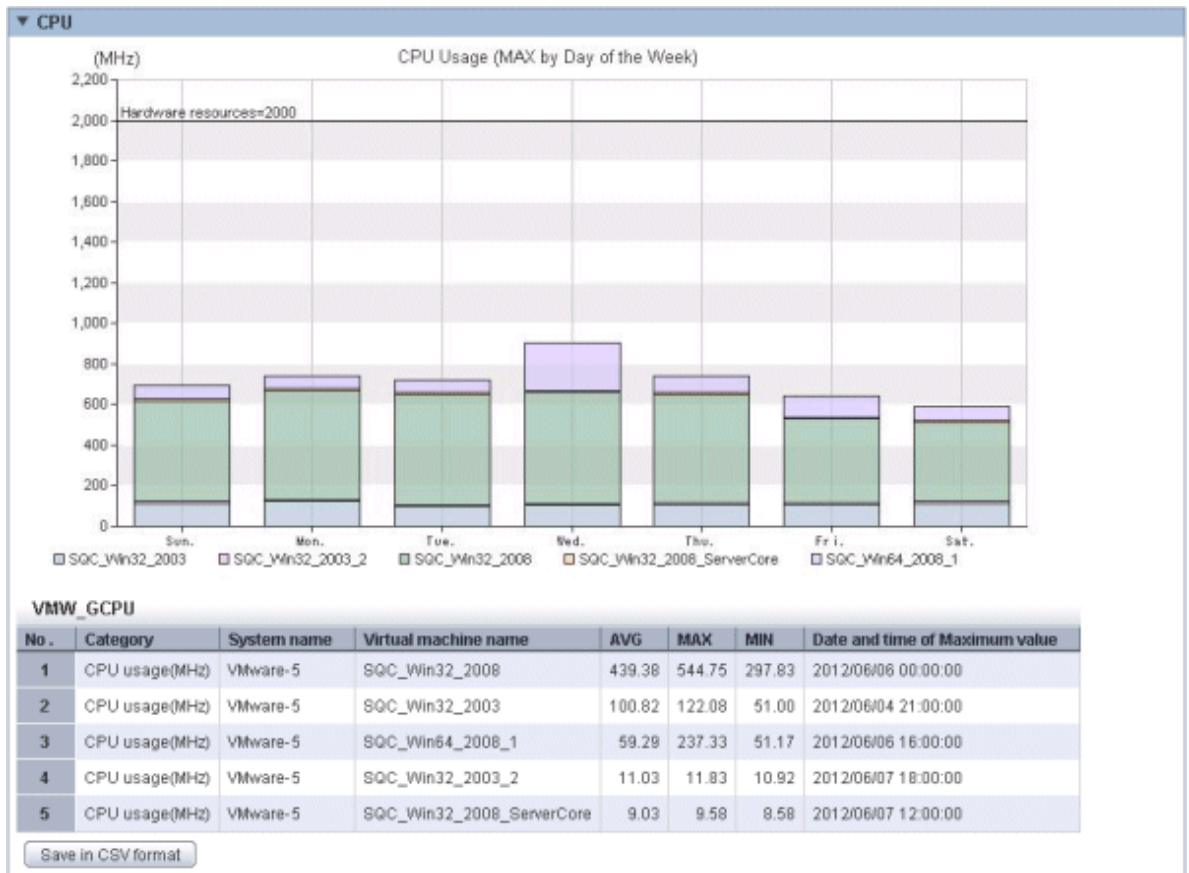
Display by time zone



Display by time series



Display by day of the week



The information about virtual machines to be aggregated and all virtual machines in the aggregation target host are displayed in a stack graph. Tables are also displayed along with the above graphs.

For each resource, if a value is too great throughout a period or there is a bias for certain time periods or days of the week, consider the combinations of the virtual machines to be relocated.

If a threshold value was set, check whether that value is greatly exceeded.

4.5.3 Analysis of Bottlenecks in Virtual Environment: [VMware Tuning Guidance]

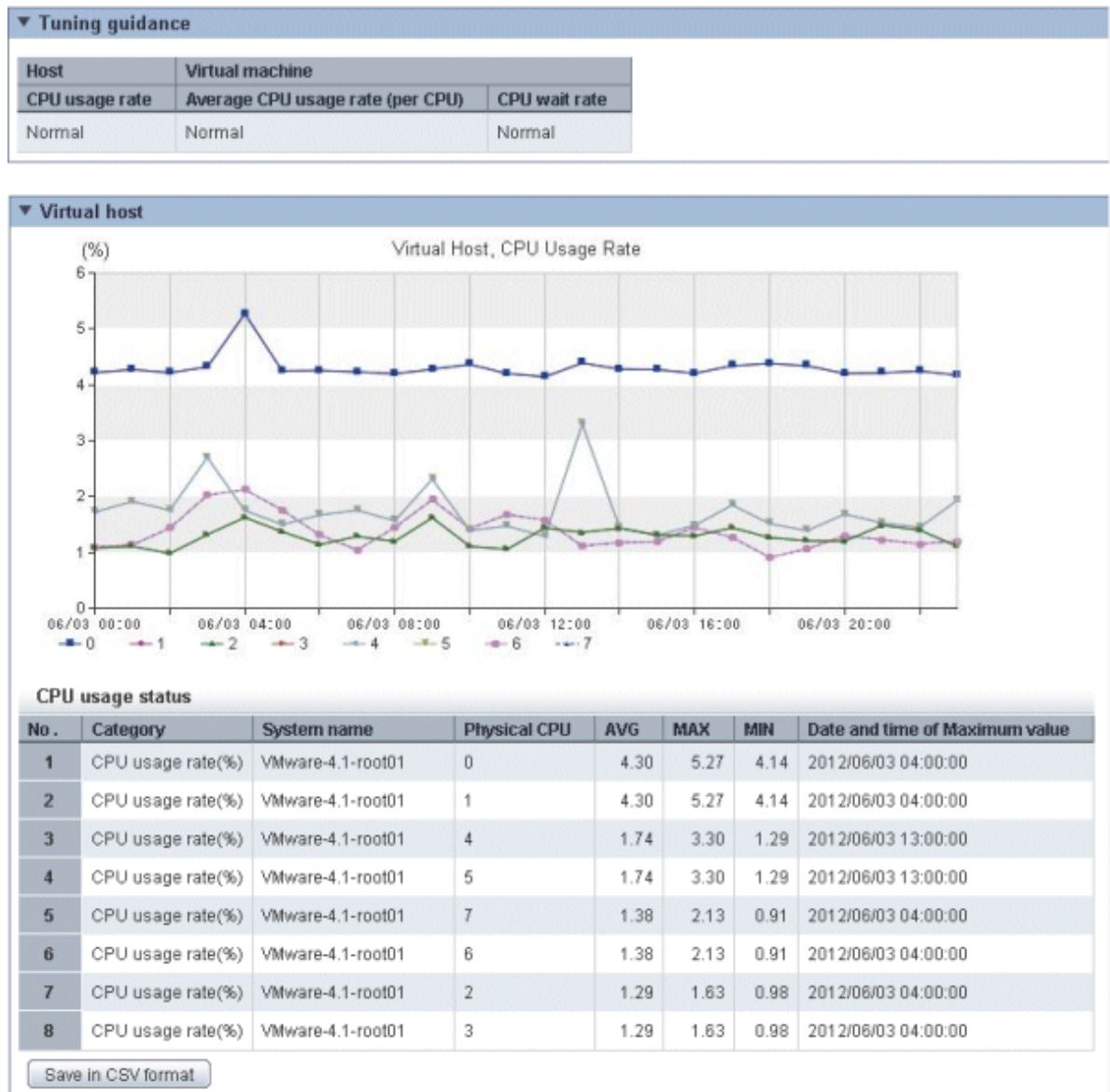
This section describes how to detect bottlenecks in virtual environments (VMware) and gives guidance on measures to take.

This section describes the procedure for using a "VMware tuning guidance" category scenario to detect bottlenecks and the actions to take.

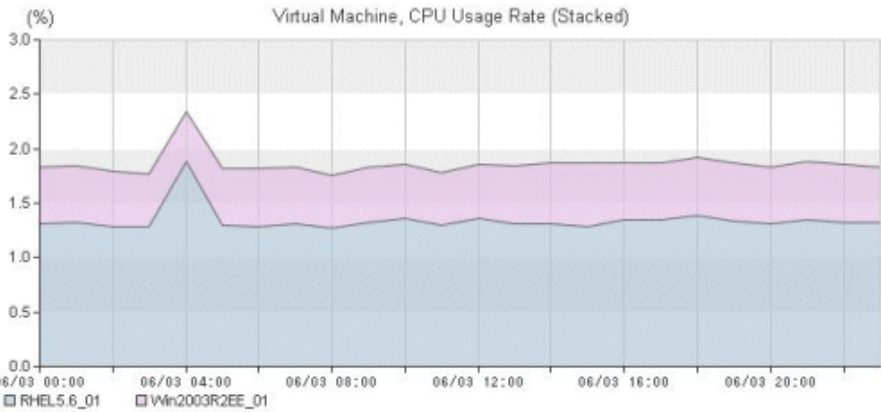
Bottleneck analysis

1. In the **Analysis/Planning** window, select the "VMware CPU tuning guidance" report of the "VMware tuning guidance" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.

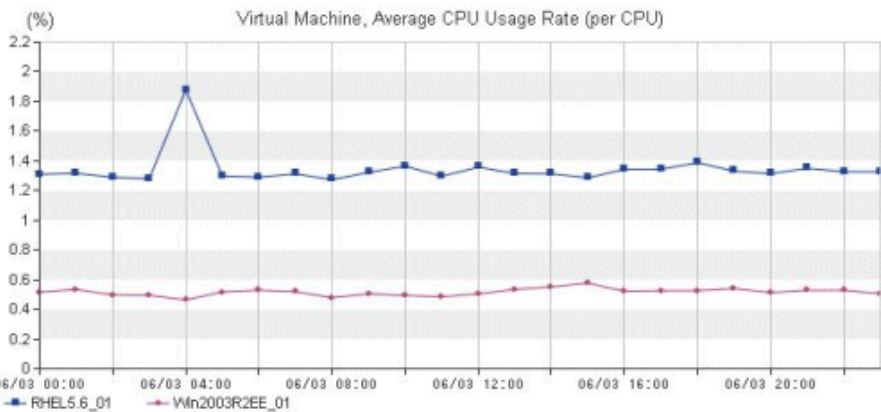


▼ Virtual machine



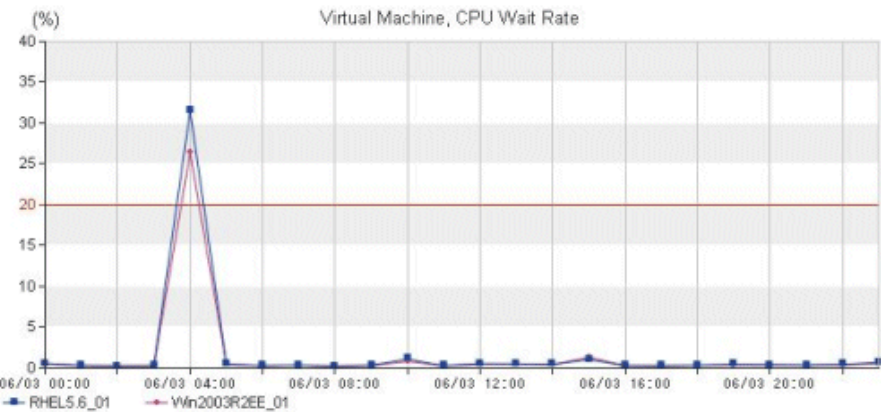
CPU usage rate status

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of
1	CPU usage rate (total CPUs)(%)	VMware-4.1-root01	RHEL5.6_01	1.34	1.88	1.27	2012/06/03 04:00
2	CPU usage rate (total CPUs)(%)	VMware-4.1-root01	Win2003R2EE_01	0.52	0.58	0.46	2012/06/03 15:00



CPU usage rate status (per CPU)

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and t
1	Average CPU usage rate (per CPU)(%)	VMware-4.1-root01	RHEL5.6_01	1.34	1.88	1.27	2012/06/03
2	Average CPU usage rate (per CPU)(%)	VMware-4.1-root01	Win2003R2EE_01	0.52	0.58	0.46	2012/06/03



CPU wait rate status

No.	Category	System name	Virtual machine name	AVG	MAX	MIN	Date and time of Maximum valu
1	CPU wait rate(%)	VMware-4.1-root01	RHEL5.6_01	1.75	31.51	0.20	2012/06/03 04:00:00
2	CPU wait rate(%)	VMware-4.1-root01	Win2003R2EE_01	1.51	26.40	0.21	2012/06/03 04:00:00

Save in CSV format

Check in the report displayed whether there are any problems with the CPU usage status of the virtual environment. If there are possible problems, these are marked with a yellow "Caution" in the background of the tuning guidance. Refer to the measures that are displayed.

Refer to "[4.2.1.2.3 VMware tuning guidance](#)" for information on analyzing reports.

2. Using the same procedure as 1, display the reports shown below and check for problems with the memory, disks, and network in the virtual environment.

Note that as with "VMware CPU tuning guidance", "Caution" and measures to take are displayed in the "VMware memory (Host) tuning guidance" and "VMware memory (Virtual machine) tuning guidance" reports.

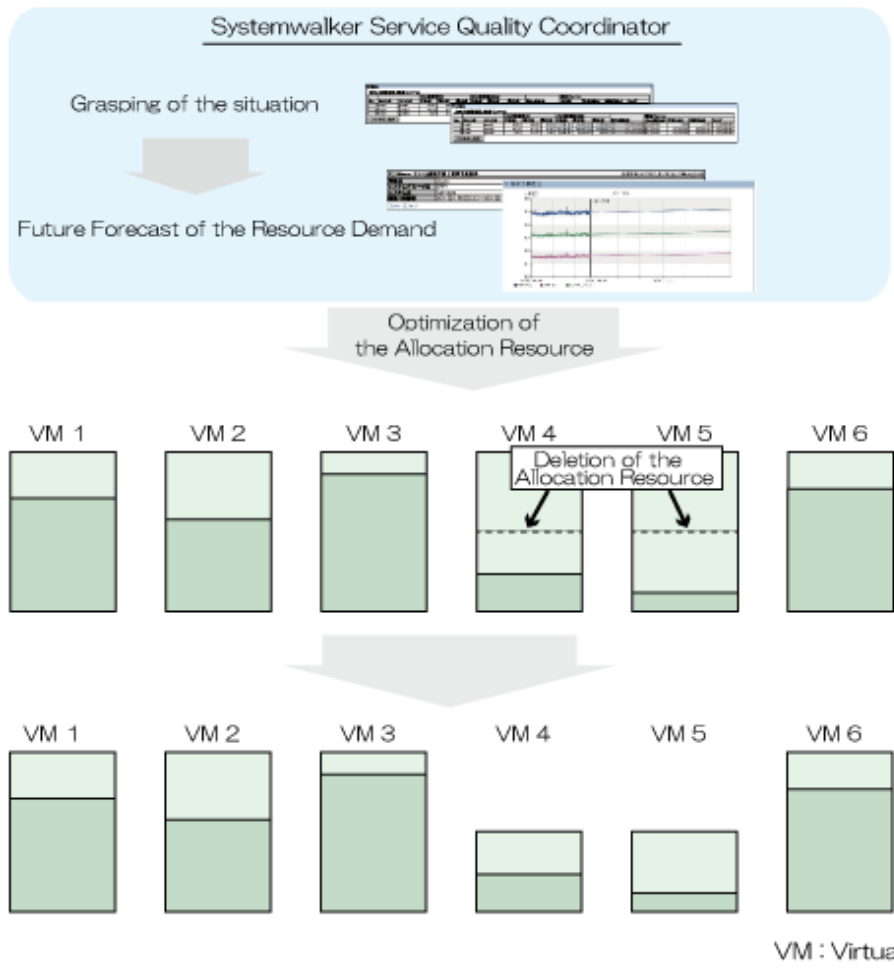
- VMware memory (Host) tuning guidance
- VMware memory (Virtual machine) tuning guidance
- VMware Physical Disk
- VMware Virtual Disk
- VMware Physical NIC
- VMware Virtual NIC

Refer to "[4.2.1.2.3 VMware tuning guidance](#)" for information on analyzing reports.

Refer to the measures displayed on the screen and to the explanation in "[4.2.1.2.3 VMware tuning guidance](#)" when a bottleneck is detected.

4.5.4 Optimization of Resources Allocated to a Virtual Machine: [Optimization of Resources Allocated to VMware]

Use Systemwalker Service Quality Coordinator to detect virtual machines with a low resource usage rate. Review the amount of resources allocated based on the results and secure available resources to optimize them.



This section describes the procedure for attempting to optimize resources by using the "VMware resource allocation optimization" category scenario.

Understanding the current status

1. In the **Analysis/Planning** window, select the "VMware resource usage status (Virtual machine list)" report of the "VMware resource allocation optimization" category, specify the analysis conditions and display the report.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.

▼ CPU								
CPU usage rate								
No .	Category	System name	Virtual machine name	AVG	MAX	MIN	CPU number	Reservation
1	CPU usage rate(%)	VMware-5	SQC_Win32_2008	12.36	14.91	9.77	1.00	
2	CPU usage rate(%)	VMware-5	SQC_RHEL6_32_1	8.18	11.21	6.38	1.00	
3	CPU usage rate(%)	VMware-5	SQC_Win32_2003	3.24	3.30	3.19	1.00	
4	CPU usage rate(%)	VMware-5	SQC_Win64_2008_1	1.66	2.09	1.57	1.00	
5	CPU usage rate(%)	VMware-5	SQC_Win7-Ultimate	1.44	1.71	1.41	4.00	
6	CPU usage rate(%)	VMware-5	SQC_RHEL6_32_2	1.37	6.61	0.34	1.00	
7	CPU usage rate(%)	VMware-5	ST-Agent-win28r2se	0.87	0.94	0.84	1.00	
8	CPU usage rate(%)	VMware-5	SQC_RHEL6_64_1	0.81	1.07	0.64	1.00	
9	CPU usage rate(%)	VMware-5	SQC_RHEL6_64_2	0.69	0.83	0.60	1.00	
10	CPU usage rate(%)	VMware-5	SQC_Win32_2008_man	0.61	0.66	0.58	1.00	
11	CPU usage rate(%)	VMware-5	SQC_Win32_2003_2	0.35	0.37	0.34	1.00	
12	CPU usage rate(%)	VMware-5	SQC_Win32_2008_ServerCore	0.29	0.30	0.28	1.00	
CPU usage								
No .	Category	System name	Virtual machine name	AVG	MAX	MIN	CPU number	Reservation
1	CPU usage(MHz)	VMware-5	SQC_Win32_2008	411.36	496.50	325.25	1.00	
2	CPU usage(MHz)	VMware-5	SQC_RHEL6_32_1	271.90	373.08	212.08	1.00	
3	CPU usage(MHz)	VMware-5	SQC_Win32_2003	107.45	109.50	105.75	1.00	
4	CPU usage(MHz)	VMware-5	SQC_Win64_2008_1	54.79	69.17	51.58	1.00	
5	CPU usage(MHz)	VMware-5	SQC_Win7-Ultimate	48.32	57.08	47.17	4.00	
6	CPU usage(MHz)	VMware-5	SQC_RHEL6_32_2	45.00	219.67	10.67	1.00	
7	CPU usage(MHz)	VMware-5	ST-Agent-win28r2se	28.28	30.67	27.42	1.00	
8	CPU usage(MHz)	VMware-5	SQC_RHEL6_64_1	26.25	35.08	20.75	1.00	
9	CPU usage(MHz)	VMware-5	SQC_RHEL6_64_2	22.40	27.00	19.58	1.00	
10	CPU usage(MHz)	VMware-5	SQC_Win32_2008_man	19.80	21.42	18.83	1.00	
11	CPU usage(MHz)	VMware-5	SQC_Win32_2003_2	11.03	11.83	11.00	1.00	
12	CPU usage(MHz)	VMware-5	SQC_Win32_2008_ServerCore	8.88	9.42	8.58	1.00	

Save in CSV format

▼ Memory							
Memory usage rate							
No .	Category	System name	Virtual machine name	AVG	MAX	MIN	Hardware memory capacity
1	Memory usage rate(%)	VMware-5	SQC_Win32_2008	22.98	28.40	19.10	
2	Memory usage rate(%)	VMware-5	SQC_RHEL6_64_2	13.39	15.99	9.54	
3	Memory usage rate(%)	VMware-5	SQC_RHEL6_32_1	10.74	12.70	8.36	
4	Memory usage rate(%)	VMware-5	SQC_Win32_2003	9.27	10.08	8.49	
5	Memory usage rate(%)	VMware-5	SQC_RHEL6_64_1	8.87	12.48	6.29	
6	Memory usage rate(%)	VMware-5	SQC_Win64_2008_1	7.85	9.93	6.50	
7	Memory usage rate(%)	VMware-5	SQC_RHEL6_32_2	6.27	20.11	1.33	
8	Memory usage rate(%)	VMware-5	ST-Agent-win28r2se	3.63	4.77	2.99	
9	Memory usage rate(%)	VMware-5	SQC_Win32_2008_man	3.28	4.14	2.78	
10	Memory usage rate(%)	VMware-5	SQC_Win7-Ultimate	2.33	3.13	1.80	
11	Memory usage rate(%)	VMware-5	SQC_Win32_2008_ServerCore	1.07	1.50	0.77	
12	Memory usage rate(%)	VMware-5	SQC_Win32_2003_2	0.41	0.67	0.15	
Memory usage							
No .	Category	System name	Virtual machine name	AVG	MAX	MIN	Hardware memory capacity
1	Memory usage(MB)	VMware-5	SQC_Win32_2008	941.75	1,163.94	782.79	
2	Memory usage(MB)	VMware-5	SQC_Win32_2003	380.07	413.24	348.16	
3	Memory usage(MB)	VMware-5	SQC_Win64_2008_1	322.26	407.32	266.69	
4	Memory usage(MB)	VMware-5	SQC_RHEL6_32_1	220.24	260.32	171.57	
5	Memory usage(MB)	VMware-5	SQC_RHEL6_64_1	181.96	255.77	129.14	
6	Memory usage(MB)	VMware-5	ST-Agent-win28r2se	149.21	195.92	123.11	
7	Memory usage(MB)	VMware-5	SQC_RHEL6_64_2	137.24	163.84	97.85	
8	Memory usage(MB)	VMware-5	SQC_Win32_2008_man	134.93	169.98	114.46	
9	Memory usage(MB)	VMware-5	SQC_RHEL6_32_2	128.64	411.99	27.53	
10	Memory usage(MB)	VMware-5	SQC_Win7-Ultimate	95.76	128.79	74.41	
11	Memory usage(MB)	VMware-5	SQC_Win32_2008_ServerCore	22.14	30.95	16.04	
12	Memory usage(MB)	VMware-5	SQC_Win32_2003_2	17.16	27.99	6.14	

Save in CSV format

Sort by CPU usage rate and memory usage rates to detect virtual machines with available resources and reduce the allocation of resources to virtual machines with low usage rates.

4.5.5 Future Prediction of Resource Demand: [ServerView Resource Orchestrator Resource Pool]

Use Systemwalker Service Quality Coordinator to make predictions about resource pool demand.

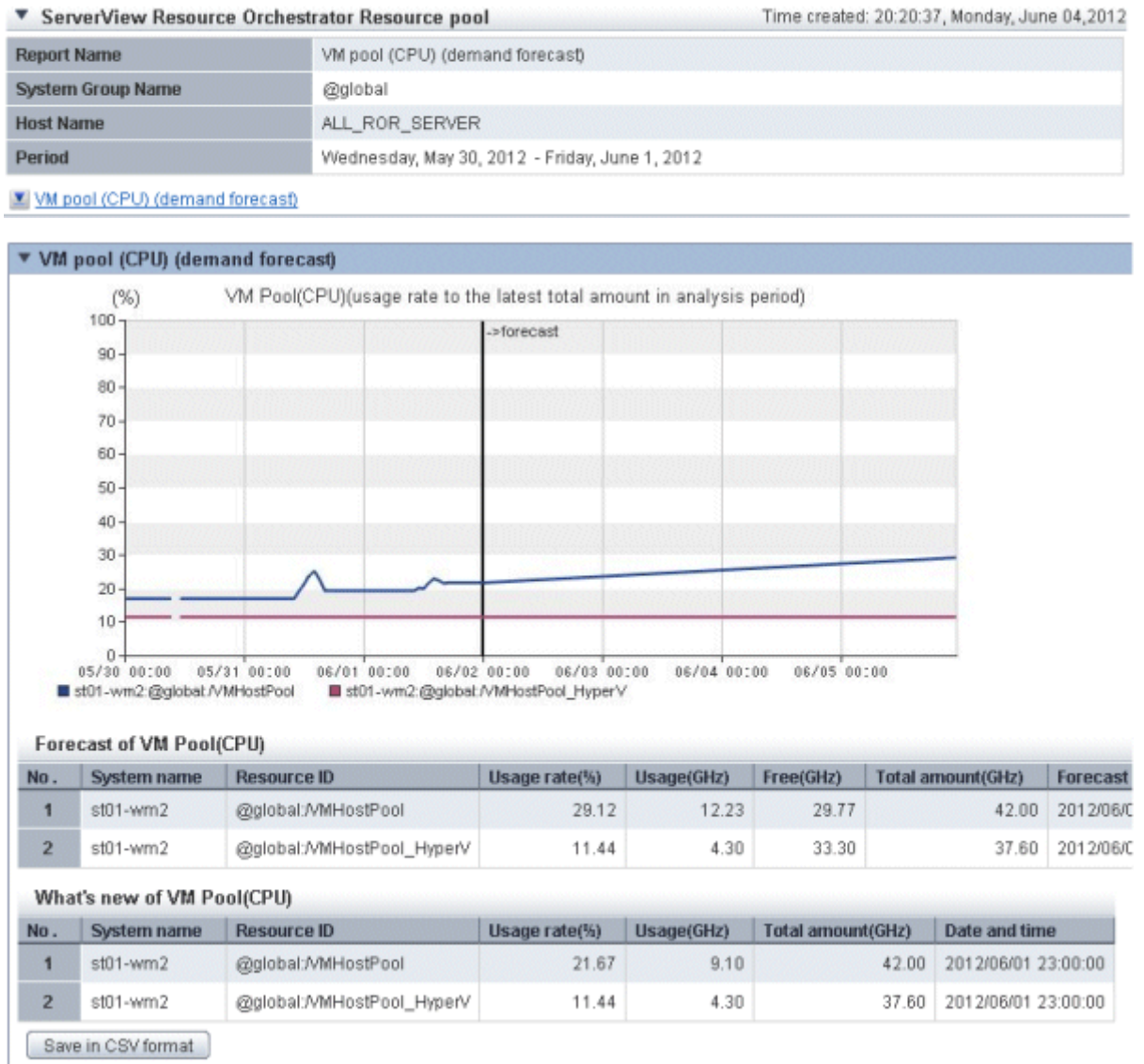
Resources that may become insufficient can be predicted, so it is possible to develop a precise expansion plan.

This section describes the procedure for using "ServerView Resource Orchestrator Resource pool" category scenarios to forecast the future demand for resources.

Demand forecast

1. In the **Analysis/Planning** window, select the "VM pool (CPU) (demand forecast)" report of the "ServerView Resource Orchestrator Resource pool" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.

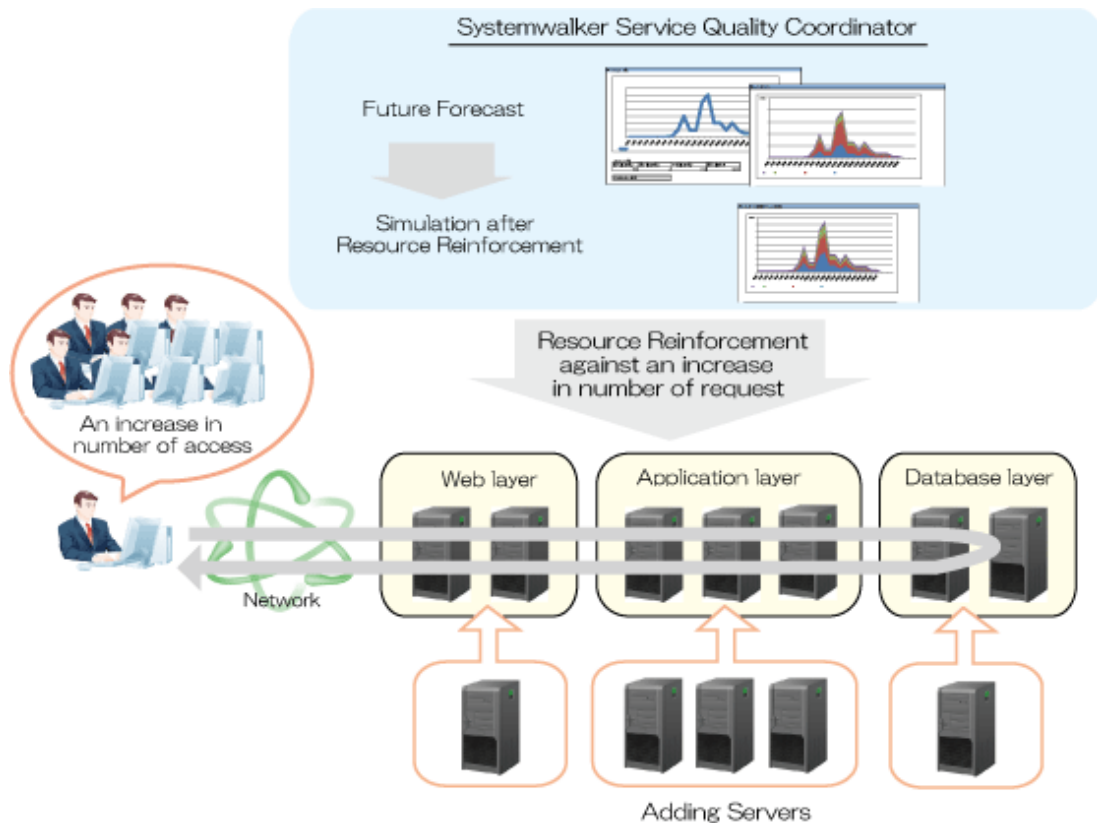


Perform regression analysis based on past VM pool (CPU) usage to forecast the amount of resources used.

Display other reports if necessary to perform a demand forecast of the resource pool.

4.5.6 Simulation of Resource Increase in Anticipation of an Increased Number of Requests: [Response Simulation]

Systemwalker Service Quality Coordinator can predict the future number of requests and perform simulation analysis of the response in the layers that make up a system (e.g., the Web layer, application layer, and database layer), enabling planning for resource expansion and a simulation of the effects of this expansion before it is actually implemented.

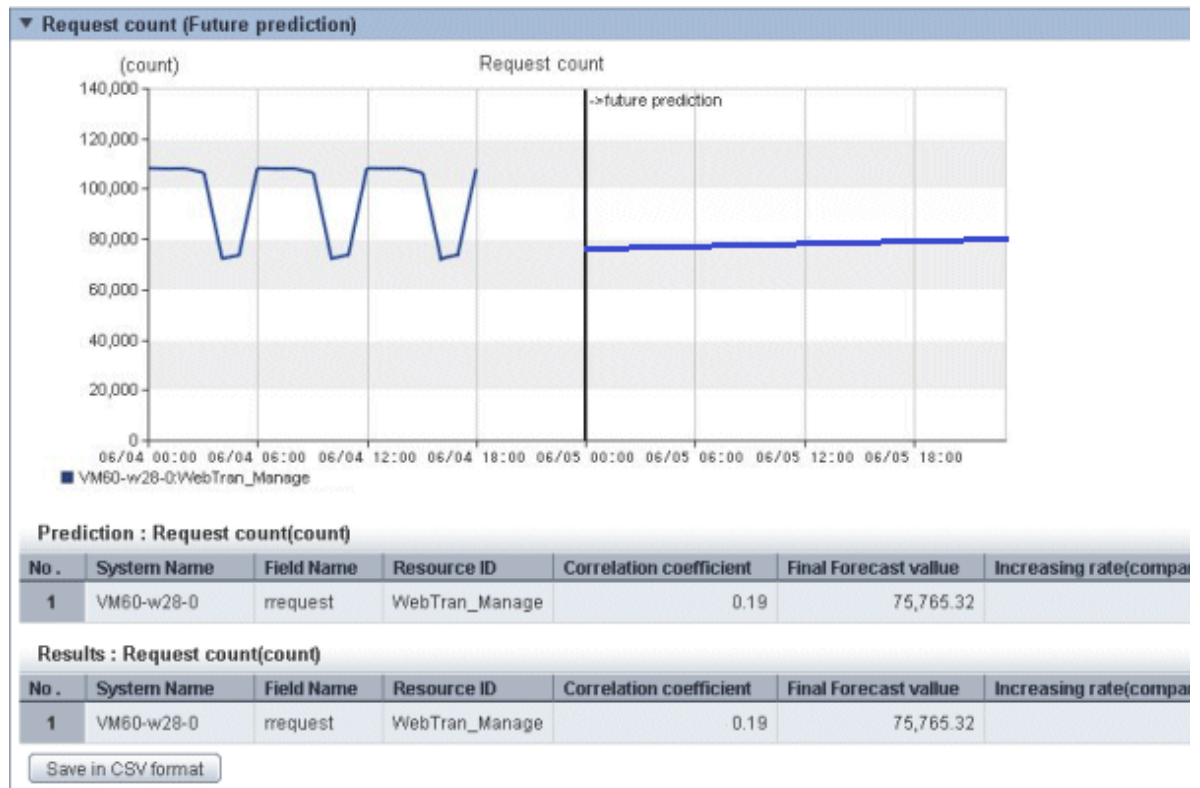


This section describes the procedure for simulation using a "Response simulation" category scenario.

Future prediction of request counts

1. In the **Analysis/Planning** window, select the "Request count (Future prediction)" report of the "Response simulation" category, specify the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.



The future prediction results for each service are displayed.

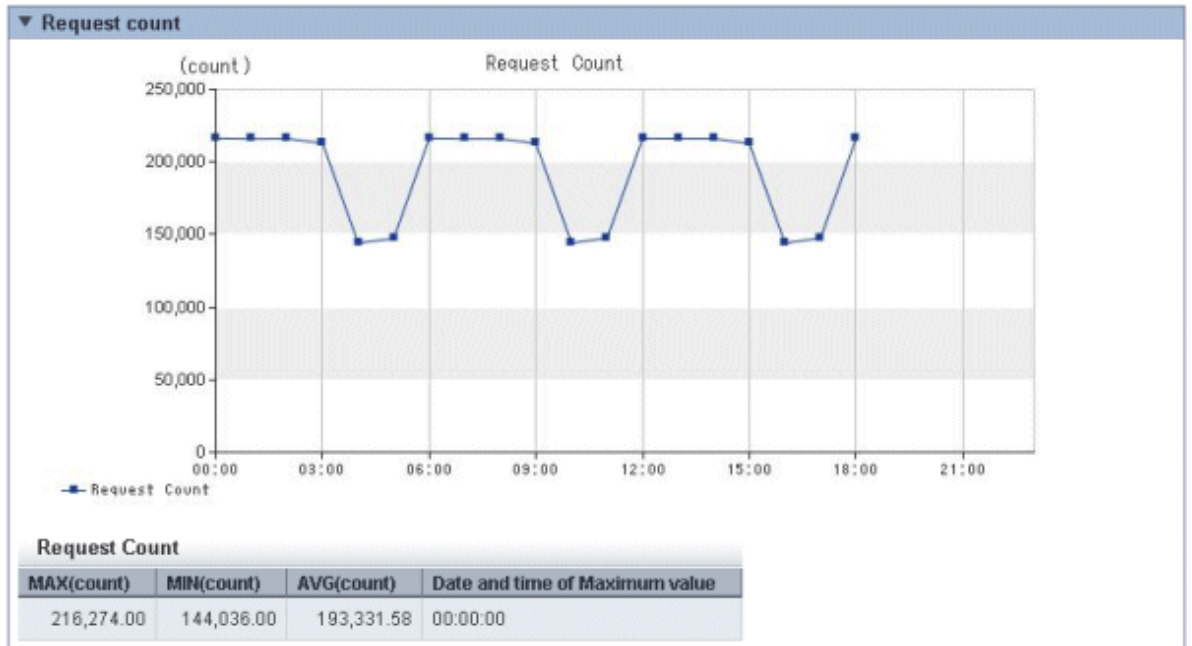
Check the rate of increase in requests compared to the current number of requests.

The rate of increase is used as the request coefficient in the Response simulation (Request increase) report.

Future prediction of response

1. In the **Analysis/Planning** window, select the "Response simulation (Request increase)" report of the "Response simulation" category, specify the analysis conditions and display the report.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.





In the "Request count" graph and table, you can see the changes in request counts across a day when there is an increase in the request count. In the "Response" graph and table you can see the response times across the whole system as the request count increases, and also the response times in the layers of the system.

Make sure that response times do not exceed reference values. If there are places where the reference value is exceeded, consider adding servers to the layer where the response times are the longest. Use the number of servers that you are considering adding as an analysis condition in the "Response simulation (Adding servers)" report.

 **Point**

Response simulation is a simulation of response times, achieved by analyzing the relationship between the number of service requests in the past and the performance information (OS) of the various servers. The precision of the simulation can be increased by excluding time periods when batch processes are performed (after hours, for example) that have no bearing on actual request processes.

Confirm the precision of the simulation by looking at the '(High)', '(Medium)', and '(Low)' reliability displayed after the response times in the table.

'(High)' indicates that the simulation was performed with little interference and the precision of the simulation is therefore high.

'N/A' is displayed in the table if the simulation could not be performed because no performance information was found or barely any correlation was achieved between the number of requests and the operating system performance information.

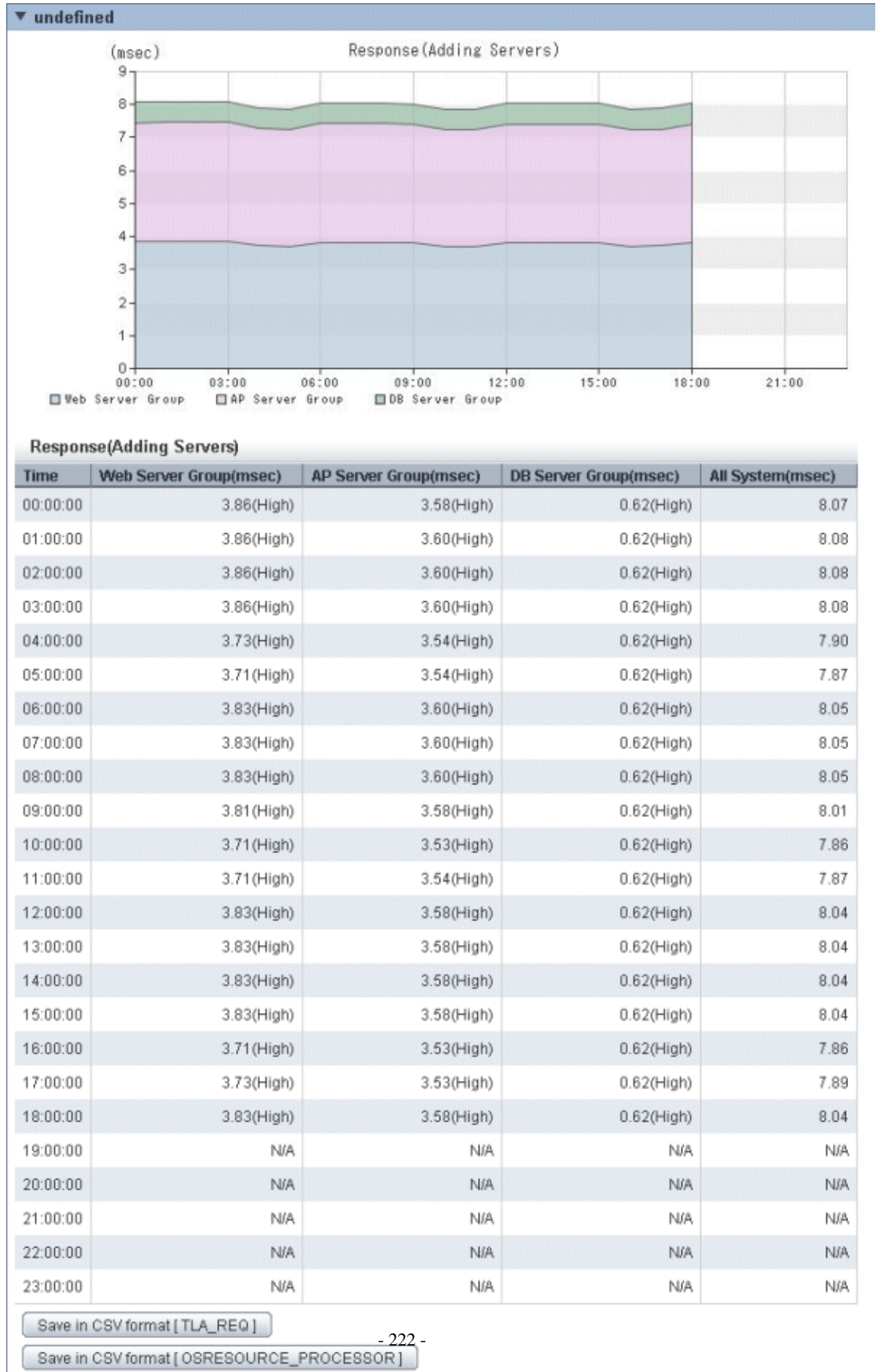
The reliability can be improved by increasing the period in **Analysis Conditions**, and taking measures to decrease interference by excluding periods when batch work is performed, such as after hours.

Refer to "[4.3 Operating the Analysis/Planning Window](#)" for information on how to configure analysis conditions.

Post-resource increase simulation

1. In the **Analysis/Planning** window, select the "Response simulation (Adding servers)" report of the "Response simulation" category, set the analysis conditions and display the report.

Refer to "4.3 Operating the Analysis/Planning Window" for information on how to configure analysis conditions.



The response times after servers are added are displayed. It is also possible to see where response time is long or where a threshold is greatly exceeded.

When the threshold is exceeded greatly, check the level where the response time is longest, add servers, then run the simulation again.

Chapter 5 Scheduled Report

"Service level management" collected performance information can be displayed in the report. In The **Analysis/Planning** window and the **Scheduled Report Registration** view, the scenario of each purpose of operation is prepared. The analysis and the planning along the purpose the displayed report is sequentially confirmed can be done.

The Scheduled Report is a function to automate the output of reports such as the daily report, weekly reports, and monthly reports by registering the condition in the report beforehand and registering in the scheduler. This function registers the report conditions in the **Scheduled Report Registration** view, creates a report using the Scheduled Report Creation Command, and uses the **Scheduled Report** view to display the report.

5.1 Types of Reports

Refer to "[4.2 Types of Reports](#)" about types of reports.

Point

The following reports cannot be used the Scheduled Report.

- P2V simulation
- VMware virtual machine relocation simulation
- Response simulation (Request count)
- Response simulation (Adding servers)

5.2 Scheduled Report Registration (Administrator Tasks)

This section explains how to use the **Scheduled Report Registration** view for registering scheduled reports.

Note

The following problems sometimes occur when users try to display the desired contents (graphs or tables).

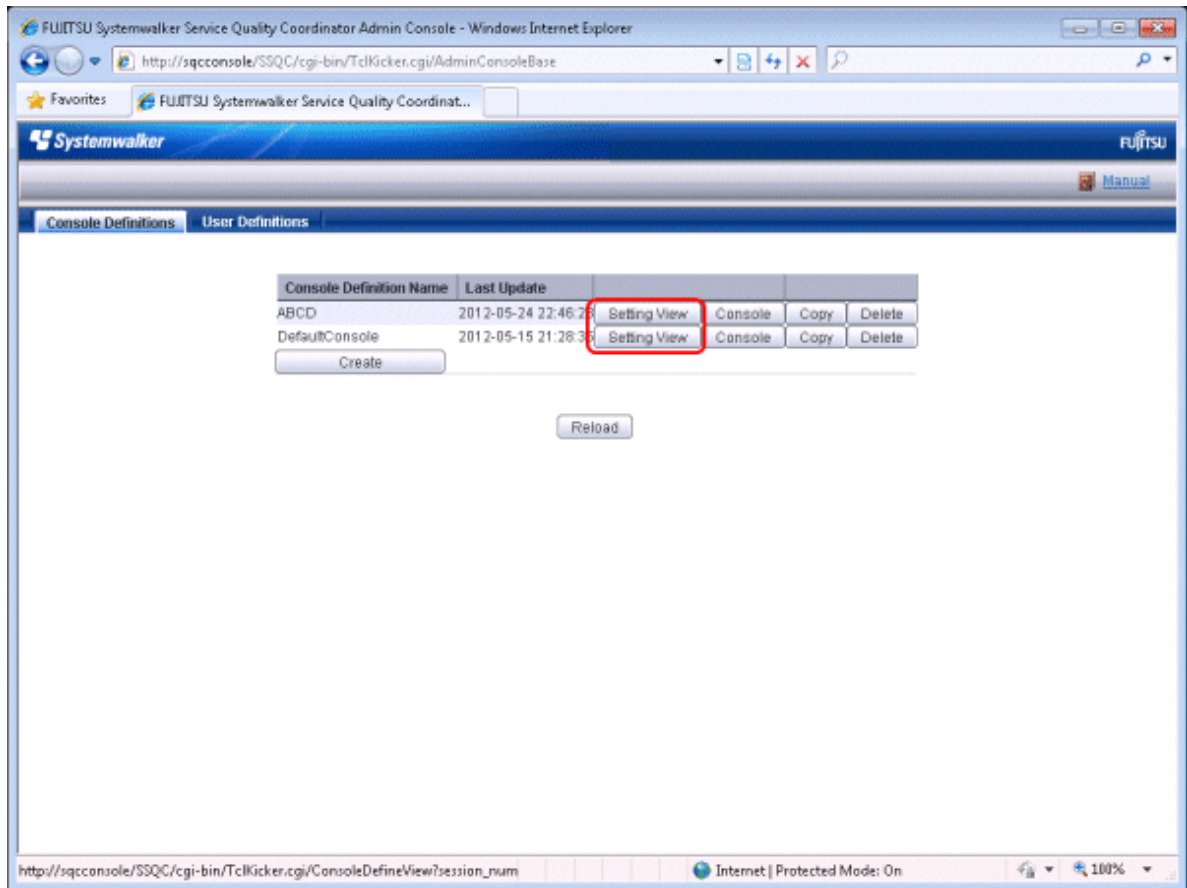
- The operation terminates with error code 1572864.
- "Chart is unavailable" is displayed instead of the graph image.
- The graph image may be left out (only graphs are not displayed).
- The following error message may be displayed.

```
"The specified CGI application misbehaved by not returning a complete set of HTTP headers. The headers it did return are: Unable to register TclNotifier window class"  
"ohd_update error."  
"Ohd file create error."
```

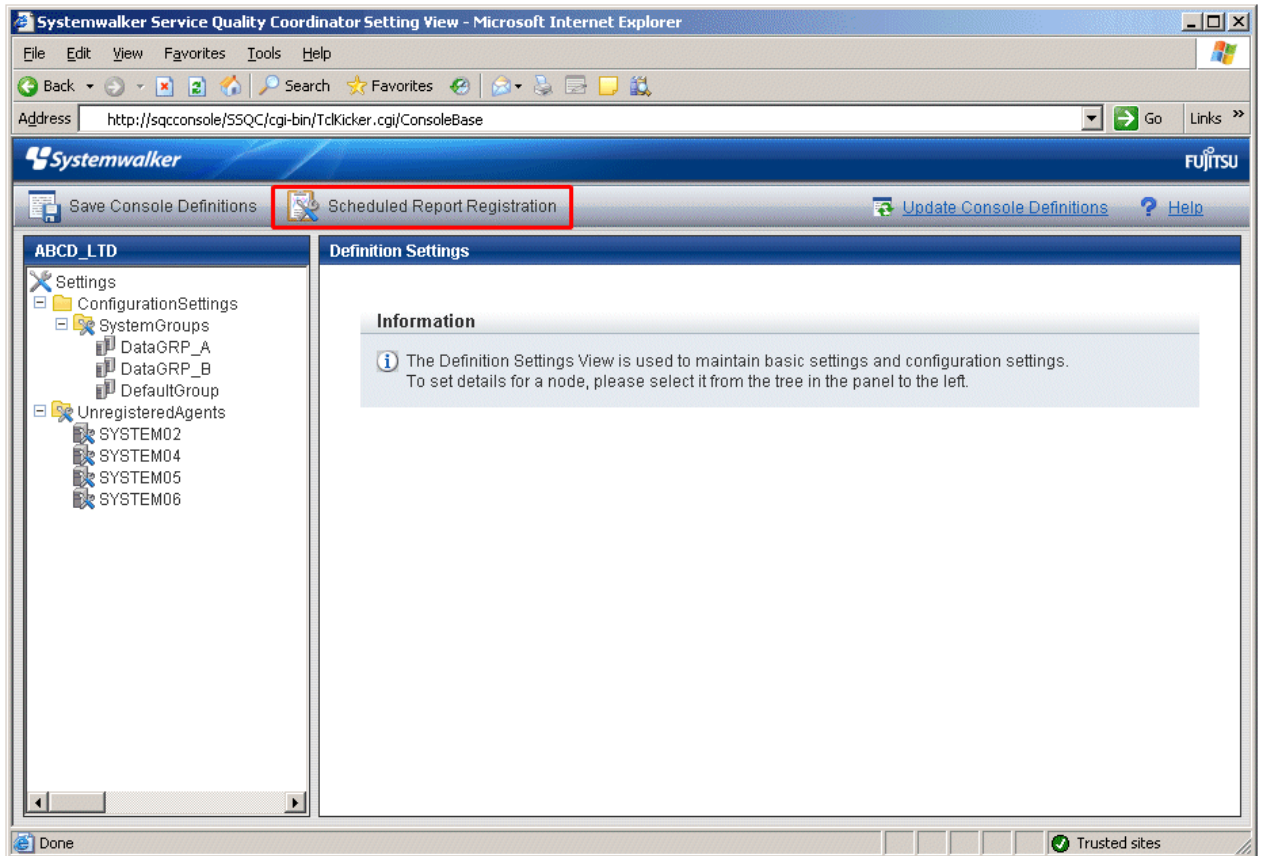
These problems may be due to insufficient space in the desktop heap for the operation management client. Increase the size of the desktop heap by referring to "[6.1 Content Display Errors](#)"

Starting the Scheduled Report Registration View

Open the **Setting View** by clicking the **Setting View** button on the **Console Definitions** tab of the **Admin Console**.



Select **Register Scheduled Report** menu from the global navigation bar in the Console window.

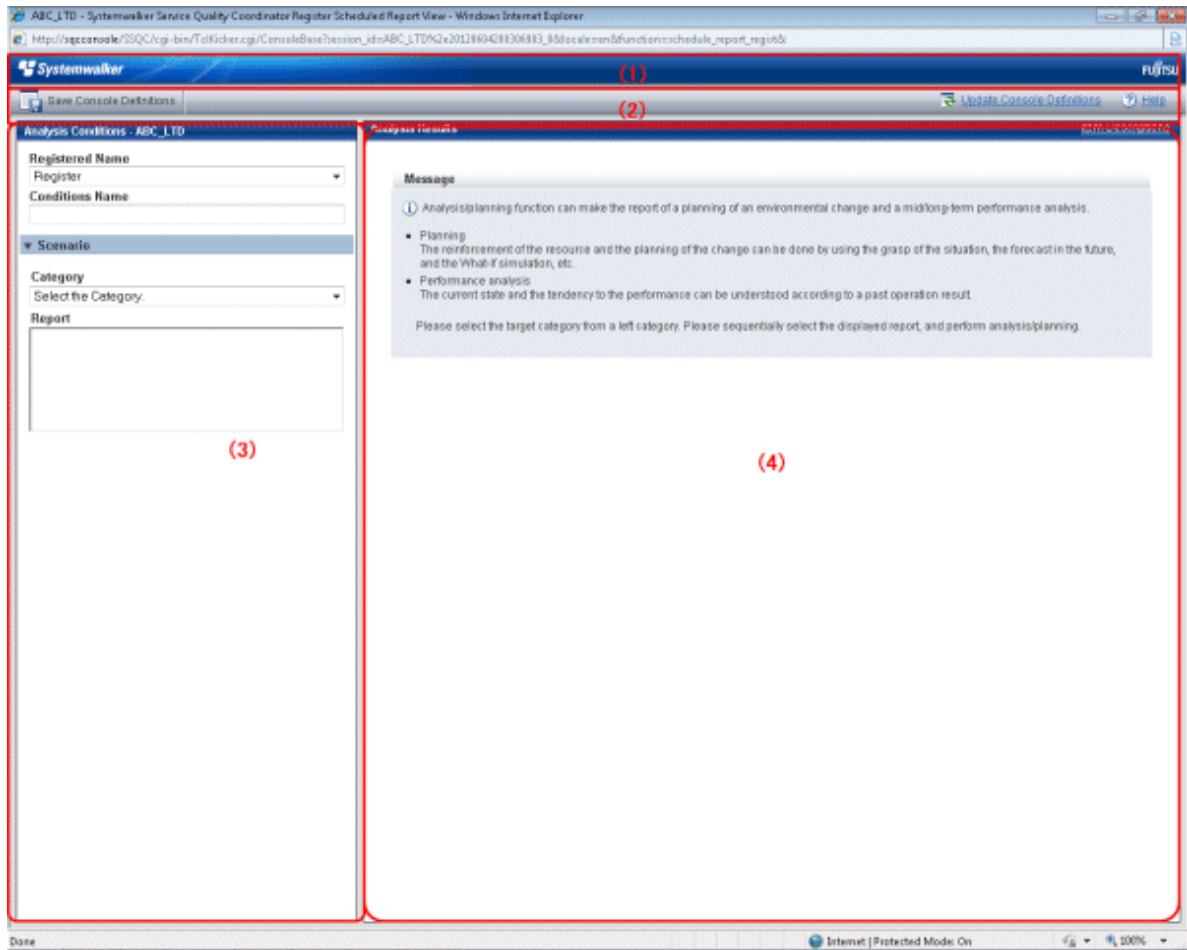


Note

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.

Configuration of the Scheduled Report Registration View

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)	Global header	The Systemwalker and Fujitsu logos are displayed.
(2)	Global navigation bar	The menus are as follows: <ul style="list-style-type: none"> - Save Console Definitions Saves the console definitions - Update Console Definitions Reloads the console definitions - Help Opens User's Guide (Console Edition).
(3)	Analysis conditions area	Report conditions can be set and registered.
(4)	Content display area	Each content is displayed.

Basic operation of the Scheduled Report Registration View

The **Scheduled Report Registration** View tabs perform the following operation.

Operation	Description
Register report conditions	Registers any report conditions. Select Register in Registered Report Name and enter a condition name in Category . Enter the required report conditions, then items other than the dates for starting and finishing reports are registered when the Register button is pressed.
Edit report conditions	Change the content of registered report conditions. Select the condition name to be edited in Registered Report Name. Enter the required report conditions, then items other than the dates for starting and finishing reports are registered when the Save Over Current button is pressed.
Copy report conditions	Copies the content of registered report conditions. Select the condition name to be copied in Registered Report Name. Enter the required report conditions, then the dialog appears when the Register button is pressed, so enter the condition name and click the OK button. Items other than the dates for starting and finishing reports are registered.
Delete report conditions	Deletes a registered report condition. Select the condition name to be deleted in Registered Report Name and press the Delete button.
Test report conditions	Runs a test display to check that the specified report conditions are correct. Refer to " Configuration of the Analysis Conditions area " for details on how to use the Scheduled Report Registration view.
Register, Edit and Delete scenario	Refer to " Basic operations ".



.....

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 global navigation bar must be clicked.

There is no need to perform **Save Console Definitions** if a new scenario is being registered, or if a scenario is being edited or deleted.

.....

Configuration of the Analysis Conditions area

The screenshot displays the 'Systemwalker' console interface. On the left, the 'Analysis Conditions' panel is configured with the following items highlighted by red boxes and numbers:

- (1) Registered Name: Sample
- (2) Scenario: Windows
- (3) Report: Windows server
- (4) Conditions: Target Settings (System Group: DefaultGroup)
- (5) View Settings (Number of Items: 5, Displayed: All, Report Format: Daily, Analysis data: 10mins, 1hour, 1day)
- (6) Operation buttons: Delete, Replace Registration, Register
- (7) Period: Start date (2012-06-06 00:00), End date (2012-06-06 23:50)
- (8) Preview button

The 'Analysis Results' panel shows a graph of 'CPU Usage Rate' and a table of 'WIN_CPUBUSY' data:

No.	System name	Resource ID	CPU usage rate(%)	CPU usage rate(%) (Maximum value)	System CPU usage rate(%)	User CPU
1	HV03-w232ex	_Total	4.31	4.42	2.05	
2	HyperV	_Total	0.52	0.62	0.31	
3	WIN-3DNP0BVCJLK	_Total	0.48	0.62	0.30	

Item No.	Component	Description
(1)	Registered Report Name	A specification relating to the report name.
(2)	Category	Select a category according to the purpose of operation.
(3)	Report	Select a report according to the purpose of operation.
(4)	Target Settings	A specification relating to the analysis target.
(5)	View Settings	Specifies the data interval, the number of display items for the report and the file output. CPU usage rates etc. are extracted by a high-ranking number to do the high CPU usage rates by the process in the troubleshooting. Available memory capacity is extracted by the low-ranking number to prevent the system down by insufficient memory. The number of data items to display in the report is about up to 10. The graph might collapse by explanatory notes in case of 10 or more.
(6)	Operation buttons (to register, edit, and delete report conditions)	Buttons for registering, changing, and deleting the report conditions.
(7)	Period Specifications	Specify the periods for reports.

Item No.	Component	Description
(8)	Operation buttons (preview)	Buttons for previewing the report conditions.

5.2.1 Registered Report Name

A specification relating to the name of report.

Item name	Description
Registered Report Name	<p>Specify a display name to identify the analysis conditions.</p> <p>This name is used in the history display and in the scheduled report list.</p> <p>When Register is selected in Registered Report Name, a Category input field appears. After registration, this appears as Registered Report Name.</p> <p>The following characters can be used for condition names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \$ " ' [] < > / ? ; : * \ & , . =) <p>Platform dependent characters can not be used.</p> <p>The registered report name can be no longer than 36 characters.</p>

5.2.2 Category

Refer to "[4.3.1.1 Category](#)".

The **My Category** cannot be selected on the **Scheduled Report Registration View**.

The **My Category Management** cannot be used on the **Scheduled Report Registration View**.

5.2.3 Report

Refer to "[4.3.1.2 Report](#)".

5.2.4 Target Settings

Refer to "[4.3.2.1 Target Settings](#)".

5.2.5 View Settings

Refer to "[4.3.2.2 Display Settings](#)".

5.2.6 Operation Buttons (to register, edit, and delete report conditions)

The operation buttons are explained.

Button	Description
Register	Displayed when Register is selected in Registered Report Name. Registers new analysis conditions under the name specified in Category . Items other than the dates for starting and finishing analysis are registered.
Register	Displayed when a registered condition name other than Register is selected in Registered Report Name. Use when copying a condition for use. Registers new analysis conditions under the name specified in the dialog that appears when the Register button is pressed. Items other than the dates for starting and finishing analysis are registered.
Save Over Current	Displayed when a registered condition name other than Register is selected in Registered Report Name. Use when changing a condition. Items other than the dates for starting and finishing analysis are overwritten.
Delete	Displayed when a registered condition name other than Register is selected in Registered Report Name. Use when deleting a condition.

5.2.7 Period Specifications


Periods are explained.

Item name	Description
Period/ Analysis Period	Specify the period of the analysis. Select the minute, hour, day, month and year using a drop-down list box to specify the date and time that analysis will start and stop.
Forecast Date	When the preview is done, the specified forecast until the date is done. The date is selected from the pull-down menu. This can be set in the following reports. <ul style="list-style-type: none"> - Future forecast display - Resource pool (CPU) (demand forecast) - Resource pool (Memory) (demand forecast) - VM pool (CPU) (demand forecast) - VM pool (Memory) (demand forecast) - Storage pool (demand forecast) - Network pool (demand forecast) - Server pool (demand forecast) - Address pool (demand forecast) - Request count (Future prediction)

The Period and Analysis Period is decided according to the operand specified for "[5.3.1 sqcMakeReport\(Scheduled Report Creation Command\)](#)" command.

5.2.8 Operation Buttons (preview)

The operation buttons are explained.

Button	Description
Preview	<p>Performs a test display of a report to verify that the content of the report is displayed correctly using the specified report conditions.</p> <p>Reports are displayed in the content display area on the right side of the report registration window.</p> <p> Point</p> <p>.....</p> <p>This operation only performs a test display of a report. It is not added to the daily, weekly or monthly scheduled report displays.</p> <p>.....</p>

While a report is being generated, the message "Loading..." will appear in the content display area.

The **Test** button will be disabled while this message is being displayed.

5.2.9 Content Display Area

Refer to "[4.3.5 Contents Display Area](#)".

5.3 Manipulating Scheduled Reports (Administrator Tasks)

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

- [5.3.1 sqcMakeReport\(Scheduled Report Creation Command\)](#)
- [5.3.2 sqcDeleteReport\(Scheduled Report Deletion Command\)](#)

Refer to "Scheduled Report Operation Command" in the *Reference Guide* for details.

- [5.3.3 Example of registration with scheduler](#)

This section also explains how to make backups of scheduled reports.

- [5.3.4 Backing up reports](#)



.....

Save up to about 5,000 scheduled reports for each console (depending on the operation management client disk performance). If a larger number is saved, then the display of the scheduled report list might be slow or not possible.

.....

5.3.1 sqcMakeReport(Scheduled Report Creation Command)

Execution environment

This command can be run on an operation management client.

Privileges required for execution

The privileges of a user belonging to the "Administrators" group are required to execute this command.

Note

- To execute this command under Windows Server 2008/Windows Vista and later, execute with the administrator privilege.

For Windows Server 2012/Windows 8

Right-click the **Start** menu (located at the bottom-left corner of the Desktop) and select **Command Prompt (Admin)**. Run the command from the Command Prompt.

For Windows Server 2008/Windows 7/Windows Vista

From the **Start** menu, select **All Programs - Accessories**, then right-click **Command Prompt**, and select **Run as administrator**. Run the command from the Command Prompt.

- To execute this command by registering it with Task Scheduler for the Windows Server 2008/Windows Vista and later, select the **General** tab of the **Properties** window for the task to be registered, and then select the **Run with highest privileges** checkbox.

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**.

Syntax

<Installation directory>\bin \sqcMakeReport	-c console_define [-g system_group] [-t begin_time -w begin_day -d begin_date] daily weekly monthly
<Installation directory>\bin \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) local time 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".

Data from a given day is displayed after 9:00 AM on the next day.

Refer to "Scheduled Report Operation Command" in the *Reference Guide* for details on options and other information.

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
```

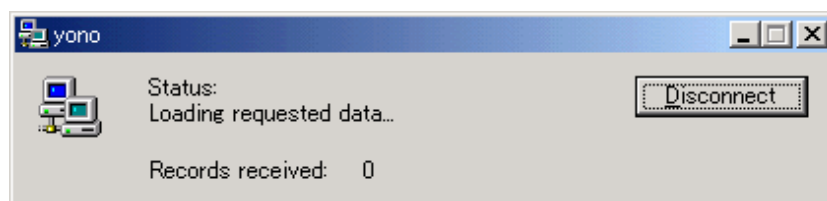
Usage example 2

The following uses registered scheduled reports to generate a daily report for 01 May 2012.

```
> sqcMakeReport -c DefaultConsole -s 20120501 -e 20120501 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.

If the command terminates abnormally with exception code 0xe06d7363, the desktop heap may be insufficient. Increase the size of the desktop heap by referring to "[6.1 Content Display Errors](#)".

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.

After executing the scheduled report creation command, check the results in the "[5.4 Scheduled Report View](#)".

5.3.2 sqcDeleteReport(Scheduled Report Deletion Command)

Execution environment

This command can be run on an operation management client.

Privileges required for execution

The privileges of a user belonging to the "Administrators" group are required to execute this command.



- To execute this command under Windows Server 2008/Windows Vista and later, execute with the administrator privilege.

For Windows Server 2012/Windows 8

Right-click the **Start** menu (located at the bottom-left corner of the Desktop) and select **Command Prompt (Admin)**. Run the command from the Command Prompt.

For Windows Server 2008/Windows 7/Windows Vista

From the **Start** menu, select **All Programs - Accessories**, then right-click **Command Prompt**, and select **Run as administrator**. Run the command from the Command Prompt.

- To execute this command by registering it with Task Scheduler for the Windows Server 2008/Windows Vista and later, select the **General** tab of the **Properties** window for the task to be registered, and then select the **Run with highest privileges** checkbox.

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.

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.



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

Reports that were created more than XX days before the command was executed will be deleted (where "XX" is the number of retention days).

Usage example

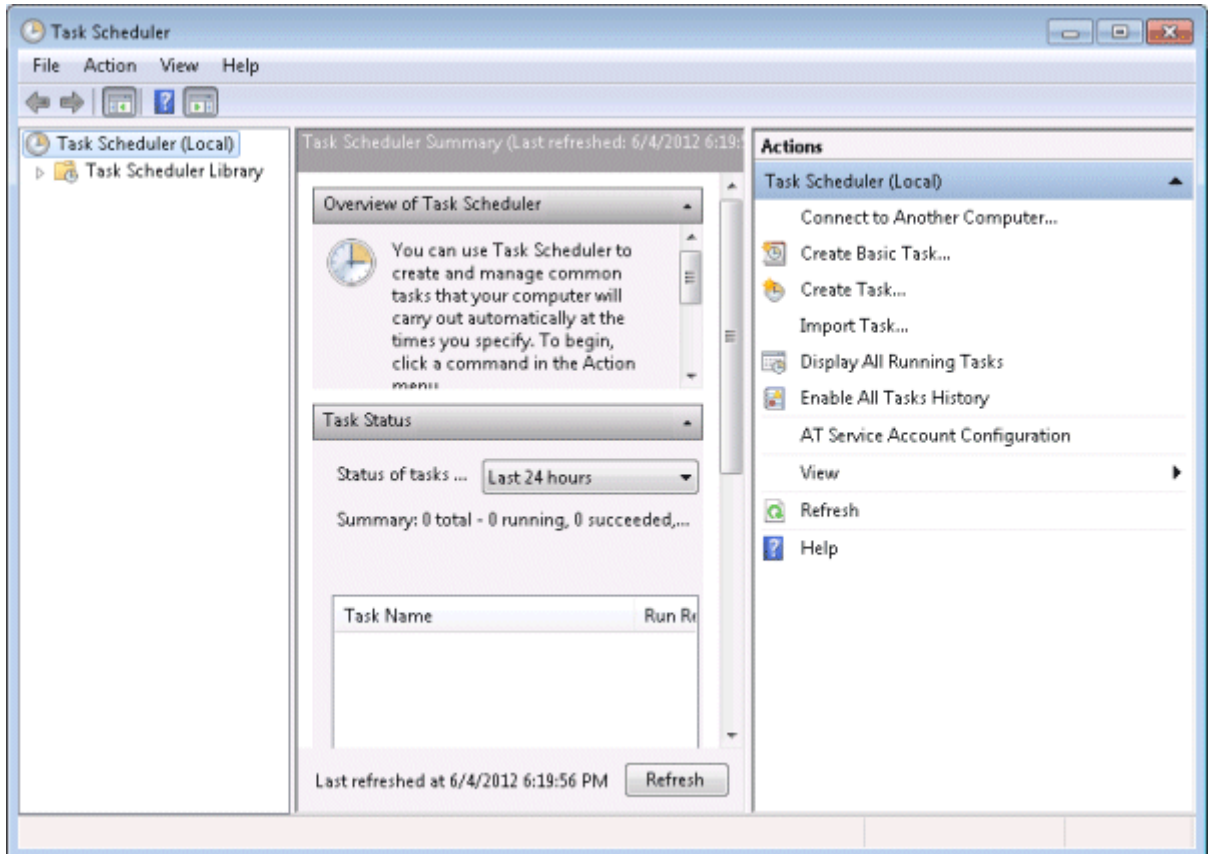
The following example shows the options used to specify a daily report storage period of 10 days, a weekly report storage period of 60 days and a monthly report storage period of 365 days.

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

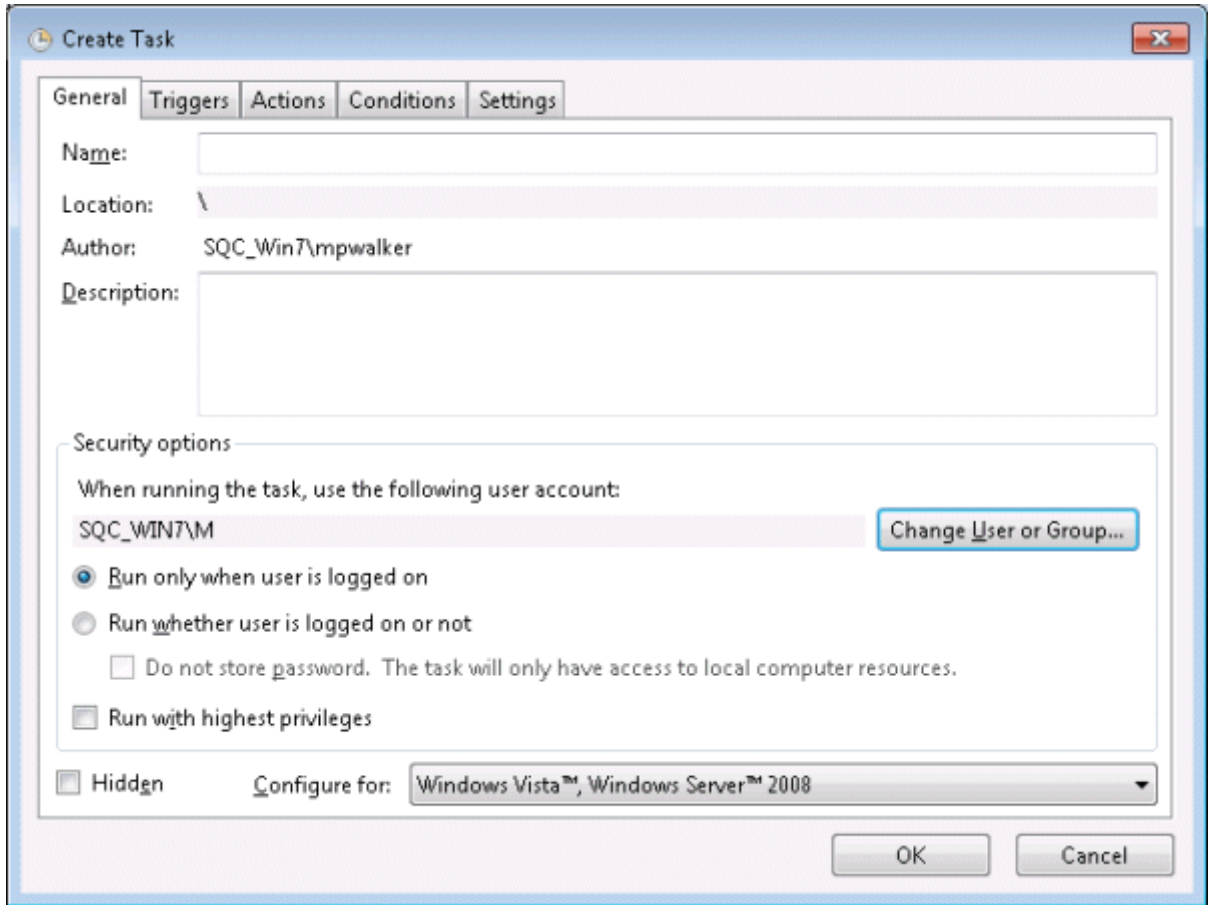
5.3.3 Example of registration with scheduler

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.

1. Select [Administrative Tools] and then [Task Scheduler] from the Control Panel.



2. [Create Task] of [Action] menu is clicked, [Create Task] screen is displayed, and [General] tab is selected.

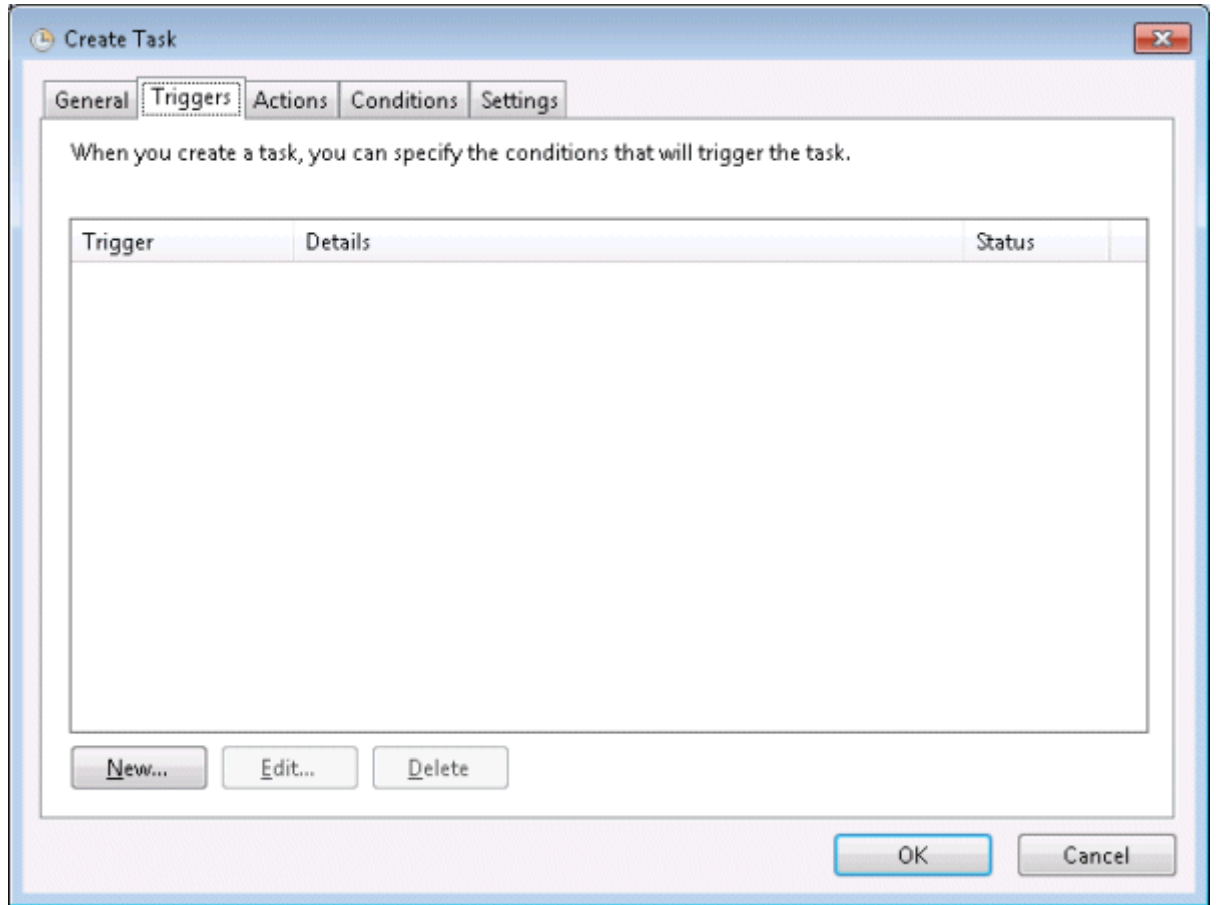


[Name] and [Security options] are properly set.

Point

.....
The user who has the Administrator authority is specified for [When running the task, use the following user account].
.....

3. [Triggers] tab is selected.



4. [New] button is clicked, [New Trigger] screen is displayed.

The screenshot shows the 'New Trigger' dialog box with the following configuration:

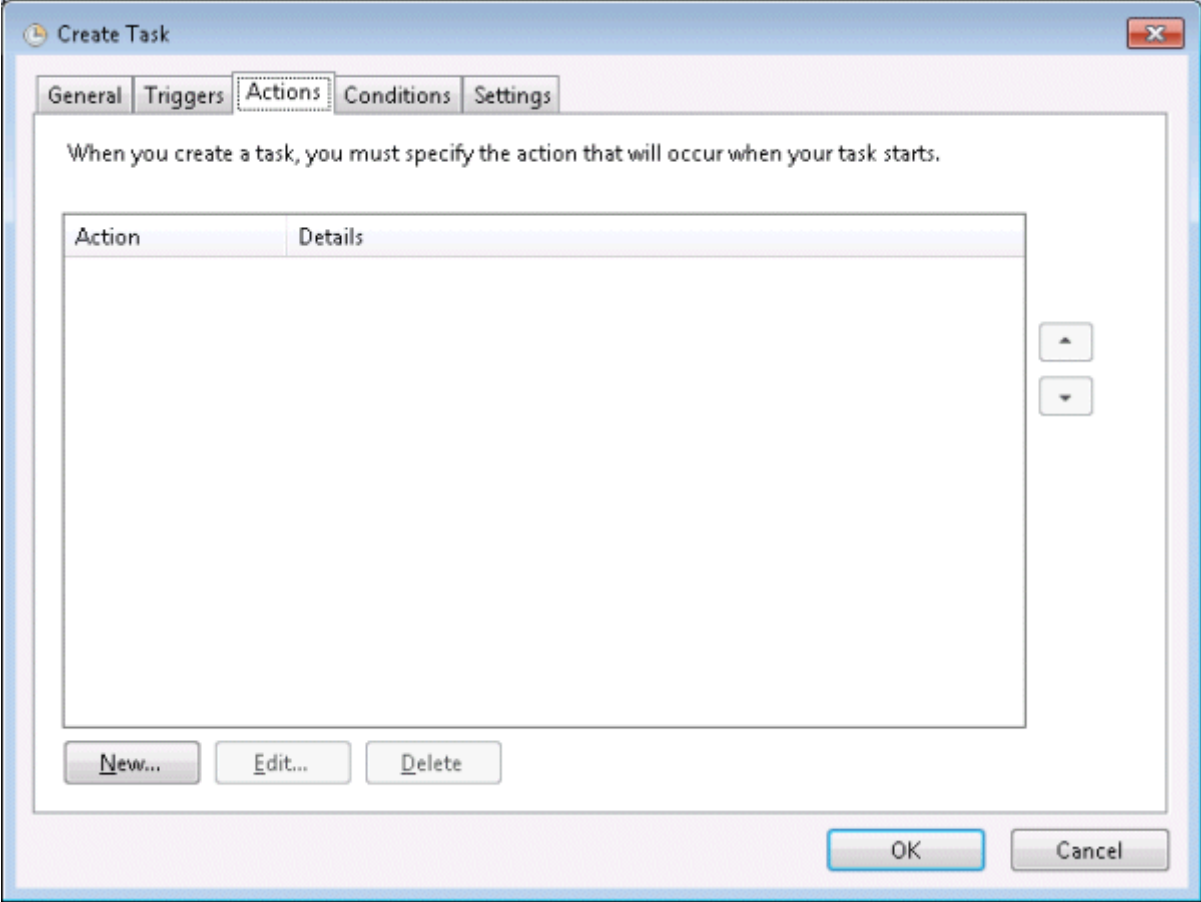
- Begin the task:** On a schedule
- Settings:**
 - Frequency: Daily
 - Start: 5/14/2012 10:25:00 AM
 - Recur every: 1 days
 - Synchronize across time zones
- Advanced settings:**
 - Delay task for up to (random delay): 1 hour
 - Repeat task every: 1 hour for a duration of: 1 day
 - Stop all running tasks at end of repetition duration
 - Stop task if it runs longer than: 3 days
 - Expire: 6/4/2013 6:27:30 PM
 - Synchronize across time zones
 - Enabled

The trigger condition of the task in the scheduled report is properly set to [Settings] and [Advanced settings] and [OK] clicks on a button.

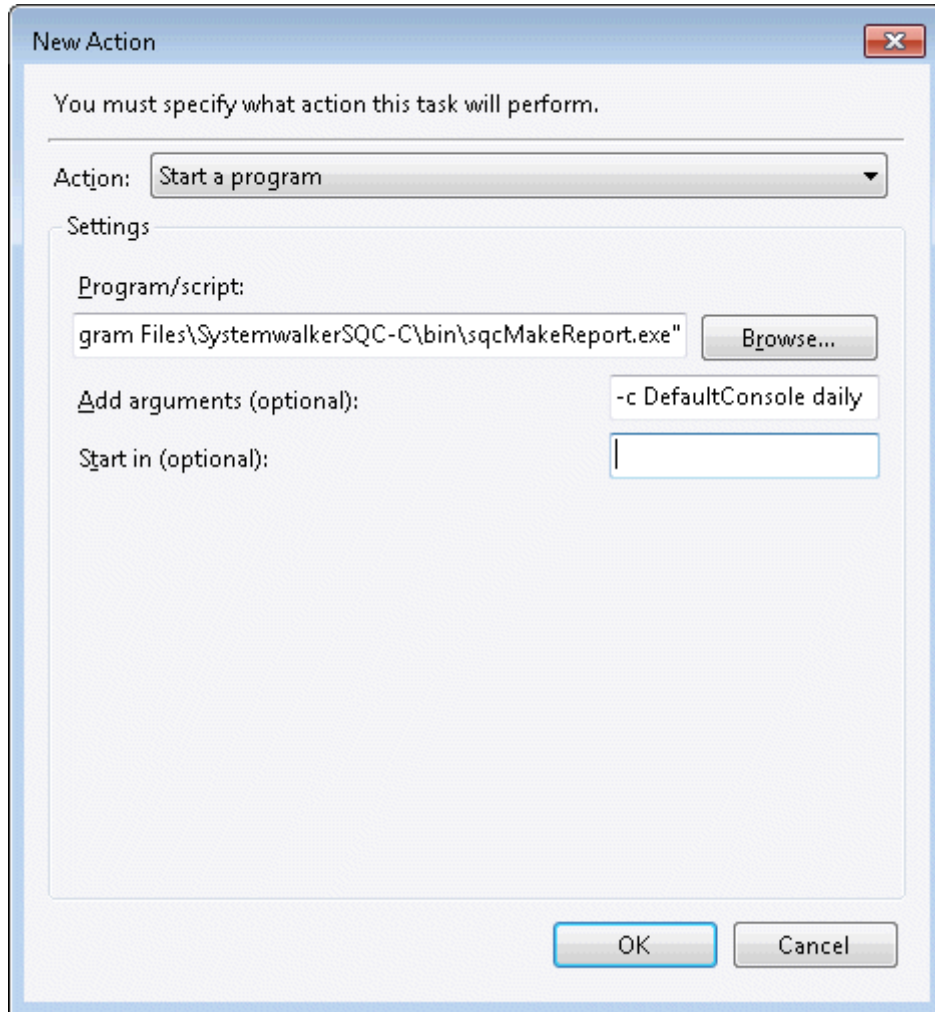
Point

.....
[Daily] is specified when the daily report is made, [Weekly] is specified when the weekly report is made, and when the monthly report is made, [Monthly] is specified.
.....

5. [Actions] tab is selected.



6. [New] button is clicked, [New Action] screen is displayed.



[Start a program] is selected with [Action], the sqcMakeReport command (or sqcDeleteReport command) is specified for [Program/script], the option of the command is specified for [Add arguments(optional)], and [OK] clicks on a button.

Example of specifying [Program/script].

"C:\Program Files\SystemwalkerSQC-C\bin\sqcMakeReport.exe"

Example of specifying [Add arguments(optional)].

-c DefaultConsole daily

7. [OK] of [Create Task] screen clicks on a button.

5.3.4 Backing up reports

In order to preserve disk space, Fujitsu recommends that old scheduled reports be automatically deleted by scheduling the ["5.3.2 sqcDeleteReport\(Scheduled Report Deletion Command\)"](#).

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
```



If the save directory for analysis reports was changed using the method in "[5.5 Storing Reports \(Administrator Tasks\)](#)", then it must be backed up.

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.



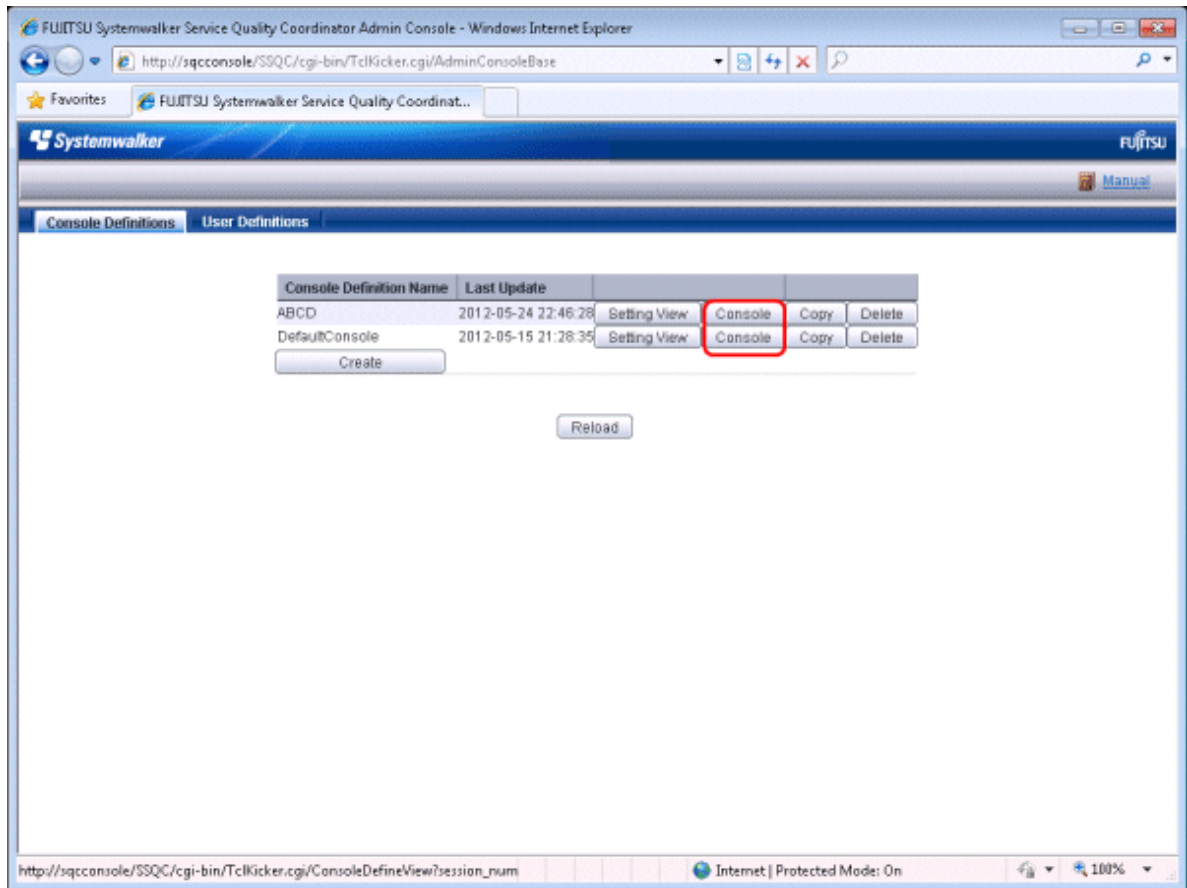
- Only copy directories, and do not move them. To delete a directory from its original location, use the "[5.3.2 sqcDeleteReport\(Scheduled Report Deletion Command\)](#)".
- Even if a report that has been deleted with the Scheduled Report Deletion Command is restored to its original location, it will 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.

5.4 Scheduled Report View

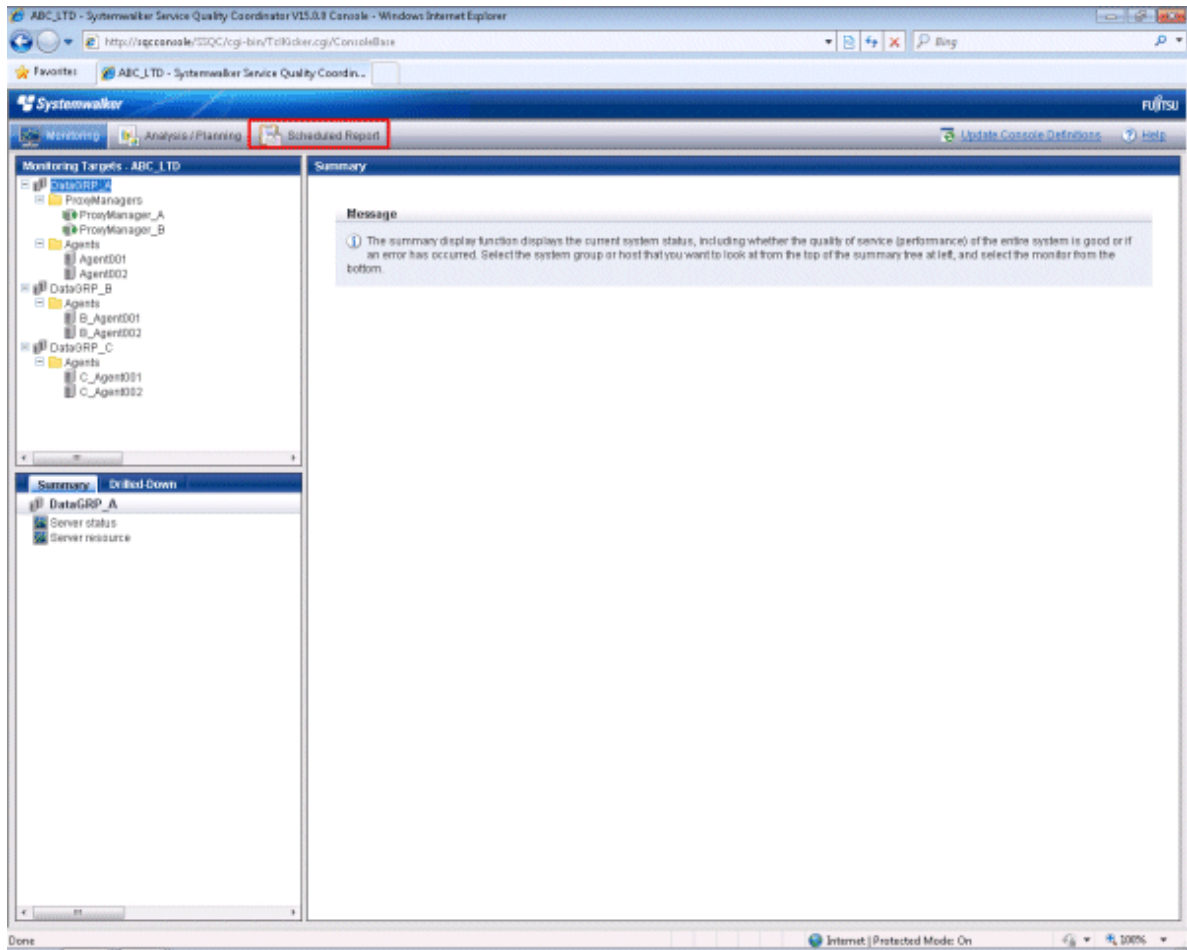
This section explains how to use the **Scheduled Report View**.

Starting the Scheduled Report View

Open the **Scheduled Report View** by clicking the **Console** button on the **Console Definitions** tab of the **Admin Console**.



The **Scheduled Report View** is started by selecting **Scheduled Report** from the global navigation bar in the Console window.

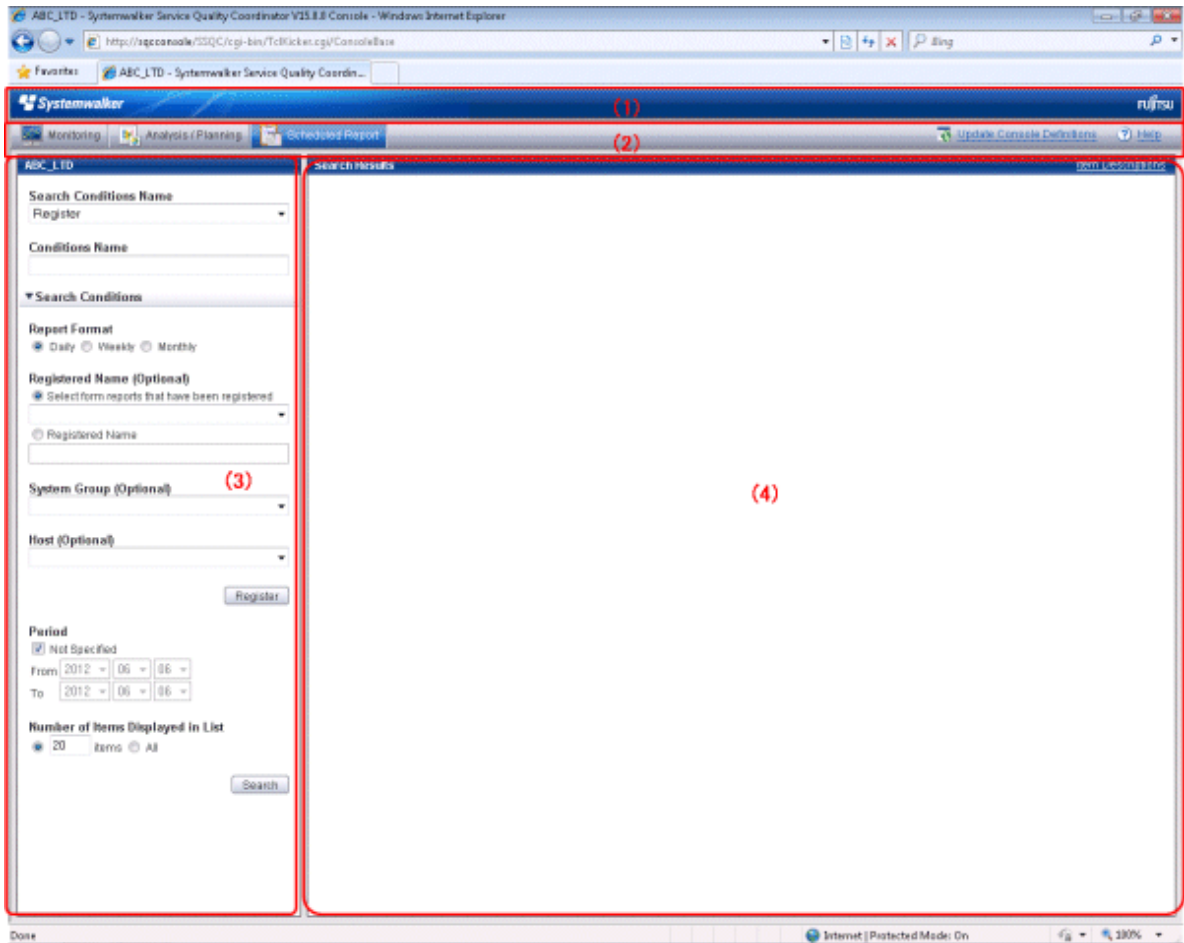


 **Note**

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

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)	Global header	The Systemwalker and Fujitsu logos are displayed.
(2)	Global navigation bar	<p>The menus are as follows:</p> <ul style="list-style-type: none"> - Monitoring Opens the "Monitoring" window. Allows checks on the current status and isolates faults when they occur. - Analysis/Planning Opens the "Analysis/Planning" window. Analyzes service quality over the medium to long term to avoid future problems. - Scheduled Report Open the "Scheduled Report" window. Displays reports about service levels for the customer or for capacity planning. - Update Console Definition Reloads the console definitions - Help Opens <i>User's Guide (Console Edition)</i>.
(3)	Search conditions area	Set the search conditions to display the daily, weekly and monthly scheduled reports that were created in "5.3.1 sqcMakeReport(Scheduled Report Creation Command) ". Search conditions can be registered.

Item No.	Component	Description
(4)	Scheduled reports list area	Scheduled reports are listed according to the search conditions specified in (3).

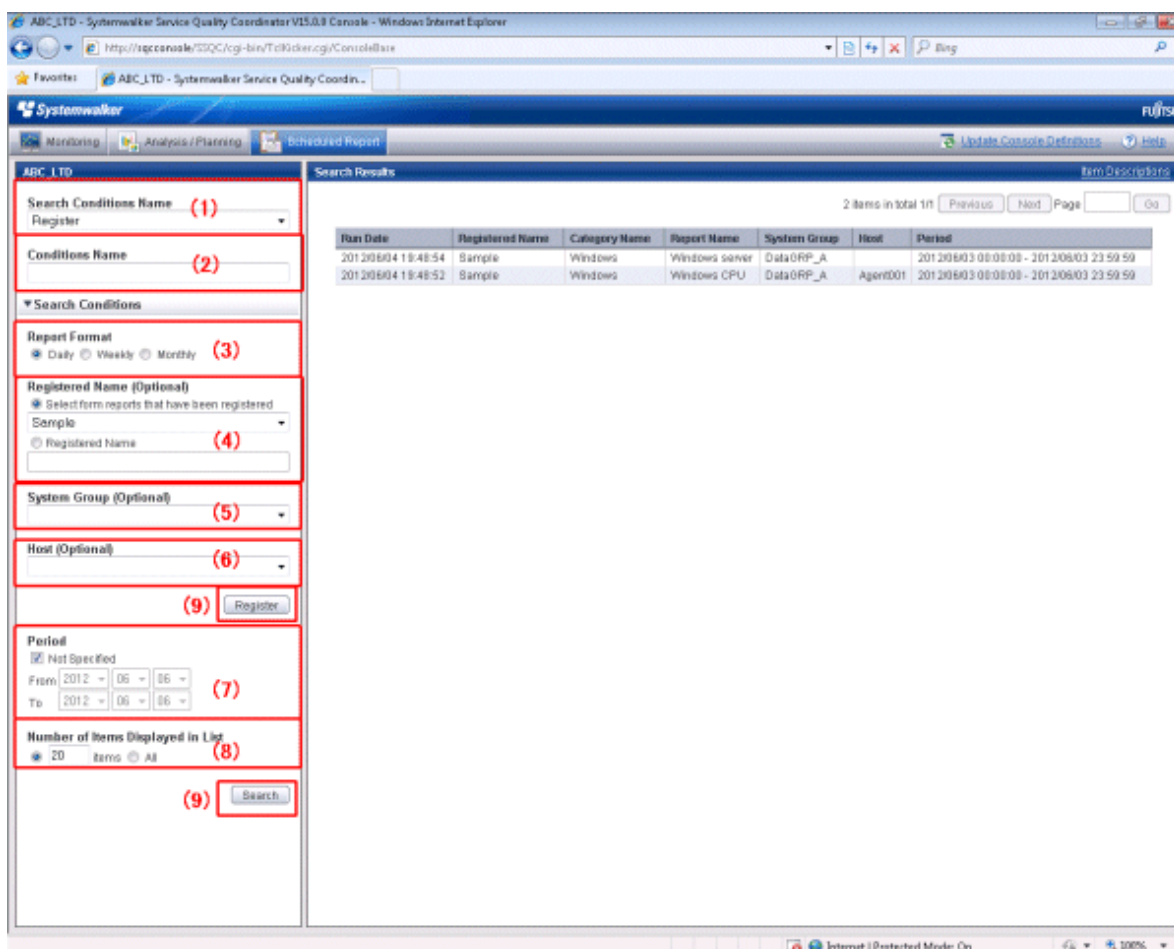
Basic operation of the Scheduled Report view

It is possible to operate it on the **Scheduled Report** view as follows.

Operation	Description
Scheduled report displayed	The scheduled report made by the sqcMakeReport command is displayed. Refer to "5.3.1 sqcMakeReport(Scheduled Report Creation Command)".

5.4.1 Search Conditions Area

The search conditions area is explained.



Basic operation

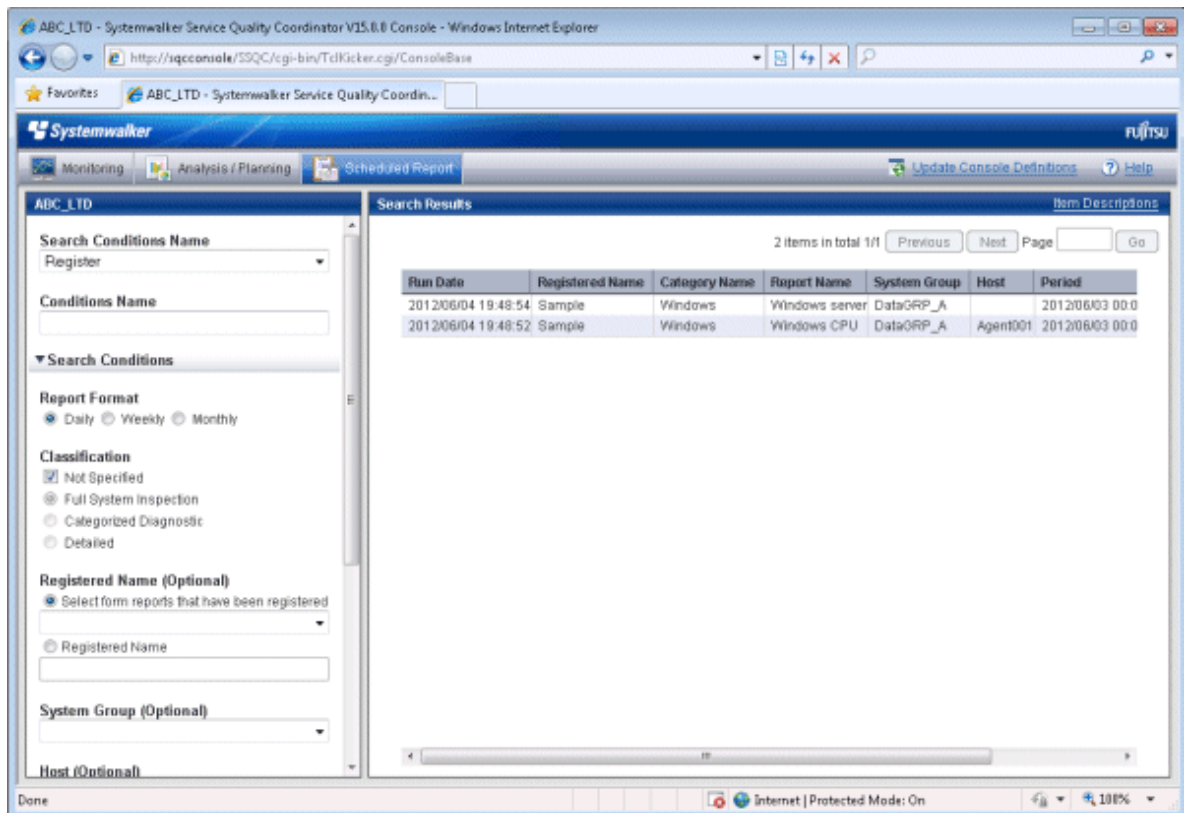
Item No.	Component	Description
(1)	Search condition name	Identifier for registered search conditions.

Item No.	Component	Description
		<p>Currently registered search conditions can be selected from a drop-down list box.</p> <p>Select Register to register new conditions.</p> <p>Searches are possible even without registering conditions.</p>
(2)	Condition name	<p>Displayed when Register is selected in Search Conditions Name.</p> <p>The following characters can be used for search condition names:</p> <ul style="list-style-type: none"> - Alphanumeric characters - Symbols (except for \$ " ' [] < > / ? ; : * \ & , . =) <p>Platform dependent characters can not be used.</p> <p>The registered report name can be no longer than 36 characters.</p>
(3)	Report formats	Select daily, weekly, or monthly.
(4)	Registered report name (any)	Registered report names can be specified. Currently registered report names can be selected from a drop-down list box. If a report is not registered, it is possible to input its name directly to specify it.
(5)	System group (any)	System groups can be specified.
(6)	Host (any)	Hosts can be specified.
(7)	Period	<p>Report periods can be specified.</p> <p>Ensure the period that includes the scheduled reports you want to retrieve is specified.</p> <p>For example, to retrieve the weekly report for August 31 to September 6, make the report start date before August 31 and the report finish date after September 6.</p>
(8)	Number of reports to display	<p>Specify the number of reports to display in scheduled reports list display area. Either specify all reports or a number of reports.</p> <ul style="list-style-type: none"> - Report number specification <p>A value between 1 and 1000 can be entered.</p> <p>The specified number of reports will be displayed on one page.</p> <ul style="list-style-type: none"> - All items specification <p>All scheduled reports are displayed on one page.</p>
(9)	Operation buttons display area	<ul style="list-style-type: none"> - Registered Displayed when Register is selected in Search Conditions Name. Registers new search conditions under the name specified in Conditions Name. - Register Displayed when a registered condition name other than Register is selected in Search Conditions Name. Use when copying a condition for use. Registers new search conditions under the name specified in the dialog that appears when the Register button is pressed. - Save Over Current Displayed when a registered condition name other than Register is selected in Search Conditions Name. Use when changing a condition.

Item No.	Component	Description
		<p>- Delete Displayed when a registered condition name other than Register is selected in Search Conditions Name. Use when deleting a condition.</p> <p>- Search Searches for scheduled reports under the specified conditions. The retrieved scheduled reports are displayed in scheduled reports list display area at the right.</p>

5.4.2 Scheduled Reports List Display Area

This section explains the scheduled reports list display area.



Scheduled reports open in separate windows when lines in the list are clicked.

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 "[5.3.2 sqcDeleteReport\(Scheduled Report Deletion Command\)](#)" and "[5.3.3 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 "5.3.4 Backing up reports" for details.

Note

The scheduled report is registered before V13.5 and **Registered Name** is displayed in **Report Name** of scheduled reports list as for the made report.

As for the report made after it upgrades to V15.0.0 and later, **Registered Name** is displayed in **Report Name**.

Registered report is selected by the **Scheduled Report Registration** View of definition screen, and select **Save Over Current** when you want to display the report name in **Report Name**.

However, **Report Name** of the report made before **Save Over Current** is selected is **Registered Name**, and it is not possible to change.

Basic operation

Any value for page number can be entered in the range of existing pages.

5.5 Storing Reports (Administrator Tasks)

This section explains how to store reports.

Report storage location

Past Analysis/Planning results and registered analysis conditions and scheduled reports are stored in the following directory for each console definition.

```
<installation directory>\www\html\ConsoleEnvironments\console definition name
```

A definition file can also be created to change the storage location.

Definition File

```
<installation directory>\www\control\sqcSetcondir.ini
```

File format

```
[Console definition name 1]  
Alias= Console definition name 1  
Localpath= Management Folder 1
```

Settings example

```
[TenantA]  
Alias=TenantA  
Localpath="c:\tenantA"  
  
[TenantB]  
Alias=TenantB  
Localpath="c:\tenantB"
```

Refer to "Dividing Report Storage Locations" in the *Installation Guide* for details.

Storing reports

- 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 analysis and 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 analysis conditions and scheduled reports will be copied as well. However, past analysis and reports (histories) will not be copied.

Chapter 6 Notes Relating to Errors

This section explains errors that may occur when an attempt is made to display the Summary View and Drilled-Down displays and the Report of the Console, and how to respond to these errors. It also explains the "-1" display in the service operational information.

6.1 Content Display Errors

The following problems sometimes occur when users try to display the desired contents (graphs or tables).

- The error code 1572864 is displayed instead of the graph image.
- "Chart is unavailable" is displayed instead of the graph image.
- The graph image drops out (only the graph is not displayed).
- The following error message is displayed.

```
"The specified CGI application misbehaved by not returning a complete set of HTTP headers.  
The headers it did return are: Unable to register TclNotifier window class"  
  
"ohd_update error."  
  
"Ohd file create error."
```

In addition, an exception is sometimes issued with the code shown below when the report creation command (sqcMakeReport.exe) is executed.

- 0xe06d7363
- 0xc0000005

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.

6.1.1 How to Increase the Size of the Desktop Heap



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

Changing the desktop heap affects the entire system, therefore make sure that there are no system operation problems after the change.

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 in the Windows values.

Increase the third value (shown in red in the example below) in multiples of 200 Ks to somewhere under following numbers.

For Windows Server 2008/Windows Vista and later

Up to 20480.

For Windows Server 2003/Windows XP

Up to 2048.

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
ServerDll=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 system.

6.1.2 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(R) Internet Information Services been set up correctly?	If the correct settings have not been made, set up Microsoft(R) Internet Information Services again by referring to "Microsoft(R) Internet Information Services" in the <i>Installation Guide</i> .
	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.

Error code	Check item	Action
	Has the IP address of the Manager been set up incorrectly on the Operation Management Client?	<p>The IP address/host name of the Manager is specified in the following registry key. Check if the content of this key is correct.</p> <p>For 32-bit versions of Windows</p> <p>\\HKEY_LOCAL_MACHINE\SOFTWARE\Fujitsu\SQL-C\CurrentVersion\Settings\ManagerIP-Address</p> <p>For 64-bit versions of Windows</p> <p>\\HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Fujitsu\SQL-C\CurrentVersion\Settings\ManagerIP-Address</p> <p>If the content is incorrect, specify the correct IP address/host name using the method described in "Changing the IP Address/Host Name of the Manager that Is Recognized by Operation Management Clients" in the <i>Installation Guide</i>.</p>
	Can communicate via IPv4 between the Operation Management Client and Manager?	<p>Communicate via IPv4 between Operation Management Client and Manager.</p> <p>Check the registry described above.</p> <p>If the Manager specified as host name, define the IPv4 address of the Manager in the Hosts file of the Operation Management Client, or specify the IPv4 address using the method described in "Changing the IP Address/Host Name of the Manager that Is Recognized by Operation Management Clients" in the <i>Installation Guide</i>.</p>

6.2 If "-1" is displayed as service operational information

Operational information for various services can be displayed in the **Summary** view and **Drilled-Down** displays and the **Analysis/Report** view of the **Console**.

The following table shows the values that are displayed as operational information, and the meanings of these values.

Service	Value	Meaning
HTTP, DNS, SMTP	0 or more	This value indicates the response time for the service.
	-1	This value indicates that either the service has stopped, or there is an error with a definition in the management target configuration information file.
Any port	0	The port is operating.
	-1	This value indicates that either the port has stopped, or there is an error with a definition in the management target configuration information file.

If "-1" is displayed for a monitored service even though it should be running, there may be an error with a definition in the management target configuration information file.

Set up the managed object configuration information file correctly by referring to ["A.2 Response/Operation Information Collection Policy Setup Command"](#).



Refer to "Response and Managed Object Configuration Information (ServiceConf.xml)" in the *User's Guide* for details on monitored services.

6.3 Application errors with tclsh84

The tclsh84.exe application may produce the following kind of application error on a Manager, an Agent, or an Operation Management Client.

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

This problem may occur because the desktop heap on the Manager, Agent, or Operation Management Client is not large enough. In this case, increase the size of the desktop heap using the method explained in "6.1.1 How to Increase the Size of the Desktop Heap".

6.4 Failure to collect server performance information

Server performance information may not be displayed (may not be collected) for the various display functions in the Console window. This is a problem with Windows, and Microsoft has announced a workaround. Refer to the following URL for details.

<http://support.microsoft.com/kb/248993/en-us>

6.5 PDB maintenance processing

Any data in the PDB that has exceeded the retention period (described in "Manager" in the *Technical Guide*) will be deleted from the PDB as part of the PDB maintenance processing that is executed at 2:00 AM each day.

While PDB maintenance processing is in progress, access to the PDB (such as executing PDB commands or displaying the Summary view and Drilled-Down displays and the Analysis/Report view of the Console) may become temporarily impossible.

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

6.6 If Management Console buttons become inoperable

Description of problem

When Internet Explorer is used to operate buttons on Systemwalker Service Quality Coordinator'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 may appear because it 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**.

6.7 If messages output by Systemwalker Service Quality Coordinator fail to appear in the status bar

Description of problem

When Systemwalker Service Quality Coordinator's Management Console is displayed in Internet Explorer, messages output by Systemwalker Service Quality Coordinator may fail to appear in the status bar.

Cause

Internet Explorer features a new security item that determines whether to allow status bar updates by means of scripts. The default settings of this item may be 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.
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.

6.8 When Images and Characters Are not Displayed Correctly

Images and characters may not be displayed correctly if the browser's "zoom" setting is not 100%.

Change the setting to 100% if this occurs.

Appendix A Setup Commands and Resident Processes

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

Refer to "Policy Commands" and "Starting and Stopping Resident Processes" in the Reference Guide for details.

A.1 Server Resource Information Collection Policy Setup Command

This section explains the Server Resource Information Collection Policy Creation Command.

Refer to "sqcRPolicy (Server Resource Information Collection Policy Creation Command)" in the *Reference Guide* for more information.

Required privileges

[Windows]

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

[UNIX]

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

[Windows]

For Windows systems, to collect disk-related performance information, the *diskperf*Windows command must be executed beforehand to enable information to be collected. This command is used as follows:

```
diskperf -y
```

Refer to the Windows help for details on the *diskperf* command. Before using this command, be sure to enable both physical drives and logical drives.



- The system must be restarted after settings are made using the *diskperf* command.
- The *diskperf* command must be executed before the Systemwalker SQC DCM service starts (before performance information starts being collected).

Format

Create a server resource information collection policy

[Windows]

```
Installation directory\bin\sqcRPolicy.exe
```

[UNIX]

```
/opt/FJSVssqc/bin/sqcRPolicy.sh
```

Refer to "[A.3 sqcSetPolicy \(Policy Application Command\)](#)" and apply the policy next.

Point

When the Server Resource Information Collection Policy Creation Command (sqcRPolicy) or sqcCtrlPolicy.exe -e RP (Remote Policy Operation Command) is executed, a file named "MiddlewareConf.xml" is created. To delete a managed object, edit the content of MiddlewareConf.xml by referring to "Resource Configuration Information (MiddlewareConf.xml)" in the *Reference Guide*.

A.2 Response/Operation Information Collection Policy Setup Command

This section explains the Response/Operation Information Collection Policy Setup Command.

Refer to "sqcAPolicy (Response/Operation Information Collection Policy Setup Command)" in the *Reference Guide* for more information.

Required privileges

[Windows]

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

[UNIX]

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

Format

Create response/operation information collection policy

[Windows]

```
Installation directory\bin\sqcAPolicy.bat
```

[UNIX]

```
/opt/FJSVssqc/bin/sqcAPolicy.sh
```

Refer to "[A.3 sqcSetPolicy \(Policy Application Command\)](#)" and apply the policy next.

A.3 sqcSetPolicy (Policy Application Command)

Once policies have been prepared, they can be applied. The specification for the Policy Application Command is explained below.

Refer to "sqcSetPolicy (Policy Application Command)" in the *Reference Guide* for details.

Privileges required for execution

[Windows]

The privileges of a user belonging to the "Administrators" group are required to execute this command.

[UNIX]

The privileges of a system administrator (superuser) are required to execute this command.

Syntax

[Windows]

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

[UNIX]

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

Options

-h <host name>

Use this option to specify a system name to change the managed system name.

Also, use this option to specify a system name for the managed system in the following kinds of cluster operations:

- Where the server is a Manager and information about resources within the server is to be collected.
=> Specify the inheritance node.
- Where the server is an Agent in a cluster system that uses node name inheritance.
=> Specify node name of each Agent.

If this option is omitted, host name which is set at the installation or the system name which was set at the last -h option will be used as system name.

Host name will not be updated automatically, so use this option to change the host name.



.....

If this command is re-executed or an Agent is reinstalled where an operating environment for this product already exists and an Agent has already been registered, then use the same system name as was used before if the -h option is specified.

If the system name has to be changed for some reason, first delete the previous system name information from the PDB using the data deletion command explained in "sqcPDBerase (Data Deletion Command)" in the *Reference Guide*. However, in this case, performance information that has already been collected cannot be displayed.

.....

-p <IP address>

In the dashboard, management target is managed by using IP address.

When using the dashboard, be sure to specify IP address of the management target by using this option after installation. Specify the IP address of the connection Manager or Enterprise Manager which is available for connection.

Specify the inheritance node if the cluster system is being used.

If this option is omitted, IP address which was set at the last -p option will be used.

IP address will not be updated automatically, so use this option to change the IP address.



.....

If this command is executed at the first time after the installation, and if this option is omitted, IP address will be set by the address which is automatically collected. However, if multiple IP addresses are existed, IP address which can

communicate with the connection Manager or Enterprise Manager might not be acquired. Be sure to specify IP address of the management target by using -p option.

Note

From Systemwalker Service Quality Coordinator V13.3.0 onwards, the service or daemon no longer needs to be stopped before executing the Policy Application Command.

However, before using the "-h" option or "-p" option, service or daemon needs to be stopped. Execute the Policy Application Command after stopping the service or daemon by referring to "[A.4 Starting and Stopping Resident Processes](#)".

If the services or daemons are running and performance data for various middleware is being collected when the Policy Application Command is executed, then the collection of this performance data will be temporarily suspended while policies are applied. Collection of this performance data will start again after the policies have been finished being applied.

A.4 Starting and Stopping Resident Processes

This section explains how to start and stop resident processes.

Refer to "Starting and Stopping Resident Processes" of the *Reference Guide* for more information about processes and so on.

Manager

[Windows]

Start or stop the following service:

- Systemwalker SQC DCM

Point

If communications using the "Pull" method are to be used, start or stop the following service:

- Systemwalker SQC sqcschdle

If the policy distribution function is to be used, start or stop the following service as well:

- Systemwalker SQC thttpd

Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the Systemwalker SQC thttpd daemon start automatically.

Note

When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the **Windows Services** window.

First execute "Stop the service", then after waiting a while execute "Start the service".

[UNIX]

Use the following scripts to start and stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqcdcm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdcm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdcm stop_wait
```

 **Point**

.....
If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop_wait), and after command completion, start option (start) to start the process.

.....
 **Point**

.....
If communications using the "Pull" method are to be used, use the following scripts to start or stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqsch start
```

To stop the processes:

```
/etc/rc0.d/K00ssqsch stop
```

If the policy distribution function is to be used, use the following scripts to start or stop the processes:

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```

Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the thttpd service or daemon start automatically.

.....
Agent/Proxy Manager

[Windows]

Start or stop the following service:

- Systemwalker SQC DCM

Point

If both the policy distribution function and communications using the "Pull" method are to be used, start or stop the following service:

- Systemwalker SQC thttpd

Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the Systemwalker SQC thttpd daemon start automatically.

Note

When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the **Windows Services** window.

First execute "Stop the service", then after waiting a while execute "Start the service".

[UNIX]

Use the following scripts to start or stop the processes.

To start the processes:

```
/etc/rc2.d/S99ssqcdcm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdcm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdcm stop_wait
```

Point

If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop_wait), and after command completion, start option (start) to start the process.

Point

If both the policy distribution function and communications using the "Pull" method are to be used, use the following scripts to start or stop the processes.

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```


Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the thttpd service or daemon start automatically.

Enterprise Manager

[Windows]

Start or stop the following service:

- Systemwalker SQC DCM

Point

If the policy distribution function is to be used, start or stop the following service:

- Systemwalker SQC thttpd

Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the Systemwalker SQC thttpd daemon start automatically.

Note

When restarting the [Systemwalker SQC DCM] service, do not execute "Restart the service" from the **Windows Services** window.

First execute "Stop the service", then after waiting a while execute "Start the service".

[UNIX]

Use the following scripts to start or stop the processes:

To start the processes:

```
/etc/rc2.d/S99ssqcdcm start
```

To stop the processes:

```
/etc/rc0.d/K00ssqcdcm stop
```

To stop the processes completely:

```
/etc/rc0.d/K00ssqcdcm stop_wait
```

Point

If the stop option (stop) is selected, this command completes without waiting for ending of the process.

If the complete stop (stop_wait) is selected, this command sends a finish signal, and completes after ending of running process.

When restarting the process, stop the process by using the complete stop option (stop_wait), and after command completion, start option (start) to start the process.



If the policy distribution function is to be used, use the following scripts to start or stop the processes:

To start the processes:

```
/opt/FJSVssqc/bin/ssqchttp start
```

To stop the processes:

```
/opt/FJSVssqc/bin/ssqchttp stop
```

Refer to "[A.5 Automatic Startup Settings for the thttpd Service/Daemon](#)" for information about how to make the thttpd service or daemon start automatically.

A.5 Automatic Startup Settings for the thttpd Service/Daemon

This section explains the procedure for starting the thttpd service/daemon when both the policy distribution function and communications using the "Pull" method are to be used.

Required privileges

[Windows]

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

[UNIX]

The user must have system administrator (superuser) privileges.

Procedure

[Windows]

1. Select [Administrative Tools] and then [Services] from the Control Panel.
2. Select [Systemwalker SQC thttpd], and then open the [Properties] window.
3. In the [General] tab, change the [Startup type] to [Automatic].

[UNIX]

Set up a startup script by executing the following commands:

```
# cd /etc/rc2.d
# ln -s /opt/FJSVssqc/bin/ssqchttp S99ssqchttp
```

Set up a stop script by executing the following commands:

```
# cd /etc/rc0.d
# ln -s /opt/FJSVssqc/bin/ssqchttp K00ssqchttp
```